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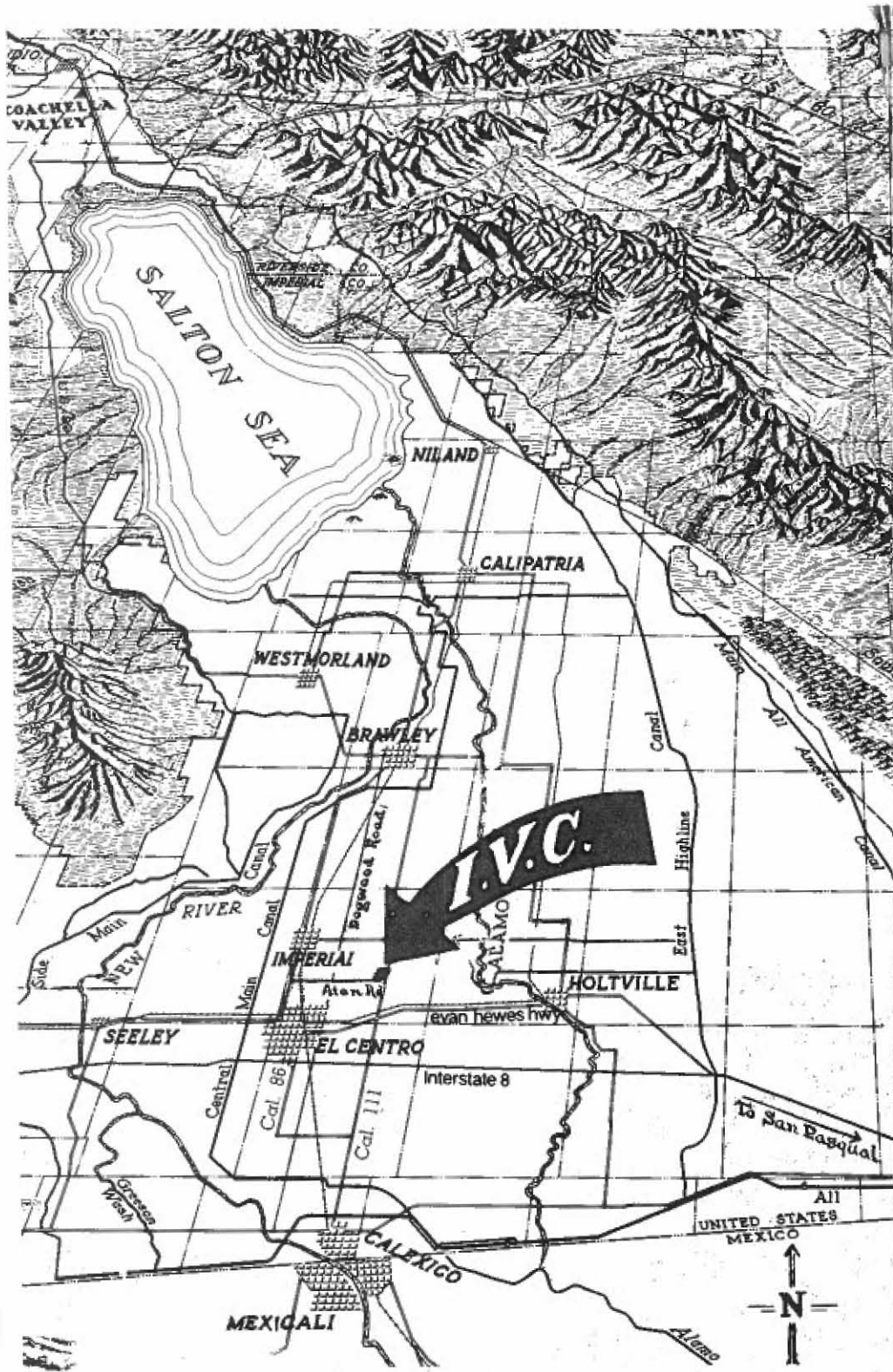
Imperial Valley College
P.O. Box 158, Imperial, California 92251
Telephone (714) 352-8320

Imperial Valley College

General Catalog 1975/1977

Price \$1.00





IMPERIAL VALLEY COLLEGE

1975 - 77

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 educational programs which it offers. In it you will find the information which you must have to succeed. In it also are those rules and regulations 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 COMMUNITY COLLEGE DISTRICT

Highway 111 and Aten Road

IMPERIAL, CALIFORNIA 92251

Phone 352-8320

IMPERIAL COUNTY, CALIFORNIA

IMPERIAL VALLEY COLLEGE

ACCREDITED

by

Accrediting Commission for Junior Colleges
 Western Association of Schools and Colleges
 The State Department of Education

A

MEMBER

of

California Community and Junior College Association

APPROVED

by

The Veterans Administration

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CALENDAR

FALL SEMESTER 1975-76

AUGUST

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

September 2-4
Preference enrollment.

September 8
Instruction begins.

SEPTEMBER

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

September 9
Admission Day (Classes Dismissed).

September 19
Last day to add classes.

OCTOBER

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

September 29
Census.

October 17
Last day to make up Spring Semester, 1975,
incomplete grades.

NOVEMBER

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

November 11
Veterans Day (Classes Dismissed).

November 27-28
Thanksgiving recess.

DECEMBER

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

December 22 - January 2
Christmas recess.

January 5
Classes resume.

JANUARY

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

January 21-28
Fall semester final examinations.

January 28
End of fall semester.

CALENDAR

SPRING SEMESTER 1976

JANUARY

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

January 27-29
Preference registration.

February 2
Instruction begins.

FEBRUARY

1 2 3 4 5 6 7
8 9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29

February 13
Last day to add classes.

February 12
Lincoln's Birthday (Classes Dismissed).

MARCH

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

February 16
Washington's Birthday (Classes Dismissed).

February 23
Census.

APRIL

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

March 12
Last day for students to file petition for June
graduation.

Last day to make up fall semester, 1975,
incomplete grades.

MAY

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

April 12-16
Spring recess.

May 31
Memorial Day (Classes Dismissed).

JUNE

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

June 3-10
Spring semester final examinations.

June 12
Commencement.

TRUSTEES - ADMINISTRATION

THE BOARD OF TRUSTEES

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Work Experience Coordinator
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Director of Physically-Limited Services
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Director of Athletics
- MR. GEORGE STAHELI
Director of Student Life and Community Services
- MRS. RAUHA K. KOSKI
Director of Nursing Education and Health Technologies

THE FACULTY

- AKERS, H. RUSSELL
Instructional Specialist for the
Physically Limited
B.A., Southern Illinois University
M.S., Indiana University
- ALBERDA, STANLEY E.
Head Librarian
B.A., Hope College
M.A.L.S., University of Michigan
M.A., Michigan State University
- ANDERSON, LESLIE R.
Law Enforcement
B.B.A., Woodbury College
- ARAGON, RAUL
Counselor
A.A., Imperial Valley College
B.A., M.S., California State U.
- ARCHULETA, JOE A.
Mathematics, Electronics
B.S., Colorado University
M.A., California State University
- BANKS, STANLEY C.
Sociology
B.A., Macalester College
M.A., California Western U.
- BARKALOW, NORVAL
Law Enforcement
California Highway Patrol (Ret.)
- BARKER, MICHAEL A.
Anthropology
B.S., Brigham Young University
M.A., UCLA
- BEOPE, FRANCES A.
Counselor
B.A., M.A., San Diego State U.
- BERNARD, WILLIS C.
Art
B.S., Massachusetts College of Art
- BILLINGS, LANELLE
Business
B.B.A., University of Texas
Ed.M., Southwest
Texas State College
- BILLINGS, ROBERT
Physical Education
B.S., University of Texas
M.S., Southwest Texas State
- BRUCE, PATRICIA M.
Physical Education
B.A., M.A., San Diego State U.
- BRUNGARDT, MARTHA
Registered Nursing
B.S.N., M.S., University of Arizona
- BUCKNER, CAROL
Assistant Librarian
B.A., California Lutheran College
M.A., University of Denver
- CERDA, DANIEL
English
A.A., Mira Costa College
B.A., San Diego State University
M.A., Northern Arizona University
- CERDA, ERNESTINE
English
A.A., Mira Costa College
B.A., San Diego State University
- CHAILLE, MICHAEL
Art
B.A., University of California
- CHAMPAGNE, PHILIP
Welding
B.A., M.A., Arizona State U.
- CHOUDHRY, SAIDUAL
Business
B.S., California State College
- DePAOLI, JOHN, JR.
Deputy Supt. - Dean of Instruction
B.A., M.A., UCLA
Ph.D., U.S. International U.
- FARRAR, LLOYD
History
B.A., Oberlin College
M.A., Columbia University
- FARRIER, PAUL
History
B.A., M.Ed., M.A.,
University of Arizona

THE FACULTY

- FEHRENBACH, WALOMA
Registered Nursing
B.S.N.E., Loma Linda University
- FIELDS, MAX
Director of Athletics - Physical Ed.
B.A., Whittier College
M.A., California State
Polytechnic College
- FINLEY, LUTHER
Engineering
Chairperson of Division of
Mathematics and Engineering
B.S., M.A., Arizona State U.
I.Ed.D., Bradley University
- FINNEY, DOROTHY T.
Physical Education
Chairperson of Division of Health,
Physical Education and Recreation
B.A., Santa Barbara State College
- FUESLER, JACK B.
Music
A.A., Norfolk Junior College
B.M.E., M.M., Northwestern U.
- GALAMGAM, ADELAIDA
Assistant Librarian
E.T.C., Ilocos Norte Normal School
B.S.E., Central Philippine College
M.S., Ed., USC
- GARES, V. DALE
Dean of Admissions-Registrar
B.A., M.A., Adams State College
Ph.D., U.S. International U.
- GARTIN, HERBERT
Psychology, Human Relations
Chairperson of Division of
Behavioral Science
B.A., M.Ed., University of Arizona
- GENTRY, GLENN A.
Work Experience
Coordinator of Work Experience
B.S., New Mexico State U.
M.S., University of Arizona
- GREVATT, JAMES
Instructional Specialist for
Learning Center
B.A., San Diego State University
M.A., La Verne College
- GRIFFIN, WILLIAM A.
Business
B.S., University of North Dakota
M.A., Colorado State College
- GUZMAN, CESAR
Evening Counselor
B.A., Adams State College
M.S., Laverne College
- HACHMUTH, KAY
Mathematics
B.A., Texas Women's University
M.S., University of Utah
- HANN, RICHARD K.
Philosophy
A.B., Chico State College
M.A., San Francisco State College
- HEBERT, ROGER
Physical Education
B.A., American
International College
M.A., Boston University
- HILLHOUSE, ROSANNE R.
Chairperson of Division of English
English
B.A., M.A., Oxford University
- HOOVER-SUCZEK, PETER
Psychology, Sociology
A.A., Diablo Valley Community
College
B.A., California State University
at San Jose
M.A., University of California,
Santa Barbara
- HUBBARD, GAIL
Instructional Specialist for
Physically-Limited
B.A., University of California,
Santa Barbara
M.A., University of New Mexico
- HULST, GARY
Physical Education,
Work Experience
B.S., Morningside College
M.A., Colorado State College
- JAVENS, JACK
Counselor
B.S., M.Ed., Penn. State U.
- JEFFCOAT, KENDRA
Psychology, Speech
B.A., M.A., University of Calif.

THE FACULTY

JERGE, MICHAEL J.
Business, Economics
B.A., M.B.A., University of Ariz.

KARATHANOS, DEMETRIUS
Instructional Specialist for
Institutional Research
B.S., M.S., Southern Illinois U.
Ph.D., University of Northern
Colorado

KELSOE, LEON
Physical Education
B.A., M.Ed., Whittier College

KOLLENBORN, Richard
Physical Education
B.A., M.A., Chico State U.

KOSKI, RAUHA K.
Director-Chairperson of Division of
Nursing Education and
Health Technologies
B.A., Northern Michigan U.
M.N., Yale University School
of Nursing

LANFORD, CONWAY
Counselor
A.B., Fresno State College
M.Div., M.A., San Francisco
Theological Seminary
M.Ed., University of Nevada

LARSSON, HAROLD J.
Astronomy, Mathematics
B.S., M.A., Columbia University
Ed., M., Harvard University

LEGARRA, STANLEY
Physical Education
B.S., M.A., University of Wyoming

LEPTICH, DEAN A.
Assoc. Supt. - Student Personnel
Services/Dean of Student
Personnel Services
B.A., M.A., San Diego State
College

LEWIS, STANLEY
Agriculture, Automotive Technology
B.S., M.S., New Mexico State U.

LOPEZ, HECTOR
Dean of Counseling Services
B.A., M.A., Northern Arizona U.

LOPEZ, REUBEN O.
Dean of External College
A.A., Otero Junior College
B.A., M.A., Adams State College

LOWE, JUANITA
Art
B.S., M.A., Western Carolina
College

MARTINEZ, MIGUEL
Spanish
B.A., M.A., San Diego State U.

MCCORMICK, JOHN M.
English
B.A., Long Beach State
M.A., Northern Arizona U.

MEEK, ALFRED
Registered Nursing
B.S., Cal Poly College
B.S., M.S., Fresno State College

MEKA, MARK
Biology, Physical Education
B.S.Ed., Wyoming University
M.A., Arizona State University

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

MOORE, ERNEST
Business - Chairperson of
Division of Business
B.S., University of Maryland
M.B.A., University of Chicago

MOORE, ROBERT
Associate Supt. - Business
B.S., Auburn University
M.A., Fresno State College
Ph.D., U.S. International U.

MURANO, ORLANDO
Spanish, Italian
B.A., M.A., UCLA

NADEAU, NANCY
English as a Second Language
B.A., Florida State University
M.A., UCLA

THE FACULTY

NIEWENHOUS, JEAN
Physical Education
B.A., University of Kentucky
M.A., Northern Arizona U.

ORENSZTEIN, ARMAND
Mathematics
B.S., M.S., University of Illinois
M.A., University of California
at Riverside

ORTEGA, ALICIA Q.
Spanish
B.A., M.A., San Diego State
College

OVERMAN, RUTH
Business
B.A., M.A., Arizona State U.

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

PENDLEY, JIMMY R.
Biology
B.S., M.S., San Diego State
College

PERSKE, GERALD K.
Biological Science
Chairperson of Division of Science
B.S., M.S., University of Nevada

RICE, PAULINE BENOIT
French, Humanities
B.A., Rice University
M.A., Baylor University

RICHWINE, HAROLD J., JR.
Chemistry
B.S., Shippensburg State College
M.S., Bucknell University

RODDEN, ROSE
Health Aide
R.N., St. Anthony's Hospital
A.S., Imperial Valley College

RUDOLPH, WILLIAM D.
Dean of Vocational-Technical
Education
B.S., M.B.A., Indiana University

SAMSON, WALTER L., JR.
History
Chairperson of Division of
Social Science
B.S., Wisconsin State College
M.A., University of Wyoming

SAMUELS, CARMEN
Registered Nursing
B.S., Indiana University
M.S., De Paul University

SANTOS, RAFAEL
Business
B.S., Arizona State University

SMITH, MARY MARGARET
English
B.A., San Diego State College
M.A., U.S. International U.

SPEER, WILLIAM R.
English
A.B., University of Chicago
M.A., Los Angeles State College

SPENCER, TERREL
Superintendent and President
B.S., University of Southern
Mississippi
M.A., Peabody College
Ph.D., University of Chicago

STAHEL, GEORGE
Physical Education,
Work Experience
Director of Student Life and
Community Services
A.S., Dixie Junior College
B.A., M.A., Adams State College

STANDIFORD, SANDRA
Counselor
B.A., University of Missouri
at Kansas City
M.S., California State College
at Los Angeles

THE FACULTY

STEARNS, HAROLD
Speech, Visual Communication
A.B., USC
M.A., California State University

STONE, JAMES R.
Music
Chairperson of Division of
Humanities
B.E., University of North Carolina
B.M., Westminster Choir College
M.M., USC

SWANN, MARIE B.
English
B.S., Ed.M., University of
Oklahoma

SWEARINGEN, MICHAEL
Agriculture, History
B.A., California Polytechnic
College

THOMPSON, BLAINE R.
Business
B.S., M.S., University of Utah

THORNBURG, WILLIAM J.
Business
B.A., University of Redlands

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

VON WERLHOF, JAY
Anthropology
M.A., University of California,
Berkeley

WALKER, JAMES D.
Dean of Evening College
B.S., Minot State College
M.S., North Dakota State U.
Ph.D., U.S. International U.

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

WEISSMAN, HARRY M.
English
B.S., University of Connecticut
M.E., West Texas State College

WENDRICK, MELVIN
Director of Physically
Limited Services
B.A., Sacred Heart Seminary,
Detroit, Michigan
M.A., University of Michigan

WHETSTINE, LEONA
Vocational Nursing
B.S.N., Arizona State University

WHITE, HOWARD
Law Enforcement
California Highway Patrol (Ret.)

WHITE, RAY A.
Automotive Technology
Chairperson of Division of
Agriculture and Automotive
Technology
A.A., Antelope Valley
Junior College
A.B., Fresno State College

WILHELM, ROBERT
Geography, Political Science
B.S., M.A., St. Louis University

WILLIAMS, RICHARD
Psychology
B.S., University of Wyoming
M.A., San Jose State University

WILSON, ALFONSO
Director of Financial Assistance
and Placement Services
B.A., M.A., San Diego State
College

WILSON, PATRICIA
English
B.A., University of California
at Santa Barbara

WISBROCK, ROLLIE
Speech
B.A., M.A., San Diego 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 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 community college for lower-division college work.

During its fifty-three years of service to residents of Imperial Valley, the community college movement has grown from two small colleges, organized by two high school districts, to a county-wide community 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.

COLLEGE HISTORY

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 community 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 community 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 Coachella Valley Community 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.

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 archi-

FACILITIES — OBJECTIVES AND PHILOSOPHY

tectural 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 January 13, 1971, the Board of Trustees, in conjunction with recent legislative action, changed the name of the District to Imperial Community College District in order to further emphasize the close relationship the college has with its service area.

FACILITIES

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. The new campus opened in 1962.

Through the judicious use of available tax funds and state aid a multi-purpose building, comparable to any such junior college building in the state, was constructed. It was designed to house sporting, musical, lecture and dramatic events. It was completed in April, 1967.

In 1975 the college opened a new Library and Media Center which is much larger and offers considerably more extensive learning services than the original Library.

It also houses a variety of audiovisual equipment and materials, circulates audiovisual equipment throughout the campus, has collections of slides, tapes, filmstrips, phonograph records, and multi-media kits that are used in the library and on campus.

Since 1962 the college has opened the Meyer Center for Business and Commerce, a new agriculture-welding complex, a new student activities building, an art museum, and an archeological museum in downtown El Centro. In 1975 a swimming pool complex was added to the steadily growing college.

OBJECTIVES AND PHILOSOPHY

A public community college serves as an apex to the locally controlled public education program. It provides an effective means of strengthening and advancing the basic ideals of democracy.

OBJECTIVES AND PHILOSOPHY

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

A community college education may well be the last organized effort made by students to improve 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, improve their knowledge and appreciation of the history of our culture, and further develop understandings of other nations and appreciation for their cultures. The community college offers an opportunity 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 occupational 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 inadequate 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 concerning occupational programs.

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

TYPES OF PROGRAMS

Some 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 through the study of the Constitution of the United States, American history, and state and local government; and by participation in student government and the broader society.
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, writing, reading and in listening with understanding through participation in English classes, speech classes, and in classes formed to develop special study skills; and as practiced in all instructional situations.
4. Using basic mathematical skills necessary in everyday life as studied in 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. Understanding his interaction with his biological and physical environment so that he may 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, a variety of courses are offered. Some will equip a student with job entry-level skills, other courses provide general education for all students to assist them in living meaningful and productive lives in a complex society. Still other types of courses provide the basis for professional training offered by four-year colleges and universities.

Regardless of the interests of the students, the first two years of college work normally can be completed at 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 for 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 difficult. 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. The student plans ahead, sets up his goal, and systematically includes those courses of study that will be of the greatest benefit to him.

Many of the needs of the student who seeks employment at the end of the sophomore year can be met by a variety of occupational courses. In addition to offering a breadth of education they meet specific needs in the shortest possible time in preparing the student for a 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 community 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 to complete high school. Evidence of success in classes of college level will permit these adults to continue their educational endeavors.

Coordinated with the general divisions of courses at the college are four programs designed with specific types of students in mind: students who can devote only evenings to school; 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.

1. The Evening College

The Evening College, composed of regular college classes that meet at night, offers an opportunity to work for the Associate in Arts degree or Associate in Science 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 requiring more time for completion than the day program, students find that with adequate planning and the assistance of a counselor, they are able to attain their higher education goals in a surprisingly short time.

2. The External College

The External College is an outreach effort by Imperial Valley College for coping with the geography of Imperial Valley, employment, family responsibilities, and other personal circumstances that make it difficult for full participation in regular classes on the main campus.

The new short-term courses are offered at various intervals during the academic year. The classes are taught at satellite locations throughout the Imperial Valley in an effort to bring classes to people in their community.

3. Cooperative Work Experience

Students may earn college credit for cooperative work experience. The student must be enrolled for eight or more units of credit including Work Experience and the work must take place at work stations approved by the college. This may be in business, industry or public service agencies willing to enter into training agreements with the college. Sixteen units of Work Experience education will be allowed toward graduation with the Associate Degree.

4. Attendance of Local High School Students

Local high school students attending the college under the Honors or Vocational programs are restricted to a spectator's role in college student activities, and extra-curricular participation is to be confined to the high school. Counseling is available at the college, but every effort will be made to leave this responsibility to the high school counseling staffs.

Students must be authorized for attendance and shall receive appropriate college credit. High school credit for Honors or Vocational classes may be negotiated.

Students must attend high school for the minimum school day.

a. Honors

The college president may admit any 11th or 12th grader as a special part-time student upon recommendation of his high school principal pursuant to rules and regulations adopted by the governing board of his district. Number of students recommended shall not exceed 15 per cent of the total 11th and 12th grade enrollment.

b. Vocational

The college president may admit 11th and 12th grade students to vocational education upon recommendation by their high school principal. Attendance shall be credited to the district maintaining the community college for allowances and apportionments from the State School Fund.

The courses or programs available to high school students are limited to those programs that are not available within a high school unless the high school and college have established other programs by prior agreement.

c. Summer

The college president may admit as a special part-time student any student who has completed the 11th grade upon recommendation of his high school principal pursuant to rules and regulations adopted by the governing board of his district. Number of students recommended shall not exceed 5 per cent of the total students who have completed the 11th grade immediately prior to the time of recommendation.

Attendance shall be credited to the district maintaining the community college for allowances and apportionments from the State School Fund, and appropriate college credit shall be earned by the student.

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 community 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 four-year college type. 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.

"With Honors" 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.

Permanent 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 out 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

FINANCIAL ASSISTANCE — EXPENSES — PARKING FEES

a faculty 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 class 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 must be recommended by the faculty for this high honor.

FINANCIAL ASSISTANCE

Imperial Valley College believes that no student who has the ability to profit from instruction should be denied an education because he lacks financial means.

There are several types of aid available to needy, deserving students each year. This assistance is made available by the college district, state, federal, civic groups, and individual citizens.

The college participates in available federal financial aids programs.

In addition to the federal programs, there is aid available from the state and local district in the form of scholarships, work study grants and loans.

Further information regarding financial assistance may be secured from the Financial Assistance and Placement Center.

EXPENSES

There is no tuition charge for full-time students who are legal California residents. Tuition for out-of-state students and out-of-country students is computed as \$39.00 per unit and that the maximum be \$585.00 per semester with no exemptions. Tuition for California adults (21 years of age or older) taking fewer than 10 contact hours is \$2.50 per unit.

Expenses normally incurred by all students are for books and supplies. These expenses average approximately \$70.00 a semester, but vary depending upon the courses that are taken.

PARKING FEE

The parking fee (excluding summer) is \$3.00 per semester for the first automobile and \$1.00 per semester for the second automobile of the same family. The parking fee for part-time students is the same as above. There is no charge for motorcycles and bicycles.

TUITION—ACCREDITATION—COUNSELING—ACTIVITIES

TUITION REFUND POLICY

Refund in full will be received for the following:

1. Tuition collected in error
2. Discontinued class

Refund Schedule

- 100% — Before first day of classes
- 75% — First week of classes
- 50% — Second week of classes
- 25% — Third week of classes
- 0% — Fourth week and thereafter

ACCREDITATION

The college is officially accredited by the Accrediting Commission for Junior Colleges, Western Association of Schools and Colleges; and the State Department of Education. The University of California and other colleges and universities give full credit for transfer courses completed here.

COUNSELING AND GUIDANCE SERVICE

It is the aim of Imperial Valley College to provide all students with pertinent information which they will need in the formulation of their goals and objectives and to assist them in making the most of their potentialities and training. Counseling is made available by professional counselors, well-skilled and trained in the areas of academic, vocational, and personal counseling. The Counseling Center is located in the Student Services Center and students are requested to contact the counseling office at any time between the hours of 8:00 a.m. and 10:00 p.m.

Although counselors assist in long-range planning and in checking specific requirements, **THE RESPONSIBILITY FOR MEETING GRADUATION REQUIREMENTS OR REQUIREMENTS FOR TRANSFER TO OTHER COLLEGES OR UNIVERSITIES IS ONE WHICH MUST BE ASSUMED BY EACH STUDENT**. In the counseling office, as well as the Career Center, students have access to a reference library of catalogs from various colleges and universities.

STUDENT ACTIVITIES

Student affairs are governed by the Associated Students of Imperial Valley College.

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.

BOOKSTORE AND SNACK BAR

The college bookstore is maintained by the district through a lease arrangement with College Book Company. All college textbooks and necessary supplies are available. The Student Union Building contains a snack and coffee bar which provides refreshments and meals for the students.

ATHLETICS

The college is a member of the Desert Conference, consisting of Barstow, College of the Desert, MiraCosta, Mount San Jacinto, Palo Verde, Victor Valley and Imperial Valley. The Desert Conference is a part of the Southern Section of the California Junior College Association. Intercollegiate competition is held in football, basketball, wrestling, golf, track, cross country, tennis and baseball.

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 register for eight or more units of work in a given semester or upon an accumulation of eight or more units, 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.

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 for admission. A transcript of the secondary record must be filed with the college and evaluated by the admissions officer.

2. Admission of **Non-Graduates of High 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 occupational program, or in courses that will complete requirements for a high school diploma, which, on recommendation of the college, may be granted by a cooperating high school.

Non-high school graduates are automatically admitted on a provisional status for the first semester. This status is removed on the completion of 12 units of work in which a grade of at least 2.0 has been earned.

3. Admission of **Special High School Students.** 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.")

4. Admission of **Students with Advanced Standing.** Applicants who have attended other colleges may be admitted with advanced standing. Before admission and advanced standing

can 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.

Students applying for admission with advanced standing are subject to the same regulations governing probation and academic dismissal that apply to students in attendance at Imperial Valley College.

5. 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 \$39.00 per unit, not to exceed a total of \$585.00 per semester, is charged out-of-state students.

6. Admission of **Foreign Students.** Foreign students may be admitted to Imperial Valley College if they 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 \$39.00 per unit, not to exceed a total of \$585.00 per semester, is charged.

TRANSCRIPTS

Two transcripts of credits earned at Imperial Valley College is furnished free to the student at his first request. Thereafter, a fee of \$1.00 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 have accumulated 8 semester units.
3. All students who are working toward the A.A. or A.S. degree.
4. All foreign students.
5. All other students when requested to do so by the administration or by the counselor.

RESIDENCE REQUIREMENTS

Each person enrolled in or applying for admission to a California community college is, for purposes of admission and/or tuition, classified as a "district resident," a "non-district resident," or a "nonresident."

If a student is classified as a district resident or a non-district resident, he will be admitted to the college without non-resident tuition. Students classified as non residents will be required to pay tuition in an amount set by the governing board of the district of enrollment.

A "district resident" is a person who has resided within California for at least one year prior to a day just before the term of enrollment.

A "non-district resident" is a student who has lived in California for more than one year, but whose residence is in a territory that is not in a community college district.

A "non-resident" student is one who does not have residence in the state for more than one year prior to the resident determination date.

Generally, residency requires actual physical presence in California, coupled with an intent to make one's home here. One's state of mind is subjective; hence, it is necessary to look at objective indications of the student's intent.

Examples of evidence that aid the college admissions officer in identifying that intent, but which are not individually decisive, are possession of a document of California origin such as a driver's license, a current utility bill, a receipt for registration to vote, a current lease, rental agreement or rent receipt showing the student's name and address and place of residence, a library card, 1974 state and federal income tax information, a current charge account or credit, or a checkbook.

Any one or a combination of these gives some indication to the admissions officer of the student's intent. Possession of the necessary intent coupled with the durational requirement of one year will satisfy the residency requirements, and the student may be classified as a resident student.

Unmarried minors (those under 18 years of age) are by law incapable of establishing their own residence, notwithstanding their physical presence within California. An admissions officer will use the following guidelines for the determination of a minor applicant's residence:

If the minor's parent father is living, the residence of the father is the residence of the minor. If the father is not living, the residence of the natural mother is the residence of the minor. If the natural mother has remarried, and she has not established her own residence following such marriage, the resident of the step-father is the residence of the minor. In cases of adoption or guardianship where either natural parent is not living, the residence of

the adopting parent or the guardian is the residence of the minor.

A minor whose parents are not living and who does not have a legal guardian may establish his own residence. However, a student who is a minor and has a parent living may not by his own act establish residence, nor will the appointment of a guardian or the relinquishment of the parent's right of control give that minor the ability to establish his own residence.

Exceptions:

Exceptions to the resident determination as set forth above will be applied to certain factual situations. If the student would otherwise be classified as a nonresident, but fits within one of the following exceptions, he will be granted resident classification until he obtains such classification.

The exceptions are:

- a. A minor who remains in California after his parents, who had previously resided within California, moved from the state prior to the resident determination date, and the minor continues full-time attendance at the institution, will retain his resident classification.
- b. A student who is a minor and who has been self-supporting and in California for one year preceding the day before the term will be granted resident classification.
- c. A student who had not been an adult for more than one year prior to the resident determination date may add his pre-18-years-of-age residence, if any, to his post-18-years-residence to obtain the durational requirement.
- d. A child or a spouse of a member of the armed forces stationed in California will be granted resident classification. A student who is a member of the armed forces not assigned to California for purposes of education will be entitled to resident classification.
- e. Adult aliens lawfully admitted for permanent residence and present for one year will be given resident classification. Minor aliens may use parents' durational presence to satisfy the one-year requirement.
- f. A student holding a valid credential authorizing service in a public school and employed in a certificated position by a community college district will be given resident classification.

- g. A student who is an apprentice within the meaning of Section 3077 of the Labor Code is entitled to resident classification.
- h. A student who is a full-time employee of a California institution of public higher education or whose parent or spouse is a full-time employee may be granted resident classification at the option of the institution of enrollment.
- i. A student who lives with a parent who performs agriculture labor in California and other states at least two months per year in each of the two preceding years, the parent must live within the district.
- j. A student who earns his livelihood by performing agriculture labor and meets the criteria required above for the parent.

STUDY LIST LIMITATIONS

A regular program is 15 to 18 units, excluding an activity course in physical education. The maximum load for any student is 18 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 CLASS SCHEDULES

It is expected that a registration schedule shall not be worked out on a trial basis; therefore, the student is expected, at the time he files his registration with the Registrar, to make no further change. If a change must be made, a student may add classes within a designated period at the beginning of each semester for the following reasons:

1. Unable to rectify an error in his original program due to circumstances beyond his control.
2. Asked to replace a class for which his background is not appropriate with a class of higher or lower level in the same subject area.
3. Change must be made because of a class cancellation for lack of sufficient enrollment.

Changes will be made by obtaining an Add Card and approval of the instructor and then filing the change with the

GRADING SYSTEM

Registrar's Office. No student may add after the last day of the change period.

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.

A grade point average of 2.0 (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 any given semester's 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.

1. GRADES

- A Superior
- B Better Than Average
- C Average
- D Passing
- F Failing

Inc. Incomplete

UNFINISHED WORK, OTHERWISE PASSING indicating that (because of medical or other sufficient reason) an important assignment such as a term paper, final examination, or experiment is missing.

An Incomplete (Inc.) grade, which is not made up by the end of the sixth week of the next regular semester, shall remain as an Incomplete (Inc.) grade on the student's transcript rather than being converted to an F grade. The Incomplete (Inc.) will not develop units nor honor points for the purpose of computing grade point average or calculating total units.

2. CREDIT GRADE

Courses designated by the appropriate divisions may be taken in which Cr grades may be given. The student must declare his intentions to the instructor by the sixth week of the semester.

- a. Cr will reflect a letter grade of C or higher.
- b. NCr will reflect incompleteness of a credit class.
- c. Cr grades are permissible except in the student's major field at Imperial Valley College.
- d. Students applying for Cr must adhere to the same class

GRADING SYSTEM

standards or regulations as a student receiving a regular grade.

- e. A maximum of 16 units toward Imperial Valley College graduation may be granted or earned on a credit basis with a limit of one class per semester.
- f. Cr grade will satisfy completion of prerequisite for sequence class.

3. WITHDRAWAL GRADES

W—Withdrawal

W/F—Withdrawal failing

A student may withdraw from any course or the college during the semester, but in order to avoid grade penalties, he must make formal application to the registrar.

Any instructor may withdraw a student during the first fifteen weeks for excessive absences or for disciplinary reasons. Any withdrawal initiated by an instructor will be noted as an unofficial withdrawal.

Grades at the time of withdrawal under either circumstance will be assigned in accordance with the following schedule:

Weeks of Semester	Grade
1 through 14	W
15 through 18	W or WF

All withdrawals are official after being processed by the Registrar's Office. If the withdrawal is signed by both the student and instructor, it is an official withdrawal. If it is signed only by the instructor, it is considered an unofficial withdrawal. The "W" will normally be given to the student during the 1st through the 15th week of the semester. A grade of "W" or "WF" may be given to a student after the 15th week at the instructor's option.

4. REPEATED CLASSES

Procedures for repeated classes:

- a. A student wishing to repeat a class, in which he has received a grade of D or F, must obtain a request form and supply his name, the class being repeated by code number, and the instructor's name to the Registrar's Office by the 12th week of the semester for which he wishes to receive credit for a repeated class.
- b. From the forms submitted by the student, the Registrar's

Office will record an R by the letter grade given by the instructor. If a student does not submit a form, the grade and units in the previous class will be used in computing total units and grade point average.

5. 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
- Cr — 0 grade points per unit;
units not charged against the student
- W — 0 grade points per unit; units not charged against the student
- WF — 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.

6. CREDIT BY EXAMINATION

A student may petition to take an examination in lieu of course work between the sixth and fourteenth weeks of the semester. A maximum of 25 units may be acquired in this fashion. No more than 15 units per semester will be authorized. The fee will be \$10.00 per unit plus \$5.00 for administrative costs for each examination administered. Students wishing to take advantage of this opportunity should request the proper petition form from the Registrar's Office.

7. MILITARY CREDIT

"A guide to the Evaluation of Educational Experiences in the Armed Services, American Council on Education," former or current edition, is used to evaluate military school credit and credit is considered by petition and presentation of proper documentation by the Petitions Committee or demonstration of skill through credit by examination for technical vocational credit.

- a. Presentation of the DD214 by petition may allow the veteran 6 units of credit (Cr) (4 units for physical education and 2 units for health education).
- b. Total number of units of credit is not to exceed 16 (includes the 6 units for Basic Training). The units may

count as **elective credit only**.

8. CREDIT FOR UPPER DIVISION COURSE WORK

Upper division credit may not be applied toward an Associate Degree. The only exception is the credit received for an upper division course which is also offered as a lower division course.

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 is placed on academic probation if his grade point average for the units designated for a student in his status (see below) is less than 2.0. The probationary status is entered on the permanent record of the student.

Status	Units Designated
A full-time student at Imperial Valley College	Units attempted at Imperial Valley College during the semester immediately preceding.
A student transferring to Imperial Valley College	All units previously attempted in any college or university and in grades 13 and 14 of junior college
A part-time student who has attempted in any college or university, or grades 13 or 14 of a junior college, a total of 12 semester units (or equivalent of quarter units)	All units so attempted

A student on probation from another institution shall be placed on probation on entrance.

No student shall be subject to probation until he has attempted a minimum of 12 units in one semester or sequence of semesters.

Summer session grades, as well as grades from regular semesters or quarter sessions, shall be considered in the establishment of probationary status.

A student on probation is required to hold periodic con:

ferences with his counselor. The counselor may regulate the student's program according to his aptitudes and achievements.

Regular status can subsequently be attained by a student on probation by his attempting 12 or more units in a semester or sequence of semesters and achieving a 2.0 or better grade point average.

All actions taken by college authorities relating to academic probation become a part of the student's permanent record.

PROVISIONAL STATUS

A first-time freshman who is enrolled in more than six units who falls into one of the categories listed below shall be admitted on provisional status:

1. His grade point average in the last three years of high school was less than 2.0 (grade C on a five-point scale with zero for an F grade) excluding only physical education and military science.

- A = 4.0
- B = 3.0
- C = 2.0
- D = 1.0
- F = 0

2. He is not a high school graduate.

A student on provisional status shall develop with his counselor a course of study commensurate with his ability. He is required to hold periodic conferences with his counselor and his program may be regulated by his counselor according to his aptitudes and achievement.

Provisional status is removed when the student has successfully completed 12 units of work.

WITHDRAWAL — DISMISSAL POLICIES

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. Further, an instructor may drop any student judged to be a disturbing element in the class.

A student who is tardy three times may 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.

Voluntary Withdrawal

A student who is required to withdraw from college because of extenuating circumstances must contact the Registrar for the procedures to be followed. See: "Withdrawal grades."

Academic Dismissal

A student who is in attendance at Imperial Valley College who has a grade point average of less than 1.75 for units attempted (regardless of number) in each of three consecutive semesters is subject to dismissal.

A student who has been dismissed from Imperial Valley College because of low academic achievement may, after one full semester, apply for readmission to the college. His application will be reviewed by the administration, and if readmission is granted, he will be subject to all conditions specified including probationary status.

A student applying for admission to Imperial Valley College who has a grade point average of less than 1.75 for units attempted (regardless of number) in each of the last three semesters attempted (or any combination of semesters and/or quarters which are as long as three semesters) will not be granted permission to register until (1) a period of time equal to a full semester has elapsed since he attended college, and (2) his petition for admission has been reviewed by the administration. If admitted, he will be subject to all conditions specified including probationary status.

All actions taken by college authorities relating to academic dismissal become a part of the student's permanent record.

Any exceptions to the regulations adopted pertaining to probation and academic dismissal will be granted only after review by the Petitions Committee. Each case will be con-

sidered individually and disposition made after the consideration of all available pertinent information.

PHYSICAL EDUCATION

District policy requires that each student who is registered for more than 8 units shall be required to register for, and regularly attend, a physical education activity class each of 4 semesters until credit for 4 semesters has been earned. Exemptions from 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. College credit may be granted (P.E. 1, H.E. 3). See counselor.

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

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 non-attendance or for failure to perform in a responsible way will be required to withdraw from all classes in which he has been officially enrolled, or 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 or WF depending upon progress to date in classes affected.

A student who is 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 physician 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 probable duration. A new statement 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 may 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 sessions) of not less than six units of work in which passing grades are earned.

GRADUATION REQUIREMENTS

ASSOCIATE DEGREES

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. ACQUISITION OF MAJOR CONSISTING OF EIGHTEEN UNITS (UNLESS OTHERWISE DESIGNATED) IN A SPECIFIED FIELD OF STUDY

Students may satisfy the major requirement in the following fields of study. Individual courses of study for each major are listed beginning on page 163.

- A.S.—Agricultural Business
- A.S.—Agricultural Chemical Technology
- A.S.—Agriculture Mechanics
- A.S.—Animal Science
- A.A.—Anthropology
- A.A.—Art
- A.S.—Automotive Technology
- A.A.—Banking—Administrative Services
- A.A.—Banking—Credit Administration
- A.A.—Banking—Secretarial
- A.A.—Banking—General Operations
- A.A.—Behavioral Science
- A.A.—Bilingual-Bicultural Studies
- A.S.—Bookkeeping
- A.A., A.S.—Business Transfer
- A.A., A.S.—Business Supervision
- A.S.—Carpentry
- A.A.—Clerical
- A.S.—Cosmetology
- A.A., A.S.—Data Processing
- A.S.—Engineering

- A.S.—Engineering Technology
- A.A.—English
- A.S.—Fire Science
- A.A.—Foreign Language
- A.A., A.S.—General Business
- A.A., A.S.—General Major
- A.A., A.S.—General Science
- A.A.—Governmental Management
- A.A.—Human Relations—Community Mental Health Worker
- A.A.—Human Relations—Counseling, School and Social Services
- A.A.—Human Relations—Personnel, Employment, Counseling and Supervision
- A.A., A.S.—Individual Interdisciplinary
- A.S.—Industrial Power Technology
- A.A.—Journalism
- A.S.—Law Enforcement
- A.A., A.S.—Life Science
- A.S.—Machinery Operation and Maintenance
- A.A., A.S.—Marketing—Sales Technology
- A.A., A.S.—Mathematics
- A.A.—Music
- A.S.—Nursing—Registered
- A.S.—Nursing—Vocational
- A.S.—Physical Education
- A.A., A.S.—Physical Science
- A.S.—Plant Science
- A.A.—Real Estate
- A.S.—Recreation
- A.A.—Rehabilitation Technician for the Physically Limited
- A.A., A.S.—Secretarial
- A.A., A.S.—Social Science
- A.S.—Soils and Water Technology
- A.A.—Teacher Aide
- A.A.—Teacher Preparation—Liberal Studies
- A.A.—Visual Communication—Motion Picture Production
- A.A.—Visual Communication—Photography
- A.S.—Water Treatment Technology
- A.S.—Welding Technology

II. STATE AND INSTITUTIONAL REQUIREMENTS

- A. Sixty units plus physical education if required.
- B. Grade point average of 2.0 or better for all college work.
- C. Completion of a minimum of forty-five units in residence, or completion of at least the last fifteen units at Imperial Valley College.

III. SUBJECT AREA REQUIREMENTS

- A. American Institutions (Complete any one of the following)
1. Soc Sci 52 — Introduction to American Government
 2. Hist 17A-B — United States History
 3. Poly Sci 1 — Introduction to Political Science and Poly Sci 2 — American Government & Politics
 4. Hist 17A — United States History and Poly Sci 2 — American Government and Politics
 5. Poly Sci 1 — Introduction to Political Science and Hist 17B — United States History
 6. Hist 8A-B — History of the Americas
- B. H.E. 1 — Health Education or
H.E. 3 — Health Education (military service) if required
- C. Physical Education (if required) See page 36 for requirements.
- D. Math 51 (if required)
(Math 50, Ag 50, Weld 50, Auto Tech 50 may be substituted)

IV. GENERAL EDUCATION

A minimum of 15 units which shall include a minimum of one course in each of the first three areas and two courses in area four.

a. Natural Science

- Nat Sci 51 Survey of the Earth Sciences
Ag 5 (See also Env Sci 5) Man and His Environment
Ag 14 Introduction to Entomology
Anat 8 Human Anatomy
Anat 10 Human Anatomy and Physiology
Astron 21 Elementary Astronomy
Bio 3 Principles of Biological Science
Env Sci 5 (See also Ag 5) Man and His Environment
Bio 21 General Microbiology
Bot 1A General Botany
Chem 1A General Inorganic Chemistry
Chem 2A Introduction to Chemistry
Geog 1 Physical Geography
Geol 1A Physical Geology
Phys Sci 25 Introduction to Physical Science
Phys 2A General Physics
Phys 4A Principles of Physics
Physio 1 Human Physiology
Zool 1A General Zoology

b. Social Science

- Anthro 1 Physical Anthropology
Anthro 2 Cultural Anthropology
Anthro 3A Introduction to Archaeological Site Surveying
Anthro 3B Introduction to Archaeological Excavations
Anthro 3C Archaeological and Museum Lab Principles and Practices
Anthro 4 California Indians
Anthro 5 Introduction to World Prehistory
Anthro 6 Native People of North America
Bus 2 Introduction to Business
Econ 1 Principles of Economics
Econ 2 Principles of Economics
Geog 2 Cultural Geography
Hist 4A History of Western Civilization
Hist 4B History of Western Civilization
Hist 10 History of Modern Russia
Hist 30 Mexico and the American Southwest
Hist 40 (Also Span 40) Civilization of Spain and Portugal
Hist 41 (Also Span 41) Civilization of Spanish America and Brazil
Poly Sci 3 Comparative Politics
Poly Sci 14 Introduction to International Relations
Psych 1A General Psychology
Psych 1B Advanced General Psychology
Psych 2 Introduction to Physiological Psychology
Psych 3 Psychology of Personal and Social Adjustment
Psych 5 Psychology of Effective Behavior
Psych 9 Introduction to Interviewing and Counseling
Psych 11 Psychology of Effective Behavior
Psych 12 Elementary Statistics
Psych 14 Abnormal Psychology
Psych 17 Social Psychology
Psych 20 (Also E.C.E. 20) Developmental Psychology of Children
Psych 21 Early Childhood Development, Children, Family and Community (Also E.C.E. 21)
Psych 24 Creative Learning Experiences for Pre-School Children (Also E.C.E. 24)
Psych 27 Psychology of Family Pathology and Emotional Problems of Children
Psych 30 Psychology of Adolescence
Psych 40 Psychology of Crisis Counseling
Psych 43 Introduction to Community Health Services
Sociol 2 Contemporary Social Problems
Sociol 1 Principles of Sociology
Sociol 33 Marriage and the Family

GRADUATION REQUIREMENTS

c. Humanities (Language, Literature, Philosophy, Fine Arts)

- Art 3A History and Appreciation of Art
- Art 3B History and Appreciation of Art
- Art 30A Introduction to Art
- Drm Arts 5A History of World Drama
- Drm Arts 5B History of World Drama
- Eng 1B Introduction to Literature
- Eng 2 Introduction to English Linguistics
- **Eng 3 (Also Hum 3) Introduction to Film History and Criticism
- **Eng 4 (Also Hum 4) Film Criticism
- Eng 15 American Literature
- Eng 16A World Literature
- Eng 16B World Literature
- Eng 17A Survey of English Literature
- Eng 17B Survey of English Literature
- Eng 20 Modern Poetry
- Eng 21A Modern Prose Fiction
- Eng 21B Modern Prose Fiction
- *Eng 24 The Modern American Novel
- Eng 27 Film and Literature
- Eng 30A (Also Span 30A) The Mexican-American in Literature
- Eng 30B (Also Span 30B) The Mexican-American in Literature
- Eng 31 (Also Span 31) Literature in the Southwest
- Eng 33 The Literary Artist as Social Critic
- Eng 36 The Bible as Literature
- Eng 37 Survey of Mythology and Folklore
- Eng 38A (Also Psych 38A) Literature and Life: A Study of Values
- Eng 38B (Also Psych 38B) Literature and Life: A Study in Values
- Eng 53 Selected Literature
- Fr 1 Elementary French
- **Fr 1A Elementary French
- **Fr 1B Elementary French
- **Fr 2A Elementary French
- Fr 3 Intermediate French
- Fr 4 Intermediate French
- **Fr 10 Conversational French
- **Fr 11 Conversational French
- Fr 40 French Civilization
- Fr 41 French Civilization
- **Fr 51A Everyday French
- Ger 1 Elementary German
- Ger 2 Elementary German

GRADUATION REQUIREMENTS

- **Ger 10 Conversational German
- **Ger 11 Conversational German
- **Hum 3 (Also Eng 3) Introduction to Film Criticism
- **Hum 4 (Also Eng 4) Film Criticism
- Hum 25 The Humanities
- Hum 26 The Humanities
- Mus 7 Music Fundamentals
- Mus 20A History and Literature of Music
- Mus 30 Music Structure and Style
- Phil 1A Introduction to Philosophy
- Phil 1B Introduction to Philosophy
- Phil 11 Ethics
- Phil 25 Religions of the Modern World
- Span 1 Elementary Spanish
- Span 2 Elementary Spanish
- Span 3 Intermediate Spanish
- Span 4 Intermediate Spanish
- Span 5A Spanish Conversation and Composition
- **Span 10 Conversational Spanish
- **Span 11 Conversational Spanish
- Span 20A Beginning Spanish for Bilinguals
- Span 20B Beginning Spanish for Bilinguals
- Span 21 Intermediate Spanish for Bilinguals
- Span 22 Intermediate Spanish for Bilinguals
- Span 24 Introduction to Spanish Literature
- Span 25 Introduction to Spanish-American Literature for Bilinguals
- Span 28A The Mexican-American in Literature
- **Span 51A Beginning Conversational Spanish and Culture
- **Span 51B Beginning Conversational Spanish and Culture

d. Learning Skills

1. Eng 1A Reading and Composition
or
Eng 51 The Communication Process
and
2. One of the following:
 - Ag 28 Heavy Equipment Operation and Maintenance
 - Art 20A Elementary Drawing
 - Art 22A Design
 - Art 23A Ceramics
 - Art 24A Ceramic Sculpture
 - Art 27 Creative Handweaving

GRADUATION REQUIREMENTS

Art 28 Technical Ceramics
Auto Tech 51 Engine Technology
Bus 9 (Also Math 17) Math for Business Analysis
Bus 11 (Also Soc Sci 62) Personal Finance
Bus 10A Practical Bookkeeping
Bus 12 Personal Income Tax
**Bus 20 Elementary Typewriting
Bus 31 Elementary Shorthand
Bus 50 Introduction to Data Processing
Drm Art 20A Fundamentals of Acting
Electricity 1 Basic Electricity
Engr 18A Plane Surveying
Engr 21 Technical Drawing
Engr 72A Surveying for Engineering Technology
Eng AB English Fundamentals
Eng 8 Advanced Composition
Eng 9AB Creative Writing
**Eng 12 Power Reading
Eng 42 Advanced English as a Second Language
Eng 43B Advanced Oral English for Bilingual Students
**Eng 50 Reading Development
Eng 52A Vocabulary Building
Eng 57 Library Resources
H.E. 2 First Aid
Jrn 1 News and Feature Writing
L.E. 23 Defensive Tactics
L.E. 25 Firearms
L.E. 29 Preliminary Investigation and Reporting
L.T. 51 Introduction to Library Services
Math A Intermediate Algebra
Math C Plane Trigonometry
Math 2 Advanced Algebra and Trigonometry
Math 3A Analytic Geometry and Calculus
Math 10 Math for Elementary School Teachers
Math 12 Elementary Statistics
Math 17 (Also Bus 9) Math for Business Analysis
Math 18 Introduction to Mathematics
Mus 10AF Class Piano
Mus 15AB Elementary Voice
Mus 21AD Instruments
Phil 10 Logic
P.L. 10 Beginning Communication with the Deaf
P.L. 20 Beginning Braille
Soc Sci 62 (Also Bus 11) Personal Finance
Sp 1 Oral Communication
Sp 11 Oral Interpretation
Sp 30 Voice and Articulation Development

GRADUATION REQUIREMENTS

Sp 51 Basic Speech
Vis Com 5 (Also Jm 5) Introduction to Photography
Vis Com 10 (Also Eng 10) Introduction to Motion
Picture Production
Weld 30 Arc Welding
Weld 32 Oxy-Acetylene Welding
Weld 34 Inert Gas Shielded Arc Welding

*1 Unit Courses

**2 Unit Courses

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. Additional information is available in the counseling office.

Students planning to transfer to one of the campuses of the California State College State University system can, at their request, have the general education requirements certified by Imperial Valley College. In order to meet this certification, a student must complete forty (40) units of selected general education in one of five areas: natural science, social science, humanities, basic subjects, and general education. With the certification of general education completed by Imperial Valley College, a student can transfer to a California State University assured that no further general education will be required once they have officially transferred. For further information regarding the necessary courses required for general education certification, contact the Counseling Center.

Transfer Credit

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

OCCUPATIONAL CURRICULA

Imperial Valley College has developed career programs which reflect employment opportunities of our county and region. Advisory committees work closely with the college to assure each student the best in education and real employment opportunities upon graduation.

In developing a major program (see page 163), each student should plan on completing graduation requirements for the Associate in Arts or Associate in Science Degree. It is recommended that students should plan a broad educational background including general education courses.

It is most important that students consult with a counselor during their first semester in preparing programs to determine the appropriate sequence of courses. Further, it should be noted that the final responsibility for the selection of proper courses rests with the student.

CERTIFICATES

Occupational Certificates are awarded to convey evidence that well-defined levels of proficiency have been attained in designated occupational fields. Certificate programs are available in some of the occupational areas for which the college offers the Associate Degree. To qualify for an Occupational Certificate a student must:

1. Complete all courses listed for a particular certificate.
2. Achieve a C grade average (2.0 GPA) for all such college courses, and for all such courses taken at Imperial Valley College.

Certificates are offered in the following areas:

Automotive Technology

Business

General Clerical: (Receptionist, File Clerk,
Small Business Records)

Clerk Typist

Secretary/Stenographer

Junior Bookkeeper-Payroll Clerk

Cosmetology

Early Childhood Education

Electronics

Basic

Intermediate

Emergency Medical Technician

Finance and Credit
 Secretary Certificate—Bank Service
 General Certificate—Bank Service
 Administrative Certificate in Bank Operations
 Credit Administration Certificate in Banking

Fire Science

Governmental Management

Health Aide

Heavy Machinery

Human Relations
 Community Mental Health Worker
 Counseling, School and Social Services
 Personnel, Employment Counseling and Supervision

Law Enforcement

Basic Library Technician

Rehabilitation Technician for the Physically Limited

Real Estate

Recreation

Teacher Aide

Vocational Nursing

Water Treatment

Welding

Requirments for certificates are listed on page 206.

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.

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.

Course numbers followed by an AB sequence indicate that the course may be taken more than once, covering the same materials, to gain proficiency in the subject matter. Course numbers which have an A and B sequence with different course descriptions indicate that new or advanced materials are to be covered.

The prerequisites for any course may be waived by the instructor and the Dean of Instruction.

SUMMER SESSION

Summer Session calendar and admission requirements may be found in the Summer Session Bulletin or Schedule of Classes which is published during the Spring Semester.

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 5 Man and His Environment (3) 3 hrs. Lec.
 (Same as Env Sci 5)

Ag 14 Entomology (3) 2 hrs. Lec.
2 hrs. Lab.

A basic study of insects with emphasis on classification, anatomy and physiology, and ecology. An insect collection is required.

Ag 20 Animal Science (3) 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) 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; vitamins and minerals and feed sources.

**Ag 22 Livestock Selection (3) 2 hrs. Lec.
2 hrs. Lab.**

Selection of beef cattle, sheep, swine and horses according to breed, type 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 23 Animal Diseases (3) 3 hrs. Lec.

The symptoms, diagnosis and treatment of animal diseases.

Ag 24 Horse Husbandry (3) 3 hrs. Lec.

Status of the horse industry; types and breeds; selection, care and management and economics of the light horse; their place and use in California and the United States.

Ag 25 Agricultural Business Management (3) 3 hrs. Lec.

Changes occurring in agriculture, careers in commercial agricultural business and public agricultural service agencies, development and growth of farm-related industries, kinds of agricultural businesses, operational characteristics of commercial agricultural industries.

Ag 26 Agricultural Business Organization and Management (3) 3 hrs. Lec.

Study of farm technological 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 27 Agricultural Sales and Service Management (3) 3 hrs. Lec.

Prerequisite: Bus 4. Supervision of people who sell agricultural products and services. Selecting, training, directing and evaluating personnel. Methods of payment, use of advertising, promotion, incentives and service.

**Ag 28 Heavy Equipment Operation and Maintenance (5) 3 hrs. Lec.
6 hrs. Lab.**

(Same as H.M. 35.)

**Ag 30 Agricultural Mechanics (3) 2 hrs. Lec.
2 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 32 Irrigation and Drainage (3) 2 hrs. Lec.
2 hrs. Lab.**

Fundamental principles and practices of irrigation. Soil-moisture 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 farm drains, and drainage requirements for land reclamation and irrigated agriculture.

**Ag 33A Farm Power (5) 3 hrs. Lec.
6 hrs. Lab.**

For the student with little or no automotive background. Design, construction and mechanical function of automobile engines including lubricating, cooling, fuel and electrical systems; clutches; and an understanding of the basic sciences relevant to such topics as internal combustion and energy conversion. \$5.00 material fee payable during first week of instruction. (Same as Auto Tech 51.)

AGRICULTURE

**Ag 33B Farm Power (5) 3 hrs. Lec.
6 hrs. Lab.**

Prerequisite: Ag 33A (Same as Auto Tech 51). Review and advanced study of the internal combustion engine and service procedures in the use of automotive machine shop tools and machines for rebuilding the engine. Review the study and service procedure of the diesel fuel systems and governors. \$5.00 material fee payable during first week of instruction. (Same as Auto Tech 55.)

**Ag 35 Fluid Power (4) 3 hrs. Lec.
3 hrs. Lab.**

A study of the principles and laws governing fluids. The design and function of hydraulic and pneumatic components, seals, fluid types, circuits and symbols. Latest developments in the control and transfer of energy and its relationship to agricultural technology. (Same as Auto Tech 57.)

**Ag 36 Agricultural Construction (3) 2 hrs. Lec.
2 hrs. Lab.**

A study of the materials and processes most suited to farm situations. Practical concrete design, farm layout and fabrication.

**Ag 37 Small Gasoline Engines (3) 2 hrs. Lec.
2 hrs. Lab.**

The history, design, construction and mechanical function of the small gasoline engine, including tune-up and major repair of the electrical and mechanical systems. (Same as Auto Tech 59.)

**Ag 38 Electricity on the Farm (3) 2 hrs. Lec.
2 hrs. Lab.**

Fundamentals of electric wiring; circuit layout and problems; motor and branch circuit protection; safe use of electricity; wiring the farmstead; and motor maintenance.

Ag 40 Soils (3) 3 hrs. Lec.

Physical, chemical and biological properties of soils as related to agriculture. Principles of soil-plant inter-relationships; development of the soil as a natural body, soil moisture, effect of management practices on soil properties; composition and use of fertilizers.

AGRICULTURE

Ag 41 Fertilizers (3) 3 hrs. Lec.

The nature of fertilizers and soil amendments, their properties, methods of application, and reaction upon soils and plants. Composition, value and use of fertilizer materials and soil correctives. Methods employed in the manufacture, distribution, and application of fertilizers.

**Ag 42 Plant Science and Forage Crops (4) 3 hrs. Lec.
3 hrs. Lab.**

Principles and practices of crop improvement, propagation, production, processing, storage, and marketing. Production, harvest and utilization of principal California forage crops. Field laboratory work required.

**Ag 43 Field and Cereal Crops (4) 3 hrs. Lec.
3 hrs. Lab.**

Principles and practices of field and cereal crops production and soil management, including study of distribution, adaptation and utilization of the major field and cereal crops. Field laboratory work required.

Ag 44A Vegetable Gardening—Cool Weather (2) 6 hrs. Lab.

Organic and inorganic production in vegetable gardening. Cultural practices, harvesting, grading and processing, marketing, disease and pest control of California vegetable crops.

Ag 44B Vegetable Gardening—Warm Weather (2) 6 hrs. Lab.

Organic and inorganic production in vegetable gardening. Cultural practices, harvesting, grading and processing, marketing, disease and pest control of California vegetable crops.

**Ag 45 Truck Crop Production (3) 2 hrs. Lec.
2 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 46 Ornamental Plant Identification and Materials (3) 2 hrs. Lec.
3 hrs. Lab.**

Identification, growth habits, culture, and ornamental use of house plants, vines, groundcover, annuals, perennials, small shrubs adapted to the climate of the southern valleys of California.

AGRICULTURE

Ag 47 Nursery Practices (3) 2 hrs. Lec.
3 hrs. Lab.

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

Ag 48 Ornamental Shrubs and Trees (3) 3 hrs. Lec.

Broadleaf shrubs and vines used in California. Identification, habits of growth, cultural requirements and landscape use.

Ag 49 Weeds and Weed Control (3) 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 50 Shop Mathematics (3) 3 hrs. Lec.

(Same as Auto Tech 50, Math 50, Weld 50.)

Ag 64 Horsemanship - Equitation (1) 1 hr. Lec.
1 hr. Lab.

Prerequisites: Ag 24 or concurrent enrollment or consent of instructor. The fundamentals of horsemanship and equitation, English and Western, the anatomy of the horse and safety are emphasized. (Students may provide their own horse and trail it to instruction areas, if carried on college accident policy or show evidence of coverage under family policy. A lab fee will be charged for those students who cannot provide their own horse.) (Same as P.E. 21A.)

Ag 65 Control of Insects and Other Pests (3) 2 hrs. Lec.
2 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 — ANTHROPOLOGY

Ag 66 Intermediate Horsemanship - Equitation (1) 1 hr. Lec.
1 hr. Lab.

Prerequisites: Ag 64 or consent of instructor. Intermediate horsemanship under saddle. Grooming, saddling, bridling, mounting, seat and hands. Study of types of horse gear and equipment. Safety precautions are emphasized. This course fulfills one semester of the physical education requirement. (Same as P.E. 21B.)

ANATOMY

Anat 8 Human Anatomy (4) 2 hrs. Lec.
6 hrs. Lab.

Prerequisite: High school biology with a grade of C or better or Zool 1A or Bio 3. Systems of the human body and their interrelationships.

Anat 10 Human Anatomy and Physiology (5) 3 hrs. Lec.
6 hrs. Lab.

Prerequisites: One year of high school chemistry and biology or one semester of each at the college level. A study of the structure and function of the human organism. Emphasis is on the circulatory, respiratory, excretory, nervous, reproductive, and digestive systems.

ANTHROPOLOGY

Anthro 1 Physical Anthropology (3) 3 hrs. Lec.

Prerequisite: Eleventh grade reading level ability is recommended for success in this course. An introduction to the study of evolution and racial variation in man. Emphasizes the processes of evolution, the relationship of man and the animals, fossil man, and the origin and meaning of race.

Anthro 2 Cultural Anthropology (3) 3 hrs. Lec.

Prerequisite: Eleventh grade reading level ability is recommended for success in this course. An introduction to the nature of culture, especially as seen in primitive society. Includes such topics as cultural history, the process of culture, technology, social organization, language, religion, and personality. May be taken before Anthro 1.

Anthro 3A Introduction to Archaeological Site Surveying (3)
 2 hrs. Lec.
 4 hrs. Lab.

Introduction to archaeological site surveying; historical development of archaeology; major contributors in 20th century; archaeological trends; methods of site surveying; types of sites; field reconnaissance; site reports and records; preparing field material for laboratory care and analysis; trails, artifacts, and features; equipment, use and care in the field.

Anthro 3B Introduction to Archaeological Excavations (3)
 2 hrs. Lec.
 4 hrs. Lab.

Introduction to archaeological excavations; mapping; laying out sites with transit, rod and alidade; archaeological excavation; selecting sites; testing and trenching; stratigraphy; keeping records; interpreting data; preparing laboratory materials; care of materials for carbon and amino acid dating; pollen and soil tests.

Anthro 3C Archaeological and Museum Laboratory Principles and Practices (3)
 2 hrs. Lec.
 2 hrs. Lab.

Prerequisites: It is advisable that students who enter this work have experience or course work in Field Archaeology (Anthro 3A or 3B), but it is not a requirement because the applications of what one will learn in the lab course reaches into many other areas of interest. Processing, cataloging, storing, and exhibiting archaeological and ethnological artifacts.

Anthro 4 California Indians (3) 3 hrs. Lec.

A study of California Indians and the relationships of these tribal peoples to their environments; linguistic families; life styles of specific Indian tribal societies; Indian art, music, stories, religions, institutions, structures, artifacts, recent Indian history.

Anthro 5 Introduction to World Prehistory (3) 3 hrs. Lec.

A survey of the major cultural achievements of mankind prior to recorded history in the areas of Europe, Asia, Africa and the Americas, and the contribution of archaeology to anthropology, history, and the development of art. Outstanding investigations are used to illustrate currents in human culture history.

Anthro 6 Indians of North America (3) 3 hrs. Lec.

Early migrations to the New World; demography and ecology of the Amerindian cultures in Alaska, Canada, United States, Mexico and Central America, in Pre-Columbian times. The modern Indian movement today.

Anthro 7 Classic Civilizations of Pre-Historic Meso-America (3)
 3 hrs. Lec.

A study of the classic Aztecs, Mayas and Incas from their origins to their highly developed states and empires, and their eventual destruction. The controversial theories that Hyerdahl and von Dannigen pose will be analyzed in factual light.

ART

Art 3A History and Appreciation of Art (3) 3 hrs. Lec.

Either Art 3A or 3B may be taken separately. Art 3A is a survey of the developments in art in painting, sculpture, architecture, and the minor arts from the birth of art to the Renaissance.

Art 3B History and Appreciation of Art (3) 3 hrs. Lec.

Either Art 3A or 3B may be taken separately. Art 3B is a continuation of 3A extending from the Renaissance to contemporary times.

Art 20A Elementary Drawing (3) 2 hrs. Lec.
 4 hrs. Lab.

A basic course in drawing involving analysis of lines, form, tone, texture and colors as essential media of expression.

Art 20B Elementary Drawing (3) 2 hrs. Lec.
 4 hrs. Lab.

Prerequisite: Art 20A. A continuation of 20A.

Art 21A Intermediate Drawing and Painting (3) 2 hrs. Lec.
 4 hrs. Lab.

Prerequisites: Art 20A and 20B. 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 33 Gallery Display (1) 2 hrs. Lab.
Theories, techniques and practices of art gallery exhibition.

Art 40 Exploration of Acrylic Painting Techniques (2)
1 hr. Lec.
2 hrs. Lab.

An exploratory course which provides opportunities to work with the various polymer emulsion paints. Basic painting assignments to develop individual application of techniques. Initial exercises in color usage and structure of the painting. Suggestions and evaluation of student work will take place on an individual basis.

ASTRONOMY

Astron 21 Elementary Astronomy (3) 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.

Astron 22 Intermediate Astronomy (3) 3 hrs. Lec.
Prerequisite: Astronomy 21, Math X, Math Y, or the consent of the instructor. A second semester course in astronomy with emphasis on the stars, their properties, and evolution, galaxies, cosmology, relativity.

AUTOMOTIVE TECHNOLOGY

Some courses in the field of Automotive Technology 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.

Auto Tech 50 Shop Mathematics (3) 3 hrs. Lec.
(Same as Ag 50, Math 50, and Weld 50.)

Auto Tech 51 Engine Technology (5) 3 hrs. Lec.
6 hrs. Lab.

For the student with little or no internal combustion engine background. Design, construction and mechanical function of internal combustion engines including lubricating, cooling, fuel and electrical systems; and an understanding of the basic sciences relevant to such topics as internal combustion and energy conversion. \$5.00 material fee payable during first week of instruction. (Same as Ag 33A.)

Auto Tech 52 Transmission Systems (3) 2 hrs. Lec.
3 hrs. Lab.

Prerequisite: Auto Tech 51 or two years of high school auto mechanics. Design, construction and mechanical function of clutches, overdrives, manual transmissions, automatic transmissions and power-transmitting mechanisms. \$5.00 material fee payable during first week of instruction.

Auto Tech 53 Brakes and Suspension (3) 2 hrs. Lec.
3 hrs. Lab.

Prerequisite: Auto Tech 51 or two years of high school auto mechanics. Study of manual and power braking systems, wheel alignment, spring suspension, tires, tire trueing, wheel balancing, and wheel bearings. Diagnosis and services procedures on repair jobs. \$5.00 material fee payable during first week of instruction.

Auto Tech 54 Electrical and Fuel Systems (3) 2 hrs. Lec.
3 hrs. Lab.

Prerequisite: Auto Tech 51 or two years of high school auto mechanics. Advance study of automotive fuel and electrical systems. Basic diagnosis and service procedures on systems. \$5.00 material fee payable during first week of instruction.

Auto Tech 55 Gasoline and Diesel Engines (5) 3 hrs. Lec.
6 hrs. Lab.

Prerequisite: Auto Tech 51 or two years of high school auto mechanics. Review and advanced study of the internal combustion engine and service procedures in the use of automotive machine shop tools and machines for rebuilding the engine. Review the study and service procedure of the diesel fuel systems and governors. \$5.00 material fee payable during first week of instruction. (Same as Ag 33B.)

Auto Tech 56 Diagnostics (3) 2 hrs. Lec.
3 hrs. Lab.

Prerequisite: Auto Tech 54. Trouble shooting the various components of the automobile using the oscilloscope and dynamometer and other precision instruments. To include the study and servicing of various automotive smog devices. \$5.00 material fee payable during first week of instruction.

Auto Tech 57 Fluid Power (4) 3 hrs. Lec.
3 hrs. Lab.

A study of the principles and laws governing fluids. The design and function of hydraulic and pneumatic components, seals, fluid types, circuits and symbols. Latest developments in the control and transfer of energy and its relationship to automotive technology. (Same as Ag 35.)

**Auto Tech 58 Automotive Air-Conditioning (3) 2 hrs. Lec.
3 hrs. Lab.**

Prerequisites: Auto Tech 54 or two years high school auto mechanics. The course is designed to impart knowledge and information needed by the learner to enter and make progress in employment on a productive basis in the automotive air-conditioning service industry. \$5.00 material fee payable during first week of instruction.

**Auto Tech 59 Small Gasoline Engines (3) 2 hrs. Lec.
2 hrs. Lab.**

The history, design, construction and mechanical function of the small gasoline engine, including tune-up and major repair of the electrical and mechanical systems. (Same as Ag 37.)

**Auto Tech 70 Auto Body Repairing and Painting (5) 3 hrs. Lec.
6 hrs. Lab.**

Prerequisites: Weld 30 and Weld 32, or permission of the instructor. The study of all phases of body repair and painting. Covers the use of modern tools and equipment and procedures for handling typical body-paint jobs.

**Auto Tech 71 Advanced Auto Body Repairing and Painting (5) 3 hrs. Lec.
6 hrs. Lab.**

Prerequisites: Auto Tech 70 or permission of instructor. Covers all phases of body repairing and repainting. Use of modern tools and equipment, step-by-step procedures for handling typical jobs. \$10.00 material fee.

**Auto Tech 80 Emission Controls and Headlight Diagnosis and Adjustments (2) 1½ hr. Lec.
1½ hr. Lab.**

Prerequisites: Auto Tech 51, Auto Tech 54, Auto Tech 56 or experience as a mechanic in the automotive field. Review and advance study of tune-up, emission controls and headlight problems using correct procedures as set forth by the State of California. This course will also be using required specifications and equipment.

AVIATION

Aviation 1 Introduction to Aviation (3) 3 hrs. Lec.

Serves to meet the written test and ground school requirements to procure a Private Pilot's Certificate and as a refresher for Pilots. The material covers aviation, meteorology, aircraft frame, aircraft engines, and current FAA regulations.

BIOLOGY

**Bio 3 Principles of Biological Science (3) 2 hrs. Lec.
3 hrs. Lab.**

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 25 for a year course in the basic principles of natural science.

**Bio 21 General Microbiology (4) 2 hrs. Lec.
6 hrs. Lab.**

Provides students with fundamental concepts of the structure and physiology of non-disease and disease producing microorganisms with particular attention to bacteria. Basic techniques for culturing, staining, counting and identifying microorganisms. Designed to meet the requirement to enter one of the medical fields as well as general education.

BOTANY

**Bot 1A General Botany (4) 2 hrs. Lec.
6 hrs. Lab.**

Prerequisite: Any year course in a high school laboratory science. Designed to present a comprehensive view of the structure and function of stems, roots, leaves, flowers, and seeds of the flowering plants.

**Bot 1B General Botany (4) 2 hrs. Lec.
6 hrs. Lab.**

Prerequisite: Bot 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

**Bus 1A Principles of Accounting (4) 4 hrs. Lec.
1 hr. Lab.**

Prerequisite: Satisfactory score on the mathematics placement test or completion of Math 51 with a C or better grade. Introduction to the theory, practice, principles of accounting as they relate to service enterprises and mercantile enterprises. Includes the completion of the accounting cycle, sales, purchases, summarizing and reporting, receivables, payables and inventories, deferrals and accruals, depreciation, systems and controls and payroll systems.

Bus 1B Principles of Accounting (4) 4 hrs. Lec.
1 hr. Lab.

Prerequisite: Satisfactory completion of Bus 1A. Principles involved in partnerships, corporations, departmental accounting, process cost systems, job order costs, budgetary control, income taxes, cash flow, and financial statement analysis.

Bus 2 Introduction to Business (3) 3 hrs. Lec.

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 3 Business Management (3) 3 hrs. Lec.

A study of the organizing and merchandising problems of a business; financial problems; business management.

Bus 4 Principles of Marketing (3) 3 hrs. Lec.

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 5A Business Law (3) 3 hrs. Lec.

Principles of business law and their application to actual cases involving business transactions, law and the resolution of disputes, social forces and legal rights, contracts, agency and employment, and commercial paper.

Bus 5B Business Law (3) 3 hrs. Lec.

Principles of business law and their application to actual cases involving business transactions, personal property and bailments, sales, security devices and insurance, partnerships, corporations, real property, estates and bankruptcy, and government and business. Bus 5B may be taken before Bus 5A.

Bus 6 Management Concepts of Supervision (3) 3 hrs. Lec.

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, machines and materials, and case studies in supervisory problems.

Bus 7 Human Relations in Management (3) 3 hrs. Lec.

Improving supervision by the use of basic psychology in building better employer-employee relationships through human relations techniques; development of leadership qualities; main human relations problems and their causes and solutions.

Bus 8 Personnel Management (3) 3 hrs. Lec.

A course that introduces personnel management in the light of current theories and practices based upon research and company experience. Includes the personnel management system, staffing, employee and management development, group behavior, management-union relations, compensation, security and a look into the future.

Bus 9 Mathematics for Business Analysis (3) 3 hrs. Lec.
(Same as Math 17.)**Bus 10A Practical Bookkeeping (3)** 3 hrs. Lec.

A basic course in elementary basic accounting principles that uses the "practice set approach" to learn how to journalize and post transactions for service-type businesses that keep their books on the cash basis.

Bus 10B Practical Bookkeeping (3) 3 hrs. Lec.

Prerequisite: Bus 10A or permission of instructor. A course that uses the "practice set approach" in learning how to journalize and post transactions for merchandising businesses that keep their books on the accrual basis.

Bus 11 Personal Finance (3) 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. (Same as Soc Sci 69.)

Bus 12 Personal Income Tax (2) 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.

Bus 13 Applied Business Law (3) 3 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 Bus 5 or the equivalent.

Bus 41 Essentials of Business Correspondence (2) 2 hrs. Lec.

Prerequisite: Ability to type. Bus 40 recommended. Emphasizes the basic elements and skills necessary for effective business communications. The business vocabulary — pronunciation, spelling, meaning, and punctuation — together with standard letter-writing styles will be stressed. Not open to students who have completed Bus 42.

Bus 42 Business Correspondence (3) 3 hrs. Lec.

Prerequisite: Typing skill. 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.

Bus 43 Business Correspondence in Spanish (3) 3 hrs. Lec.
(Same as Span 23.)**Bus 49A Medical Terminology for Secretaries (3) 3 hrs. Lec.**

Provides training in the proper usage, meaning and origin of terms and names used in the medical sciences. 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.

Bus 49B Medical Terminology for Secretaries (3) 3 hrs. Lec.
Continuation of Bus 49A in greater depth.**Bus 50 Introduction to Data Processing (3) 3 hrs. Lec.**

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 51 Data Processing Operations (3) 3 hrs. Lec.
1 hr. Lab.**

An introduction to computer hardware and its operation. Students will experience actual hands-on operation with key punches, sorters, key-to-tape devices, and digital computers.

Bus 52 Computer Programming I (3) 3 hrs. Lec.

Prerequisite: Bus 50. A basic course in the programming of electronic digital computers to prepare programmers and students of closely related occupations for employment in business and industry. Course covers problems of data processing, characteristics of computers, and computer programming.

Bus 53 Computer Programming II (3) 3 hrs. Lec.

Prerequisite: Bus 52. A second semester course in electronic digital computer programming designed for student achievement of technological proficiency in programming input and output devices, machine-aided coding, program optimizing, basic file maintenance, computer problem planning, and report writing.

Bus 54 Data Processing Systems (3) 3 hrs. Lec.

Prerequisite: Bus 53. A study of data processing systems and procedures including analysis of various existing business data processing applications, integrated processing principles, total management information, and data systems concepts. Case study projects developing detailed data processing procedures are stressed.

Bus 55 Programing in Fortran (3) 3 hrs. Lec.

A practical course covering the fundamentals of Fortran Programming Language as adapted to a variety of different applications. (Same as Math 47.)

Bus 56 AB Computer Operations Lab (1-1) 2 hrs. Lab.

Prerequisite: Concurrent enrollment in Bus 52 or Bus 53. Course designed to provide an opportunity for additional experiences with software and hardware related to the curricula of Bus 52 and Bus 53.

**Bus 59 Key punching (1) 1 hr. Lec.
2 hrs. Lab.**

Prerequisites: Ability to type 40 wpm. Beginning course in acquainting the student with the basic principles of punched card key machines. The course is designed to develop key punching skills to entrance-level job requirements.

Bus 60 Principles of Bank Operations (3) 3 hrs. Lec.

Fundamentals of bank function in the descriptive fashion so that the beginning student may seek a broad and open perspective in banking.

Bus 61 Analysis of Financial Statements (3) 3 hrs. Lec.

Prerequisites: Bus 1A and 1B. This course focuses upon investment and analysis of credit to appraise the extent and nature of risk involved, and to determine the willingness and ability of prospective debtor to repay a proposed loan in accordance with terms set forth. Topic includes profit-loss analysis. Analyzing of inventory and the development of ratio analysis.

Bus 92B Legal Aspects of Real Estate (3) 3 hrs. Lec.

Prerequisites: Bus 92A or real estate license. This course expands the coverage of the basic course outline on this subject to include further consideration of those areas of the law where problems are most frequently encountered or which present so many facets that further time is needed to adequately consider the scope and effect of applicable laws.

Bus 93 Real Estate Finance (3) 3 hrs. Lec.

Prerequisite: Bus 90 or employment in the real estate field as a licensee. 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, multifamily, commercial, and special purpose properties.

Bus 94A Real Estate Appraisal (3) 3 hrs. Lec.

Prerequisite: Permission of the instructor or employment in the real estate field as a licensee. Methods and techniques for determination of loan, market, 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 94B Real Estate Appraisal (3) 3 hrs. Lec.

Prerequisite: Bus 94A or real estate license. This course extends the appraisal techniques of real estate appraisal and the use of the three standard approaches to value on the many types of properties and interests that an appraiser might be called upon for an opinion of value, such as apartments, commercial, industrial, rural property, leasehold interest, valuing the business, and the bounds of responsibility.

Bus 95 Real Estate Economics (3) 3 hrs. Lec.

Prerequisites: Bus 90, 91, 92A and 92B, recommended Bus 93, 94A and 94B. 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.

CARPENTRY**Carp 1 Apprenticeship and Mathematics (3) 2 hrs. Lec.
2 hrs. Lab.**

Prerequisite: Permission of the instructor. This course is designed so that the apprentice will know what part he will take in the construction industry. It will introduce him to the following subjects: the construction industry, collective bargaining, the role of government, wages and benefits, the purpose of the joint apprenticeship committee, and the development of carpentry mathematics skills which he will find necessary.

**Carp 2 Pre-Job and Plot Planning (3) 2 hrs. Lec.
2 hrs. Lab.**

Prerequisite: Successful completion of Carp 1 or permission of the instructor. This course is designed to introduce the apprentice to interpret and apply the building codes, the types and purposes of pre-job planning, who is responsible for it, why it is important and where it begins. The student will also learn to read blueprints and specifications, understand surveys, property and building lines, and setbacks. Excavating and trenching, foundations, walls and retaining wall forms will also be covered.

**Carp 3 Rough Framing (3) 2 hrs. Lec.
2 hrs. Lab.**

Prerequisite: Satisfactory completion of Carp 2 or permission of the instructor. This course is designed to teach the student various methods of framing, such as plot form or Western versus Ballon Framing, materials used, limitations in building, fire preventions, layout procedures and how to calculate for rough openings and a study of the building codes.

**Carp 4 Roof Framing (3) 2 hrs. Lec.
2 hrs. Lab.**

Prerequisite: Satisfactory completion of Carp 3 or permission of instructor. A course designed to cover the types and styles of roofs, roof framing tools, roof design, layout of common and shed roof rafters, layout of hip, volley and jack rafters, materials, and erecting roofs.

**Carp 5 Interior and Exterior Finish (3) 2 hrs. Lec.
2 hrs. Lab.**

Prerequisite: Completion of Carp 4 or permission of the instructor. A complete study of modern home exteriors and interiors; finishes and design will be covered. Emphasis will be on why certain types of materials are used. Nomenclature and the methods of cutting and installing finishes will be studied.

CHEMISTRY

Carp 6 Stair Building (3) 2 hrs. Lec.
2 hrs. Lab.

Prerequisite: Satisfactory completion of Carp 5. The student will study the many types of stairs and stair design. The code requirements for stairway construction will be covered.

Carp 7 Concrete and Forms (3) 2 hrs. Lec.
2 hrs. Lab.

Prerequisite: Completion of Carp 6 or permission of the instructor. The student will learn how to erect concrete forms and identify the materials to be used, which is a very important area of study. He will learn how to estimate the amount of concrete needed and how to place it.

Carp 8 Heavy Timber Construction and Welding (3) 2 hrs. Lec.
2 hrs. Lab.

Prerequisite: Completion of Carp 7 or permission of the instructor. This course is designed to teach the student how to place timbers and secure them, usually in dams and bridges. Welding in the areas important for the journeyman will be taught. Nomenclature of heavy timber construction will be covered.

CHEMISTRY

Chem 1A General Inorganic Chemistry (5) 3 hrs. Lec.
6 hrs. Lab.

Prerequisites: High school algebra and plane geometry or satisfactory score on mathematics placement exam, high school chemistry or Chem 2A. Fundamental principles and theory of atomic and molecular structure related to bonding and geometry. Study of kinetic molecular theory and the first law of thermodynamics. Periodic relationships of the elements, physical states of matter, solutions, oxidation-reduction, electrolysis and equilibrium. Laboratory exercises to strengthen and illustrate concepts from lectures.

Chem 1B General Inorganic Chemistry (5) 3 hrs. Lec.
6 hrs. Lab.

Prerequisite: Chem 1A with a minimum grade of C. Detailed study of three laws of thermodynamics and their relation to chemical reactions, rates of reactions and equilibrium. Survey of selected groups from the periodic table, oxidation-reduction with respect to concentration, nuclear processes and introductory organic reactions. Laboratory exercises related to electrochemical studies and qualitative analysis.

COSMETOLOGY

Chem 2A Introduction to Chemistry (4) 3 hrs. Lec.
3 hrs. Lab.

Prerequisite: One year of high school algebra or its equivalent. Intended for students who have not had high school chemistry or who need further preparation for Chem 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 Chem 1A or the equivalent. Course may be offered as a Credit class.

Chem 5 Quantitative Analysis (4) 2 hrs. Lec.
6 hrs. Lab.

Prerequisite: Chem 1B. Theory and practice of volumetric and electrochemical methods of analysis. (Usually offered during Summer Session.)

Chem 12 Organic Chemistry (5) 3 hrs. Lec.
6 hrs. Lab.

Prerequisite: Chem 1B. 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.

COSMETOLOGY

Cos 50A Introduction to Cosmetology (10) 360 Classroom hrs.

Prerequisite: At least a 10th grade education or the equivalent. State rules and regulations set forth by the California State Board of Cosmetology. Introduction to sterilization and sanitation for patron protection. Personal development as a cosmetologist. Introduction to all phases of cosmetology, including theory and practical (Lab). Introduction to the Anatomy in Beauty Culture. Instruction in proper use and care of all equipment necessary in cosmetology.

Cos 50B Introduction to Cosmetology (10) 360 Classroom hrs.

Prerequisite: At least a 10th grade education or the equivalent. Introduction to cosmetic chemistry. Correct application to shampoo, cold waving, hair coloring, manicuring, basic hair styling, curl construction, and roller placement. Theory of anatomy and dermatology. Diseases and conditions pertaining to cosmetology. Facials, make-up, basic hair cutting and scalp treatments.

DRAMATIC ART

Cos 52A Intermediate Cosmetology (10) 360 Classroom hrs..

Prerequisite: At least a 10th grade education or the equivalent. Cosmetology Act and rules set forth by the State Board of Cosmetology. Theory of anatomy and bacteriology pertaining to cosmetology. Theory and practical training in chemical hair relaxing and hair pressing. Use of electrical equipment in all phases of cosmetology.

Cos 52B Intermediate Cosmetology (10) 360 Classroom hrs.

Prerequisite: At least a 10th grade education or the equivalent. The continued theoretical and practical training in all phases of cosmetology introduced in previous courses. Laboratory and desk experience. Techniques of salesmanship, methods of advanced hair styling, and the construction, care and fitting of wigs. Laboratory safety practices in the use of chemicals.

Cos 54A Advanced Cosmetology (5) 160 Classroom hrs.

Prerequisite: At least a 10th grade education or the equivalent. Theory of salon management and employment practices. Study of electricity, use of the sonoscope, and training in use of slide and movie projectors. State Board preparation in all phases of cosmetology.

DRAMATIC ART

Drm Art 5A History of World Drama (3) 3 hrs. Lec.

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. Drm Art 5A covers theatre development through Ibsen. Drm Art 5A or 5B may be taken separately.

Drm Art 5B History of World Drama (3) 3 hrs. Lec.

Either Drm Art 5A or 5B may be taken separately. Drm Art 5B covers the period from Ibsen to the present.

Drm Art 20AB Fundamentals of Acting (3-3) 2 hrs. Lec. 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.

EARLY CHILDHOOD EDUCATION

Drm Art 21 Intermediate Acting (3) 2 hrs. Lec. 3 hrs. Lab.

Prerequisite: Drm Art 20B. A continuation of Drm Art 20B with further emphasis on fundamental acting skills, laboratory hours to be arranged.

Drm Art 22ABCD Rehearsal and Performance (1-1-1-1) 3 hrs. Lab.

Prerequisite: Permission of the instructor. Enrollment contingent upon participation in campus major dramatic production. Maximum credit 1 unit per semester for four semesters. Hours to be arranged.

Drm Art 23 Modern Drama (3) 3 hrs. Lec.

Reading and discussion of selected plays. A general education course for the student interested in literature. (Same as Eng 23.)

EARLY CHILDHOOD EDUCATION

ECE 20 Developmental Psychology of Children (3) 3 hrs. Lec. (Same as Psych 20.)

ECE 21 Early Childhood Development, Children, Family and Community (3) 3 hrs. Lec.

This course covers the years before school. It describes in detail the various stages of infancy, the various types of infants, and the various ways of dealing with them. This course follows a sequential development in children. While this course lends itself to nursery school personnel, it can also be used by parents and prospective parents. (Same as Psych 21.)

ECE 22 Early Childhood Development I (3) 3 hrs. Lec.

Interrelationships of physical, emotional, intellectual and social growth as it relates to pre-school children. Emphasis will be upon the developmental needs of the child. Observations at area schools are required. (Same as Psych 22.)

ECE 23 Early Childhood Development II (3) 3 hrs. Lec.

Prerequisite: ECE 22. Interrelationships of physical, emotional, intellectual and social growth as it relates to pre-school children. Emphasis will be upon the developmental needs of the child. Observations at area schools are required. Continuation of ECE 22. (Same as Psych 23.)

ECE 24 Creative Learning Experiences for Pre-School Children (3) 3 hrs. Lec.

Prerequisite: ECE 22. The course deals with the development, guidance and importance of creative activities for pre-school children. Types of creative materials in art, music, science, mathematics and learning games will be studied in depth. Creative in approach, these ideas and materials are coordinated with knowledge of child development in mind. (Same as Psych 24.)

ECONOMICS

Econ 1 Principles of Economics (3) 3 hrs. Lec.

An introduction to economic concepts and the principles of economic analysis. Emphasis on economic institutions, issues of public policy; and macro-analysis in national income, money and banking, and economic stabilization.

Econ 2 Principles of Economics (3) 3 hrs. Lec.

Prerequisite: Econ 1 or consent of the instructor. An introduction to economic concepts and principles of economic analysis. Emphasis on economic institutions, issues of public policy; and micro-analysis in the direction of production and the allocation of resources through the price-system.

EDUCATION

**Ed 1 Introduction to Education (2) 1 hr. Lec.
3 hrs. Lab.**

Recommended for students interested in a teaching credential. Opportunity to explore specific grade levels through weekly observations and participation in actual classroom situations. Gives broad overview of the varied aspects of teaching.

ELECTRICITY

**Electricity 1 Basic Electricity (3) 2 hrs. Lec.
3 hrs. Lab.**

Prerequisite: Math 51 or satisfactory score on placement test. An introductory course to the study of electricity and electronics. Basic theory of the physical phenomena involved in the use and selection of various electrical components, instruments and circuits is presented in the lecture. Practical experiments demonstrating this theory are performed in the lab.

ELECTRONICS

**Electronics 1A Basic Electronics (4) 3 hrs. Lec.
4 hrs. Lab.**

Prerequisites: Electricity 1 or satisfactory score on the electronics screening examination and completion of Math 51 or satisfactory score on the placement examination. Course covers the fundamental characteristics of transistors and diodes; linear amplifiers and single stage amplifiers.

**Electronics 1B Basic Electronics (2) 1 hr. Lec.
3 hrs. Lab.**

Prerequisites: Electronics 1A and Math 3A. Course covers multistage amplifiers, tuned amplifiers, oscillators continuing the electronic theory and circuits through transmitting systems.

**Electronics 2 Transistors and Semi-conductors (5) 3 hrs. Lec.
4 hrs. Lab.**

Prerequisites: Electronics 1A, 1B and Math 3B. Study of the semiconductor devices and circuits with application of fundamental network theorems to electronic circuits and propagation.

Electronics 3 FCC 2nd Class Radiotelephone License Preparation (3) 3 hrs. Lec.

Prerequisite: Electronics 2. Preparation for second class radio-telephone operator's license and operation and maintenance of studio equipment and transmitters.

Electronics 4 FCC 1st Class Radiotelephone License Preparation (3) 3 hrs. Lec.

Prerequisites: Electronics 3, a Second Class FCC Radiotelephone License, or satisfactory score on screening examination. Preparation of first class radio-telephone operator's license and advanced problems in studio and transmitter operation.

EMERGENCY MEDICAL TECHNICIAN

**EMT 1 Emergency Medical Technician I (6) 5 hrs. Lec.
26 hrs. Lab.
4 hrs. Prac. Lab.**

Prerequisites: Preferential enrollment for ambulance service personnel (public and private) in accordance with California recommendations for Emergency Medical Technicians. Other persons will be enrolled on a space available basis. A course for individuals who will come in contact with sick or injured persons in an emergency situation. Although aimed primarily for ambulance atten-

Engr 14 Architectural Drawing III (3)**1 hr. Lec.
5 hrs. Lab.**

Prerequisite: Engr 13 or equivalent. Working drawings for small commercial buildings. Planning merchandising facilities: banks, medical offices and clinics, food stores, restaurants and cafeterias, motels and parking facilities, shopping centers, churches. Curtain-wall systems. Uniform Building Code. Modern American architecture.

Engr 15 Statics (3)**3 hrs. Lec.**

Prerequisite: Phys 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, shear and moment diagrams.

Engr 16 Dynamics (3)**3 hrs. Lec.**

Prerequisites: Engr 15 and Phys 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.

Engr 18A Plane Surveying (3)**1 hr. Lec.
6 hrs. Lab.**

Prerequisite: Math C, Engr 21, or equivalent. Principles of surveying, use of surveying instruments in the field, calculations, mapping and plotting.

Engr 18B Advanced Surveying (3)**1 hr. Lec.
6 hrs. Lab.**

Prerequisite: Engr 18A. Topographic surveying with study of triangulation calculations using transit-stadia, profile and cross section work, horizontal curves.

Engr 21 Technical Drawing (3)**1½ hrs. Lec.
4½ hrs. Lab.**

A general course for students who have had no high school mechanical drawing. Covers proper use of drafting instruments, geometric constructions, lettering, orthographic projections, pictorial representations, isometric drawings, dimensions, and symbols.

Engr 23 Slide Rule and Computations (1)**1 hr. Lec.**

Prerequisite: Completion of Math X. Performing necessary manipulations with the slide rule, while using correct methods to solve engineering and technical problems.

Engr 30 Orientation to Engineering (2)**2 hrs. 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.

Engr 53 Construction Materials (2)**1 hr. Lec.
3 hrs. Lab.**

Basic theory of structures: materials characteristics, availability, economic factors, handling, transportation and storage. Properties and uses of wood, steel, concrete and masonry materials. Study of modern applications of building materials.

Engr 55 Strengths of Materials (3)**2 hrs. Lec.
2 hrs. Lab.**

Prerequisites: Engr 21, Engr 61B. Fundamental stress and strain relationships, simple stresses, physical properties of engineering materials, stresses in thin walled cylinders, riveted and welded joint, design, investigation of stresses and deflections in beams and columns, torsional, impact and repeated loading stress.

Engr 61A Technical Mathematics (3)**3 hrs. Lec.**

Prerequisite: Satisfactory score on mathematics placement test. Slide rule; variation; algebra fundamentals; fractions; exponents and radicals; linear and quadratic functions; solution of triangles.

Engr 61B Technical Mathematics (3)**3 hrs. Lec.**

Prerequisite: Engr 61A. Applied vocational mathematics; manipulation of formulas; introduction to geometry; the use of graphs, proportions, percentage.

Engr 65 Statics (3)**3 hrs. Lec.**

Prerequisite: Engr 61B or equivalent. Study of vectors; forces and equilibrium.

Engr 72A Surveying for Engineering Technology (3)**1 hr. Lec.
5 hrs. Lab.**

Prerequisite: Engr 21 and 61A or equivalent, or permission of the instructor. Care and use of surveying instruments and accessories, differential leveling and measuring horizontal angles.

Engr 72B Surveying for Engineering Technology (3)**1 hr. Lec.
5 hrs. Lab.**

Prerequisite: Engr 72A. Calculations, field book entries, running traverses, mapping and plotting.

Engr 81A Basic Electronics (4) **3 hrs. Lec.
4 hrs. Lab.**

Prerequisite: Engr 11. Course covers the fundamental characteristics of transistors and diodes; linear amplifiers and single stage amplifiers.

Engr 81B Basic Electronics (2) **1 hr. Lec.
3 hrs. Lab.**

Prerequisites: Engr 81A and Math 3A. Course covers multistage amplifiers, tuned amplifiers, oscillators continuing the electronic theory and circuits through transmitting systems.

Engr 82 Transistors and Semi-conductors (5) **3 hrs. Lec.
4 hrs. Lab.**

Prerequisites: Engr 81B and Math 3B. Study of the semiconductor devices and circuits with application of fundamental network theorems to electronic circuits and propagation.

**Engr 83 FCC 2nd Class Radiotelephone
License Preparation (3)** **3 hrs. Lec.**

Prerequisite: Engr 82. Preparation for second class radiotelephone operator's license and operation and maintenance of studio equipment and transmitters.

**Engr 84 FCC 1st Class Radiotelephone
License Preparation (3)** **3 hrs. Lec.**

Prerequisite: Engr 83. Preparation of first class radiotelephone operator's license and advanced problems in studio and transmitter operation.

ENGLISH

Students with a reading level of 11th or 12th grade are strongly advised to enroll in English 12, Power Reading, during their FIRST SEMESTER. Students with a reading level BELOW 11th grade are urged to enroll in English 50AB, Reading Development, during their FIRST SEMESTER.

Eng AB English Fundamentals (3-3) **3 hrs. Lec.**
Prerequisite: Assignment by placement test. Intensive study of vocabulary, grammar and usage with frequent writing of short themes. This course is designed for those students who wish a thorough review in preparation for Eng 1A. Concurrent enrollment in Eng 50AB is strongly recommended. Eng AB may be used to partially fulfill the graduation requirement in communications.**Eng 1A Reading and Composition (3)** **3 hrs. Lec.**

Prerequisite: Satisfactory score on the placement test or placement by retesting. The standard course in freshman English. The course seeks to improve the student's ability to understand serious and complex prose and to improve the student's ability to write exposition that is thoughtful and clear.

Eng 1B Introduction to Literature (3) **3 hrs. Lec.**

Introduction to the study of poetry, fiction and drama, with further practice in writing. It is recommended that the student take Eng 1A before Eng 1B.

Eng 2 Introduction to English Linguistics (3) **3 hrs. Lec.**

The course will introduce students to selected aspects of English linguistics, such as phonology-spelling, dialects-language classification, vocabulary-dictionary, and grammar-usage. Odd and interesting facts about the English language will be included, as well as comparisons with the Spanish language. Intended for teachers, prospective teachers, and anyone interested in extending his knowledge of the English language.

Eng 3 Introduction to Film History and Criticism (2) **1 hr. Lec.
2 hrs. Lab.**

Origin and development of the film. An inquiry into the quality of artistic vision which is the sole property of the film as an art form. A selection of films from different historical periods is critically examined. (Same as Hum 3.)

Eng 4A Film Criticism: Westerns, Comedies, Musicals (2) **1 hr. Lec.
2 hrs. Lab.**

A continuation of Eng 3 with emphasis on certain major genres and directors. This course will focus on the western, the comedy and the musical, and on such directors as Ford, Kurosawa, Peckinpah, Chaplin, Keaton and Tati. May be taken before Eng 3. (Same as Hum 4A.)

Eng 4B Film Criticism: Horror, Fantasy, Science Fiction (2) **1 hr. Lec.
2 hrs. Lab.**

This course will focus on films of horror, suspense, fantasy and science fiction, and on such directors as Dreyer, Hitchcock, Lang, Godard, Cocteau and Fellini. May be taken before Eng 3 and Eng 4A. (Same as Hum 4B.)

Eng 4C Film Criticism: Gangsters, Politics, Social Protest (2)
 1 hr. Lec.
 2 hrs. Lab.

This course will focus on films of social protest, politics and war, on the gangster movie, and on such directors as Eisenstein, Renoir, Godard, Bunuel, De Sica, Rocha and Truffaut. May be taken before Eng 3, Eng 4A and 4B. (Same as Hum 4C.)

Eng 4D Film Criticism: Documentaries, Experimental Films (2)
 1 hr. Lec.
 2 hrs. Lab.

This course will focus on the feature film of social observation, the documentary and the experimental film, and on such directors as Flaherty, Ozu, Olmi, Rohmer, Bergman, Antonioni, Losey, S. Ray, Cassevetes and Brakhage. May be taken before Eng 3, Eng 4A, Eng 4B and Eng 4C. (Same as Hum 4D.)

Eng 7 Technical and Report Writing (3) 3 hrs. Lec.

Prerequisite: Eng 51, Eng A, Eng 1A, or permission of the instructor. Practical experience in writing various kinds of technical reports, descriptions, and evaluations; writing assignments fitted to the interests of individual students. Satisfies part of the graduation requirements in communications.

Eng 8 Advanced Composition (3) 3 hrs. Lec.

Prerequisite: Eng 1A. Advanced expository prose, argumentation, description and the study of prose style. Offers an opportunity for creative writing.

Eng 9AB Creative Writing (3-3) 3 hrs. Lec.

Prerequisite: Eng 1B or permission of the instructor. Study and application of the principles of literary construction. Concentrated exercises in the writing of imaginative literature, including short story, poetry, drama, and essay.

Eng 10 Introduction to Motion Picture Production (3) 3 hrs. Lec.

Plus Production practice hours to be arranged
 Prerequisites: A course in still photography, or permission of instructor. Study of the basic elements of the film-making process in 8 mm., including scripting, shooting and editing. (Same as Vis Com 10.)

**Eng 12 Power Reading (2) 2 hrs. Lec.
 1 hr. Lab.**

Designed to help adequate readers become superior readers. Recommended for college transfer students who wish to develop the efficient reading skills necessary for all types of college-level reading.

Eng 15 American Literature (3) 3 hrs. Lec.

Prerequisite: Eng 1B, or permission of the instructor. A study of the works of major American writers.

Eng 16A World Literature (3) 3 hrs. Lec.

Prerequisite: Eng 1B or permission of instructor. Study of selected literature of the Hebrews, Greeks, Romans, the Middle Ages, and the Renaissance. Emphasis on literature other than American and English.

Eng 16B World Literature (3) 3 hrs. Lec.

Prerequisite: Eng 1B or permission of instructor. Study of selected literature of Neo-classicism, Romanticism, Naturalism, Symbolism, and modern schools. Emphasis on literature other than American and English. May be taken before Eng 16A.

Eng 17A Survey of English Literature (3) 3 hrs. Lec.

Prerequisite: Eng 1B or permission of the instructor. Close study of works of major English writers up to the end of the 18th century, with consideration of the more important aspects of English literary history.

Eng 17B Survey of English Literature (3) 3 hrs. Lec.

Prerequisite: Same as for Eng 17A. Close study of works of major English writers of the 19th and 20th centuries, with consideration of the more important aspects of English literary history. May be taken before Eng 17A.

Eng 20 Modern Poetry (3) 3 hrs. Lec.

A literature course designed to give students an adequate background in 20th century poetry. Emphasis is on enjoyment of reading, active discussion of ideas, individual and group projects. Students will become acquainted with writers such as Robert Lowell, Sylvia Plath, Theodore Roethke, Robert Creeley, Robert Duncan, Paul Blackburn, LeRoi Jones, Laura Nyro and Phil Ochs.

- Eng 21A Modern Prose Fiction (3)** 3 hrs. Lec.
A literature course designed to enrich the student's background in a variety of fiction since nineteen hundred. Emphasis is on enjoyment of reading, active discussion of ideas, individual and group projects. Writing skills will be reinforced. The subject matter of the course will be chosen, partly according to student interest, from a variety of topics, such as blacks in literature, the small town in literature, women in literature, the rebel, the teacher, the wilderness, violence, initiation, childhood, and from certain types of literature, such as science fiction and utopian writing.
- Eng 21B Modern Prose Fiction (3)** 3 hrs. Lec.
A continuation of Eng 21A. This course will concentrate on national and/or regional literature, such as Afro-American, Southern, Midwestern, Oriental, Irish, Russian, Jewish, etc. Eng 21B may be taken before Eng 21A.
- Eng 23 Modern Drama (3)** 3 hrs. Lec.
Reading and discussion of selected plays. A general education course for the student interested in literature. (Same as Drm Art 23.)
- Eng 24 The Modern American Novel (1)** 1 hr. Lec.
This course is designed for those who find their schedules such that additional units may be or must be added to the last seven weeks of the spring semester. A representative list of novels studied is as follows: "Sister Carrie," Drieser; "Farewell to Arms," Hemingway; "My Antonia," Cather; "Great Gatsby," Fitzgerald; "Main Street," Lewis; "All the Kings Men," R. P. Warren; "The Hamlet," Faulkner; "Grapes of Wrath," Steinbeck.
- Eng 27 Film and Literature (3)** 3 hrs. Lec.
A course designed to deepen the student's understanding of film and literature, with emphasis on the narrative film, the drama, the short story and the novel. Study of the essential qualities of each form and the differences that occur when a piece of literature is filmed.
- Eng 30A The Mexican-American in Literature (3)** 3 hrs. Lec.
Prerequisite: Eligibility for Eng 1A. Study of the contributions by Mexican-Americans to all genres of literature. Course to be developed through the study of the Mexican-American historical and socio-cultural backgrounds, and by comparing and contrasting the works of Mexican-Americans with their familiar Anglo-American counterparts, as well as with the works of familiar Mexican authors. This course will concentrate on the cultural and literary heritage of the Mexican-American. Conducted in English. (Same as Span 28A.)

- Eng 30B The Mexican-American in Literature (3)** 3 hrs. Lec.
Prerequisite: Eligibility for Eng 1A. A continuation of Eng 30A with emphasis on contemporary Mexican-American writers. Eng 30B may be taken before Eng 30A. (Same as Span 28B.)
- Eng 31 Literature of the Southwest (3)** 3 hrs. Lec.
Prerequisites: Eng AB or permission of instructor. A literature course designed to enrich students' background in a variety of fiction and non-fiction from the southwestern United States. This course will cover major attitudes, concerns, and changes in the Southwest. The approach will be through the writings of the major authors of this region. Conducted in English. (Same as Span 30.)
- Eng 33 The Literary Artist as Social Critic (3)** 3 hrs. Lec.
A critical analysis of literary works relevant to the study of American social issues, such as women's liberation, racial conflict and war.
- Eng 36 The Bible as Literature (3)** 3 hrs. Lec.
A study of the prose and poetry of the Bible.
- Eng 37 Survey of Mythology and Folklore (3)** 3 hrs. Lec.
A survey of mythology stressing the relationship between man's constant need for myth and his gods. Emphasis is on archetypal elements in classical myth: themes, heroes, journeys, patterns. The mythological origins of folklore are investigated.
- Eng 38A Literature and Life: A Study in Values (3)** 3 hrs. Lec.
A course designed to broaden the student's experience by introducing him to the social insights that works of literature can offer and by helping him apply these insights to his own life. (Same as Psych 38A.)
- Eng 38B Literature and Life: A Study in Values (3)** 3 hrs. Lec.
A course designed to broaden the student's experience by introducing him to the psychological insights provided by a study of literature and by helping him apply these insights to his own life. May be taken before Eng 38A. (Same as Psych 38B.)
- Eng 40 Beginning English as a Second Language (4)** 4 hrs. Lec.
1 hr. Lab.
Prerequisite: Designated score on placement test. A beginning course in English designed for the student who has not had any formal English classes in the United States. The course covers basic dialogs to be learned, vocabulary, and some grammar. The skills most emphasized are listening and speaking, with writing having some emphasis in the latter part of the semester.

Eng 40A Beginning English as a Second Language (2)

2 hrs. Lec.
½ hr. Lab.

Prerequisites: Designated score on placement test or permission of instructor. This course covers the first half semester's work of Eng 40 (4 units) and is offered for the convenience of night students who cannot attend more than one night a week. This course will emphasize vocabulary building, conversational skills and listening comprehension. This course, together with Eng 40B, is equivalent to Eng 40. Not open to students who have completed Eng 40.

Eng 40B Beginning English as a Second Language (2)

2 hrs. Lec.
½ hr. Lab.

Prerequisites: Eng 40A or permission of instructor. A continuation of Eng 40A. The course will emphasize vocabulary building and oral and reading comprehension. Some writing will also be emphasized. Satisfactory completion of Eng 40A and 40B is the equivalent of credit for Eng 40. Not open to students who have completed Eng 40.

Eng 41 Intermediate English as a Second Language (4)

4 hrs. Lec.
1 hr. Lab.

Prerequisite: Designated score on placement test or satisfactory completion of Eng 40. An intermediate course in English as a second language introducing composition of basic sentences and paragraphs. Grammar and verbs are extensively covered. Reading is also given some emphasis.

Eng 41A Intermediate English as a Second Language (2)

2 hrs. Lec.
½ hr. Lab.

Prerequisites: Designated score on placement test or satisfactory completion of Eng 40B. The course covers the first half semester's work of Eng 41 (4 units) and is offered for the convenience of night students who cannot attend class more than one night per week. This course, together with Eng 41B, is equivalent to Eng 41. Not open to students who have completed Eng 41.

Eng 41B Intermediate English as a Second Language (2)

2 hrs. Lec.
½ hr. Lab.

Prerequisite: Satisfactory completion of Eng 41A. This course covers the second half semester's work of Eng 41 (4 units) and is offered for the convenience of night students who cannot attend class more than one night per week. Satisfactory completion of Eng 41A and 41B is equivalent to Eng 41 and qualifies the student to enroll in Eng 42 or Eng 42A. Not open to students who have completed Eng 41.

Eng 42 Advanced English as a Second Language (4)

4 hrs. Lec.
1 hr. Lab.

Prerequisite: Eng 41 or Eng 41A and 41B or equivalent. Advanced composition, grammar, and reading are emphasized. Satisfactory completion of this course qualifies the student for enrollment in Eng AB or Eng 51. This course satisfies part of the requirement in communications.

Eng 42A Advanced English as a Second Language (2)

2 hrs. Lec.
½ hr. Lab.

Prerequisites: Designated score on placement test or satisfactory completion of Eng 41 or Eng 41B. The course covers the first half semester's work of Eng 42 (4 units) and is offered for the convenience of night students who cannot attend more than one night per week. This course, together with Eng 42B, is equivalent to Eng 42. Not open to students who have completed Eng 42.

Eng 42B Advanced English as a Second Language (2)

2 hrs. Lec.
½ hr. Lab.

Prerequisites: Satisfactory completion of Eng 42A. This course covers the second half semester's work of Eng 42 (4 units) and is offered for the convenience of night students who cannot attend class more than one night per week. Satisfactory completion of Eng 42A and Eng 42B is the equivalent of Eng 42 and qualifies the student to enroll in Eng AB or Eng 51. Not open to students who have completed Eng 42.

Eng 43A Intermediate Oral English for Bilinguals (3) 3 hrs. Lec.

Prerequisites: To be taken concurrently with Eng 41 or by permission of instructor. A conversational course designed for the intermediate student. Students will utilize oral English by creating their own dialogs and presenting them, and by speaking on posters or other visual materials. Differences between the students' native language and English and how these differences affect the students' oral English will be discussed.

Eng 43B Advanced Oral English for Bilinguals (3) 3 hrs. Lec.

Prerequisites: To be taken concurrently with Eng 42, after completion of Eng 43A, or by permission of instructor. An intensive course in oral American English for students who have learned English as a second language. Students will present skits in English and participate in group discussions on current events. Individual reports, short oral quizzes on the reports, utilization of the library, newspapers, and magazines will be included in the course. Satisfies part of the graduation requirement in communications.

**Eng 44 Phonetics for Bilinguals (2) 2 hrs. Lec.
1 hr. Lab. plus 1 hr. Lab. to be arranged**

Prerequisites: To be taken concurrently with Eng 40 or Eng 41 or permission of instructor. A practical course covering the fundamentals of the English sound system. Sound patterns as adapted to a variety of different applications. Students must plan for an additional hour of individual laboratory work.

**Eng 45AB Vocabulary Building and Spelling for English as a Second Language (3-3) 3 hrs. Lec.
1 hr. Lab.**

Prerequisites: This course can be taken concurrently with Eng 40 and Eng 41 or by permission of the instructor. It can be taken for two semesters. Three levels of vocabulary will be offered: beginning, intermediate and advanced. Some spelling techniques will be taught and vocabulary will be used both in oral and written sentences.

**Eng 50AB Reading Development (2-2) 2 hrs. Lec.
1 hr. Lab.**

Designed primarily for the individual who wishes to increase his efficiency as a student. Concentration, rate building, comprehension of written materials, vocabulary development, flexibility in the use of reading methods, application of reading skills to subject areas are covered. Development of individual reading interests is encouraged.

Eng 51 The Communication Process (3) 3 hrs. Lec.

A course designed to familiarize the student with everyday communication processes. Includes analysis of typical media (TV, newspapers, magazines) and is aimed at developing critical ability. Practice in oral and written communication. This course (or Eng 1A) must be taken in partial fulfillment of the IVC graduation requirement in communications.

Eng 52AB Vocabulary Building (3-3) 3 hrs. Lec.

A concentrated study of affixes, roots, word origins, language change, varieties of meaning, the dictionary, and vocabulary in the various subject areas.

Eng 53 Selected Literature (3) 3 hrs. Lec.

Reading of short stories, novels, plays and poetry. Some writing required. Emphasis is on developing a personal response to literature rather than an extensive literary analysis. Satisfies part of the general education requirement in communications.

Eng 55AB Spelling (1-1) 1 hr. Lec.

Diagnosis of specific spelling problems and prescription of remedies; investigation of the basic spelling rules.

Eng 56 Grammar and Usage (3) 3 hrs. Lec.

A review of the parts of speech and the structure of the sentence. Work is also done to improve English usage. (Same as Bus 40.)

Eng 57 Library Resources (1) 1 hr. Lec.

Use of library facilities, especially the card catalog, reference books, and periodical indexes, as a basis for research in any field. Techniques of preparing and presenting a research paper are included. Work on an actual term paper is not required although students may use this course to assist them in writing a research (term) paper for other courses if they wish. Helpful to any individual from the community who wishes to use the library to keep up to date on the latest developments and to compile a bibliography in his area(s) of interest.

ENVIRONMENTAL SCIENCE

Env Sci 5 Man and His Environment (3) 3 hrs. Lec.

The study of natural resources vital to man's existence. Emphasis on composition of the physical environment and problems associated with contamination of air, water, and soil. (Same as Ag 5.)

FIRE SCIENCE

Fire Science 81 Introduction to Fire Science (3) 3 hrs. Lec.

Fire suppression organization; fire suppression equipment; characteristics and behavior of fire; fire hazard properties of ordinary materials, building design and construction; extinguishing agents; basic fire fighting tactics; public relations.

Fire Science 82 Fire Fighting Tactics and Strategy (3) 3 hrs. Lec.

Review of fire chemistry, equipment, and manpower; basic fire fighting tactics and strategy; methods of attack; pre-planning fire problems.

Fire Science 83 Fire Hydraulics (3) 3 hrs. Lec.

Prerequisite: Completion of Math 51 or satisfactory score on Mathematics Placement Test. Review of basic mathematics; hydraulic laws and formulas as applied to the fire service; application of formulas and mental calculation to hydraulic problems; water supply problem; underwriters' requirements for pumps.

Fire Science 84 Fire Apparatus and Equipment (3) 3 hrs. Lec.

Driving laws, driving technique, construction and operation of pumping engines, ladder trucks, aerial platforms, specialized equipment, apparatus maintenance.

Fire Science 85 Fire Company Organization and Procedure (3) 3 hrs. Lec.

Review of fire department organization; fire company organization; the company officer; personnel administration; communications; fire equipment; maintenance; training; fire prevention; fire fighting company; fire fighting capability; records and reports.

Fire Science 86 Rescue Practices (3) 3 hrs. Lec.

Rescue practices, the human body, emergency care of victims, childbirth, artificial respiration, toxic gases, chemicals and diseases, radioactive hazards, rescue problems, and techniques.

Fire Science 87 Fundamentals of Fire Prevention (3) 3 hrs. Lec.

Prerequisites: Fire Science 81 or employment with a fire protection agency. Fire prevention organization; inspection, surveying and mapping procedures; recognizing the hazard; engineering a solution; enforcing the solution; public relations.

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. Placement will be made by examination and/or consent of the instructor. Contact the Foreign Language Department for further information.

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. Students are strongly advised to see the instructor before enrolling.

**Fr 1 Elementary French (4) 4 hrs. Lec.
1 hr. Lab. plus 1 hr. Lab. to be arranged**

An intensive, methodical presentation to develop facility in the skills of listening, comprehension, speaking, reading and writing with control of the basic structures in both oral and written form. The student will be introduced to aspects of French culture and civilization.

**Fr 1A Elementary French (2) 2 hrs. Lec.
½ hr. Lab. plus ½ hr. Lab. to be arranged**

Prerequisites: None. This course is one-half the content of the regular Fr. 1 course. Completion of Fr 1A and 1B will be the equivalent of Fr. 1, and the total of 4 units. Fr 1A will be offered in the fall, and Fr 1B in the spring.

**Fr 1B Elementary French (2) 2 hrs. Lec.
½ hr. Lab. plus ½ hr. Lab. to be arranged**

Prerequisite: Fr 1A. A continuation of Fr 1A.

**Fr 2 Elementary French (4) 4 hrs. Lec.
1 hr. Lab. plus 1 hr. Lab. to be arranged**

Prerequisite: Fr 1 or placement by examination. Continuation of Fr. 1.

**Fr 2A Elementary French (2) 2 hrs. Lec.
½ hr. Lab. plus ½ hr. Lab. to be arranged**

Prerequisite: Fr 1B or placement by examination and consent of instructor. This course is one-half the content of the regular Fr 2 course. Completion of Fr 2A and 2B will be the equivalent of Fr 2, and the total of 4 units. Fr 2A will be offered in the fall, and Fr 2B in the spring.

**Fr 2B Elementary French (2) 2 hrs. Lec.
½ hr. Lab. plus ½ hr. Lab. to be arranged**

Prerequisite: Fr 2A. A continuation of Fr 2A.

FRENCH

**Fr 3 Intermediate French (4) 4 hrs. Lec.
1 hr. Lab. plus 1 hr. Lab. to be arranged**

Prerequisite: Fr 2 or placement by examination. Continuation of Fr 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) 4 hrs. Lec.
1 hr. Lab. plus 1 hr. Lab. to be arranged**

Prerequisite: Fr 3 or placement by examination. Continuation of Fr 3.

**Fr 5 Intermediate French Reading and Grammar Review (2) 1 hr. Lec.
3 hrs. Lab. to be arranged**

Prerequisites: Fr 2 or two years of high school French or consent of instructor. Intermediate French Reading and Grammar Review Lab: Independent and individualized study. SRA reading comprehension exercises, speed reading exercises, vocabulary development and research. Supplementary listening comprehension and pronunciation exercises on tape. Independent grammar review with self-checking quizzes.

**Fr 10 Intermediate Conversational French (2) 2 hrs. Lec.
1 hr. Lab. to be arranged**

Prerequisites: Fr 2 or two years of French in high school or by examination and consent of instructor. Practical conversational skills are developed through listening exercises, directed conversations on assigned readings from newspaper and magazine articles, current topics, simple dialogues and plays. Emphasis on contemporary life in countries where French is spoken.

**Fr 10A Conversational French (1) 1 hr. Lec.
1 hr. Lab. to be arranged**

Prerequisites: Eligibility for Fr 2 or one year of French in high school and/or consent of instructor. Two sections of French 10 (A and B) will be equivalent to Fr 10. Advanced elementary and beginning intermediate conversational French. May be taken concurrently with Fr 2, 3, 4. Students are grouped within the class according to level of proficiency. Conversational skills developed through pattern drills, situational interviews, model dialogues, short topics and vocabulary development.

FRENCH

**Fr 10B Conversational French (1) 1 hr. Lec.
1 hr. Lab. to be arranged**

Prerequisite: Fr 10A. A continuation of Fr 10A.

**Fr 11 Advanced Conversational French (2) 2 hrs. Lec.
1 hr. Lab.**

Prerequisites: Fr 3 or 10, or four years of high school French, or by examination and consent of instructor. Continuation of Fr 10.

Fr 20 French Drama — Reading and Performance (1) 3 hrs. Lab.

Prerequisites: Fr 2 or two years of high school French or consent of instructor. Oral reading and performance of French plays and skits. Includes vocabulary development and fluency in the spoken language. One selection of a one-act play or a skit will be made by the instructor and the students for in-depth study and performance for students of French in the high schools.

Fr 40 French Civilization (3) 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 from pre-history to the 18th century. Conducted in English.

Fr 41 French Civilization (3) 3 hrs. Lec.

Continuation of Fr 40 from the 18th century to the present. Includes French speaking countries other than France. Conducted in English.

Fr 51A French Culture, Cuisine and Conversation (3) 3 hrs. Lec.

An introduction to French culture, cuisine and conversation around the world. Discussion, demonstration and preparation of native French dishes. Includes introduction and practice in basic phrases and vocabulary for travel as well as travel tips presented by lecture, guest speakers, and multi-media illustrations. Field trip to French restaurant.

Fr 51B French Culture, Cuisine and Conversation (3) 3 hrs. Lec.

Prerequisite: Fr 51A. Continuation of Fr 51A.

GEOGRAPHY

Geog 1 Physical Geography (3) 3 hrs. Lec.

An introduction to the physical characteristics of the earth. Topics include: climate, land forms, natural vegetation, and the water and mineral resources of the earth.

Geog 2 Cultural Geography (3) 3 hrs. Lec.

An introduction to the regions and cultures of the world. Emphasis on the contemporary demographic, linguistic, religious, and economic characteristics of major regions in the world. May be taken before Geog 1.

GEOLOGY

**Geol 1A Physical Geology (4) 3 hrs. Lec.
3 hrs. Lab.**

Prerequisite: One year of high school science or permission of instructor. 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 10 Life of the Past: An Introduction to Paleontology (3) 3 hrs. Lec.

Prerequisites: One year of high school science or permission of instructor. Biological principles of evolutionary development and types of fossils recorded in the rocks from ancient times to present. The age of invertebrates; the age of dinosaurs and other reptiles; the age of birds; the age of mammals. (Same as Zool 10.)

Geol 11 General Geology: An Introduction to Geology (3) 3 hrs. Lec.

Prerequisite: One semester of high school science recommended. The basic elements of physical and historical geology. Study of rocks and fossils; their meaning and origins. Origin of the earth, volcanics, tectonics, earthquakes and geologic time. The building of mountains; erosion by wind and water. Glaciers and their activities, climatic changes through time, the changing landscape. Emphasis on the geology of the Imperial Valley. A general education course closed to those who have credit in Geol 1A or Geol 1B.

Geol 12 Introduction to Historical Geology (3) 3 hrs. Lec.

Prerequisite: One semester of high school science recommended. Origin and evolution of the earth, solar system and universe. Measurement of geologic time: the geologic periods. Typical fossils and organic evolution. Survey of paleogeography and paleoecology. Biological and geological principles in a historical perspective. Emphasis on past events in Imperial Valley. A general education course closed to those who have credit in Geol 1B, Historical Geology.

Geol 12L Introduction to Geology Lab (1) 3 hrs. Lab.

Prerequisites: Geol 12 or concurrent registration in Geol 12. Origin and evolution of the earth, solar system and universe. Measurement of geologic time: the geologic periods. Typical fossils and organic evolution. Survey of paleogeography and paleoecology. Biological and geological principles in a historical perspective. Emphasis on past events in Imperial Valley. A general education course closed to those who have credit in Geol 1B.

Geol 13 Geology of California (3) 3 hrs. Lec.

Prerequisites: One semester of high school science or permission of instructor. A study of geologic history of California, the geology of its physiographic provinces and the origin and development of its scenic landscapes. Land forms, plate tectonics, earthquakes: their cause and prediction.

GERMAN

**Ger 1 Elementary German (4) 3 hrs. Lec.
2 hrs. Lab.**

Pronunciation, practice in speaking, introduction to reading and writing, basic grammar of the German language. The student must plan for an additional half hour of individual language laboratory.

**Ger 1A Elementary German (2) 2 hrs. Lec.
½ hr. Lab. plus ½ hr. Lab. to be arranged**

Beginning course of graded lessons acquainting the student with the basic structure and pronunciation through practice in speaking, reading and writing. This course is the first half of the first semester of Ger 1. Completion of Ger 1A and Ger 1B is the equivalent of Ger 1, a total of 4 units.

GRAPHIC ARTS

Ger 1B Elementary German (2) 2 hrs. Lec.
 ½ hr. Lab. plus ½ hr. Lab. to be arranged
 Continuation of Ger 1A.

Ger 2 Elementary German (4) 3 hrs. Lec.
 2 hrs. Lab. plus ½ hr. Lab. to be arranged
 Prerequisites: Ger 1 or by placement examination. An intensive, methodical presentation to develop facility in the skills of listening, comprehension, speaking, reading and writing with control of the basic structures in both oral and written form. The student will be introduced to aspects of German culture and civilization.

Ger 10 Conversational German (2) 2 hrs. Lec.
 1 hr. Lab.
 Prerequisites: Ger 1 and 2 or by examination and consent of instructor. Conversational skills developed through oral drills, laboratory assignments and guided conversations on assigned topics. Practice in the spoken language; practical and diplomatic vocabulary, simple dialogues and plays. Meets German conversation requirements for enrollment in upper division courses.

Ger 11 Conversational German (2) 2 hrs. Lec.
 1 hr. Lab.
 Prerequisites: Ger 2 or Ger 10. This course is a continuation of Ger 10.

GRAPHIC ARTS

G.A. 10 Graphic Communication I (3) 2 hrs. Lec.
 3 hrs. Lab.
 Prerequisites: Art 22A or equivalent is recommended. A course designed to be a guide for the preparation of art and the mechanics for reproduction in the graphic arts field. The emphasis is on advertising and studio skills. This course will cover newspaper ads, brochure layout, pasteup, camera-ready art work, color separation and design coordination.

G.A. 20 Offset Printing I (3) 3 hrs. Lec.
 Study of the principles of offset presswork at the elementary level. Instruction in operation of offset presses under 11 x 17 inches. Students print simple offset work, color work and close-register. This course will also offer instruction in the theory of offset press trouble shooting, including standard trouble shooting procedures.

HEALTH AIDE

HEALTH AIDE

The Health Aide Program (one semester in length) prepares the student to receive a Certificate of Completion from the college in one of four different specialty areas and to be employed as an Aide in an agency according to the specialty area.

1. Hospital Nurse Aide - Orderly:

For employment in a general acute care hospital, a convalescent hospital or a rest home.

2. Community Health Aide:

For employment in a clinic, agency or health department which has a home-health program or community outreach program.

3. Developmental Disability - Mental Retardation Aide:

For employment in a community living center or group home as a counselor or houseparent, as a teacher's aide for Special Education classes, aide at a sheltered workshop or work activity center.

4. Mental Health Aide:

For employment in a psychiatric hospital, day treatment center, crisis team, drug or alcohol detoxification center.

Students are admitted each semester. An admissions committee will review all applications. Early application (through the college counseling department) is recommended, since the number of students who can be admitted is limited. Admission requirements include a health examination, writing of the college placement tests and an interview with a member of the Health Aide faculty. Applicants with prior education in nursing (R.N., L.V.N. or Health Aide) may apply for credit by examination and/or advanced placement. This will be determined on an individual basis. A grade of C or better is required for successful completion of the Health Aide course. An overall 2.0 grade point average is required in order to receive a Certification of Completion.

Curriculum

HA 15	Health	9
Psych 5	Psychology of Effective Behavior	3
	(or Psych 1, if eligible)	
Eng 51	The Communication Process	3
	(or Eng 1A, if eligible)	
P.E.	Physical Education, if required	1

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Nursing — Continuing Education

Prospective students are advised to check with the college previous to each semester concerning continuing education courses to be offered. New courses are offered periodically as community health agency and health personnel needs are identified.

HA 15A Hospital Nurse Aide - Orderly (9) **3 hrs. Lec.**
18 hrs. Lab.

Prerequisites: Enrollment in the Health Aide Program. A course for those intending to work as aides in a variety of health agencies — acute hospital, convalescent hospital, community health, mental health, developmentally disabled/mental retardation. Seven (7) weeks will be taught as a "core course" for all enrolled. Topics will include the role and functions of the health aide, legal and ethical responsibilities, communication skills, community resources for health care. Basic knowledge of nutrition, personal hygiene, safety, comfort and rest, growth and development will be studied. College laboratory periods will allow for practice in the procedural skills needed in these areas. Nine (9) weeks will consist of supervised laboratory experiences in various health agencies according to the student's area of chosen specialty. Weekly lecture-discussion classes will continue within the specialty areas. The final two (2) weeks will consist of "sharing" and review classes at the college for all enrolled. Students who complete the course will receive a standard Red Cross First Aid Certificate. Students of the Community Health Aide portion of the Health Aide Program will receive certification by the State of California as a Home Health Aide/Homemaker.

HA 15B Community Health Aide (9) **3 hrs. Lec.**
18 hrs. Lab.

(Same description as HA 15A.)

HA 15C Developmental Disability/Mental Retardation Aide (9) **3 hrs. Lec.**
18 hrs. Lab.

(Same description as HA 15A.)

HA 15D Mental Health Aide (9) **3 hrs. Lec.**
18 hrs. Lab.

(Same description as HA 15A.)

HA 22 Coronary Care Nursing (2) **1 hr. Lec.**
2 hrs. Lab. - Dem.

Prerequisites: R.N., L.V.N., or Aide-Orderly with some experience in a hospital Intensive Care Unit. Others by permission of instructor. (Same as R.N. 22, V.N. 22.)

HA 23 Basic Arrhythmia Recognition and Cardio-pulmonary Resuscitation (1) **1 hr. Lec.**

Prerequisites: Registered Nurse, Licensed Vocational Nurse, others by permission of instructor. Satisfactory completion of this course satisfies partial prerequisites for R.N. 20 and V.N. 20, Nursing the Acutely Ill. (Same as R.N. 23 and V.N. 23.)

HEALTH EDUCATION

H.E. 1 Health Education (2) **2 hrs. Lec.**

Fundamentals of healthful living designed to provide 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.

H.E. 2 First Aid (3) **3 hrs. Lec.**

The immediate and temporary care given in case of accident, illness and emergency childbirth. Course shall qualify students for the Standard or Advanced Red Cross First Aid Certificate.

H.E. 3 Health Education - Military Service (2)

Prerequisite: The satisfactory completion of one year or more in the military service of the United States. The student wishing credit for military service must present his DD214 or equivalent supporting document to the Admissions Office and register for the credit. If the student signs up for the class for military credit and does not submit verification of service, he will be dropped as a No-Show and will not receive credit. H.E. 3 does not count for units toward V.A. or full-time student. These are not contact hours. May only be taken once.

HEAVY MACHINERY

- H. M. 35 Heavy Equipment Operation and Maintenance (5)**
 3 hrs. Lec.
 6 hrs. Lab.

The selection, operation, maintenance, and minor repair and adjustment of heavy equipment including hydraulic and pneumatic operations and safety, including dozer, backhoe, graders, skip loaders, cranes, etc. (Same as Ag 28.)

HISTORY

- Hist 4A History of Western Civilization (3)** 3 hrs. Lec.
 A survey of the major developments in the Western heritage from the world of the ancient Greeks to sixteenth century Europe. Emphasis is on the foundation of Western culture, religion, politics and society.
- Hist 4B History of Western Civilization (3)** 3 hrs. Lec.
 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 Hist 4A.
- Hist 8A History of the Americas (3)** 3 hrs. Lec.
 A survey course in which the history of the United States, Canada and Latin America are considered as an integrated whole. Native American Indian cultures and colonial development through the era of independence are discussed. This course together with Hist 8B will satisfy graduation requirements in American Institutions.
- Hist 8B History of the Americas (3)** 3 hrs. Lec.
 A survey course in which the history of the United States, Canada and Latin America are considered as an integrated whole. The area of study covers nineteenth and twentieth century development of the Americas. Consideration is given to the Constitution of the United States. This course together with Hist 8A will satisfy graduation requirements in American Institutions.
- Hist 10 History of Modern Russia (3)** 3 hrs. Lec.
 A history of modern Russia from about 1900 to the present day, showing the historical background of Russian Marxism, special attention to the Russian revolution of 1917, the consolidation of the Stalinist dictatorship, foreign and domestic policies of the Soviet Union since the Revolution, and a discussion of the expansion of Russian communism and the challenge of Russia today.

- Hist 17A United States History (3)** 3 hrs. Lec.
 Prerequisite: Admission by placement examination. A survey of the political and social development of the United States from the seventeenth century to 1865. This course and either Hist 17B or Poly Sci 2 will meet graduation requirements in American Institutions.
- Hist 17B United States History (3)** 3 hrs. Lec.
 Prerequisite: Admission by placement examination. A survey of the political and social maturation of the United States from the end of the Civil War to the present. This course and either Hist 17A or Poly Sci 1 will meet graduation requirements in American Institutions. May be taken before Hist 17A.
- Hist 30 Mexico and the American Southwest (3)** 3 hrs. Lec.
 A one-semester survey of Mexico from the early nineteenth century, the independence movement, the Mexican-American War and the development of Mexico and the American Southwest in the last century.
- Hist 40 Civilizations of Spain and Portugal (3)** 3 hrs. Lec.
 (Same as Span 40.)
- Hist 41 Civilizations of Spanish America and Brazil (3)** 3 hrs. Lec.
 (Same as Span 41.)

HONORS

- Honors 21 Humanities Division Honors Program**
 (1-2) 1-2 hrs. Lec.
- Honors 22 Business Division Honors Program (1-2)**
 1-2 hrs. Lec.
- Honors 23 Social Science Division Honors Program (1-2)**
 1-2 hrs. Lec.
- Honors 24 Behavioral Science Division Honors Program (1-2)**
 1-2 hrs. Lec.
- Honors 25 Automotive-Agriculture Technology Division Honors Program (1-2)** 1-2 hrs. Lec.
- Honors 26 English Division Honors Program (1-2)**
 1-2 hrs. Lec.
- Honors 27 Science Division Honors Program (1-2)**
 1-2 hrs. Lec.
- Honors 28 Mathematics-Engineering Division Honors Program (1-2)** 1-2 hrs. Lec.
- Honors 29 Health, Physical Education, and Recreation Division Honors Program (1-2)** 1-2 hrs. Lec.

Honors 21-29 Course Description

Prerequisites: Sophomore standing and admission to the program. Individual study with special guidance of instructor. Recommended for honor students in a major area offered by the division or for students requesting study in depth in a particular area. By request of students and/or suggestion of instructor and approval of division chairperson. Interdisciplinary conference, with readings, discussion, reports.

Honors 30A-B Field Study (1-6) Lec./Lab. by arrangement

Regular class instruction for honors students in major area of study offered by a division. Interdisciplinary conferences with readings, discussion, and reports. Travel to on-site study areas may be required at the student's expense. Special curriculum may be requested by the students and/or instructors, but must be approved by the appropriate division chairperson and the Dean of Instruction.

Honors 31 Nursing Division Honors Program (1-3)

Lec./Lab. by arrangement

Prerequisites: Admission to ADRN or LVN Program and permission of Program Director. Intended for transfer students or students who will only take a portion of one of the Registered Nursing or Vocational Nursing courses.

HUMANITIES

Hum 3 Introduction to Film History and Criticism (2)

1 hr. Lec.
2 hrs. Lab.

(Same as Eng 3.)

Hum 4A Film Criticism: Westerns, Comedies, Musicals (2)

1 hr. Lec.
2 hrs. Lab.

(Same as Eng 4A.)

Hum 4B Film Criticism: Horror, Fantasy, Science Fiction (2)

1 hr. Lec.
2 hrs. Lab.

(Same as Eng 4B.)

Hum 4C Film Criticism: Gangsters, Politics, Social Protest (2)

1 hr. Lec.
2 hrs. Lab.

(Same as Eng 4C.)

Hum 4D Film Criticism: Documentaries, Experimental Films (2)

1 hr. Lec.
2 hrs. Lab.

(Same as Eng 4D.)

Hum 17 Mexican Popular Folk Arts (3)

3 hrs. Lec.

Mexican society as it is reflected in their arts, beliefs, customs, dances, fiestas, legends and songs. Class reports and discussion on the composite Mexican will be included. Conducted in English by lecture, multi-media, guest lecturers and field excursions to Mexicali. Recommended for teachers' aides and persons working with children of Mexican descent.

Hum 25 The Humanities (3)

3 hrs. Lec.

An exploratory course designed to introduce the student to the major areas of study in the Humanities (Art, Architecture, Drama, Dance, Literature, Linguistics, Music) and to help the student relate his life to humanistic values in the world as they are demonstrated in the various media. Presented by a team of IVC faculty and guest lectures. Class sessions conducted by lecture, field trips, film, and discussion.

Hum 26 The Humanities (3)

3 hrs. Lec.

Prerequisites: Hum 25 with a grade of B or better or eligibility for Eng 1A. An advanced course dealing extensively in music, drama, visual arts and architecture. Humanistic and interdisciplinary approach to study man's reflection of himself in creative expression. Research paper or creative project required. Conducted by lecture, discussion, field trips, films, and guest lecturers.

HUMAN RELATIONS

The Human Relations curriculum with an Associate of Arts degree has been designed to prepare students for employment as counselor aides and group counselor aides, vocational rehabilitation aides, teacher aides, eligibility workers, social service technicians and other pre-professional positions in the vocational "new careers" concepts in people-to-people services. These services are in use in youth and adult correctional institutions, welfare and vocational rehabilitation agencies, mental hospitals, state employment centers, educational institutions and child care centers.

- Ind Stu 89 Individual Studies for the Learning Center (1)**
 2 hrs. Lab.
 An individualized course of study in any discipline using materials in the Learning Center. Non-transferable.

ITALIAN

- Ital 1A Elementary Italian (2)** 2 hrs. Lec.
 ½ hr. Lab.
 The course is designed to develop in the student rudimentary abilities in the four basic language skills: hearing, speaking, reading and writing with emphasis on contemporary usage.
- Ital 1B Elementary Italian (2)** 2 hrs. Lec.
 ½ hr. Lab.
 Prerequisites: Ital 1A or equivalent. A continuation of Ital 1A. Ital 1A plus Ital 1B together are equivalent to a regular four-unit one-semester college level Ital 1 course. (Same as P.E. 44.)

JOURNALISM

- Jrn 1 News and Feature Writing (3)** 3 hrs. Lec.
 Introduction to techniques of compiling and writing general news and feature stories. Interviewing methods, presentation of a critical review, public affairs coverage and the responsibilities of a reporter are included.
- Jrn 2 Advanced News and Feature Writing (3)** 3 hrs. Lec.
 Continuation of Jrn 1, including a three-part feature series. Basic editorial writing is introduced.
- Jrn 3 Mass Communications (3)** 3 hrs. Lec.
 Survey of mass media; their interrelationships, their problems and responsibilities. Relationship of the mass media to the individual.
- Jrn 5 Introduction to Photography (3)** 2 hrs. Lec.
 3 hrs. Lab.
 The basic theory, techniques, and skills of photography. Consideration will be given to factors such as correct use of cameras and lenses, determination of exposure, different types of films and filters, lighting, principles of composition, and the legal aspects of photography. Print production will be covered by sections on darkroom techniques, photographic chemicals, development of film, contact printing and enlargement technique. The student will provide an adjustable camera for assignment work. Specific projects will be developed for students with special subject interests. There will be a materials fee. (Same as Vis Com 5.)

- Jrn 8 Public Relations Techniques (3)** 3 hrs. Lec.
 A study and analysis of projecting a public image by a business, public institution, governmental bureau. Planning of public relations campaigns for individual personalities, and for institutions and organizations, i.e., philanthropic, health, political, civic, commercial. Use of communications media (radio, television, newspapers, technical publications, inplant publications) to help student planning. Writing of press releases. Planning of press conferences. Preparing a press kit. Publicizing events. (Same as Bus 79.)

LAW ENFORCEMENT

- Law Enf 21 Introduction to the Administration of Justice (3)**
 3 hrs. Lec.
 The history and philosophy of administration of justice in America; recapitulation of the system; identifying the various sub-systems; role expectations, and their interrelationships; theories of crime, punishment and rehabilitation; ethics, education and training for professionalism in the system.
- Law Enf 22 Police Patrol Procedures (3)** 3 hrs. Lec.
 Techniques of patrol and observation; handling complaints and called-for services; public relations; techniques of field interrogation; officer's notebook procedures; essentials of police report writing; utilization of specialized equipment.
- Law Enf 23 Defensive Tactics (2)** 2 hrs. Lab.
 A study of the art of self-defense through boxing, wrestling and fencing. Includes the art of weight lifting. Satisfies the district physical education activity requirement for one semester. (Same as P.E. 44.)
- Law Enf 24 Traffic Control and Vehicle Code (3)** 3 hrs. Lec.
 Prerequisite: L.E. 21 or concurrent enrollment. The study of traffic control and vehicle code problems.
- Law Enf 25 Firearms (1)** 3 hrs. Lab.
 Prerequisites: L.E. 21 and permission of instructor. Open only to law enforcement majors. Survey of types and uses of law enforcement weapons.
- Law Enf 26 Traffic Accident Investigation (3)** 3 hrs. Lec.
 Prerequisite: L.E. 21 or concurrent enrollment. The study and procedures of traffic accident investigation.

LAW ENFORCEMENT

Law Enf 27 Basic Training — Jail Operations (3) 3 hrs. Lec.

A study of custody and detention practices, including responsibilities of law enforcement officials, and rights and privileges of detained persons. Consideration of control problems, overcrowding, health and psychological factors. This course is designed to fulfill the requirements of Section 1020 of the Minimum Jail Standards of California.

Law Enf 29 Preliminary Investigation and Reporting (3) 3 hrs. Lec.

The organization and preparation of written communications and reports. Emphasis on practical aspects of report preparation required from law enforcement officers in the course of their duties including reporting on mock crime scenes.

Law Enf 33 Concepts of Criminal Law (3) 3 hrs. Lec.

Historical development of law and constitutional provisions; definitions; classifications of crime, and their application to the system of administration of justice; legal research, study of case law, methodology, and concepts of law as a social force.

Law Enf 34 Criminal Investigation (3) 3 hrs. Lec.

Prerequisites: L.E. 21 or concurrent enrollment. 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 35 Legal Aspects of Evidence (3) 3 hrs. Lec.

Prerequisites: L.E. 21. Origin, development, philosophy and constitutional basis of evidence; constitutional and procedural considerations affecting arrest, search and seizure; kinds and degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies.

Law Enf 36 Principles and Procedures of the Justice System (3) 3 hrs. Lec.

Prerequisites: L.E. 21. An in-depth study of the role and responsibilities of each segment within the administration of the justice system: law enforcement; judicial; corrections. A past, present and future exposure to each sub-system procedure, from initial entry to final disposition, and the relationship each segment maintains with its system member.

LAW ENFORCEMENT

Law Enf 37 Juvenile Control (3) 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 38 Community Relations (3) 3 hrs. Lec.

An in-depth exploration of the roles of the administration of justice practitioners and their agencies. Through interaction and study the student will become aware of the inter-relationships and role expectations among the various agencies and the public. Principal emphasis will be placed upon the professional image of the system of justice administration and the development of positive relationships between members of the system and the public.

Law Enf 39 Arrest and Firearms (3) 3 hrs. Lec.

Prerequisites: Active reserve or full-time peace officer. Designed to satisfy the curriculum standards of the Commission on Peace Officer Standards and Training as required by Penal Code Section 832 for peace officers; includes laws of arrest, search and seizure, methods of arrest, discretionary decision making and where applicable, firearms; mandatory for all peace officers who do not possess a basic certificate awarded by the Commission on Peace Officer Standards and Training.

Law Enf 40 Advanced Officers Course (1) 1 hr. Lec.

Prerequisites: Permission of instructor. This course is designed to keep officers informed of new laws, new court decisions, changes in law enforcement, policy, new concepts of police technology, advanced techniques, police-community relations, law enforcement ethics in maintaining police integrity and such other refresher training as may be necessary.

Law Enf 41 Mass Sociology and Collective Behavior (3) 3 hrs. Lec.

(Same as Sociol 41.)

**Law Enf 45 Basic Law Enforcement
Orientation (14)****17¼ hrs. Lec.**

Prerequisites: Enrollment by permission of the instructor. A basic overview course in condensed version designed to prepare the new officer for immediate field duty. Open to law enforcement personnel and general students who are otherwise qualified as potential employees for law enforcement service. All students must provide their own equipment, uniforms, weapons, insurance, etc.

**Law Enf 46 The Mentally Ill, Alcoholic,
Drug Addict and the Law (3)****3 hrs. Lec.**

(Same as Psych 46.)

LIBRARY TECHNICIAN

L.T. 51 Introduction to Library Services (3)**3 hrs. Lec.**

Prerequisites: This course is an introduction to libraries and their organization. It is designed for students interested in employment in school, public, or college libraries as library technicians. Basic philosophy, procedures, tools, and techniques for library routines are emphasized.

L.T. 52 Support for Technical Services (3)**3 hrs. Lec.**

Prerequisites: L.T. 51 or consent of the instructor. An introduction to the various semi-professional tasks in the technical processes phase of library operation.

L.T. 53 Support for Public Services (3)**3 hrs. Lec.**

Prerequisites: L.T. 51 or consent of the instructor. Library public relations, circulation control systems and location of information, through use of card catalogs, indexes, and basic reference books.

L.T. 54 Introduction to Audiovisual Services (3)**3 hrs. Lec.**

Prerequisites: L.T. 51 or consent of instructor. A survey course of the processes necessary for the utilization of audiovisual materials and equipment in the library situation.

L.T. 55 Cataloging and Classifying (3)**3 hrs. Lec.**

Prerequisites: L.T. 51 and/or L.T. 52 or consent of the instructor. A course devoted to the development of the skills and practical experiences needed by library technical assistants in support of the technical services aspect of a library operation. The student learns the theory and philosophy underlying the classification systems used in American libraries, classifies and catalogs book and non-book materials, and is exposed to a variety of work-experience situations where this knowledge is put to use.

MATHEMATICS

Whenever a mathematics class of any kind is a prerequisite, that mathematics class must be passed with a C or better grade.

Math X Beginning Algebra (3)**3 hrs. Lec.**

Prerequisite: Completion of Math 51 or satisfactory score on mathematics placement test. A one-semester course which covers the material generally included in a full year high school algebra course.

Math Y Plane Geometry (3)**3 hrs. Lec.**

Prerequisite: Completion of Math 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)**3 hrs. Lec.**

Prerequisites: Math X and Y. 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 systems, radicals and exponents, quadratic equations, binomial expansion, arithmetics and geometric progressions, logarithms, conics and the introduction to determinants.

Math C Plane Trigonometry (3)**3 hrs. Lec.**

Prerequisite: Math A or its equivalent. Special emphasis is placed on trigonometric analysis, applications, solving trigonometric 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 some universities and state colleges as high school subjects. 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) 5 hrs. Lec.

Prerequisite: Math A or equivalent. 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.

MATHEMATICS

Math 3A Analytic Geometry and Calculus (5) 5 hrs. Lec.

Prerequisite: Math 2 or equivalent. Includes the study of inequalities, limits and continuity, differentiation of algebraic and transcendental functions, definite integrals, applications, parametric equations, arc length and some review of conics.

Math 3B Analytic Geometry and Calculus (5) 5 hrs. Lec.

Prerequisite: Math 3A. Topics include Polar coordinates, vectors in a plane, formulas and methods of integration, applications, solid analytic geometry, vectors in three dimensions and elements of the infinite series.

Math 4 Calculus and Differential Equations (4) 5 hrs. Lec.

Prerequisite: Math 3B. Partial differentiation, multiple integration, ordinary differential equations, applications, and elements of linear algebra.

Math 6 Linear Algebra (3) 3 hrs. Lec.

Prerequisites: Math 3A and Math 3B with a grade of C or better. The course covers systems of linear equations, matrices and determinants, matrix algebra, eigen values, vector spaces, and linear transformations. Physical applications will be considered when appropriate.

Math 10 Mathematics for Elementary School Teachers (3) 3 hrs. Lec.

Prerequisites: Math X and Y, or the equivalent, or permission of instructor. Recommended for students who are working towards a teaching credential in elementary education. Sets and relations, functions, the development of the number system from the natural numbers, including the whole numbers, the integers, the rational numbers, and the real numbers.

Math 12 Elementary Statistics (3) 3 hrs. Lec.

Prerequisite: Math 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. (Same as Psych 12.)

Math 17 Mathematics for Business Analysis (3) 3 hrs. Lec.

Prerequisites: Math A or the equivalent. To prepare for upper division courses in business. To provide some understanding of ideas from modern mathematics which are so important in this computer age. Topics included are logic, sets, counting, probability, vectors and matrices, mathematics of finance, linear programming, and calculus with applications. (Same as Bus 9.)

MUSIC

Math 18 Introduction to Mathematics (3) 3 hrs. Lec.

Prerequisites: Math X and Y 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 of arithmetic and algebra of the real number system. Not intended for mathematics majors.

Math 47 Programming in Fortran (3) 3 hrs. Lec. (Same as Bus 55.)

Math 50 Shop Mathematics (3) 3 hrs. Lec.

A basic course in mathematics designed to meet the needs of students enrolled in the following vocational programs: automotive technology, welding, and agricultural engineering. The course will cover applied mathematics for the shop student, factoring, fractions, measuring devices, basic geometry, measurement of areas and volumes, board measure, metric measurement. Satisfies the Imperial Valley College mathematics competency requirement as demonstrated by appropriate examination and is not open to students who have completed Math 51. (Same as Ag 50, Auto Tech 50, Weld 50.)

Math 51 Basic Mathematics (3) 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 52 The Metric System (1) 1 hr. Lec.

A brief introduction to the history of the metric system. Advantages and popularity of the International System of Units (SI). Metric units include those for length, area, volume, capacity, weight, temperature, and others. Conversions to and from the metric system are presented.

MUSIC

Mus 7 Music Fundamentals (3) 3 hrs. Lec.

Elementary music theory for the classroom teacher. Development of skills necessary to present music to children including notation, meter, rhythm, scales, intervals, triads and elementary keyboard facility.

- Mus 8A Musicianship (2)** 2 hrs. Lec.
Prerequisite: Mus 7 or approval of instructor. Required of all music majors. A course designed to present basic skills and theory of music for persons interested in a background for appreciation of or further studies in music. Skills to be studied and developed are sight-singing, ear-training, keyboard harmony and basic piano skills.
- Mus 8B Musicianship (2)** 2 hrs. Lec.
Prerequisite: Mus 8A. Continuation of Mus 8A.
- Mus 8C Intermediate Musicianship (2)** 2 hrs. Lec.
Prerequisite: Mus 8B. A continuation of Mus 8A and 8B to increase skills in sight-singing, ear-training, and keyboard harmony.
- Mus 8D Intermediate Musicianship (2)** 2 hrs. Lec.
Prerequisite: Mus 8C. A continuation of Mus 8C.
- Mus 9A Elementary Harmony (3)** 3 hrs. Lec.
Prerequisite: Mus 7 or Mus 8A concurrently, or consent of the instructor. Sight-singing, dictation and keyboard harmony. Traditional diatonic harmony, four-voice writing, analysis.
- Mus 9B Elementary Harmony (3)** 3 hrs. Lec.
Prerequisite: Mus 9A. A continuation of Mus 9A.
- Mus 9C Intermediate Harmony (3)** 3 hrs. Lec.
Prerequisite: Mus 9B. A comprehensive study of the theory of music to include skills and creative experiences in traditional harmony. An introduction to 20th century harmonic and melodic systems.
- Mus 9D Intermediate Harmony (3)** 3 hrs. Lec.
Prerequisite: Mus 9C. A continuation of Mus 9C.
- Mus 10A Class Piano (1)** 1 hr. Lec.
2 hrs. Lab.
Basic keyboard experience through study of music reading, notation, scales, chords and sight-reading covering a repertoire of beginning and intermediate songs and piano literature, with emphasis on keyboard harmony.
- Mus 10B Class Piano (1)** 1 hr. Lec.
2 hrs. Lab.
Prerequisite: Mus 10A or its equivalent. A continuation of Mus 10A.

- Mus 10C Class Piano (1)** 1 hr. Lec.
2 hrs. Lab.
Prerequisite: Mus 10B or its equivalent. Introduction to the essentials of advanced piano study; pianistic techniques involved in selected literature from classic, romantic and modern compositions; participation in informal recitals.
- Mus 10D Class Piano (1)** 1 hr. Lec.
2 hrs. Lab.
Prerequisite: Mus 10C or its equivalent. A continuation of Mus 10C.
- Mus 10E Class Piano (1)** 1 hr. Lec.
2 hrs. Lab.
Prerequisite: Mus 10D or its equivalent. A continuation of Mus 10D.
- Mus 10F Class Piano (1)** 1 hr. Lec.
2 hrs. Lab.
Prerequisite: Mus 10E or its equivalent. A continuation of Mus 10D.
- Mus 11A Class Guitar (2)** 1 hr. Lec.
2 hrs. Lab.
A basic course on how to accompany with the guitar. Stress will be placed on tuning, chording, different types of strums and elementary transposition.
- Mus 11B Class Guitar (2)** 1 hr. Lec.
2 hrs. Lab.
Prerequisites: Mus 11A or consent of instructor. A continuation of Mus 11A with the following additions: 1. Reading music (standard musical notation); 2. A thorough presentation of bar chords including sevenths, ninths, diminished, augmented and various altered chords; 3. Advanced picking techniques.
- Mus 15A Elementary Voice (2)** 1 hr. Lec.
2 hrs. Lab. plus 1 hr. to be arranged
The student receives guidance in the performance and appreciation of the various types of solo songs while acquiring the facilities for good vocal technique. Principles are applied through group and individual singing.
- Mus 15B Elementary Voice (2)** 1 hr. Lec.
2 hrs. Lab. plus 1 hr. to be arranged
Prerequisite: Mus 15A or its equivalent. A continuation of Mus 15A.

Mus 16 Intermediate Voice (2) 1 hr. Lec.
2 hrs. Lab. plus 1 hr. to be arranged

Prerequisites: Mus 15A and Mus 15B or their equivalent.
A continuation of Mus 15B.

Mus 17ABCD College Chamber Singers (2-2-2-2) 3 hrs. Lab.
3 hrs. to be arranged

Prerequisite: Permission of the instructor. A performance organization presenting music of all styles, sacred and secular, a capella and accompanied. A minimum of six outside performances required each semester.

Mus 18ABCD Chamber Orchestra (2) 2 hrs. Lec.
2 hrs. Lab. plus 1 hr. to be arranged

Prerequisites: Permission of instructor. A performance organization specializing in literature for a small orchestra. Performances in local communities and on campus are required. Field trips to other musical events will be included to help performers develop efficient listening and evaluating practices. Solo and ensemble rehearsals and performances are included.

Mus 20A History and Literature of Music (3) 3 hrs. Lec.

The historical development of music with a study of various types of music from stylistic periods as a medium of cultural development. Intended as a background toward further studies in music for the music major and persons interested in a thorough background for enjoying music.

Mus 20B History and Literature of Music (3) 3 hrs. Lec.
A continuation of Mus 20A.

Mus 21ABCD Instruments (2-2-2-2) 1 hr. Lec.
2 hrs. Lab.

Depth study and performance of literature for brass, woodwind, string and percussion instruments.

Mus 22A Introduction to Principles and Practices of Conducting (2) 2 hrs. Lec.
1 hr. Lab.

Prerequisites: Mus 7 or permission of instructor. Techniques of instrumental and vocal conducting. Preparation — rehearsal and performance procedures for the conductor.

Mus 22B Conducting Principles and Practices (2) 2 hrs. Lec.
1 hr. Lab.

Prerequisites: Mus 22A. Techniques involved in standard conducting problems. Preparation — rehearsal, and procedural problems encountered in conducting music.

Mus 25ABCD Stage Band (1-1-1-1) 1 hr. Lec.
2 hrs. Lab.

Prerequisites: Audition and permission of instructor. Techniques and literature of the stage band. A lab situation in popular and jazz music with opportunities for the development of skill in performing, arranging and improvisation.

Mus 26ABCD Rehearsal and Performance (1-1-1-1) 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 27ABCDEF Band (1-1-1-1-1-1) 3 hrs. Lab.

A performance organization specializing in literature for wind instruments. Student capability to perform on a wind instrument is developed as far as possible with special emphasis on correct techniques for performing band and wind ensemble music. Performance at community and college events is required. Field trips to music events is required in order to form a background for efficient listening and evaluating practices.

Mus 28ABCDEF College Chorus (2-2-2-2-2-2) 1 hr. Lec.
2 hrs. Lab. plus 1 hr. Lab. to be arranged

Open to all students who have an interest in learning to sing and who enjoy music. Breath control, tone placement, articulation and enunciation. Rehearsal, performance and study of choral literature. Introduction to music theory as a means of learning to read music rather than learning by rote.

Mus 29ABCDEF Estudiantina (2-2-2-2-2-2) 1 hr. Lec.
2 hrs. Lab. plus 1 hr. Lab. to be arranged

Open to all students, particularly those of Mexican background and culture who wish to perform music stemming from the tradition of "tunas," developed during the Renaissance in Spain's large and influential universities. For singer and/or instrumentalists playing accordion, castanets, guitar, mandolin, string bass, tambourine.

Mus 30 Music Structure and Style (3) 3 hrs. Lec.

An introduction to music for the non-music major. A study of the materials of music with emphasis upon development of listening skills. A presentation of the structure and style of the major media and forms of music.

**Mus 55 Beginning Guitar and Mexican Folksongs
for Spanish Speakers (2) 2 hrs. Lec.
1 hr. Lab.**

Study of basic guitar chords used in traditional Mexican folksongs with a brief introduction to the history and background of the origins of each selection. Study of contemporary songs by modern composers and their growing popularity among all classes in Mexico. Practice and drill in playing the guitar and singing. (Same as Span 55.)

NATURAL SCIENCE

Nat Sci 51 Survey of the Earth Sciences (3) 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. Not open to students with credit in Geog 1, Geol 2, Geol 1A-B, or Astron 1.

NURSING - REGISTERED

The Registered Nurse Program (four semesters in length) prepares the student to receive the Associate of Science degree from the College and be eligible to write the examination given by the California Board of Nursing Education and Nurse Registration to obtain licensure as a registered nurse. The program prepares men and women to give direct nursing care to patients in hospitals, clinics, and similar community health-care agencies. Courses in general education and nursing are taken at the college campus. Nursing laboratory experiences are offered at selected area hospitals and other health agencies under the guidance of nursing faculty members.

Students are admitted once a year in September. A Nursing Admissions Committee will review all applications. Early application (previous to February 15) is recommended, since the number of students who can be admitted is limited. Admission requirements include high school graduation (or its equivalent), a year of high school chemistry and biology (or their college equivalent), eligibility to take the Eng 1A course (as determined by college placement tests), physical and dental examinations (including specified immunizations) and an interview with a member of the nursing faculty. Applicants with prior education in nursing (R.N., V.N. or Health Aide) may apply for credit by examination and/or advanced placement. This will be determined on an individual basis.

For continuation in the program, a grade of C or better is required in all nursing courses. An overall 2.00 grade point average (C=2.00) must be maintained in order to enroll in each succeeding semester of the program. The college graduation requirements in health education is waived for R.N. students. The nursing faculty reserves the right to recommend that a student be asked to withdraw from the nursing program at any time if academic, clinical, health or personal standards are not maintained.

The A.S. Degree will be awarded to graduates of hospital diploma schools of nursing who meet all of the following criteria and complete the following program:

Criteria

1. Graduate of a state-accredited hospital school of nursing which had a curriculum covering the five basic areas of nursing (medicine, surgery, obstetrics, pediatrics, psychiatry).
2. Present California Registered Nurse Licensure.
3. Present enrollment at Imperial Valley College.

Program to Be Completed

Blanket credit for previous R.N. courses completed	34 Units
(Corresponds to number of R.N. course units in IVC Registered Nurse Program.)	
General Education courses to meet college requirements for graduation	26 Units

(In order to allow the graduate to articulate with baccalaureate programs in nursing, it is strongly recommended that the following courses be taken within the general education requirements: Anatomy 8, Human Physiology 1, Microbiology 21, Psychology 1A, Sociology 1.)

Applicants for this degree must verify items 1 and 2 of the Criteria with the Nursing Director. Check with Counseling Department for procedure to follow.

CURRICULUM
First Year

	Units 1st S.	Units 2nd S.
*R.N. 1-2, Registered Nursing	7	7
**Anat 10, Anatomy-Physiology	5	
(Anat 8 and Physio 1 may be substituted)		
**Psych 1A, Gen. Psychology	3	
Physical Education, if required	1	1
**Bio 21, Gen. Microbiology		4
**Sociol 1, Prin. of Sociology		3
**Eng 1A, Reading and Comp.		3
	15-16	17-18

Second Year

*R.N. 3&4 Registered Nursing	10	10
Learning Skills Elective	3	
"American Institutions" Elective	3	3
Physical Education, if required	1	1
Humanities Elective		3
	16-17	16-17

*Must be taken in this sequence.

**Courses to be taken preceding or during the semester indicated.

NURSING — CONTINUING EDUCATION

Prospective students are advised to check with the college previous to each semester concerning continuing education courses to be offered. New courses are offered periodically as community health agency and health personnel needs are identified.

R.N. 1 Registered Nursing 1 (7)

4 hrs. Lec.
9 hrs. Lab.

Prerequisite: Admission to ADRN Program. Introduction to nursing including role and functions of the nurse in health and illness. Historical foundations and trends of nursing and health care. Theory and integrated clinical experiences in basic nursing principles and skills which meet basic needs common to individuals of all ages. Principles of growth and development and mental health concepts introduced. Personality development, understanding of self and therapeutic nursing roles are studied. Community resources for health care, legal responsibilities of the nurse, communication skills, pharmacology, nutrition in health and disease all introduced and then integrated throughout nursing program.

R.N. 2 Registered Nursing 2 (7)

4 hrs. Lec.
9 hrs. Lab.

Prerequisites: R.N. 1 and Psych 1A. Using the concepts of growth and development, physiological and psychological responses to trauma and disease are studied as are the more common health problems encountered by individuals of all ages. Special needs of individuals before, during and after surgery included. Interrelatedness of emotions and organic disease introduced. Experience in participating with the interdisciplinary psychiatric team with emphasis on the role of the nurse in interacting with individuals or groups with mental health problems.

R.N. 3 Registered Nursing 3 (10)

5 hrs. Lec.
15 hrs. Lab.

Prerequisites: R.N. 1 and R.N. 2. Role of the family in society and the helping role of the nurse with emphasis on meeting needs of individuals during the maternal cycle — preceding, during and following normal and abnormal birth. Interrelatedness of mental health, handicapping conditions of children and interference with sexual needs studied. Community resources that contribute to the welfare of mothers, children and the family unit. Clinical experiences concurrent in the hospital, community agencies and the home.

R.N. 4 Registered Nursing 4 (10)

5 hrs. Lec.
15 hrs. Lab.

Prerequisites: R.N. 1, R.N. 2 and R.N. 3. Development of attitudes and skills required to plan, carry out and evaluate comprehensive nursing care of individuals of all ages with complex health problems in the hospital and the home. Opportunity given to work with individuals and/or groups in mental health and to participate in the nursing leadership role. The need for patient teaching, rehabilitation, health maintenance and community resources are stressed. Trends in nursing and health care as well as career opportunities for registered nurses discussed.

R.N. 20 Nursing the Acutely Ill (7)

7 hrs. Lec.

Prerequisites: R.N., V.N. (with permission of instructor). In addition these nurses must have completed American Heart Association Basic C.P.R. certification and successfully completed Basic Arrhythmia Recognition course which is R.N. 23, V.N. 23 and H.A. 23. Challenge

examinations will be given for the last two prerequisites. This course is an intensive review of cardiovascular, pulmonary, autonomic nervous, and renal systems and the disease processes involved. Nursing care of the pacemaker patient and nursing assessment of the acutely ill patient. Comprehensive study in electrocardiography and analysis of arrhythmias, drug management, fluid and electrolyte balance. Emergency nursing measures will be explored in detail. Course will be given once each semester. (Class is held five days per week, Monday through Friday for a three-week period from 8:00 a.m. to 4:30 p.m. each day. Total hours, 120). (Same as V.N. 20.)

R.N. 21 Obstetrics for Nurses (2) **1 hr. Lec.**
2 hrs. Lab.-Dem.

Prerequisites: R.N. or L.V.N. Preview of basic anatomy and physiology of conception, pregnancy, labor and delivery, and post partum care. In-depth coverage of pathological conditions and new methods, including the fetal heart monitor. Nursing care of the obstetrical patient, the newborn infant and the family group. (Same as V.N. 21.)

R.N. 22 Coronary Care Nursing (2) **1 hr. Lec.**
2 hrs. Lab.-Dem.

Prerequisites: R.N., L.V.N. or Aide-Orderly with some experience in a hospital Intensive Care Unit. Others by permission of instructor. Review of basic anatomy, physiology and patho-physiology of the cardiovascular system. Class each week will study an actual patient and his particular condition. Rhythm strips that are pertinent to the subject of each session will be studied. Assessment of cardiac complications. (Same as V.N. 22, HA 22.)

R.N. 23 Basic Arrhythmia Recognition and Cardio pulmonary Resuscitation (1) **1 hr. Lec.**

Prerequisites: R.N., L.V.N., others by permission of instructor. Satisfactory completion of this course satisfies partial prerequisite for R.N. 20, V.N. 20, Nursing the Acutely Ill. This course is a basic program in interpretation and recognition of cardiac arrhythmias in the monitored hospital patient and the appropriate treatment and/or nursing intervention required. Basic cardio-pulmonary resuscitation using standards established by the American Heart Association also will be taught. Six session of two hours each and one session of three hours required for completion of the course. (Same as V.N. 23, HA 23.)

NURSING - VOCATIONAL

The Vocational Nurse Program (three semesters in length) prepares the student to receive a Certificate of Completion from the college and be eligible to write the examination given by the California Board of Vocational Nurse and Psychiatric Technician Examiners to obtain licensure as a Licensed Vocational Nurse. The program prepares men and women to give direct patient care in health-care agencies under the supervision of a registered nurse or physician. In addition to classes on the college campus, students receive coordinated instruction and clinical experiences at selected area hospitals under the guidance of nursing faculty members.

Students are admitted every third semester (in September or January). A Nursing Admissions Committee will review all applications. Early application (at least three months before anticipated admission) is recommended, since the number of students who can be admitted is limited. Admission requirements include high school graduation (or its equivalent), eligibility to take the Eng 1A course (as determined by college placement tests), physical and dental examinations (including specified immunizations) and an interview with a member of the nursing faculty. Applicants with prior education in nursing (R.N., V.N., or Health Aide) may apply for credit by examination and/or advanced placement. This will be determined on an individual basis. For continuation in the program, a grade of C or better is required in all nursing courses and an overall 2.0 grade point average (C=2.0) must be maintained in order to enroll in each succeeding semester of the program.

CURRICULUM

	Units 1st Sem	*Units 2nd Sem	*Units 3rd Sem
Psych 5 Psychology of Effective Behavior		3	
			(or Psych 1A, if eligible)
V.N. 50 Medical-Surgical Nursing I	7		
V.N. 51 Clinical Fundamentals	7		
V.N. 52 Medical-Surgical Nursing II		4	
V.N. 53 Maternal-Child Health Nursing		6	
V.N. 54 Clinical Fundamentals		7	
V.N. 55 Medical-Surgical Nursing III			10
V.N. 56 Clinical Fundamentals			7
	17	17	17

*Second and third semesters may be reversed.

NURSING — CONTINUING EDUCATION

Prospective students are advised to check with the college previous to each semester concerning continuing education courses to be offered. New courses are offered periodically as community health agency and health personnel needs are identified.

V.N. 20 Nursing the Acutely Ill (7) 7 hrs. Lec.
(Same as R.N. 20.)

V.N. 21 Obstetrics for Nurses (2) 1 hr. Lec.
2 hrs. Lab.-Dem.
Prerequisites: R.N. or L.V.N. (Same as R.N. 21.)

V.N. 22 Coronary Care Nursing (2) 1 hr. Lec.
2 hrs. Lab.-Dem.
Prerequisites: R.N., L.V.N. or Aide-Orderly with some experience in a hospital Intensive Care Unit. Others by permission of instructor. (Same as R.N. 22, HA 22.)

V.N. 23 Basic Arrhythmia Recognition and Cardio pulmonary Resuscitation (1) 1 hr. Lec.
Prerequisites: R.N., L.V.N., others by permission of instructor. Satisfactory completion of this course satisfies partial prerequisites for R.N. 20, V.N. 20, Nursing the Acutely Ill. (Same as R.N. 23 and H.A. 23.)

V.N. 50 Medical-Surgical Nursing I (7) 7 hrs. Lec.
Introduction to the relationship that exists between the nurse and the patient and between the nurse and other members of the health team. The legal aspects and ethical responsibilities in vocational nursing. Foundation and theory of principles of nursing care as they relate to patients with musculo-skeletal and digestive system disorders. The normal, as well as the abnormal, will be studied. The vocational nurse's responsibility toward prevention of disease and rehabilitation. Application of these basic skills required to meet the immediate needs of the patient. Includes psychological impact of illness on a patient and his family and the nursing care implications as it relates to the patient. Medications and diet are integrated throughout. Basic concepts of nutrition and diet therapy.

V.N. 51 Clinical Fundamentals (7) 21 hrs. Lab.
(Concurrent with V.N. 50.) Enrollment in Nursing Program.

V.N. 52 Medical-Surgical Nursing II (4) 4 hrs. Lec.

Prerequisite: V.N. 50. Development of previously learned skills in addition to procedures of more complex nature and related to the total patient needs as well as the specific diseases and disorders. Encouragement to adapt knowledge to patient situations independently. Nursing care and planning for patients with circulatory disease. Medications and nutrition integrated throughout.

V.N. 53 Maternal-Childhealth Nursing (6) 6 hrs. Lec.

Prerequisite: V.N. 50. Maternal and child health is stressed with emphasis on the normal growth and development pattern. Abnormal conditions are introduced as they relate to prevention and control. Nursing care of the mother and child for specific normal and abnormal conditions. The role of the vocational nurse and her nursing responsibilities to the family as a whole.

V.N. 54 Clinical Fundamentals (7) 21 hrs. Lab.
(Concurrent with V.N. 52 and V.N. 53.)

V.N. 55 Medical-Surgical Nursing III (10) 10 hrs. Lec.

Prerequisites: Enrollment in the Vocational Nursing Program, also V.N. 50 and V.N. 51. Continuation of development of proficiency in performing procedures and planning total patient care. Independent decision making within the realm of the vocational nurse. Intensive and comprehensive nursing techniques. Employment opportunities, organizations helpful to the vocational nurse, and licensing requirements. Nursing care of patients with health problems involving the excretory, integumentary, respiratory, endocrine and nervous systems, care of the geriatric patient and the patient with eye disorders. Previously learned nursing care will be emphasized and correlated as it relates to these in order to develop nursing judgment within the realm of the vocational nurse. Stress will be placed on planning nursing care and making independent decisions.

V.N. 56 Clinical Fundamentals (7) 21 hrs. Lab.
(Concurrent with V.N. 55.)

PHILOSOPHY
(See page 162)

PHYSICAL EDUCATION

Unless exempt, each student is required by district policy to schedule one activity course each semester. A student may take A-B-C-D sections of the same course but may not repeat any section for required credit.

P.E. 1 Physical Education Activity - Military Service (4)

Prerequisite: The satisfactory completion of one year or more in the military service of the United States. The student wishing credit for military service must present his DD214 or equivalent supporting document to the Admissions Office. If the student signs up for the class for military credit and does not submit verification of service, he will be dropped as a No-Show and will not receive credit. P.E. 1 does not count for units toward V.A. or full-time student status. These hours are not contact hours. This course meets the physical education requirement, but may be taken only once.

P.E. 2A Beginning Gymnastics, Coed (1) 2 hrs. Lab.

An introduction to gymnastics, which involves the heavy apparatus plus the so-called free exercise or free calisthenics. Individual development and performance is emphasized with a stress on safety.

P.E. 2B Intermediate Gymnastics, Coed (1) 2 hrs. Lab.

Prerequisites: P.E. 2A or approval of instructor. Offers training in the advanced fundamentals of gymnastics, instruction is given concerning group stunts and rules concerned with competition and exhibitions.

P.E. 3A Beginning Tennis, Coed (1) 2 hrs. Lab.

Beginning tennis offers training in the basic fundamentals of the game including history, rules and etiquette.

P.E. 3B Intermediate Tennis, Coed (1) 2 hrs. Lab.

Prerequisite: P.E. 3A or approval of instructor. Offers training in the advanced fundamentals of tennis and actual participation. Social etiquette of the game is stressed along with the worthy use of leisure time.

P.E. 3C Advanced Tennis, Coed (1) 2 hrs. Lab.

Prerequisite: P.E. 3B or approval of instructor. Review and practice of forehand, backhand, serve and volley; overhead smash and lob. Emphasis on court strategy and tactics for singles and doubles competition.

P.E. 4A Beginning Badminton, Coed (1) 2 hrs. Lab.

An introduction to the etiquette, rules, background and techniques of playing badminton.

P.E. 4B Intermediate Badminton, Coed (1) 2 hrs. Lab.

Prerequisite: P.E. 4A. Advanced skills of play and game strategy technique.

P.E. 5A Beginning Swimming, Coed (1) 2 hrs. Lab.

This course is primarily concerned with teaching the student to successfully execute the proper strokes with emphasis on safety.

P.E. 5B Intermediate Swimming, Coed (1) 2 hrs. Lab.

Prerequisites: P.E. 5A or approval of instructor. This course is primarily concerned with the teaching of advanced skills and fundamentals of swimming. Safety knowledge is also stressed.

P.E. 6ABCD Life-Saving and Water Safety Instructor Training (2-2-2-2) 1½ hrs. Lec. 1½ hrs. Lab.

Prerequisite: P.E. 5B or approval of instructor. Techniques of life saving and water safety. This course meets requirements of the Red Cross Senior Life Saving Certificate.

P.E. 7ABCD Synchronized Swimming, Women (1-1-1-1) 2 hrs. Lab.

Prerequisite: Consent of instructor. Synchronized swimming is the concept of swimming as an art form. The swimmer executes movements in time with music as a solo performer or in time with other swimmers.

P.E. 8A Beginning Bowling, Coed (1) 2 hrs. Lab.

An introduction to the etiquette, rules, background and techniques of bowling.

P.E. 8B Intermediate Bowling, Coed (1) 2 hrs. Lab.

Prerequisite: P.E. 8A or approval of instructor. A follow-up of Beginning Bowling stressing fundamental skills and score-keeping plus league bowling.

P.E. 9ABCD Adapted Physical Exercises, Coed (1-1-1-1) 2 hrs. Lab.

Open only to students who are unable to participate in regular physical education program. Adapted Physical Exercise is designed for the student who cannot keep up with the regular program. The course is specifically designed to meet the individual needs of these students.

- P.E. 10A Team Sports (1) 2 hrs. Lab.**
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. Includes touch football and basketball (men); volleyball and softball (women).
- P.E. 10B Team Sports (1) 2 hrs. Lab.**
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. Includes soccer and softball (men); basketball and volley tennis (women). P.E. 10B may be taken before P.E. 10A.
- P.E. 11 Volleyball, Coed (1) 2 hrs. Lab.**
A course designed to present the basic fundamentals of volleyball such as the serve, setting, spiking, and team play. Rules and class competition are included.
- P.E. 13 Soccer (2) 2 hrs. Lab.**
Plus 4 hrs. Lab. to be arranged
Theory and practice of competitive soccer. Emphasis will be placed on development of mental and physical skills necessary for competition.
- P.E. 14ABCD Recreational Games, Coed (1-1-1-1) 2 hrs. Lab.**
Designed to offer students a chance to participate in many activities not otherwise offered in the physical education curriculum. Recreation majors, physical education majors, and those just interested in setting up community recreation centers will find this course most valuable. Meets physical education activity requirement.
- P.E. 15ABCD Figure Control for Women (1-1-1-1) 2 hrs. Lab.**
This course is designed to emphasize physical conditioning and development. Equips the student with a knowledge of exercises and conditioning activities which can be used to maintain physical fitness throughout her adult life.
- P.E. 16ABCD Song and Cheer (2-2-2-2) 4 hrs. Lab.**
Practice and performance class for songleaders and cheerleaders. Satisfies physical education activity class requirement.

- P.E. 17ABCD Physical Fitness, Men (1-1-1-1) 2 hrs. Lab.**
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 college and adult life.
- P.E. 18A Beginning Golf, Coed (1) 2 hrs. Lab.**
Offers training in the basic fundamentals of strokes with irons, woods and putters; includes rules and etiquette of the game.
- P.E. 18B Intermediate Golf, Coed (1) 2 hrs. Lab.**
Offers training in the advanced fundamentals of the game of golf and actual participation upon the golf course. Social etiquette of the game is stressed along with the worthy use of leisure time.
- P.E. 19A Karate, Coed (1-1-1-1) 2 hrs. Lab.**
Designed to give the student an introduction to the basic movements and self defense tactics used in Okinawan Kempo Karate.
- P.E. 19B Karate, Coed (1) 2 hrs. Lab.**
Prerequisite: P.E. 19A or permission of instructor. Course is designed to give the student greater skill and expertise in using techniques and self-defense tactics learned in P.E. 19A. Kumite (free sparring) will be a key element in further developing the skills learned in P.E. 19A.
- P.E. 19C Advanced Karate (1) 2 hrs. Lab.**
Prerequisites: P.E. 19A and P.E. 19B. This course is designed to give the intermediate student a chance to strengthen and perfect pin — ans and fighting techniques learned in P.E. 19B. Breaking techniques will also be included as part of the course.
- P.E. 20ABCD Bicycling, Coed (1-1-1-1) 2 hrs. Lab.**
Designed to provide physical exercise, recreation and transportation.
- P.E. 21A Horsemanship-Equitation (1) 1 hr. Lec. 1 hr. Lab.**
(Same as Ag 64.)
- P.E. 21B Intermediate Horsemanship-Equitation (1) 1 hr. Lec. 1 hr. Lab.**
(Same as Ag 66.)

- P.E. 22 Racquet Ball and Handball (1) 2 hrs. Lab.**
Instruction and development of the handball skills. Presentation of singles and doubles play, including basic shots and strategy.
- P.E. 25AB Folk Dance, Coed (1-1) 2 hrs. Lab.**
Participation and instruction in basic fundamentals, forms and patterns of folk dancing. P.E. 25B may be taken before P.E. 25A.
- P.E. 26A Beginning Modern Dance, Coed (1) 2 hrs. Lab.**
Participation and instruction in rhythmic fundamental factors related to movement, movement fundamentals, and dance skills, creative activity, and evaluation. Designed to develop the student's ability to use expressive body movements in a creative art form. Emphasis upon developing dance skills as well as conditioning the body by improving strength, flexibility, posture and coordination.
- P.E. 26B Intermediate Modern Dance, Coed (1) 2 hrs. Lab.**
Prerequisite: P.E. 26A or permission of instructor. More advanced dance skills. Improvisational problems using various forms of motivation. More complex individual dance sketches and small group dance studies.
- P.E. 27ABCD Social Dance, Coed (1-1-1-1) 2 hrs. Lab.**
To enhance the dancing skills of "already dancers" and offer new dances to the novice.
- P.E. 28ABCD Modern Dance Theater (2-2-2-2) 3 hrs. Lab.
1 hr. by arrangement**
Prerequisite: Permission of the instructor. A performance group presenting all forms of dance and related theatre arts. A minimum of five outside performances required each semester. Meets physical education activity requirement.
- P.E. 29ABCD Modern Jazz Dance, Coed (1-1-1-1) 2 hrs. Lab.**
Prerequisite: Consent of instructor. A study of syncopated movement.
- P.E. 30AB Beginning Ballet (1-1) 2 hrs. Lab.**
Instruction in the principles of Classical Ballet, a stylized technique which develops muscle coordination as well as physical and mental discipline. This course is designed to give the student the tools for creating good movement so that he and/or she can develop confidence, poise and grace, along with an appreciation for the dance as an art as well as a science. This course fulfills one semester of the physical education requirement.

- P.E. 31AB Intercollegiate Football and P.E. (2-2)**
Hours to be arranged
Theory and practice of competitive football. Limited to students trying out for varsity team. The students must schedule for a minimum of 10 hours per week.
- P.E. 32ABCD Intercollegiate Basketball and P.E. (2-2-2-2)**
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 10 hours per week.
- P.E. 33AB Intercollegiate Track and P.E. (2-2)**
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 10 hours per week.
- P.E. 34AB Intercollegiate Baseball and P.E. (2-2)**
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 10 hours per week.
- P.E. 35ABCD Intercollegiate Wrestling and P.E. (2-2-2-2)**
Hours to be arranged
Theory and practice of wrestling. Limited to students trying out for varsity team. Student must schedule for a minimum of 10 hours per week.
- P.E. 36AB Intercollegiate Golf and P.E. (2-2)**
Hours to be arranged
Theory and practice of golf. Limited to students trying out for varsity team.
- P.E. 37AB Intercollegiate Cross Country and P.E. (2-2)**
Hours to be arranged
Intercollegiate cross country running over a four-mile course. The student must schedule for a minimum of 10 hours per week.
- P.E. 38AB Intercollegiate Tennis and P.E. (2-2)**
Hours to be arranged
Eligibility will be determined by Desert Conference rules; however, "redshirts" will be permitted to take the class and work out with the team. IVC guidelines in the AS Handbook for athletics will also apply. Team membership will be the top seeded 8-10 players. Open to both men and women.

PHYSICAL EDUCATION

- P.E. 44 Defensive Tactics (2) 2 hrs. Lab.**
A study of the art of self-defense through boxing, wrestling and fencing. Includes the art of weight lifting. Satisfies the district (Same as L.E. 23) Physical Education activity requirement for one semester.
- P.E. 45 Women's Athletics (2) 10 hrs. Lab.**
Prerequisites: Consent of instructor. Theory and practice of competitive sports for women. Students must schedule for a minimum of 10 hours per week. Limited to women trying out for the women's varsity team.
- P.E. 47 Coaching Techniques of Wrestling (2) 2 hrs. Lec.**
Course designed to prepare physical education students with the basic knowledge of wrestling fundamentals and coaching techniques. Organization of new programs and conducting of tournaments.
- P.E. 50 Introduction to Physical Education (2) 2 hrs. Lec.**
Principles of physical education, organization of physical education; areas of specialization within the field.
- P.E. 51 Structuring Intramurals (2) 1 hr. Lec.
4 hrs. Lab.**
Prerequisite: Knowledge of competitive sports and recreational games. Course will be designed so that students will be able to structure various types of tournament and assist in running the IVC Intramural Program.
- P.E. 52 Theory of Baseball (2) 2 hrs. Lec.**
A history of the game, knowledge of rules, current and possible future trends in the game, coaching techniques and scouting. Recommended for physical education majors, potential coaches and recreation majors.
- P.E. 54 Theory of Football (2) 2 hrs. Lec.**
Provides students with fundamental concepts, theories and techniques of coaching and playing intercollegiate and interscholastic football.
- P.E. 58 Psychology of Coaching (2) 2 hrs. Lec.**
Prerequisites: Sophomore status or permission of instructor. A course covering all the aspects of the psychology of coaching sports. Includes certain guides to show how teaching and learning may be applied to the coaching of sports, and to bring out the relationship of meaningful learning to successful athletic coaching.
- P.E. 59A Sports Officiating, Men (2) 2 hrs. Lec.**
Theory and practice in the techniques of officiating in highly organized games and sports such as basketball, football and wrestling.

PHYSICALLY LIMITED

- P.E. 59B Sports Officiating, Men (2) 2 hrs. Lec.**
Theory and practice in the techniques of officiating in highly organized games and sports such as baseball, track and tennis.
- P.E. 60AB Sports Officiating, Women (2-2) 2 hrs. Lec.**
To familiarize prospective physical education majors and minors with the rules of team and individual sports for girls.
- P.E. 61 Physical Education in the Elementary School (3) 3 hrs. Lec.**
This course is designed to prepare the elementary school teacher to teach the whole child through physical education.

PHYSICALLY LIMITED

- P.L. 1 Survey of Physical Limitations 3 hrs. Lec.**
Physical limitations commonly found among physically limited-handicapped persons, including impairments of the central nervous system, orthopedic handicaps, blindness and visual problems and hearing and speech limitations.
- P.L. 2 Practicum Experience to Work with the Physically Limited Person (2) 6 hrs. Lab.**
Prerequisites: P.L. 1, Psych 1A, and Sociol 1. Concurrent enrollment or by permission of instructor. A course designed to extend the experience of Rehabilitation Technician Majors, who wish to explore a specific area of contact with physically limited individuals. Experience may be gained on the college campus or in the field with deaf, blind or orthopedically handicapped individuals.
- P.L. 3 Survey of Campus Life for the Physically Limited (1-6)**
This course is designed to help prepare the physically limited student for full or adaptive participation in community college activities, academic, social, vocational and environmental.
- P.L. 6ABCD Personal and Social Adjustment for the Physically Limited (1-4) 1-4 hrs. Lec.**
This course is designed to help the physically limited students who have difficulty in adjusting to the educational complexities encountered in college level classes because of deficiencies in their educational backgrounds.

P.L. 10 Beginning Communication with the Deaf (3) 3 hrs. Lec.

An introduction to the American Manual Alphabet and American Sign Language, designed to provide basic conversational skill in the language used among most deaf people in the United States.

P.L. 11 Intermediate Communication with the Deaf (3) 3 hrs. Lec.

Prerequisites: P.L. 10 or equivalent. Further training in Manual Alphabet and Sign Language for communication purposes with the deaf to increase speed with accuracy and rhythm.

P.L. 12 Advanced Communication with the Deaf (3) 3 hrs. Lec.

Prerequisites: Completion of P.L. 2 and P.L. 3, or proficiency in sign vocabulary. This course is designed for the student with extensive sign vocabulary who desires skills for interpreting for the deaf in the classroom or other social situations.

P.L. 13ABCD Communication with the Deaf in the College Classroom (1-1-1-1) 1 hr. Lec.

Prerequisites: P.L. 10, P.L. 11 and P.L. 12. This course is designed for deaf students at IVC and students assisting as interpreters in class.

P.L. 20 Beginning Braille (3) 3 hrs. Lec.

Fundamentals of Braille; practice in reading and writing Braille; methods and techniques for teaching Braille.

P.L. 21 Intermediate Braille (3) 3 hrs. Lec.

Prerequisite: P.L. 20 or equivalent. Further training in the fundamentals of Braille; practice in reading and writing Braille; methods and techniques for teaching Braille.

P.L. 30 Introduction to Speech and Language (3) 3 hrs. Lec.

Prerequisites: P.L. 1 (may be taken concurrently). This course is designed to acquaint the student with the normal speech and language developmental sequence, and introduce him to deviations from normal patterns. Etiology, characteristics, and prognosis for various speech and language disorders would be explored.

P.L. 31 Interviewing and Testing Techniques for Speech and Hearing Problems (3) 3 hrs. Lec.

Prerequisites: P.L. 1 (may be taken concurrently). A course designed to acquaint students with good interview techniques, and to provide experience in administration of basic speech and language screening materials. The students would gain insight into test design and factors affecting test outcomes.

P.L. 32 Behavior Modification Techniques for Speech and Hearing Pathology (3) 3 hrs. Lec.

Prerequisites: P.L. 30 or permission of instructor. A course designed to introduce the student to principles of behavior modification as used in speech and hearing pathology, to enable him to isolate modifiable behavior, and to successfully modify simple behavior patterns.

P.L. 33 Introduction to Audiology (3) 3 hrs. Lec.

This course includes an introduction to the science of hearing, fundamentals of acoustics as they apply to audiometric testing, basic anatomy and physiology of the hearing mechanism, pathologies causing impaired hearing, interrelationship of hearing to speech and language development, and familiarization with audiologic assessment and clinical procedures.

P.L. 34 Audiometry and Hearing Conversation (3) 3 hrs. Lec.

This course includes identification audiometry, pre-school hearing screening, industrial audiometry, and the role of the audiometrist, nurse-audiometrist and speech-hearing therapist in the total conversation of hearing program.

P.L. 40 Introduction to Physical Therapy (3) 3 hrs. Lec.

A course dealing with the most common types of neurological and orthopedic problems and various methods of physical therapy used in treatment of these problems.

PHYSICAL SCIENCE**Phys Sci 25 Introduction to Physical Science (4) 3 hrs. Lec. 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. May be combined with Bio 3 for a year course in the basic principles of natural science.

Psych 1B Advanced General Psychology (3) 3 hrs. Lec.

Prerequisite: Psych 1A. This course is designed to enhance and continue exploration of the basic principles of psychology with emphasis in the areas of perception, individuality and personality, and social behavior.

Psych 2 Introduction to Physiological Psychology (3) 3 hrs. Lec.

Prerequisite: Psych 1A. An introduction to the function of experimental methodology in the investigation of physiological processes in psychology. Emphasis is placed upon those physiological mechanisms which provide a basis for perception, learning, motivation, and other complex patterns of behavior.

Psych 3 Psychology of Personal and Social Adjustment (3) 3 hrs. Lec.

Prerequisite: Psych 1A. The development of the normal personality, with particular emphasis placed upon the social and emotional problems of adjustment. (Same as T.A. 3.)

Psych 5 Psychology of Effective Behavior (3) 3 hrs. Lec.

A survey of some of the relevant psychological facts, principles, and concepts involved in the experience and problems of everyday living. An experiential approach, including emphasis upon child-training, vocational adjustment, mental hygiene, and effective behavior. Not open to students who have completed Psych 1A.

Psych 9 Interviewing and Counseling (3) 3 hrs. Lec.
(Same as H.R. 9.)**Psych 10 Small Group Leadership (3) 3 hrs. Lec.**
(Same as H.R. 10.)**Psych 11 Practicum (3) 1 hr. Lec.**
10 hrs. work experience

Prerequisite: H.R. 9, Psych 1A, and Sociol 1, or concurrent enrollment, or by permission of instructor. (Same as H.R. 11.)

Psych 12 Elementary Statistics (3) 3 hrs. Lec.
Prerequisite: Math A or equivalent. (Same as Math 12.)**Psych 14 Abnormal Psychology (3) 3 hrs. Lec.**

Prerequisites: Psych 1A. Recommended: Psych 2 and Psych 3. This course reviews the causes and problems of disordered behavior. Current practices in therapy and prevention are emphasized. The topics of anxiety and fear, psychoneuroses, organic and functional psychoses are included.

Psych 15 Social and Psychological Dynamics of Drug Use (3) 3 hrs. Lec.

Either Psych 1A, Psych 1B, Psych 17, Sociol 1 or Sociol 17 is recommended previous to taking this course or may be taken concurrently. This course views drug use behavior from a sociological and psychological perspective. It includes an analysis of factors contributing to drug use; societal influences, subcultural influences, primary group influences (peer group and the family), and personal psychodynamics and development. It encompasses illegal drug use as well as legal drugs, particularly alcohol. Some emphasis will be given to potential solutions and preventive methods which could be of practical value to parents and various professional and semi-professional workers. (Same as Sociol 15.)

Psych 17 Social Psychology (3) 3 hrs. Lec.

A study of the social and psychological aspects of how people interact and influence each other. The course will cover such topics not included in Psych 1A or Soc 1 as: methods and ethics of research, influence, attitude changes, persuasion, and propaganda, aggression, cooperation and competition, conformity, prejudice, communication, affiliation, dynamics of group structure, including leadership and role playing. These topics are covered at both the theoretical and practical levels (Same as Sociol 17.)

Psych 20 Developmental Psychology of Children (3) 3 hrs. Lec.

A study of the psychological development of children, aimed at immediate and practical application of child rearing theory and practice, designed for prospective parents, parents, and those working with children. The course will cover the research and theories on factors affecting or altering children's behavior, intelligence, learning, mental and physical well-being, and motivation. The factors covered would include heredity, environment, maturation, and prenatal, natal, and post-natal physiology. (Same as E.C.E. 20.)

- Psych 21 Psychology of Early Childhood Development (3)** 3 hrs. Lec.
(Same as E.C.E. 21.)
- Psych 22 Early Childhood Development I (3)** 3 hrs. Lec.
(Same as E.C.E. 22.)
- Psych 23 Early Childhood Development II (3)** 3 hrs. Lec.
(Same as E.C.E. 23.)
- Psych 24 Creative Learning Experiences for Pre-School Children (3)** 3 hrs. Lec.
(Same as E.C.E. 24.)
- Psych 27 Psychology of Family Pathology and Emotional Problems of Children (3)** 3 hrs. Lec.
Prerequisite: Permission of instructor. A study of constructive intervention into emotional situations encountered in family living, designed for the para-professional and those who work with children. The course will cover both the theoretical and practical approach to the creation of healthy family interaction.
- Psych 30 Psychology of Adolescence (3)** 3 hrs. Lec.
Deals with the practical aspects of the development and growth of adolescence. Particular attention is given to the influences, settings, and problem areas of adolescence and youth.
- Psych 38A Literature and Life: A Study in Values (3)** 3 hrs. Lec.
(Same as Eng 38A.)
- Psych 38B Literature and Life: A Study in Values (3)** 3 hrs. Lec.
(Same as Eng 38B.)
- Psych 40 Psychology of Crisis Counseling (3)** 3 hrs. Lec.
A course designed to familiarize the student with a basic understanding of the causes, manifestations and treatment of emotional illness.
- Psych 43 Introduction to Community Mental Health Services I (2)** 2 hrs. Lec.
Prerequisites: Employment in the mental health field or permission of instructor. An introduction to the major theories that are used in contemporary mental health work. The course will cover theories of personality, deviant behavior and therapy from four different perspectives: Psychodynamic, existential-humanistic, learning theory, and bio-physical. Included also will be a developmental approach emphasizing stages of emotional maturation, problems encountered at various developmental stages and interventions appropriate to those levels. Special problems in marriage and family counseling will also be discussed.

- Psych 43B Introduction to Community Mental Health Services II (2)** 2 hrs. Lec.
Prerequisites: Employment in the mental health field or permission of instructor. Psych 43B is a continuation of Psych 43A.
- Psych 46 The Mentally Ill, Alcoholic, Drug Addict and the Law (3)** 3 hrs. Lec.
An integrated approach to the understanding of laws governing the treatment of the emotionally disturbed individual, alcoholic, and drug addict as seen from the viewpoint of the professional, para-professional, law enforcement and the courts. (Same as Law Enf 46.)

RECREATION

- Rec 70 Introduction to Leisure (3)** 3 hrs. Lec.
Presents the basic ideas and problems in our contemporary society and projects this thinking into the future when greater amounts of leisure time will be at our disposal. The course shows the need of our citizenry to cope successfully with the pressures of our daily lives and have a balanced and meaningful use of leisure time in maintaining mental and physical health.
- Rec 71 Social Recreation (3)** 3 hrs. Lec.
A theory and activity course designed to present instruction, material, and information necessary to effectively conduct social recreation in clubs, playgrounds, recreation centers, churches and camps. Emphasis is on the social development and integration of individuals into group programs, including planning, programming, and conducting social recreation activities.
- Rec 72 Outdoor Recreation (3)** 2 hrs. Lec.
3 hrs. Lab.
History, development, principles and trends of organized camping, nature and conservation, and outdoor recreation. Laboratory and field trips, including camping and hiking activities. Practical skills in firecrafts, outdoor cooking and backpacking. Leadership training in camp counseling. Required for recreation majors. (Will not satisfy P.E. requirement)
- Rec 73 Recreation for Special Groups (4)** 2 hrs. Lec.
4 hrs. Lab. plus 2 hrs. to be arranged
Prerequisites: Rec 74, P.E. 14 and P.E. 61. Field work in therapeutic recreation in the community. The special groups emphasis area is dedicated to understanding and serving individuals and groups in our society who exhibit special recreational needs. Restricted to sophomores.

Rec 74 Introduction to Community Recreation (3) 3 hrs. Lec.

For recreation majors and non-majors, a general orientation to the field of recreation and parks, including a history of the development of the recreation profession, a survey of recreation and leisure services, description and interpretation of recreation as a form of community service and the nature and scope and significance of leisure and recreation as a social force in contemporary society. Emphasis is on the role of the professional leader in a variety of settings.

SOCIAL SCIENCE**Soc Sci 52 Introduction to American Government (3) 3 hrs. Lec.**

An introduction to the foundations and major characteristics of the governments of the United States and California, stressing the political habits of the American people within a historical setting. This course will meet the graduation requirement in American Institutions at Imperial Valley College, but is offered to students who do not intend to transfer to senior institutions. Not open to students with credit in Hist 17AB or Poly Sci 1, 2.

Soc Sci 69 Personal Finance (3) 3 hrs. Lec.
(Same as Bus 11.)**SOCIOLOGY****Sociol 1 Principles of Sociology (3) 3 hrs. Lec.**

Prerequisite: A minimum of eleventh-grade reading ability is recommended for success in this course.

A study of the characteristics of social life which emphasizes the processes of social interaction, the tools of sociological investigation, and the development and application of sociological concepts to social problems in the United States.

Sociol 2 Contemporary Social Problems (3) 3 hrs. Lec.

Prerequisite: Sociol 1 or Psych 1A. Study of modern social problems emphasizing the use of the scientific method in evaluating the causation and resolution of social problems.

Sociol 15 Social and Psychological Dynamics of Drug Use (3) 3 hrs. Lec.
(Same as Psych 15.)**Sociol 17 Social Psychology (3) 3 hrs. Lec.**
(Same as Psych 17.)**Sociol 33 Marriage and the Family (3) 3 hrs. Lec.**

An analysis of factors predictive of successful marital adjustment. Attention focused upon such family processes as courtship, marriage, reproduction, child rearing, and marital dissolution.

Sociol 41 Mass Sociology and Collective Behavior (3) 3 hrs. Lec.

This course will involve the formation and evolution of groups and group behavior in varying social settings. The impact of participants, audiences and outsiders will be used to examine the relationships of the individual to the group, groups to each other, and mass movements and events. Problems of social control and change as they relate to mass movements and mass psychology will be explored in depth. Leadership and decision making models will aid the student to understand these phenomenon ranging from groups and crowds to a study of riots. This course will be valuable to students of social change, social control, and law enforcement. (Same as Law Enf 41.)

SPANISH

High school Spanish courses may be used to meet the prerequisites of advanced Spanish courses at IVC only if they include training in all four basic language skills: listening, speaking, reading and writing. The courses must have included phonetics practice in both guided and free conversation as well as in reading aloud; testing in reading and listening comprehension; writing from dictation; and word-picture association. These high school courses will not count as college credit toward graduation. Placement will be made by examination and/or consent of the instructor. Contact the IVC Counseling Office for further information.

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. For advance placement, at least one course in Spanish must have been taken the year prior to entering college; otherwise, it is suggested that the student enroll in Span 1.

The above requirements may be waived by examination or by consent of the instructor.

Span 1 Elementary Spanish (4)**4 hrs. Lec.
1 hr. Lab.**

The course, based on a contrastive analysis between Spanish and English, is designed to develop, in the English-speaking student, rudimentary abilities in the four basic language skills: hearing, speaking, reading and writing. The student will be familiarized with those features of Hispanic culture which reflect the different frame of reference from which the native speaker of Spanish views the world around him. Not open to students with native ability in Spanish. (See Span 20A.)

Span 1A Elementary Spanish (2)**2 hrs. Lec.
½ hr. Lab.**

This course is one-half the content of the regular Span 1 course. Completion of Span 1A and 1B sequence will be the equivalent of Span 1, and the total of 4 units. Span 1A will be offered in the fall and Span 1B in the spring.

Span 1B Elementary Spanish (2)**2 hrs. Lec.
½ hr. Lab.**

This course is one-half the content of the regular Span 1 course. Completion of Span 1A and 1B sequence will be the equivalent of Span 1, and the total of 4 units. Span 1A will be offered in the fall and Span 1B in the spring.

Span 2 Elementary Spanish (4)**4 hrs. Lec.
1 hr. Lab.**

Prerequisite: Span 1 or one year of high school Spanish. Continuation of Span 1. Not open to students with native ability in Spanish. (See Span 20B.)

Span 2A Elementary Spanish (2)**2 hrs. Lec.
½ hr. Lab.**

Prerequisites: Span 1 or placement by examination. This course is one-half the content of the regular Span 2 course. Completion of Span 2A and 2B sequence will be the equivalent of Span 2, and the total of 4 units. Span 2A will be offered in the fall and Span 2B in the spring. Continuation of Span 1.

Span 2B Elementary Spanish (2)**2 hrs. Lec.
½ hr. Lab.**

Prerequisites: Span 2A or placement by examination. Continuation of Span 2A.

Span 3 Intermediate Spanish (4)**4 hrs. Lec.
1 hr. Lab.**

Prerequisite: Span 2 or two years of high school Spanish. This course deals primarily with the more complex grammatical structures and figures of speech found in the written language. From the beginning, each student will participate in a programmed review of the fundamental principles of Spanish grammar. Not open to students with native ability in Spanish. (See Span 21.)

Span 4 Intermediate Spanish (4)**4 hrs. Lec.
1 hr. Lab.**

Prerequisite: Span 3 or three years of high school Spanish. Continuation of Span 3. (Spanish speakers, see Span 22.)

Span 7 The Spanish Sound System (3)**3 hrs. Lec.**

The sounds of Spanish and of the Spanish phonemic system with special attention to the problems involved in the hearing of Spanish sounds for English-speaking students. (Same as Bus 36.)

Span 10 Intermediate Conversational Spanish (2)**2 hrs. Lec.
1 hr. Lab.**

Prerequisites: Span 1 and 2 or by examination and consent of instructor. Conversational skills are developed through oral-aural drills, lab work and guided conversation based on selected readings. Not open to students with bilingual or native ability.

Span 11 Advanced Conversational Spanish (2)**2 hrs. Lec.
1 hr. Lab.**

Prerequisite: Span 3 or 10. Continuation of Span 10.

Span 18 Intermediate Shorthand for Bilinguals (3)**2 hrs. Lec.
3 hrs. Lab.**

(Same as Bus 36.)

Span 20A Beginning Spanish for Bilinguals (4)**4 hrs. Lec.
Plus 1 hr. to be arranged**

First year college Spanish for Spanish speakers. The course studies the basic grammar of Spanish, with dialogs and exercises. It introduces the contemporary culture of Spain, Spanish America, including the Spanish-speaking communities of the United States: Mexican, Cuban, Puerto Rican and Sephardic-Spanish Jews.

Span 20B Beginning Spanish for Bilinguals (4)**4 hrs. Lec.
Plus 1 hr. to be arranged**

Prerequisites: Span 20A. A continuation of 20A.

Span 20C Oral Spanish for Spanish Speakers (3) 3 hrs. Lec.

Prerequisite: Previous study of Spanish and/or consent of instructor. An intensive course in oral Spanish for students who have learned Spanish as a native language. It is intended for students who may read well and have a good grasp of grammar, but still need more practice in manipulating oral structures. Relevant everyday topics: sports, the fad of the occult, music, fashion, books, films, yoga, etc.

Span 21 Intermediate Spanish for Bilinguals (3) 3 hrs. Lec.

Prerequisites: Span 20A and 20B or Span 2. A course designed in an effort to further develop the ability of the bilingual student to use standard Spanish as opposed to colloquial Spanish, in a manner comparable to students in Hispanic universities. Intensive vocabulary-building and translating, grammar and composition. The student is introduced to 20th century Spanish culture. This course prepares the bilingual student for further study in Spanish.

Span 22 Intermediate Spanish for Bilinguals (3) 3 hrs. Lec.

Prerequisites: Span 21 or placement by examination. A continuation of Span 21. Intermediate oral and written composition. Review of the subjunctive mood. Intensive use of the laboratory to improve oral ability. The student is introduced to 20th century Spanish-American culture.

Span 23 Business Correspondence in Spanish (3) 3 hrs. Lec.

Recommended for bilingual secretaries with Business 11 or equivalent. Practice in letter form and style, business vocabulary, spelling, and punctuation. Emphasis on differences and similarities in English and Spanish business correspondence. (Same as Bus 43.)

Span 24 Introduction to Spanish Literature (3) 3 hrs. Lec.

Prerequisites: Span 22 or consent of instructor. Course conducted in Spanish. Introduction to the more important movements, authors, and works in Spanish literature from the Middle Ages to the present. Lecture; readings on assigned topics. It is recommended that Span 40 be taken concurrently with this course.

Span 25 Introduction to Spanish-American Literature (3) 3 hrs. Lec.

Prerequisites: Consent of instructor. Course conducted in Spanish. An introduction to the more important movements, authors and works in Spanish-American literature from The Conquest to the present time. Lectures; readings on assigned topics. It is recommended that Span 41 be taken concurrently with this course.

Span 28A The Mexican-American in Literature (3) 3 hrs. Lec.
(Same as Eng 30A.)**Span 28B The Mexican-American in Literature (3) 3 hrs. Lec.**
(Same as Eng 30B.)**Span 30 Literature of the Southwest (3) 3 hrs. Lec.**
(Same as Eng 31.)**Span 40 Civilization of Spain and Portugal (3) 3 hrs. Lec.**
A general survey of the physical, racial, historical and artistic influences—Oriental, Jewish, and African—which have molded Iberian culture from prehistory to present time. Illustrated lectures, outside readings and written reports on assigned topics. Conducted in English. (Same as Hist 40.)**Span 41 Civilization of Spanish America and Brazil (3) 3 hrs. Lec.**

A general survey of the indigenous, European and African heritage of Spanish-America as expressed through the centuries in literature, art and philosophy. Illustrated lectures on history, geography, customs, folklore, etc. From pre-Columbian times to the present. Conducted in English. (Same as Hist 41.)

Span 42 The Mexican-American (3) 3 hrs. Lec.

A survey of the history, culture, traditions and artistic contributions of the Mexican-Americans to the United States. Special emphasis on the economic, social and historical background from the Indo-Hispanic merger to the contemporary period. This course is conducted in English.

Span 43 History and Culture of the Philippines (3) 3 hrs. Lec.

A survey of the history, culture, and traditions and artistic contributions of the Filipinos. Special emphasis on the economic, social and historical background from the Pre-Hispanic period to the present.

**Span 51A Beginning Conversational Spanish and Culture (2) 2 hrs. Lec.
1 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, listening comprehension, and culture.

Span 51B Beginning Conversational Spanish and Culture (2) 2 hrs. Lec.
1 hr. Lab.

Prerequisite: Span 51A. Continuation of Span 51A.

Span 53 Practical Spanish for Public Service Personnel (2) 2 hrs. Lec.
1 hr. Lab.

Course designed primarily for police, fire and medical professions. Highly specialized vocabulary and phonetic course with illustrations and expressions in both English-Spanish and Spanish-English. Taught by extensive conversational drills and a multi-media learning system with use of visuals and cassettes. Recommended for assistance to the general public, including lawyers, legal secretaries, airline hostesses, telephone operators, travelers, etc. "Text prepared in collaboration with various police and fire departments throughout the United States and Mexico."

Span 54 Beginning Conversational Spanish and Beginning Guitar (2) 2 hrs. Lec.
1 hr. Lab.

Basic conversational Spanish for students with little or no previous instruction in the language. Presentation of elementary structures and vocabulary. Designed for communication on everyday matters. A portion of the instructional period will be devoted to acquaint the student with a basic accompaniment on the guitar of popular Mexican folk songs.

Span 55 Beginning Guitar and Mexican Folk Songs for Spanish Speakers (2) 2 hrs. Lec.
1 hr. Lab.

(Same as Mus 55.)

Span 56A Practical Spanish for Medical Professionals (2) 2 hrs. Lec.
1 hr. Lab.

The object of the course is to teach each student to communicate in and understand a basic spoken Spanish, with emphasis on situations in a medical setting. The classroom work will focus on learning a basic vocabulary and simple grammatical rules and on applying them in oral conversation. During lab, students will be able to drill orally on familiar phrases, tape their own voices for comparison with Spanish speakers, and listen to a variety of people who speak Spanish to train their ears for comprehension.

Span 56B Practical Spanish for Medical Professionals (2) 2 hrs. Lec.
1 hr. Lab.

Prerequisites: Spanish 56A or equivalent. Second of two courses offering a basic Spanish, oriented toward health personnel. Course features extensive oral drills and role playing in medical situations.

Span 57 Spanish Lab: Individualized Study (1) 1 hr. Lec.
2 hrs. Lab. to be arranged

A course designed to give the beginning or intermediate student of Spanish additional practice in reading or audio comprehension or phonetics and pronunciation. Assigned taped materials and correlated reading materials in the language laboratory will be used.

Span 80 Orientation for Travel in Mexico (1) 2 hrs. Lec.

Course designed specifically for persons planning a trip to Mexico. The course will touch on all of the aspects of Mexican life — history, geography, language, culture — in order to enhance and make a trip to Mexico more enriching. Included will be intensive drill on phrases essential to the traveler in Mexico as well as information on prices, visa requirements, recommended hotels, methods of travel, places of interest, and shopping trips. The course will consist of lectures, discussions, filmstrip presentations, and field trips.

Span 81 Travel in Mexico (1)

Prerequisite: Span 80. Field excursion to areas in Mexico to practice the Spanish language and to acquaint the student with Mexican culture and everyday life in an authentic setting. An introduction to travel, accommodations and tourist sites available to tourists in Mexico.

SPECIAL STUDIES

Special Studies 51 or 81 Vocational Education (1-3)
Hours by Arrangement

Special Studies 52 or 82 Humanities (1-3)
Hours by Arrangement

Special Studies 53 or 83 English (1-3)
Hours by Arrangement

Special Studies 54 or 84 Natural Science (1-3)
Hours by Arrangement

Special Studies 55 or 85 Social Science (1-3)
Hours by Arrangement

Special Studies 56 or 86 Business (1-3)
Hours by Arrangement

**Special Studies 57 or 87 Health, Physical
Education, and Recreation (1-3)**
Hours by Arrangement

Special Studies 58 or 88 Behavioral Science (1-3)
Hours by Arrangement

Special Studies 51-58 Course Description

Course content, prerequisites, and unit credit to be determined by the Division and the Office of Instruction in relation to community-student interest and available staff. Not offered every semester. Courses numbered 81-88 are non-transferable.

SPEECH

Sp 1 Oral Communication (3) 3 hrs. Lec.

Training in the fundamental processes involved in oral communication with emphasis on organizing material, outlining, constructing, and delivering various forms of speeches.

Sp 2 Intermediate Public Speaking (3) 3 hrs. Lec.

Prerequisite: Sp 1. A continuation of Sp 1 with particular emphasis on organization and delivery, and study in the areas of parliamentary procedure, debate, discussion, and oral reading.

Sp 10 Argumentation and Debate (3) 3 hrs. Lec.

Prerequisite: Sp 1, taken previously or concurrently. An introduction to the problems of evidence and inference, with emphasis on the application of logic to rational discussion of social problems.

Sp 11 Oral Interpretation (3) 3 hrs. Lec.

Discovering and imparting, vocally, intelligent and emotional meanings of the printed page.

Sp 12ABCD Forensics (1-1-1-1)

Prerequisites: Eligibility for Eng 1A and permission of the instructor. Sp 1 and 2 recommended. Enrollment contingent upon participation in forensic or competitive speech activities as a member of the IVC Speech Team. Student must be prepared to meet the following: 1) be present for 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 30 Voice and Articulation Development (3) 3 hrs. Lec.

Satisfies the requirement of voice and diction for pathology majors. It is recommended for those planning careers in elementary education, special education, and early childhood education. Enables the student to develop a pleasant voice and manner of expression. The various problems of voice and diction are presented, including the physiology of voice production and phonetics. Drills for the improvement of the student's voice are presented. Recommended for bilingual students to improve their articulation and English language usage.

Sp 51 Basic Speech (3) 3 hrs. Lec.

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 Eng 51.

TEACHER AIDE

T.A. 1 Introduction to Education (3) 3 hrs. Lec.

Introductory course for students interested in a career as an Instructional Associate or in a teaching credential. Brief overviews of philosophies, ideals, goals, new directions, problems and issues in public education today, organization of school system; financial and legal aspects of teaching, career opportunities; credentialing, degree-certificate requirements.

T.A. 2 Introduction to Instructional Associate (3) 3 hrs. Lec.

For students planning to become Instructional Associates in elementary school. Defines terminology; legal status in California; needed functional, clerical and mechanical skills; role in classroom and in community; reviews duties, responsibilities, positive relationships with students, teachers, administrators, parents; provides information on employment trends, ways to find jobs and further career.

T.A. 3 Psychology of Personal and Social Adjustment (3)
3 hrs. Lec.

Prerequisite: Psych 1A. The development of the normal personality, with particular emphasis placed upon the social and emotional problems of adjustment. (Same as Psych 3.)

T.A. 4 The Learning Process for the Elementary School Child (3)
3 hrs. Lec.

Basic course in the learning processes of children. Emphasis on defining, understanding, identifying the developmental stages of children ages 5 through 12. Review of modern theories of behavior, motivation, impact of school on personality development, problems of anxiety in children. Includes weekly classroom observation and recording of behavior of children.

T.A. 5 Instructional Media for Instructional Associate (3)
3 hrs. Lec.

Exploratory course in preparation, presentation, full utilization of instructional media. Emphasis on production of teaching-learning materials. Experiences in still and motion picture projection, graphic arts, monaural and stereo audio systems, video tape recording, programmed instruction.

T.A. 6 Language Arts for Instructional Associate (3) 3 hrs. Lec.

Introduction to basic language art skills of listening, speaking, reading, writing needed for instructional competency in elementary school. Experiences in use of children's literature, commercial materials. Covers grade level readiness criteria.

T.A. 7 Creative Arts for Instructional Associate (3) 3 hrs. Lec.

Current trends and methods in instructing children at the elementary school in art, crafts, music, bodily movement, recreation and physical education, fundamentals of first aid and safety. Covers effective use of materials, techniques, creative thinking, innovative practices through use of demonstrations, project making, laboratory experiences and school visitations.

T.A. 8 Mathematics for Instructional Associate (3) 3 hrs. Lec.

Understanding of elementary concepts of the real number system, numeration systems, mathematical sets, philosophy of modern mathematics. Emphasis on providing most effective techniques for instruction of elementary school children. Study of texts, other media used in local schools, visitations to observe programs.

VISUAL COMMUNICATIONS**Vis Com 5 Introduction to Photography** 2 hrs. Lec.
3 hrs. Lab.

The basic, theory, techniques, and skills of photography. Consideration will be given to factors such as correct use of cameras and lenses, determination of exposure, different types of films and filters, lighting principles of composition, and the legal aspects of photography. Print production will be covered by sections on darkroom techniques, photographic, chemicals, development of film contact printing and enlargement technique. The student will provide an adjustable camera for assignment work. Specific projects will be developed for students with special subject interest. There will be a material fee. (Same as Jm 5.)

Vis Com 6 Intermediate Photography (3) 2 hrs. Lec.
3 hrs. Lab.

A continuation of Vis Com 5 and Jm 5 with emphasis on lighting, basic poses and studio work. Posing of the subject and visualization of the finished picture will be stressed, with further practice in camera operation and film processing. There will be a materials fee.

Vis Com 7 Advanced Photography (3) 2 hrs. Lec.
3 hrs. Lab.

Emphasis on advanced studio and location work and on illustrative photography including magazine covers, fashion and lay-out.

Vis Com 10 Introduction to Motion Picture Production (3)
3 hrs. Lec.

Plus production practice hours to be arranged

Prerequisites: A course in still photography, or permission of the instructor. Study of the basic elements of the film-making process in 8mm, including scripting, shooting and editing. (Same as Eng 10.)

Vis Com 11 Intermediate Motion Picture Production (3)
3 hrs. Lec.

Continued work in the 8mm medium. Practice in the skills of continuity development and of sound recording on film. Study of the aesthetics of the film medium, including the effects of sound and dynamic editing upon the viewer.

Zool 1B General Zoology (4) **2 hrs. Lec.**
6 hrs. Lab.

Prerequisite: Zool 1A. Continuation of Zool 1A with emphasis upon comparative anatomy and physiology, development of vertebrate forms and their interrelationships.

Zool 10 Life of the Past: An Introduction to Paleontology (3) **3 hrs. Lec.**

Prerequisite: One year of high school science or permission of instructor. (Same as Geol 10.)

PHILOSOPHY

Phil 1A Introduction to Philosophy (3) **3 hrs. Lec.**

Man's interpretation of the nature and meaning of reality. Emphasis placed upon the existence of God, free will and mind-body problems.

Phil 1B Introduction to Philosophy (3) **3 hrs. Lec.**

The place of philosophy in intelligent living and the methods and significance of philosophical inquiry. Emphasis is placed upon problems of value and human nature. Phil 1B may be taken before Phil 1A.

Phil 10 Logic (3) **3 hrs. Lec.**

An introduction to deductive and inductive logic. Attention focused upon the relationship between logic and language, fallacies, and the use of logic in everyday life.

Phil 11 Ethics (3) **3 hrs. Lec.**

An introduction to significant and typical value theories and systems, and of the concrete problems such theories seek to explain. Emphasis placed upon teaching students to critically analyze their own value systems.

Phil 25 Religions of the Modern World (3) **3 hrs. Lec.**

An introduction to the various contemporary religions of the world with an emphasis on their historical development. Study of basic beliefs of such religions as Hinduism, Buddhism, Taoism, Zen.

MAJORS

Generally, 18 units of specified course work will satisfy the requirement for the major. However, some majors will require more than 18 units. Please note the specified number of required units at the beginning of each major description.

The following definitions apply to the major descriptions shown in this catalog:

1. Required courses are the specific courses which must be taken to fulfill the requirements in an area of study.
2. Acceptable courses are those from which the student may select in order to meet the total units requirement. The total number of units from the required course list, plus the number of units selected by the student from the acceptable course list must equal at least the total unit count required for the major.
3. Courses recommended as electives are beyond the majors requirement. These courses are suggested only, and selection from this list depends upon the student's individual desire and the total number of electives available within his own program.

Students may satisfy the major requirements in the following fields of study:

AGRICULTURAL BUSINESS

Twenty-four units required for the major

- I. Required courses for the major
 - Ag 14 Entomology (3)
 - Ag 25 Agricultural Business Management (3)
 - Ag 26 Agricultural Business Organization
and Management (3)
 - Ag 40 Soils (3)
 - Ag 41 Fertilizers (3)
 - Ag 49 Weeds and Weed Control (3)
- II. Acceptable courses for the major (6 units from the following courses)
 - Bus 4 Principles of Marketing (3)
 - Bus 5A Business Law (3)
 - Bus 10A Practical Bookkeeping (3)
 - Bus 23 Office Machines (3)
 - W.E. Occ 80 Personal Efficiency (4)
 - W.E. Occ 81 Motivation (4)
 - W.E. Occ 82 Labor and the Economy (4)
 - W.E. Occ 83 Laws Affecting Employees (4)

AGRICULTURAL CHEMICAL TECHNOLOGY

Twenty-two units required for the major

I. Required courses for the major

Ag 14	Entomology	(3)
Ag 28	Heavy Equipment Operation and Maintenance	(5)
Ag 40	Soils	(3)
Ag 41	Fertilizers	(3)
Ag 49	Weeds and Weed Control	(3)

II. Acceptable courses for the major (5 units from the following courses)

Ag 30	Agricultural Mechanics	(3)
Ag 32	Irrigation and Drainage	(3)
Ag 33A	Farm Power	(5)
Ag 37	Small Gasoline Engines	(3)
Ag 65	Control of Insects and Other Pests	(3)
Weld 30	Arc Welding	(3)
Weld 32	Gas Welding	(3)
Bot 1A	General Botany	(4)
Chem 2A	Introduction to Chemistry	(4)
Eng 7	Technical and Report Writing	(3)
W.E. Occ 80	Personal Efficiency	(4)
W.E. Occ 81	Motivation	(4)
W.E. Occ 82	Labor and the Economy	(4)
W.E. Occ 83	Laws Affecting Employees	(4)

AGRICULTURAL MECHANICS

Twenty-two units required for the major

I. Required courses for the major

Ag 28	Heavy Equipment Operation and Maintenance	(5)
Ag 30	Agricultural Mechanics	(3)
Ag 33A	Farm Power	(5)
Weld 30	Arc Welding	(3)
Weld 32	Oxy-Acetylene Welding	(3)

II. Acceptable courses for the major (3 units from the following courses)

Ag 33B	Farm Power	(5)
Ag 35	Fluid Power	(4)
Ag 36	Agricultural Construction	(3)
Ag 37	Small Gasoline Engines	(3)
Ag 38	Electricity on the Farm	(3)
Ag 50	Shop Mathematics	(3)
W.E. Occ 80	Personal Efficiency	(4)
W.E. Occ 81	Motivation	(4)
W.E. Occ 82	Labor and the Economy	(4)
W.E. Occ 83	Laws Affecting Employees	(4)

ANIMAL SCIENCE

Twenty-two units required for the major

- I. Required courses for the major
- | | | |
|-------|---------------------------|-----|
| Ag 20 | Animal Science | (3) |
| Ag 21 | Feeds and Feeding | (3) |
| Ag 22 | Livestock Selection | (3) |
| Ag 23 | Animal Diseases | (3) |
| Ag 24 | Horse Husbandry | (3) |
- II. Acceptable courses for the major (7 units from the following courses)
- | | | |
|-------------|--|-----|
| Ag 14 | Entomology | (3) |
| Ag 28 | Heavy Equipment Operation
and Maintenance | (5) |
| Ag 30 | Agricultural Mechanics | (3) |
| Ag 33A | Farm Power | (5) |
| Ag 42 | Plant Science and Forage Crops | (4) |
| Ag 64 | Horsemanship-Equitation | (1) |
| Ag 66 | Intermediate Horsmanship-Equitation .. | (1) |
| Weld 30 | Arc Welding | (3) |
| Weld 32 | Oxy-Acetylene Welding | (3) |
| Chem 2A | Introduction to Chemistry | (4) |
| W.E. Occ 80 | Personal Efficiency | (4) |
| W.E. Occ 81 | Motivation | (4) |
| W.E. Occ 82 | Labor and the Economy | (4) |
| W.E. Occ 83 | Laws Affecting Employees | (4) |

ANTHROPOLOGY

Twenty-one units required for the major.

- I. Required courses for the major
- | | | |
|-----------|---|-----|
| Anthro 1 | Physical Anthropology | (3) |
| Anthro 2 | Cultural Anthropology | (3) |
| Anthro 3A | Introduction to Field Archaeology | (3) |
| Anthro 4 | California Indians | (3) |
| Psych 1A | General Psychology | (3) |
- II. Acceptable courses for the major (minimum of 6 units required from the following courses)
- | | | |
|-----------|---|-----|
| Anthro 3B | Advanced Field Archaeology | (3) |
| Anthro 3C | Archaeological and Museum
Laboratory Principles and Practices | (3) |
| Anthro 5 | World Prehistory | (3) |
| Anthro 6 | Indians of North America | (3) |
| Anthro 7 | Classic Civilizations of Meso-America:
Aztec, Maya, and Inca | (3) |
| Bio 3 | Principles of Biological Science | (3) |
| Sociol 1 | Principles of Sociology | (3) |
| Hist 4A | History of Western Civilization | (3) |
| Geog 1 | Physical Geography | (3) |

ART

Eighteen units required for the major

- I. Required courses for the major
- | | | |
|----------|---------------------------------------|-----|
| Art 3A | History and Appreciation of Art | (3) |
| Art 3B | History and Appreciation of Art | (3) |
| *Art 20A | Elementary Drawing | (3) |
| *Art 20B | Elementary Drawing | (3) |
| Art 22A | Design | (3) |

Note: Art 20A-20B must be taken the first year.

II. Acceptable courses for the major (3 units from the following courses)

- | | | |
|----------|---------------------------------------|-------|
| Art 21A | Intermediate Drawing & Painting | (3) |
| Art 21B | Intermediate Drawing & Painting | (3) |
| Art 22B | Design | (3) |
| Art 23A | Ceramics | (3) |
| Art 23B | Ceramics | (3) |
| Art 23C | Ceramics | (3) |
| Art 24AB | Ceramic Sculpture | (3-3) |
| Art 25A | Life Drawing | (3) |
| Art 25B | Life Drawing | (3) |
| Art 26 | Design in Crafts | (3) |
| Art 27 | Creative Handweaving | (3) |
| Art 31 | Crafts | (3) |
| Art 33 | Art Gallery Display | (1) |
| Hum 25 | The Humanities | (3) |

*Should be taken first year if possible to allow for sequence of Art 21A and 21B courses the following year.

AUTOMOTIVE TECHNOLOGY

Twenty-two units required for the major

I. Required courses for the major

Auto Tech 50	Shop Mathematics (if required)	(3)
Auto Tech 51	Engine Technology, or equivalent	(5)
Auto Tech 52	Transmission Systems	(3)
Auto Tech 53	Brakes and Suspension	(3)
Auto Tech 54	Electrical and Fuel Systems	(3)
Auto Tech 55	Gasoline and Diesel Engines	(5)
Auto Tech 56	Diagnostic	(3)

II. Acceptable courses for the major (5 units from the list below may be accepted as major credit if the equivalent of Auto Tech 51 has been completed in high school (2 years of high school auto tech).

Auto Tech 57	Fluid Power	(4)
Auto Tech 58	Automotive Air-Conditioning	(3)
Auto Tech 59	Small Gasoline Engines	(3)
Auto Tech 70	Auto Body Repairing and Painting	(5)
Auto Tech 71	Advanced Auto Body Repairing and Painting	(5)
Weld 30	Arc Welding	(3)
Weld 32	Oxy-Acetylene Welding	(3)
W.E. Gen 70	Personal Efficiency	(3)
W.E. Gen 71	Motivation	(3)
W.E. Gen 72	Labor and the Economy	(3)
W.E. Gen 73	Laws Affecting Employees	(3)

BANKING—ADMINISTRATIVE SERVICES

Twenty-three units required for the major

I. Required courses for the major

Bus 1A	Principles of Accounting I	(4)
Bus 1B	Principles of Accounting II	(4)
Bus 6	Management Concepts of Supervision	(3)
Bus 7	Human Relations in Management	(3)
Bus 60	Principles of Bank Operations	(3)

II. Acceptable courses for the major (select any two courses)

Bus 5A	Business Law	(3)
Bus 42	Business Correspondence	(3)
Econ 1	Principles of Economics	(3)
Sp 1	Oral Communications	(3)

BANKING—CREDIT ADMINISTRATION

Twenty-three units required for the major

Bus 1A	Principles of Accounting I	(4)
Bus 1B	Principles of Accounting II	(4)
Bus 60	Principles of Bank Operations	(3)
Bus 61	Analysis of Financial Statements	(3)
	(Prerequisite: Bus 1A & 1B)	
Bus 62	Installment Credit	(3)

II. Acceptable courses for the major (select any two courses)

Bus 5A	Business Law	(3)
Econ 1A	Principles of Economics	(3)
Sp 1	Oral Communications	(3)
Bus 7	Human Relations in Management	(3)
Bus 42	Business Correspondence	(3)
Bus 63	Financing Business Enterprise	(3)
Bus 64	Agricultural Finance	(3)

BANKING—SECRETARIAL

Twenty-two to 27 units required for the major

I. Required courses for the major

Bus 5A	Business Law	(3)
Bus 21A	Proficiency-Exit Typing (1)	(2)
Bus 21B	Proficiency-Exit Typing (1)	(2)
Bus 32A	Dictation and Transcription Lab (2)	(3)
Bus 32B	Dictation and Transcription Lab (2)	(3)
Bus 40	Grammar and Usage	(3)
Bus 41	Business Correspondence	(2)
Bus 60	Principles of Bank Operations	(3)

II. Acceptable courses for the major (6 units from the following courses)

Sp 1	Oral Communications	(3)
Bus 7	Human Relations in Management	(3)
Bus 23	Office Machines	(3)
Bus 39	Office Procedures	(3)
Bus 50	Introduction to Data Processing	(3)

(1) Minimum skill level of 60 net words per minute required to qualify for major. If skill level attained in Bus 21A, student is excused from Bus 21B.

(2) Minimum skill level of 90 words per minute required to qualify for major. If attained in Bus 32A, student is excused from Bus 32B.

***BANKING—GENERAL OPERATIONS**

Twenty-two to 25 units required for the major

I. Required courses for the major

Bus 5A	Business Law	(3)
Bus 10A	Practical Bookkeeping (2)	(3)
Bus 21A	Proficiency-Exit Typing (1)	(2)
Bus 21B	Proficiency-Exit Typing (1)	(2)
Bus 23	Office Machines	(3)
Bus 40	Grammar and Usage	(3)
Bus 60	Principles of Bank Operations	(3)

II. Acceptable courses for the major (select any two courses)

Sp 1	Oral Communications	(3)
Bus 7	Human Relations in Management	(3)
Bus 39	Office Procedures	(3)
Bus 41	Business Correspondence	(2)
Bus 50	Introduction to Data Processing	(3)

(1) Minimum skill level 40 words per minute required to qualify for major. If skill level attained in Bus 21A, student is excused from Bus 21B.

(2) Bus 1A will be substituted if student has completed one year of high school bookkeeping.

*Designed for bank tellers, file clerks, bookkeepers, etc. Not intended for secretarial staff members.

BEHAVIORAL SCIENCE

The requirement for a major in Behavioral Science may be satisfied by taking 18 units from the following list, concentrating in the following three groups of primary interest:

I. Required courses for the major

Anthropology

Anthro 1	Physical Anthropology	(3)
Anthro 2	Cultural Anthropology	(3)
Anthro 5	Introduction to World Prehistory	(3)

Psychology

Psych 1A	General Psychology	(3)
Psych 1B	Advanced General Psychology	(3)
Psych 2	Intro to Physiological Psychology	(3)
Psych 3	Psychology of Personal and Social Development	(3)
Psych 12	Elementary Statistics	(3)
Psych 17	Social Psychology	(3)
Psych 20	Developmental Psychology of Children	(3)

Sociology

Sociol 1	Principles of Sociology	(3)
Sociol 2	Contemporary Social Problems	(3)
Sociol 33	Marriage and the Family	(3)

II. Recommended as Electives (do not fulfill major requirements)

Bio 3	Principles of Biological Science	(3)
Econ 1	Principles of Economics	(3)
Geog 1	Physical Geography	(3)
Geog 2	Cultural Geography	(3)
Hist 4A	History of Western Civilization	(3)
Hist 4B	History of Western Civilization	(3)
Hist 8A	History of the Americas	(3)
Hist 8B	History of the Americas	(3)
Hist 17A	United States History	(3)
Hist 17B	United States History	(3)
Hist 30	Mexico and the American Southwest	(3)
Math 12	Elementary Statistics	(3)
Math 18	Introduction to Mathematics	(3)
Phil 1A	Introduction to Philosophy	(3)
Phil 1B	Introduction to Philosophy	(3)
Poly Sci 1	Introduction to Political Science	(3)
Poly Sci 2	American Government & Politics	(3)
Poly Sci 3	Comparative Politics	(3)

Transfer students planning to major in these areas should take the I.V.C. General Major, and complete requirements listed in catalog of the school to which they anticipate transferring.

BILINGUAL - BICULTURAL STUDIES

Twenty-one to 24 units required for the major

I. Required courses for the major

Eng 2	Introduction to English Linguistics	(3)
Eng 30A	The Mexican-American in Literature ..	(3)
Hist 30	Mexico and the American Southwest	(3)
Span 42	The Mexican-American	(3)

Required for monolingual students only

*Span 2	Elementary Spanish	(4)
*Span 3	Intermediate Spanish	(4)
*Span 4	Intermediate Spanish	(4)

Required for bilingual students only

*Span 20B	Beginning Spanish for Bilinguals	(4)
*Span 21	Spanish for Bilingual Students	(3)
*Span 22	Spanish for Bilingual Students	(3)

*These courses may be waived on the basis of language proficiency examination.

II. Recommended as electives to fulfill the requirements for the multiple subject (elementary) credential as specified by the Ryan Bill (do not fulfill major requirement)

Group 1

Eng 1A	Reading and Composition	(3)
Eng 1B	Introduction to Literature	(3)
Sp 1	Oral Communication	(3)

Group 2

Bio 3	Principles of Biological Science	(3)
Geog 1	Physical Geography	(3)
Astron 21	Elementary Astronomy	(3)
Psych 1A	General Psychology	(3)
Math 10	Mathematics for Elementary School Teachers	(3)

*Language proficiency by examination

Group 3

Hist 40	Civilizations of Spain and Portugal ..	(3)
Anthro 2	Cultural Anthropology	(3)
H.E. 1	Health Education	(2)
Hist 17A	United States History	(3)
Hist 17B	United States History	(3)
	or	
Poly Sci 1	Introduction to Political Science	(3)
Poly Sci 2	American Government and Politics ..	(3)

Group 4

Art 22A	Design	(3)
Mus 7	Music Fundamentals	(3)

III. Recommended as electives for students planning to serve as teacher aides or similar paraprofessionals (do not fulfill major requirement)

Anthro 2	Cultural Anthropology	(3)
Art 22A	Design	(3)
E.C.E. 20	Developmental Psychology of Children	(3)
E.C.E. 21	Early Childhood Development: Children, Family and Community ..	(3)
Mus 7	Music Fundamentals	(3)
P.E. 61	Physical Education in the Elementary School	(3)
Psych 5	Psychology of Effective Behavior	(3)
Span 7	The Spanish Sound System	(3)
Sp 30	Voice and Articulation Development ..	(3)
T.A. 1	Introduction to Education	(3)
T.A. 2	Introduction to Instructional Associate	(3)

Two courses in Work Experience

BOOKKEEPING

Twenty units required for the major

I. Required courses for the major

Bus 10A	Practical Bookkeeping	(3)
Bus 10B	Practical Bookkeeping	(3)
Bus 21AB	Proficiency — Exit Typewriting (1) ..	(2)
Bus 23	Office Machines	(3)
Bus 24	Records Management	(3)
Bus 50	Introduction to Data Processing	(3)

II. Acceptable for the major (3 units from the following courses)

Bus 3	Business Management	(3)
Bus 13	Applied Business Law	(3)

(1) Minimum skill level of 40 net words per minute required to qualify for the major. If skill level is attained in Bus 21A, student is excused from Bus 21B.

BUSINESS SUPERVISION

Twenty-one units required for the major

I. Required courses for the major

Bus 2	Introduction to Business	(3)
Bus 3	Business Management	(3)
Bus 6	Management Concepts of Supervision ..	(3)
Bus 7	Human Relations in Management	(3)
Bus 10A	Practical Bookkeeping	(3)
Bus 13	Applied Business Law	(3)
Bus 50	Introduction to Data Processing	(3)

BUSINESS — TRANSFER

Twenty units required for the major

I. Required courses for the major

Bus 1A	Principles of Accounting	(4)
Bus 1B	Principles of Accounting	(4)
Bus 5A	Business Law	(3)
Econ 1	Principles of Economics	(3)
Econ 2	Principles of Economics	(3)

II. Acceptable for the major (3 units from the following courses)

Bus 2	Introduction to Business	(3)
Bus 5B	Business Law	(3)
Bus 9	Mathematics for Business Analysis	(3)
Bus 23	Office Machines	(3)
Bus 42	Business Correspondence	(3)
Bus 50	Introduction to Data Processing	(3)

CARPENTRY

Twenty-four units required for the major

I. Required courses for the major

Carp 1	The Apprenticeship and Math	(3)
Carp 2	Pre-job and Plot Planning	(3)
Carp 3	Rough Framing	(3)
Carp 4	Roof Framing	(3)
Carp 5	Interior and Exterior Finish	(3)
Carp 6	Stair Building	(3)
Carp 7	Concrete and Forms	(3)
*Carp 8	Heavy Timber Construction and Welding	(3)

*If Welding 30 and Welding 32 have been satisfactorily completed, Carp 8 will be waived.

CLERICAL*

Eighteen units required for the major

I. Required courses for the major

Bus 21AB	Proficiency-Exit Typewriting	(2)
Bus 22	Machine Transcription	(1)
Bus 23	Office Machines	(3)
Bus 24	Records Management	(3)

II. Acceptable courses for the major

Bus 10A	Practical Bookkeeping	(3)
Bus 13	Applied Business Law	(3)
Bus 39	Office Procedures	(3)
Bus 41	Essentials of Business Correspondence ..	(2)
Bus 50	Introduction to Data Processing	(3)

*To qualify for the clerical major, the student must have a typing skill of 40 words per minute. If skill level is attained in Bus 21A, student is excused from Bus 21B.

COSMETOLOGY

I. Required courses for the major

Cos 50A	Introduction to Cosmetology	(10)
Cos 50B	Introduction to Cosmetology	(10)
Cos 52A	Intermediate Cosmetology	(10)
Cos 52B	Intermediate Cosmetology	(10)
Cos 54A	Advanced Cosmetology	(5)

DATA PROCESSING

Twenty units required for the major

I. Required courses for the major

Bus 1A	Principles of Accounting	(4)
Bus 1B	Principles of Accounting	(4)
Bus 50	Introduction to Data Processing	(3)
Bus 52	Computer Programming I	(3)
Bus 53	Computer Programming II	(3)
Bus 54	Data Processing Systems	(3)

ENGINEERING

Eighteen units required for the major

I. Required courses for the major

Engr 2A	Engineering Drawing	(3)
Engr 3	Descriptive Geometry	(3)
Engr 10	Engineering Problems	(3)
Engr 16	Dynamics	(3)
Engr 18A	Plane Surveying	(3)
Engr 18B	Plane Surveying	(3)

II. Recommended as electives (do not fulfill major requirements)

Engr 5	Strength of Materials	(3)
Engr 6	Properties of Materials	(3)
Engr 12	Architectural Drafting I	(3)
Engr 13	Architectural Drafting II	(3)
Engr 14	Architectural Drawing III	(3)
Engr 30	Orientation to Engineering	(2)
Phys 4A	Principles of Physics	(4)
Phys 4B	Principles of Physics	(4)
Phys 4C	Principles of Physics	(4)
Math 3A	Analytic Geometry and Calculus	(5)
Math 3B	Analytic Geometry and Calculus	(5)
Math 4	Calculus and Differential Equations	(4)
Math 47	Programming in Fortran	(3)

ENGINEERING TECHNOLOGY

Eighteen units required for the major

I. Required for the major (minimum of 18 units from the following courses)

Engr 21	Technical Drawing	(3)
Engr 23	Slide Rule and Computations	(1)
Engr 30	Orientation to Engineering	(2)
Engr 53	Construction Materials	(2)
Engr 55	Strengths of Materials	(3)
Engr 61A	Technical Mathematics	(3)
Engr 61B	Technical Mathematics	(3)
Engr 65	Statics	(3)
Engr 72A	Surveying for Engineering Technology	(3)
Math 47	Programming in Fortran	(3)

II. Recommended as electives (do not fulfill major requirements)

Astron 21	Elementary Astronomy	(3)
Electronics 2	Intermediate Electronics	(4)
Engr 11	Fundamentals of Electricity	(3)
Engr 12	Architectural Drafting I	(3)
Engr 13	Architectural Drafting II	(3)
Engr 14	Architectural Drawing III	(3)
Math 2	Advanced Algebra and Trigonometry	(5)
Math C	Plane Trigonometry	(3)
Weld 30	Arc Welding	(3)
Weld 32	Oxy-Acetylene Welding	(3)

Student may substitute the transfer course which relates to a terminal-type course, if the student meets stated prerequisites.

ENGLISH

Eighteen units required for the major

- I. Required courses for the major (12 units)
- | | | |
|----------|------------------------------------|-------|
| Eng 1A | Reading and Composition | (3) |
| Eng 1B | Introduction to Literature | (3) |
| Eng 17AB | Survey of English Literature | (3-3) |
| | or | |
| Eng 16AB | World Literature | (3-3) |
- II. Acceptable courses for the major (6 units from the following courses)
- | | | |
|---------|---|-----|
| Eng 2 | Introduction to English Linguistics | (3) |
| Eng 3 | Introduction to Film History
and Criticism | (2) |
| Eng 4A | Film Criticism: Westerns, Comedies | (2) |
| Eng 4B | Film Criticism: Horror, Science Fiction | (2) |
| Eng 4C | Film Criticism: Gangsters, Politics | (2) |
| Eng 4D | Film Criticism: Documentaries and
Experimental Films | (2) |
| Eng 8 | Advanced Composition | (3) |
| Eng 9 | Creative Writing | (3) |
| Eng 15 | American Literature | (3) |
| Eng 20 | Modern Poetry | (3) |
| Eng 21A | Modern Prose Fiction | (3) |
| Eng 21B | Modern Prose Fiction | (3) |
| Eng 23 | Modern Drama | (3) |
| Eng 24 | Modern American Novel | (1) |
| Eng 27 | Film and Literature | (3) |
| Eng 30A | The Mexican-American in Literature | (3) |
| Eng 30B | The Mexican-American in Literature | (3) |
| Eng 31 | Literature in the Southwest | (3) |
| Eng 33 | The Literary Artist as Social Critic | (3) |
| Eng 36 | The Bible as Literature | (3) |
| Eng 37 | Survey of Mythology and Folklore | (3) |
| Eng 38A | Literature and Life:
A Study in Values | (3) |
| Eng 38B | Literature and Life:
A Study in Values | (3) |

FIRE SCIENCE

- I. Required courses for the major
- | | | |
|-------------|--|-----|
| Fire Sci 81 | Introduction to Fire Science | (3) |
| Fire Sci 82 | Fire Fighting Tactics and Strategy | (3) |
| Fire Sci 83 | Fire Hydraulics | (3) |
| Fire Sci 84 | Fire Apparatus and Equipment | (3) |
| Fire Sci 85 | Fire Company Organization and
Procedure | (3) |
| Fire Sci 86 | Rescue Practices | (3) |
| Fire Sci 87 | Fundamentals of Fire Prevention | (3) |

FOREIGN LANGUAGE

Eighteen units required for the major

I. Required courses for the major (a minimum of 18 units from any one of the following sequences)

French

- | | | |
|-------|--|-----|
| Fr 1 | Elementary French | (4) |
| Fr 1A | Elementary French | (2) |
| Fr 1B | Elementary French | (2) |
| Fr 2 | Elementary French | (4) |
| Fr 3 | Intermediate French | (4) |
| Fr 4 | Intermediate French | (4) |
| Fr 10 | Intermediate Conversational French | (2) |
| Fr 11 | Advanced Conversational French | (2) |

Spanish

- | | | |
|---------|---|-----|
| Span 1 | Elementary Spanish | (4) |
| Span 2 | Elementary Spanish | (4) |
| Span 3 | Intermediate Spanish | (4) |
| Span 4 | Intermediate Spanish | (4) |
| Span 5A | Spanish Conversation & Composition | (3) |
| Span 5B | Spanish Conversation & Composition | (3) |
| Span 10 | Intermediate Conversational Spanish | (2) |
| Span 11 | Advanced Conversational Spanish | (2) |

Spanish (Bilingual)

- | | | |
|---------|--|-----|
| Span 21 | Spanish for Bilingual Students | (3) |
| Span 22 | Spanish for Bilingual Students | (3) |
| Span 24 | Introduction to Spanish Literature
for Bilinguals | (3) |
| Span 25 | Spanish-American Literature
for Bilinguals | (3) |
| Span 40 | Civilization of Spain and Portugal | (3) |
| Span 41 | Civilization of Spanish-America
and Brazil | (3) |

Some courses may be waived through testing or advanced placement.

II. Recommended as electives (do not fulfill major requirements)

Art 3A	History & Appreciation of Art	(3)
Art 3B	History & Appreciation of Art	(3)
Fr 40	French Civilization	(3)
Fr 41	French Civilization	(3)
Ger 1	Elementary German	(4)
Ger 2	Elementary German	(4)
Ger 10	Conversational German	(2)
Ger 11	Conversational German	(2)
Hist 4A	History of Western Civilization	(3)
Hist 4B	History of Western Civilization	(3)
Hum 25	The Humanities	(3)
Span 5A	Spanish Conversation & Composition	(3)
Span 5B	Spanish Conversation & Composition	(3)
Span 23	Business Correspondence in Spanish	(3)
Span 40	Civilization of Spain and Portugal	(3)
Span 41	Civilizations of Spanish-America and Brazil	(3)

Students with one year high school foreign language with skills in listening, speaking, reading and writing, meeting Level I objectives may enter Course #2 (Fr 2, Span 2, Ger 2); two years, Course #3 (Fr 3, Span 3, Ger 3); three years, Course #4 or #11 (Fr 4 & 11, Span 4 & 11); four years, Course #5 (Span 5). Conversation courses should be taken concurrently (Fr 3 & 10, Fr 4 & 11; Span 3 & 10; Span 4 & 11). Students should contact foreign language instructors and counselors in order to determine whether they have met the designated behavioral objectives for Level I, II, III, IV or V Courses.

GENERAL BUSINESS

Twenty units required for the major

I. Required courses for the major

Bus 2	Introduction to Business	(3)
Bus 3	Business Management	(3)
Bus 4	Principles of Marketing	(3)
Bus 10A	Practical Bookkeeping	(3)
Bus 50	Introduction to Data Processing	(3)

II. Acceptable courses for the major

Bus 14	Practical Salesmanship	(3)
Bus 21AB	Proficiency-Exit Typewriting	(2)
Bus 23	Office Machines	(3)
Bus 24	Records Management	(3)
Bus 41	Essentials of Business Correspondence	(2)

GENERAL MAJOR

Completion of a minimum of eighteen units of lower division courses that are required or recommended subjects as specified for upper division standing in a designated major by a specific college.

This major provides for students whose lower division preparation for a specific college requires courses in more than one division.

Some examples of such majors (taken at random from the University of California publication "Prerequisites and Recommended Subjects" and from the California State University, San Diego catalog) are as follows:

Agriculture	.....	Agriculture, Mathematics, Social Science, Physical Science
Art Design	.....	Art, Anthropology, History, Philosophy
Anthropology	.....	Biological Science, Psychology, English, Mathematics
Biological Science	.....	Biological Science, Chemistry, Physics, Mathematics
Business	.....	Business, Social Science, Mathematics, English
Comparative Literature	.....	English, History, Philosophy, Foreign Language
Criminology	.....	English, Foreign Language, Social Science, Mathematics
Economics	.....	Social Science, Mathematics, Business
English	.....	English, Social Science, Philosophy
Engineering	.....	Engineering, Mathematics, Physical Science
Foreign Language	.....	Foreign Language, History, Philosophy
History	.....	History, Mathematics, Foreign Language
Home Economics	.....	Biological Science, Physics, Mathematics, Social Science
Physical Education	.....	Physical Education, Biological Science, Mathematics, Social Science
Pre-Dentistry	.....	Biological Science, Physical Science, English, Social Science
Pre-"Elementary Education"	.....	Major prerequisites as specified for elementary education plus Art, Social Science, Mathematics, Music, Physical Education and Speech
Pre-Physiotherapy	.....	Biological Science, Physical Science, Mathematics, Social Science
Psychology	.....	Biological Science, Mathematics, Physical Science, Philosophy, Anthropology, Sociology
Recreation	.....	Physical Education, Biological Science, Recreation, Social Science
Sociology	.....	Psychology, Philosophy, Mathematics

Students in the General Major will work out in conference with a counselor, a course of study that will meet requirements for their specific majors at the selected colleges they expect to attend.

GENERAL SCIENCE

Successful completion of all courses offered in one subject field (Anatomy, Biology, Botany, Chemistry, Geology, Math, Physics, Physiology, and Zoology) may be combined with courses from at least two other subject fields (within the general area of Natural-Physical Science) to accumulate 18 hours for the General Science Major.

The most reliable guide for appropriate course combinations in this major will be the catalog from the specific college to which the student will transfer.

Natural Science

Anat 8	Human Anatomy	(4)
Anat 10	Human Anatomy and Physiology	(5)
Bio 3	Principles of Biological Science	(3)
Bio 21	General Microbiology	(4)
Bot 1A	General Botany	(4)
Bot 1B	General Botany	(4)
Env Sci 5	Man and His Environment	(3)
Physio 1	Human Physiology	(4)
Zool 1A	General Zoology	(4)
Zool 1B	General Zoology	(4)

Physical Science

Anthro 1	Physical Anthropology	(3)
Astron 21	Elementary Astronomy	(3)
Chem 1A	General Inorganic Chemistry	(5)
Chem 1B	General Inorganic Chemistry	(5)
Chem 5	Quantitative Chemistry	(4)
Chem 12	Organic Chemistry	(5)
Geog 1	Physical Geography	(3)
Geol 1A	Physical Geology	(4)
Math 2	Advanced Algebra & Trigonometry	(5)
Math 3A	Analytic Geometry & Calculus	(5)
Math 3B	Analytic Geometry & Calculus	(5)
Math 4A	Calculus & Differential Equations	(4)
Phys Sci 25	Introduction to Physical Science	(4)
Phys 2A	General Physics	(4)
Phys 2B	General Physics	(4)
or Phys 4A	Principles of Physics	(4)
Phys 4B	Principles of Physics	(4)
Phys 4C	Principles of Physics	(4)

GOVERNMENTAL MANAGEMENT — PUBLIC SERVICE ADMINISTRATION

Twenty-one to 22 units required for the major

I. Required courses for the major

Bus 8	Personnel Management	(3)
Bus 70	Fundamentals of Governmental Management	(3)
Bus 71	State and Local Government Management	(3)
Bus 72	Finance Management	(3)

II. Acceptable courses for the major

(Select three courses from the following)

Bus 6	Management Concepts of Supervision	(3)
Bus 7	Human Relations in Management	(3)
Bus 50	Introduction to Data Processing	(3)
Sp. Stu. 51	Theory and Practice of Community Planning	(3)
W.E. Occ 82	Labor and the Economy	(4)
	or	
W.E. Occ 83	Laws Affecting Employees	(4)

HUMAN RELATIONS — COMMUNITY MENTAL HEALTH WORKER

Thirty-six units required for the major

I. Required courses for the major

Psych 1A	General Psychology	(3)
Psych 1B	Advanced General Psychology	(3)
Psych 3	Psychology of Personal and Social Adjustment	(3)
Psych 9	Interviewing and Counseling	(3)
Psych 11	Practicum	(3)
Psych 14	Abnormal Psychology	(3)
Sociol 1	Principles of Sociology	(3)

II. Acceptable courses for the major

(select fifteen units from the following courses)

Anthro 2	Cultural Anthropology	(3)
Psych 15	Social and Psychological Dynamics of Drug Use	(3)
Psych 17	Social Psychology	(3)
Psych 20	Developmental Psychology of Children	(3)
Psych 30	Adolescent Psychology	(3)
Psych 40	Psychology of Crisis Counseling	(3)
Psych 43AB	Introduction to Community Mental Health I and II	(2-2)
Psych 46	The Mentally Ill, Alcoholic, Drug Addict and the Law	(3)
Sociol 17	Social Psychology	(3)

**HUMAN RELATIONS — COUNSELING, SCHOOL,
AND SOCIAL SERVICES**

Twenty-seven units required for the major

I. Required courses for the major

Psych 1A	General Psychology	(3)
Psych 1B	Advanced General Psychology	(3)
Psych 3	Psychology of Personal and Social Adjustment	(3)
Psych 9	Interviewing and Counseling	(3)
Psych 14	Abnormal Psychology	(3)

Three units to be selected from the following courses

Anthro 2	Cultural Anthropology	(3)
Sociol 1	Principles of Sociology	(3)
Sociol 17	Social Psychology	(3)

II. Acceptable courses for the major

(select nine units from the following courses)

Psych 10	Small Group Leadership	(3)
Psych 11	Practicum	(3)
Psych 12	Elementary Statistics	(3)
Psych 15	Social and Psychological Dynamics of Drug Use	(3)
Psych 20	Developmental Psychology of Children	(3)
Psych 30	Psychology of Adolescence	(3)
Psych 40	Psychology of Crisis Counseling	(3)
Psych 46	The Mentally Ill, Alcoholic, Drug Addict and the Law	(3)
Anthro 2	Cultural Anthropology (if not elected in the required courses)	(3)
Sociol 1	Principles of Sociology (if not elected in the required courses)	(3)
Sociol 2	Contemporary Social Problems	(3)
Sociol 17	Social Psychology	(3)
Sociol 33	Marriage and the Family	(3)

**HUMAN RELATIONS — PERSONNEL, EMPLOYMENT
COUNSELING AND SUPERVISION**

Twenty-four units required for the major

I. Required courses for the major

Psych 1A	General Psychology	(3)
Psych 3	Psychology of Personal and Social Adjustment	(3)
Psych 9	Interviewing and Counseling	(3)
Bus 6	Management Concepts of Supervision	(3)
H.R. 10	Small Group Leadership	(3)

Three units to be selected from the following courses

Anthro 2	Cultural Anthropology	(3)
Sociol 1	Principles of Sociology	(3)
Sociol 17	Social Psychology	(3)

II. Acceptable courses for the major

(select six units from the following courses)

Bus 7	Human Relations in Management	(3)
Bus 79	Public Relations Techniques	(3)
Bus 50	Introduction to Data Processing	(3)
H.R. 11	Practicum	(3)
Psych 1B	Advanced General Psychology	(3)
Psych 12	Elementary Statistics	(3)
Sociol 2	Contemporary Social Problems	(3)
Sociol 17	Social Psychology (if not elected in the required courses)	(3)

INDIVIDUAL INTERDISCIPLINARY MAJOR

This major for an Associate Degree provides occupational-oriented students with an area of concentration within two divisions to meet a specific job need.

The requirements for the major will be met by satisfactory completion of nine (or more) units in each division.

The courses required will be approved by division chairmen, a counselor, and the Dean of Vocational-Technical Education. The courses approved will be from courses already established. The student will initiate the request for the major through the Counseling Office.

INDUSTRIAL POWER TECHNOLOGY

Twenty-six units required for the major

I. Required courses for the major

Ag 33A	Farm Power	(5)
Ag 33B	Farm Power	(5)
Ag 37	Small Gasoline Engines	(3)
Ag 35	Fluid Power	(4)
Auto Tech 52	Transmission Systems	(3)
Auto Tech 58	Automotive Air Conditioning	(3)

Three (3) units to be selected from the following courses:

Ag 50	Shop Mathematics	(3)
Eng 7	Technical & Report Writing	(3)
Weld 30	Arc Welding	(3)
Weld 32	Oxy-Acetylene Welding	(3)
W.E. Gen 70	Personal Efficiency	(3)
W.E. Gen 71	Motivation	(3)
W.E. Gen 72	Labor and the Economy	(3)
W.E. Gen 73	Laws Affecting Employees	(3)

JOURNALISM

Twenty-one units required for the major

I. Required courses for the major

Jrn 1	News and Feature Writing	(3)
Jrn 2	Advanced News and Feature Writing	(3)
Jrn 3	Mass Communications	(3)
Jrn 5	Introduction to Photography	(3)
Jrn 6	Public Relations Techniques	(3)
Eng 1B	Introduction to Literature	(3)
	(or any other Literature course)	

II. Acceptable courses for the major

(minimum of 3 units from the following courses)

Econ 1	Principles of Economics	(3)
Econ 2	Principles of Economics	(3)
Sociol 1	Principles of Sociology	(3)
Sociol 2	Contemporary Social Problems	(3)
*Poly Sci 1	Introduction to Political Science	(3)
*Poly Sci 2	American Government and Politics	(3)

*If not used to satisfy the American Institutions Requirement for graduation.

LAW ENFORCEMENT

Twenty-one units required for the major

I. Required courses for the major

L.E. 21	Introduction to the Administration of Justice	(3)
L.E. 33	Concepts of Criminal Law	(3)
L.E. 35	Legal Aspects of Evidence	(3)
L.E. 36	Principles and Procedures of Justice System	(3)
L.E. 38	Community Relations	(3)

II. Acceptable courses for the major (6 units from the following courses)

L.E. 22	Police Patrol Procedures	(3)
L.E. 34	Criminal Investigation	(3)
L.E. 37	Juvenile Control	(3)

III. Recommended as electives

(do not fulfill major requirements)

L.E. 23	Defensive Tactics	(2)
L.E. 24	Traffic Control and Vehicle Code	(3)
L.E. 25	Firearms	(1)
L.E. 26	Traffic Accident Investigation	(3)
L.E. 27	Basic Training—Jail Operations	(3)
L.E. 29	Preliminary Investigation and Reporting	(3)
	Any Sp Studies in the Law Enforcement area	(3)

NOTE: L.E. 45—Basic Law Enforcement Orientation cannot be used to fulfill the Law Enforcement major requirement.

LIFE SCIENCE

Eighteen units required for the major

I. Required courses for the major (minimum of 18 units from the following courses)

Anat 8	Human Anatomy	(4)
Anat 10	Human Anatomy and Physiology	(5)
Bio 3	Principles of Biological Science	(3)
Bio 21	General Microbiology	(4)
Bot 1A	General Botany	(4)
Bot 1B	General Botany	(4)
Physio 1	Human Physiology	(4)
Zool 1A	General Zoology	(4)
Zool 1B	General Zoology	(4)
Env Sci 5	Man and His Environment	(3)
Anthro 1	Physical Anthropology	(3)

(maximum of 6 units from the following courses)

Chem 1A	General Inorganic Chemistry	(5)
Chem 1B	General Inorganic Chemistry	(5)
Chem 5	Quantitative Analysis	(4)
Chem 12	Organic Chemistry	(5)
Chem 2A	Introduction to Chemistry	(4)

MACHINERY OPERATION AND MAINTENANCE

Twenty-four units required for the major

I. Required courses for the major

H.M. 35	Heavy Equipment Operation and Maintenance	(5)
Ag 35	Fluid Power	(4)
Ag 37	Small Gasoline Engines	(3)
Weld 30	Arc Welding	(3)
Weld 32	Oxy-Acetylene Welding	(3)

Six (6) units to be selected from the following courses:

Ag 50	Shop Mathematics	(3)
Eng 7	Technical & Report Writing	(3)
W.E. Gen 70	Personal Efficiency	(3)
W.E. Gen 71	Motivation	(3)
W.E. Gen 72	Labor and the Economy	(3)
W.E. Gen 73	Laws Affecting Employees	(3)

MARKETING—SALES TECHNOLOGY

Eighteen units required for the major

I. Required courses for the major

Bus 2	Introduction to Business	(3)
Bus 4	Principles of Marketing	(3)
Bus 13	Applied Business Law	(3)
Bus 14	Practical Salesmanship	(3)

II. Acceptable courses for the major (6 units from the following courses)

Bus 1A	Principles of Accounting	(4)
Bus 10A	Practical Bookkeeping	(3)
Bus 21AB	Proficiency—Exit Typewriting	(2-2)
Bus 23	Office Machines	(3)

MATHEMATICS

Eighteen units required for the major

I. Required courses for the major

Math 3A	Analytic Geometry and Calculus	(5)
Math 3B	Analytic Geometry and Calculus	(5)

II. Acceptable courses for the major

*Math C	Plane Trigonometry	(3)
*Math 2	Advanced Algebra and Trigonometry ..	(5)
Math 4	Calculus and Differential Equations	(4)
Math 6	Linear Algebra	(3)
Math 12	Elementary Statistics	(3)
Math 18	Introduction to Mathematics	(3)
Math 47	Programming in Fortran	(3)

*Either Math C or Math 2, but not both, are acceptable for the major.

III. Recommended as electives (do not fulfill major requirements)

Chem 1A	General Inorganic Chemistry	(5)
Engr 15	Statics	(3)
Engr 16	Dynamics	(3)
Phys 4A	Principles of Physics	(4)
Phys 4B	Principles of Physics	(4)
Phys 4C	Principles of Physics	(4)

NOTE: It is highly recommended that Math 4, Calculus and Differential Equations; and Math 6, Linear Algebra, be completed at Imperial Valley College.

MUSIC

Eighteen units required for the major

I. Required for the major (minimum of 18 units from the following courses)

Mus 8A	Musicianship	(2)
Mus 8B	Musicianship	(2)
Mus 8C	Musicianship	(2)
Mus 8D	Musicianship	(2)
Mus 9A	Elementary Harmony	(3)
Mus 9B	Elementary Harmony	(3)
Mus 9C	Elementary Harmony	(3)

Mus 9D	Elementary Harmony	(3)
Mus 10A	Class Piano (requirement may be waived by audition)	(1)
Mus 10B	Class Piano	(1)
Mus 10C	Class Piano	(1)
Mus 10D	Class Piano	(1)
Mus 20A	History and Literature of Music	(3)
Mus 20B	History and Literature of Music	(3)

Any four performance classes from the list below
(minimum of 4 units, maximum of 8 units)

Mus 17ABCD	College Chamber Singers (admission by audition)	(2-2-2-2)
Mus 18AB	Chamber Orchestra	(2-2)
Mus 25ABCD	Stage Band	(1-1-1-1)
Mus 27ABCDEF	Concert Band	(1-1-1-1-1-1)
Mus 28ABCDEF	College Mixed Chorus	(1-1-1-1-1-1)
Mus 29ABCD	Estudiantina	(2-2-2-2)

II. Recommended as electives (do not fulfill major requirements)

Mus 7	Music Fundamentals	(3)
Mus 15A	Elementary Voice	(1)
Mus 15B	Elementary Voice	(1)
Mus 16	Intermediate Voice	(1)
Mus 18ABCD	Chamber Orchestra	(2-2-2-2)
Mus 21A	Instruments	(1)
Mus 21B	Instruments	(1)
Mus 21C	Instruments	(1)
Mus 21D	Instruments	(1)
Mus 22A	Introduction to Principles and Practices of Conducting	(2)
Mus 22B	Introduction to Principles and Practices of Conducting	(2)
Mus 26ABCD	Rehearsal and Performance (by special arrangement with instructors)	(1-1-1-1)
Mus 29ABCD	Estudiantina	(2-2-2-2)
Mus 30	Music Structure and Style	(3)
Mus 70	Ensemble and Chamber Music (admission by audition)	(1)

**NURSING
(Registered)**

Thirty-four units required for the major

I. A. Required courses for the major

R.N. 1	Registered Nursing	(7)
R.N. 2	Registered Nursing	(7)
R.N. 3	Registered Nursing	(10)
R.N. 4	Registered Nursing	(10)

B. Other courses required to complete R.N. Program (30 units required)

Anat 10	Anatomy-Physiology	(5)
Bio 21	Microbiology	(4)
Psych 1A	General Psychology	(3)
Sociol 1	Principles of Sociology	(3)
Eng 1A	Reading and Composition	(3)
	American Institutions Electives	(6)
	Learning Skills Elective	(3)
	Humanities Elective	(3)

II. Acceptable courses for the major

Anat 8 (4 units) and Physio 1 (4 units) may be substituted for Anat 10.

**NURSING
(Vocational)**

Fifty-one units required for the major

I. Required courses for the major

Psych 5	Psychology of Effective Behavior (or Psych 1A, if eligible)	(3)
V.N. 50	Medical-Surgical Nursing I	(7)
V.N. 51	Clinical Fundamentals	(7)
V.N. 52	Medical-Surgical Nursing II	(4)
V.N. 53	Maternal-Childhealth Nursing	(6)
V.N. 54	Clinical Fundamentals	(7)
V.N. 55	Medical-Surgical Nursing III	(10)
V.N. 56	Clinical Fundamentals	(7)

II. Recommended as electives (do not fulfill major requirements)

Anat 10	Human Anatomy and Physiology	(5)
Bio 3	Principles of Biological Science	(3)
Bio 21	General Microbiology	(4)
Chem 2A	Introduction to Chemistry	(4)
Psych 1A	General Psychology	(3)
Soc Sci 52	Introduction to American Government	(3)
Sociol 1	Principles of Sociology	(3)

PHYSICAL EDUCATION

Eighteen units required for the major

I. Required course for the major

H.E. 1	Health Education	(2)
H.E. 2	First Aid	(3)
P.E. 6	Lifesaving and Water Safety	(2)
P.E. 50	Introduction to Physical Education	(2)
P.E. 61	Physical Education in the Elementary Schools	(3)

Two units selected from the following courses

P.E. 51	Structuring Intramurals	(2)
P.E. 58	Psychology of Coaching	(2)
P.E. 59	Sports Officiating, Men	(2)
P.E. 60	Sports Officiating, Women	(2)

II. Acceptable courses for the major

(4 units selected from the following courses)

P.E. 2B	Intermediate Gymnastics	(1)
P.E. 3A	Beginning Tennis	(1)
P.E. 3B	Intermediate Tennis	(1)
P.E. 4B	Intermediate Badminton	(1)
P.E. 5A	Beginning Swimming	(1)
P.E. 6AB	Lifesaving and Water Safety Instructor Training	(2-2)
P.E. 14	Recreational Games	(1)
P.E. 17ABCD	Physical Fitness, Men	(1-1-1-1)
P.E. 18A	Beginning Golf	(1)
P.E. 18B	Intermediate Golf	(1)
P.E. 25B	Folk Dance	(1)
P.E. 26A	Beginning Modern Dance	(1)
P.E. 26B	Intermediate Modern Dance	(1)
P.E. 27AB	Social Dance	(1-1)

III. Recommended as electives

(do not fulfill major requirements)

Anat 8	Human Anatomy	(4)
Ed 1	Introduction to Education	(2)
Rec 70	Introduction to Leisure	(3)
Rec 71	Social Recreation	(3)
Rec 72	Outdoor Recreation	(3)
Rec 73	Recreation for Special Groups	(3)
Rec 74	Introduction to Community Recreation	(3)

PHYSICAL SCIENCE

Eighteen units required for the major

I. Required courses for the major

(minimum of 18 units from the following courses)

Astron 21	Elementary Astronomy	(3)
Chem 1A,B	General Inorganic Chemistry	(5-5)
Chem 5	Quantitative Analysis	(4)
Chem 12	Organic Chemistry	(5)
Geog 1	Physical Geography	(3)
Geol 1A	Physical Geology	(4)
Phys Sci 2	Introduction to Physical Science	(4)
Phys 2A,B	General Physics	(4-4)
Phys 4A,B,C	Principles of Physics	(4-4-4)
Env Sci 5	Man and His Environment	(3)

II. Acceptable courses for the major

(maximum of 6 units from the following courses)

Engr 23	Slide Rule and Computations	(1)
Math 2	Advanced Algebra & Trigonometry	(5)
Math 3AB	Analytic Geometry & Calculus	(5-5)
Math 4	Calculus & Differential Equations	(4)

PLANT SCIENCE

Twenty-three units required for the major

I. Required courses for the major

Ag 40	Soils	(3)
Ag 41	Fertilizers	(3)
Ag 42	Plant Science and Forage Crops	(4)
Ag 43	Field and Cereal Crops	(4)
Ag 49	Weeds and Weed Control	(3)

II. Acceptable courses for the major

(6 units from the following courses)

Ag 14	Entomology	(3)
Ag 28	Heavy Equipment Operation and Maintenance	(5)
Ag 30	Agricultural Mechanics	(3)
Ag 32	Irrigation and Drainage	(3)
Ag 33A	Farm Power	(5)
Ag 65	Control of Insects and Other Pests	(3)
Weld 30	Arc Welding	(3)
Weld 32	Oxy-Acetylene Welding	(3)
Chem 2A	Introduction to Chemistry	(4)
Eng 7	Technical and Report Writing	(3)
W.E. Occ 80	Personal Efficiency	(4)
W.E. Occ 81	Motivation	(4)
W.E. Occ 82	Labor and the Economy	(4)
W.E. Occ 83	Laws Affecting Employees	(4)

REAL ESTATE

Twenty-seven units required for the major

I. Required courses for the major

Bus 90	Real Estate Principles	(3)
Bus 91	Real Estate Practices	(3)
Bus 92A	Legal Aspects of Real Estate	(3)
Bus 92B	Legal Aspects of Real Estate	(3)
Bus 93	Real Estate Finance	(3)
Bus 94A	Real Estate Appraisal	(3)
Bus 94B	Real Estate Appraisal	(3)
Bus 95	Real Estate Economics	(3)

II. Acceptable courses for the major

(3 units from the following courses)

Bus 1A	Principles of Accounting	(4)
Bus 2	Introduction to Business	(3)
Bus 5A	Business Law	(3)

RECREATION

Eighteen units required for the major

I. Required courses for the major

Rec 70	Introduction to Leisure	(3)
Rec 72	Outdoor Recreation	(3)
Rec 73	Recreation for Special Groups	(4)
Rec 74	Introduction to Community Recreation	(3)
P.E. 14	Recreational Games	(1)

Two units to be selected from the following courses

P.E. 61	Physical Education in the Elementary Schools	(3)
Rec 71	Social Recreation	(3)
P.E. 59	Sports Officiating, Men	(2)
P.E. 60	Sports Officiating, Women	(2)
Art 31	Crafts	(3)

II. Acceptable courses for the major

Two units to be selected from the following courses

P.E. 2A	Beginning Gymnastics	(1)
P.E. 2B	Intermediate Gymnastics	(1)
P.E. 3A	Beginning Tennis	(1)
P.E. 3B	Intermediate Tennis	(1)
P.E. 4A	Beginning Badminton	(1)
P.E. 4B	Intermediate Badminton	(1)
P.E. 5A	Beginning Swimming	(1)
P.E. 6A	Life Saving and Water Safety Instructor Training	(2)
P.E. 10A	Team Sports	(1)
P.E. 10B	Team Sports	(1)
P.E.17ABCD	Physical Fitness	(1-1-1-1)
P.E. 18A	Beginning Golf	(1)
P.E. 18B	Intermediate Golf	(1)
P.E. 25	Folk Dance	(1)
P.E. 26A	Beginning Modern Dance	(1)
P.E. 26B	Intermediate Modern Dance	(1)
P.E. 27A	Social Dance	(1)

**REHABILITATION TECHNICIAN FOR THE
PHYSICALLY LIMITED**

Twenty units required for the major

I. Required courses for the major

P.L. 1	Survey of Physical Limitations	(3)
P.L. 2	Practicum Experience to Work with the Physically Limited Person	(2)
Psych 1A	General Psychology	(3)
(or Psych 5)	Psychology of Effective Behavior	(3)
Sociol 1	Principles of Sociology	(3)
P.L. 30	Introduction to Speech and Hearing	(3)

II. Acceptable courses for the major
Select any of the following options:

Option A

P.L. 10	Beginning Communication with the Deaf	(3)
P.L. 11	Intermediate Communication with the Deaf	(3)

Option B

P.L. 20	Beginning Braille	(3)
P.L. 21	Intermediate Braille	(3)

Option C

P.L. 31	Interview and Testing Techniques for Speech and Hearing Problems	(3)
P.L. 32	Behavior Modification Techniques for Speech and Hearing Pathology	(3)

III. Recommended as electives
(do not fulfill major requirement)

P.L. 12	Advanced Communication with the Deaf	(3)
P.L. 13A-D	Communication with the Deaf in the College Classroom	(1)
P.L. 33	Introduction to Audiology	(3)
P.L. 34	Audiometry and Hearing Conservation	(3)
P.L. 40	Introduction to Physical Therapy	(3)
Rec 73	Recreation for Special Groups	(4)
Psych 3	Psychology of Personal and Social Adjustment	(3)

SECRETARIAL*

Twenty-one units required for the major

I. Required for the major

Bus 21A or B	Proficiency-Exit Typewriting	(2)
Bus 22	Machine Transcription	(1)
Bus 23	Office Machines	(3)
Bus 24	Records Management	(3)
Bus 32	Dictation and Transcription Lab	(3)
Bus 39	Office Procedures	(3)
Bus 40	Grammar and Usage	(3)
Bus 42	Business Correspondence	(3)

*To qualify for a secretarial major, the student must have a minimum skill level of 60 words a minute in typing and 100 words a minute in shorthand dictation.

SOCIAL SCIENCE

I. Required courses for the major

a. The requirements for a major in Social Science may be satisfied by taking 18 units from the following list to include at least one course from three of the seven fields:

Anthropology

Anthro 1	Physical Anthropology	(3)
Anthro 2	Cultural Anthropology	(3)
Anthro 3A	Introduction to Archaeological Site Surveying	(3)
Anthro 3B	Introduction to Archaeological Excavations	(3)
Anthro 3C	Archaeological and Museum Laboratory Principles and Practices	(3)
Anthro 4	California Indians	(3)
Anthro 5	Introduction to World Prehistory	(3)
Anthro 6	Indians of North America	(3)

Economics

Econ 1	Principles of Economics	(3)
Econ 2	Principles of Economics	(3)

Geography

Geog 1	Physical Geography	(3)
Geog 2	Cultural Geography	(3)

History

Hist 4A	History of Western Civilization	(3)
Hist 4B	History of Western Civilization	(3)
Hist 8A	History of the Americas	(3)
Hist 8B	History of the Americas	(3)
Hist 10	History of Modern Russia	(3)
Hist 17A	United States History	(3)
Hist 17B	United States History	(3)
Hist 30	Mexico and the American Southwest ..	(3)
Hist 40	Civilization of Spain and Portugal	(3)
Hist 41	Civilization of Spanish-America and Brazil	(3)

Political Science

Poly Sci 1	Introduction to Political Science	(3)
Poly Sci 2	American Government & Politics	(3)
Poly Sci 3	Comparative Politics	(3)
Poly Sci 14	Introduction to International Relations	(3)

Social Science

Soc Sci 52	Introduction to American Government ..	(3)
Soc Sci 69	Personal Finance	(3)

Sociology

Sociol 1	Principles of Sociology	(3)
Sociol 2	Contemporary Social Problems	(3)
Sociol 33	Marriage and the Family	(3)

SOIL AND WATER TECHNOLOGY

Twenty-two units required for the major

I. Required courses for the major

Ag 30	Agricultural Mechanics	(3)
Ag 32	Irrigation and Drainage	(3)
Ag 35	Fluid Power	(4)
Ag 37	Small Gasoline Engines	(3)
Ag 40	Soils	(3)
Ag 41	Fertilizers	(3)

II. Acceptable courses for the major

(3 units from the following courses)

Ag 28	Heavy Equipment Operation and Maintenance	(5)
Ag 33A	Farm Power	(5)
Weld 30	Arc Welding	(3)
Weld 32	Oxy-Acetylene Welding	(3)
Chem 2A	Introduction to Chemistry	(4)
Eng 7	Technical and Report Writing	(3)
Engr 72	Surveying for Engineering Technology	(3)
W.E. Occ 80	Personal Efficiency	(4)
W.E. Occ 81	Motivation	(4)
W.E. Occ 82	Labor and the Economy	(4)
W.E. Occ 83	Laws Affecting Employees	(4)

TEACHER AIDE

Twenty-seven to 28 units required for the major

I. Required courses for the major

T.A. 1	Introduction to Education	(3)
T.A. 2	Introduction to Instructional Associate	(3)
T.A. 3	Psychology of Personal and Social Adjustment	(3)
T.A. 4	The Learning Process for the Elementary School Child	(3)
T.A. 5	Instructional Media for Instructional Associate	(3)
T.A. 6	Language Arts for Instructional Associate	(3)
T.A. 7	Creative Arts for Instructional Associate	(3)
T.A. 8	Mathematics for Instructional Associate	(3)

Work Experience:

One semester of supervised work experience

TEACHER PREPARATION

The Teacher Preparation and Licensing Law of 1970 (Ryan Act) provides for two types of teaching credentials, each permitting instruction in grades K-12. One is the **MULTIPLE SUBJECT CREDENTIAL** for teachers in a self-contained classroom as commonly practiced in California elementary schools. The other is the **SINGLE SUBJECT CREDENTIAL** for teachers responsible for only one subject as practiced in junior and senior high schools.

To satisfy the requirements for the **MULTIPLE SUBJECT CREDENTIAL**, the student must either pass an examination (National Teachers Examination — Commons Section) or complete an approved major. This major must cover 84 semester units with 21 units in each of the following areas: (1) English and Communications, (2) Mathematics and Science, (3) Social Science, (4) Humanities. Most universities have developed **LIBERAL STUDIES** majors which have been approved for this credential. The National Teachers Examination may be taken at any time that the student feels capable of passing it. Only passing scores are to be submitted. For those passing the examination, any degree major may be completed. In addition to the major, professional education courses including student teaching are required. A full credential requires 30 semester units after the B.A. degree.

To satisfy the requirements for the **SINGLE SUBJECT CREDENTIAL**, the individual must pass an examination or have a degree major in one of the areas listed below:

Art	Home Economics	Music
Business	Industrial Arts	Physical Education
English	Languages	Physical Science
Government	Life Sciences	Social Science
History	Mathematics	

Other degree majors may be subsumed under these categories: e.g., Speech, Drama, Journalism under English. Check the university catalog for specific listings. A person would increase the possibilities for employment by passing several examinations in addition to his major. It is no longer possible to teach a "minor" subject. Professional education courses and student teaching are required and a full credential is earned by completion of a year past the B.A. degree.

SPECIALIST CREDENTIALS

These credentials require advanced preparation after the individual has earned a valid credential.

Early Childhood Education	Agriculture
Bilingual-Cross Cultural	Mathematics
Special Education including learning handicapped, educationally handicapped, mentally retarded, physically handicapped, speech and hearing disorders.	Reading

SERVICES CREDENTIALS

These also require advanced preparation after the individual has a valid teaching credential.

Pupil Personnel	Librarian
Health	Administrative

LIBERAL STUDIES MAJOR AT IVC

The Liberal Studies Major offers a general type of education that will enable the student to extend his-her background in the four multiple subject groups of knowledge identified below.

The Liberal Studies Major is also recommended for students who plan to enter elementary education. It meets all requirements for the multiple subject diversified major as specified in the Ryan Act.

To complete the lower division preparation for transferring to the four-year college or university, a total of 60 units are needed to be fully prepared to make formal application to the education program of the college of your choice. **SEE A COUNSELOR.**

1. English: (15 units required)

Required Courses: Eng 1A, Eng 1B, Eng 25, Sp 1
Electives: (3 units from the following general areas:)

- a. Comparative English
- b. English, i.e., American Literature, English Literature, Creative Writing
- c. Journalism
- d. Speech Communication

2. Math and Science: (15 units required)

Required Courses:

- a. Three or more units of physical science, i.e.,
Geog 1, Astron 21, Phys Sci 25,
Chemistry, Geology, Physics
- b. Three or more units of life science, i.e.,
Bio 3, Bio 21, Bot 1A, Zool 1A
- c. Psych 1A
- d. Six units of math, i.e., Math 10

3. Social Science: (15 units required)

Required Courses: Six units of American Institutions, H.E. 1

Electives: Seven units to include courses from the following:

- a. Anthropology
- b. Economics
- c. Geography (not Geog 1)
- d. History
- e. Political Science
- f. Sociology

4. Humanities and Fine Arts: (15 units required)

Required Courses: Art 22A, Mus 7 and three units from
drama, humanities or philosophy

Electives: Six units selected from the following areas:

- a. Foreign Languages and Literature
- b. Humanities
- c. Music
- d. Philosophy

NOTE: P.E. 43, Elementary Games and Activities, is needed by students
planning to enter elementary education.NOTE: GRADE POINT AVERAGE: A 2.5 cumulative grade point average
is required to enter student teaching throughout the state. Some
universities require a 3.0 average.**VISUAL COMMUNICATION — MOTION
PICTURE PRODUCTION**

Twenty units required for the major

I. Required courses for the major

Vis Com 5/Jrn 5	Introduction to Photography	(3)
Vis Com 10/Eng 10	Introduction to Motion Picture Production	(3)
Vis Com 11	Intermediate Motion Picture Production	(3)
Vis Com 12	Motion Picture Production Practices	(3)
Hum 3/Eng 3 or	Introduction to Film History and Criticism	(2)
Hum 4A/Eng 4A or	Film Criticism: Westerns, Comedies, Musicals	(2)
Hum 4B/Eng 4B or	Film Criticism: Horror, Fantasy and Science Fiction	(2)
Hum 4C/Eng 4C or	Film Criticism: Gangsters, Politics and Social Protest	(2)
Hum 4D/Eng 4D	Film Criticism: Documentaries, Experimental Films	(2)

II. Acceptable courses for the major (minimum of six units
required from the following courses: no more than one
course for each area.)

Art 3A or Art 3B	History and Appreciation of Art	(3)
Art 22A or Art 22B	Design	(3)
Mus 30	Music Structure and Style	(3)
Mus 20A or	History and Literature	
Mus 20B	of Music	(3)
Drn Arts 20A/20B	Fundamentals of Acting	(3)

VISUAL COMMUNICATION — PHOTOGRAPHY

Eighteen units required for the major

I. Required courses for the major

Vis Com 5/Jrn 5	Introduction to Photography	(3)
Vis Com 6	Intermediate Photography	(3)
Vis Com 7	Advanced Photography	(3)
Vis Com 10/Eng 10	Introduction to Motion Picture Production	(3)
Psych 1A or	General Psychology	(3)
Psych 5	Psychology of Effective Behavior	(3)
Art 22A or Art 22B or	Design	(3)
Art 3A or Art 3B	History and Appreciation of Art	(3)

WATER TREATMENT TECHNOLOGY

Nineteen to 22 units required for the major

I. Required courses for the major

W.T. 1	Water Treatment Plant Operator I	.....(4)
W.T. 2	Water Treatment Plant Operator II	.....(4)
W.T. 3	Waste Water Treatment I	.....(4)
W.T. 4	Waste Water Treatment II	.....(4)
*Math 51	Basic Mathematics	.....(3)

II. Acceptable courses for the major
(3 units from the following courses)

Bus 3	Business Management	.....(3)
Bus 6	Management Concepts of Supervision	(3)
Bus 7	Human Relations in Management	.....(3)
Chem 1A	General Inorganic Chemistry	.....(5)
Chem 2A	Introduction to Chemistry	.....(4)

*Waived if competency established

WELDING TECHNOLOGY

The practice of joining metals by welding is becoming more of a science every day. Imperial Valley College recognizes this and consequently has instituted a two-year Associate Degree program in Welding Technology. This program is designed to train technicians by giving the student ample laboratory welding practice along with related theory, plus a firm background in associated subjects such as mechanics and metal-fabricating techniques.

The welding facility consists of an indoor, air-conditioned laboratory equipped with oxy-acetylene, arc welders, Tig welders, Mig welders, and resistance welders.

Graduates from this program will find many opportunities for employment with aircraft industries, shipbuilding companies, construction crews, etc. The future is almost unlimited for the student with interests along these lines.

Twenty-one to 24 units required for the major

I. Required courses for the major

Weld 30	Arc Welding	.....(3)
Weld 32	Oxy-Acetylene Welding	.....(3)
Weld 34	Gas Shielded Arc Welding	.....(3)
Weld 36A	Advanced Welding	.....(3)
Weld 36B	Advanced Welding	.....(3)
Weld 36C	Advanced Welding	.....(3)
Ag 38	Electricity on the Farm	.....(3)
Math 50	Shop Mathematics, if required	.....(3)

II. Recommended as electives
(do not fulfill major requirements)

Bus 2	Introduction to Business	.....(3)
Bus 14	Practical Salesmanship	.....(3)
Chem 2A	Introduction to Chemistry	.....(4)
Engr 21	Technical Drawing	.....(3)
Engr 72A	Surveying for Engineering Technology	..(3)
Env Sci 5	Man and His Environment	.....(3)
W.E. Occ 80	Personal Efficiency	.....(4)
Ag 33A	Farm Power	.....(5)
Ag 35	Fluid Power	.....(4)
Ag 36	Agricultural Construction	.....(3)
Ag 37	Small Gasoline Engines	.....(3)
	All Automotive Technology courses	

CERTIFICATE PROGRAMS

AUTOMOTIVE TECHNOLOGY

Certificate Program

	Units
Auto Tech 50 Shop Mathematics (if required)	3
Auto Tech 51 Engine Technology, or equivalent	5
Auto Tech 52 Transmissions Systems	3
Auto Tech 53 Brakes and Suspension	3
Auto Tech 54 Electrical and Fuel Systems	3
Auto Tech 55 Gasoline and Diesel Engines	5
Auto Tech 56 Diagnostic	3
Total Units	22-25

The following courses may be substituted for any of the above required courses:

Auto Tech 57 Fluid Power	4
Auto Tech 58 Automotive Air-Conditioning	3
Auto Tech 59 Small Gasoline Engines	3
Weld 30 Arc Welding	3
Weld 32 Oxy-Acetylene Welding	3

BANKING

Certificate Programs

ADMINISTRATIVE CERTIFICATE IN BANK OPERATIONS

Bus 1A Principles of Accounting I	4
Bus 1B Principles of Accounting II	4
Bus 6 Management Concepts of Supervision	3
Bus 7 Human Relations in Management	3
Bus 60 Principles of Bank Operations	3
Select any two of the following electives	
Bus 5A Business Law	3
Bus 42 Business Correspondence	3
Econ 1 Principles of Economics	3
Sp 1 Oral Communications	3
Total Units	23

CREDIT ADMINISTRATION CERTIFICATE IN BANKING

	Units
Bus 1A Principles of Accounting I	4
Bus 1B Principles of Accounting II	4
Bus 60 Principles of Bank Operations	3
Bus 61 Analysis of Financial Statements	5
(Prerequisite: Bus 1A & 1B)	
Bus 62 Installment Credit	3
Select any two of the following electives	
Bus 5A Business Law	3
Bus 7 Human Relations in Management	3
Bus 42 Business Correspondence	3
Bus 63 Financing Business Enterprises	3
Bus 64 Agricultural Finance	3
Econ 1 Principles of Economics	3
Sp 1 Oral Communications	3
Total Units	25

GENERAL CERTIFICATE IN BANK SERVICES*

Bus 5A Business Law	3
Bus 10A Practical Bookkeeping	3
Bus 21AB Proficiency—Exit Typewriting (1)	2
Bus 23 Office Machines	3
Bus 40 Grammar and Usage	3
Bus 60 Principles of Bank Operations	3
Select any two of the following electives	
Bus 7 Human Relations in Management	3
Bus 39 Office Procedures	3
Bus 41 Essentials of Business Correspondence	2
Bus 50 Introduction to Data Processing	3
Sp 1 Oral Communications	3
Total Units	22-23

1. Minimum skill level 40 net words per minute required to qualify for certificate. If skill level attained in Bus 21A, student is excused from Bus 21B.
2. Bus 1A will be substituted if student has completed 1 year of high school bookkeeping.

*Designed for bank tellers, file clerks, bookkeepers, etc. Not intended for secretarial staff members.

SECRETARY CERTIFICATE IN BANK SERVICE

	Units
Bus 5A Business Law	3
Bus 21AB Proficiency—Exit Typewriting (1)	2
Bus 32A Dictation and Transcription Lab (2)	3
Bus 32B Dictation and Transcription Lab	3
Bus 40 Grammar and Usage	3
Bus 41 Essentials of Business Correspondence	2
Bus 60 Principles of Bank Operation	3

Select any two of the following electives

Bus 7 Human Relations in Management	3
Bus 23 Office Machines	3
Bus 39 Office Procedures	3
Bus 50 Introduction to Data Processing	3
Sp 1 Oral Communications	3

Total Units25

1. Minimum skill level of 60 net words per minute required to qualify for certificate. If skill level attained in Bus 21A student is excused from Bus 21B.
2. Minimum skill level of 90 words per minute required to qualify for certificate. If attained in Bus 32A, student is excused from Bus 32B.

BUSINESS

Certificate Programs

Demonstrated competency in Eng 51 and Math 51 is required for all business certificates. Those trainees with the requisite skills in typing, shorthand, and/or transcription will not be required to complete these courses, but will concentrate on typing lab, business correspondence and transcription.

General Clerical:

(Receptionist - File Clerk - Small Business Records) Units

Bus 10A Bookkeeping	3
Bus 21AB Proficiency-Exit Typewriting	2
(40 wpm net)*	
Bus 22 Machine Transcription	1
Bus 23 Office Machines	3
Bus 24 Records Management	3
Business Electives	8

Total Units20

Clerk Typist:

	Units
Bus 21AB Proficiency-Exit Typewriting (50 wpm)*	2
Bus 22 Machine Transcription	1
Bus 23 Office Machines	3
Bus 24 Records Management	3
Bus 39 Office Procedures	3
Business Electives	8
Total Units	20

Secretary Stenographer:

Bus 21AB Proficiency-Exit Typewriting (60 wpm)*	2
Bus 22 Machine Transcription	1
Bus 23 Office Machines	3
Bus 24 Records Management	3
Bus 32A Dictation and Transcription Lab (90 wpm)*	3
Bus 39 Office Procedures	3
Bus 40 Grammar & Usage	3
Bus 41 Essentials of Business Correspondence	2
Total Units	20

Junior Bookkeeper-Payroll Clerk

Bus 10A Practical Bookkeeping	3
Bus 10B Practical Bookkeeping	3
Bus 21AB Proficiency-Exit Typewriting (40 wpm)*	2
Bus 23 Office Machines	3
Bus 24 Records Management	3
Business Electives	6
Total Units	20

*Denotes the completion-level skill required.

**COSMETOLOGY
Certificate Program**

	Units
Cos 50A Introduction to Cosmetology	10
Cos 50B Introduction to Cosmetology	10
Cos 52A Intermediate Cosmetology	10
Cos 52B Intermediate Cosmetology	10
Cos 54A Advanced Cosmetology	5
Total Units	45

CERTIFICATE PROGRAMS

EARLY CHILDHOOD EDUCATION
Certificate Program

	Units
E.C.E. 20 Developmental Psychology of Children	3
E.C.E. 21 Early Childhood Development, Children, Family and Community	3
E.C.E. 22 Early Childhood Development I	3
E.C.E. 23 Early Childhood Development II	3
Total Units	12

ELECTRONICS
Certificate Programs

Basic Electronics:

	Units
Electronics 1A Basic Electronics	4
Electronics 1B Basic Electronics	2
Electronics 2 Transistors and Semi-conductors	5
Electronics 3 FCC 2nd Class Radiotelephone License Preparation	3
Total Units	14

Intermediate Electronics Certificate:

Possession of the Basic Electronics Certificate	14
Electronics 4 FCC 1st Class Radiotelephone License Preparation	3
Total Units	17

EMERGENCY MEDICAL TECHNICIAN
Certificate Program

	Units
E.M.T. 1 Emergency Medical Technician I	6
Total Units	6

CERTIFICATE PROGRAMS

FIRE SCIENCE
Certificate Program

	Units
Fire Sci 81 Introduction to Fire Science	3
Fire Sci 82 Fire Fighting Tactics and Strategy	3
*Fire Sci 83 Fire Hydraulics	3
Fire Sci 84 Fire Apparatus and Equipment	3
Fire Sci 85 Fire Company Organization and Procedures	3
Fire Sci 86 Rescue Practices	3
Fire Sci 87 Fundamentals of Fire Prevention	3
*Math 51 Basic Mathematics, or equivalent	3
	21-24

*Math 51 or equivalent required before registration in Fire Science 83.

GOVERNMENTAL MANAGEMENT — PUBLIC
SERVICE ADMINISTRATION
Certificate Program

Bus 8 Personnel Management	3
Bus 70 Fundamentals of Governmental Management	3
Bus 71 State and Local Government Management	3
Bus 72 Finance Management	3

Select any three of the following courses

Bus 6 Management Concepts of Supervision	3
Bus 7 Human Relations in Management	3
Bus 50 Introduction to Data Processing	3
W.E. Occ 82 or Labor and the Economy	4
W.E. Occ 83 Laws Affecting Employees	4
Sp Stu 51 Theory and Practice of Community Planning	3

Total Units21-23

CERTIFICATE PROGRAMS

**HEALTH AIDE
Certificate Program**

	Units
H.A. 15A or H.A. 15B or H.A. 15C or H.A. 15D	Health Aide 9
Psych 5	Psychology of Effective Behavior 3 (or Psych 1A, if eligible)
Eng 51	The Communication Process 3 (or Eng 1A, if eligible)
P.E.	Physical Education, if required 1
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Total Units	15-16

**HEAVY MACHINERY
Certificate Program**

Total of 30 units required for the certificate.
Required courses:

	Units
H.M. 35	Heavy Equipment Operation and Maintenance 5
Ag 33A	Farm Power 5
Ag 33B	Farm Power 5
Ag 35	Fluid Power 4
Ag 37	Small Gasoline Engines 3
<hr/>	
22 and	

eight (8) units to be selected from the following courses:

Ag 50	Shop Mathematics 3
Weld 30	Arc Welding 3
Weld 32	Oxy-Acetylene Welding 3
W.E. Gen 70	Personal Efficiency 3
W.E. Gen 71	Motivation 3
W.E. Gen 72	Labor and the Economy 3
W.E. Gen 73	Laws Affecting Employees 3
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Total Units	30

CERTIFICATE PROGRAMS

**HUMAN RELATIONS — COMMUNITY MENTAL
HEALTH WORKER
Certificate Program**

	Units
Psych 1A	General Psychology 3
Psych 1B	Advanced General Psychology 3
Psych 3	Psychology of Personal and Social Adjustment 3
Psych 9	Interviewing and Counseling 3
Psych 11	Practicum 3
Psych 14	Abnormal Psychology 3
Sociol 1	Principles of Sociology 3

Fifteen units to be selected from the following courses

Anthro 2	Cultural Anthropology 3
Psych 15	Social and Psychological Dynamics of Drug Use 3
Psych 17	Social Psychology 3
Psych 20	Developmental Psychology of Children .. 3
Psych 30	Adolescent Psychology 3
Psych 40	Psychology of Crisis Counseling 3
Psych 43AB	Introduction to Community Mental Health I and II 2-2
Psych 46	The Mentally Ill, Alcoholic, Drug Addict, and the Law 3
Sociol 17	Social Psychology 3
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Total Units	36

CERTIFICATE PROGRAMS

**HUMAN RELATIONS — COUNSELING, SCHOOL
AND SOCIAL SERVICES**
Certificate Program

		Units
Psych 1A	General Psychology	3
Psych 1B	Advanced General Psychology	3
Psych 3	Psychology of Personal and Social Adjustment	3
Psych 9	Interviewing and Counseling	3
Psych 14	Abnormal Psychology	3

Three units to be selected from the following courses

Anthro 2	Cultural Anthropology	3
Sociol 1	Principles of Sociology	3
Sociol 17	Social Psychology	3

Nine units to be selected from the following courses

Psych 10	Small Group Leadership	3
Psych 11	Practicum	3
Psych 12	Elementary Statistics	3
Psych 15	Social and Psychological Dynamics of Drug Use	3
Psych 20	Developmental Psychology of Children ..	3
Psych 30	Psychology of Adolescence	3
Psych 40	Psychology of Crisis Counseling	3
Psych 46	The Mentally Ill, Alcoholic, Drug Addict, and the Law	3
Anthro 2	Cultural Anthropology (if not elected in the core)	3
Sociol 1	Principles of Sociology (if not elected in the core)	3
Sociol 2	Contemporary Social Problems	3
Sociol 17	Social Psychology	3
Sociol 33	Marriage and the Family	3

Total Units 27

CERTIFICATE PROGRAMS

**HUMAN RELATIONS — PERSONNEL, EMPLOYMENT
COUNSELING, AND SUPERVISION**
Certificate Program

		Units
Psych 1A	General Psychology	3
Psych 3	Psychology of Personal and Social Adjustment	3
Psych 9	Interviewing and Counseling	3
Bus 6	Management Concepts of Supervision	3
H.R. 10	Small Group Leadership	3

Three units to be selected from the following courses

Anthro 2	Cultural Anthropology	3
Sociol 1	Principles of Sociology	3
Sociol 17	Social Psychology	3

Six units to be selected from the following courses

Bus 7	Human Relations in Management	3
Bus 50	Introduction to Data Processing	3
Bus 79	Public Relations Techniques	3
H.R. 11	Practicum	3
Psych 1B	Advanced General Psychology	3
Psych 12	Elementary Statistics	3
Sociol 2	Contemporary Social Problems	3
Sociol 17	Social Psychology (if not elected in the core)	3

Total Units 24

CERTIFICATE PROGRAMS

**LAW ENFORCEMENT
Certificate Program**

	Units
L.E. 21 Introduction to Administration of Justice	3
L.E. 33 Concepts of Criminal Law	3
L.E. 35 Legal Aspects of Evidence	3
L.E. 36 Principles and Procedures of the Justice System	3
L.E. 37 Juvenile Control	3
L.E. 38 Community Relations	3
Total Units	18

**BASIC POST ACADEMY
Certificate Program**

L.E. 45 Basic Law Enforcement Orientation	14
Total Units	14

**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.

Bus 90 Real Estate Principles	3
Bus 91 Real Estate Practices	3
Bus 92A Legal Aspects of Real Estate	3
Bus 92B Legal Aspects of Real Estate	3
Bus 93 Real Estate Finance	3
Bus 94A Real Estate Appraisal	3
Bus 94B Real Estate Appraisal	3
Bus 95 Real Estate Economics	3
Total Units	24

CERTIFICATE PROGRAMS

**RECREATION
Certificate Program**

	Units
Rec 70 Introduction to Leisure	3
Rec 72 Outdoor Recreation	3
Rec 73 Recreation for Special Groups	4
Rec 74 Introduction to Community Recreation ...	3
P.E. 14 Recreational Games	1

Two units selected from the following courses

Art 31 Crafts	3
P.E. 59 Sports Officiating, Men	2
Elementary Schools	3
P.E. 60 Sports Officiating, Women	2
P.E. 61 Physical Education in the	
Rec 71 Social Recreation	3

Two units selected from the following courses

P.E. 2B Intermediate Gymnastics	1
P.E. 3A Beginning Tennis	1
P.E. 3B Intermediate Tennis	1
P.E. 4B Intermediate Badminton	1
P.E. 5A Beginning Swimming	1
P.E. 6AB Life Saving and Water Safety	2-2
P.E. 17ABCD Physical Fitness, Men	1-1-1-1
P.E. 18A Beginning Golf	1
P.E. 18B Intermediate Golf	1
P.E. 25B Folk Dance	1
P.E. 26A Beginning Modern Dance	1
P.E. 26B Intermediate Modern Dance	1
P.E. 27AB Social Dance	1-1

Total Units

CERTIFICATE PROGRAMS

**REHABILITATION TECHNICIAN FOR THE
PHYSICALLY LIMITED
Certificate Program**

Twenty units required for the certificate

	Units
P.L. 1 Survey of Physical Limitations	3
P.L. 2 Practicum Experience to Work with the Physically Limited Person	2
Psych 1A General Psychology	3
(or Psych 5) Psychology of Effective Behavior	3
Sociol 1 Principles of Sociology	3
P.L. 30 Introduction to Speech and Hearing	3

Select any of the following options:

Option A

P.L. 10 Beginning Communication with the Deaf ..	3
P.L. 11 Intermediate Communication with the Deaf	3

Option B

P.L. 20 Beginning Braille	3
P.L. 21 Intermediate Braille	3

Option C

P.L. 31 Interview and Testing Techniques for Speech and Hearing Problems	3
P.L. 32 Behavior Modification Techniques for Speech and Hearing Pathology	3

Total Units 20

CERTIFICATE PROGRAMS

**TEACHER AIDE
Certificate Program**

	Units
T.A. 1 Introduction to Education	3
T.A. 2 Introduction to Instructional Associate	3
T.A. 3 Psychology of Personal and Social Adjustment	3
T.A. 4 The Learning Process for the Elementary School Child	3
T.A. 5 Instructional Media for Instructional Associate	3
T.A. 6 Language Arts for Instructional Associate	3
T.A. 7 Creative Arts for Instructional Associate	3
T.A. 8 Mathematics for Instructional Associate	3
Work Experience	
One semester of supervised work experience	—
Total Units	27-28

**VOCATIONAL NURSING
Certificate Program**

Psych 5 Psychology of Effective Behavior	3
(or Psych 1A, if eligible)	
V.N. 50 Medical-Surgical Nursing I	7
V.N. 51 Clinical Fundamentals	7
V.N. 52 Medical-Surgical Nursing II	4
V.N. 53 Maternal-Childhealth Nursing	6
V.N. 54 Clinical Fundamentals	7
V.N. 55 Medical-Surgical Nursing III	10
V.N. 56 Clinical Fundamentals	7
Total Units	51

CERTIFICATE PROGRAMS

WATER TREATMENT TECHNOLOGY

Certificate Program

	Units
W.T. 1 Water Treatment Plant Operator I	4
W.T. 2 Water Treatment Plant Operator II	4
W.T. 3 Waste Water Treatment I	4
W.T. 4 Waste Water Treatment II	4
*Math 51 Basic Math	3
Total Units	

*Waived if competency established

WELDING

Certificate Program

Weld 30 Arc Welding	3
Weld 32 Oxy-Acetylene Welding	3
Weld 34 Inert Gas Shielded Arc Welding	3
Weld 36A Advanced Welding	3
Weld 36B Advanced Welding	3
*Ag 30 Agricultural Mechanics	3
*Ag 38 Electricity on the Farm	3
Total Units	

*Substitutions may be made upon approval by the instructor.

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Imperial Valley College

Addendum to 1975-1977
General Catalog



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IMPERIAL VALLEY COLLEGE DOES NOT DISCRIMINATE IN THE ADMISSION OF STUDENTS NOR IN THE OFFERING OF PROGRAMS AND ACTIVITIES BECAUSE OF RACE, COLOR, NATIONAL ORIGIN, OR SEX. NECESSARY REFERENCES ON THE DISCRIMINATION POLICY SHOULD BE MADE TO THE IVC PERSONNEL ASSISTANT, ROOM 18, ADMINISTRATION BUILDING.

TELEPHONE 352-8320 Ext. 262 or 263

ADMINISTRATION

Dr. Terrel Spencer
Superintendent-President

Dr. John A. DePaoli, Jr.
Deputy Superintendent and Dean of Instruction

Dr. Robert Moore, Jr.
Associate Superintendent-Business

Mr. Dean Leptich
Associate Superintendent-Student Personnel Services
and Dean of Student Personnel Services

Dr. Dale Gares
Dean of Admissions and Registrar

Mr. William Rudolph
Dean of Vocational-Technical Education

Dr. James D. Walker
Dean of Evening College

Mr. Hector Lopez
Dean of Counseling Services

Mr. Reuben Lopez
Dean of External College

Mr. Melvin Wendrick
Director of Physically Limited Services

Mr. George Staheli
Director of Student Life and Community Services

Mr. Alfonso Wilson
Director of Financial Assistance and Placement Services

DIVISION CHAIRPERSONS

Mr. Stanley E. Alberda
Head Librarian

Mr. Gary Hulst
Chairperson of Division of Health, Physical Education and Recreation

Mr. Herbert Gartin
Chairperson of Division of Behavioral Science

Mrs. Rosanne R. Hillhouse
Chairperson of English Division

Dr. Luther Finley
Chairperson of Division of Mathematics and Engineering

Mrs. Rauha Koski
Chairperson of Division of Nursing Education and Health Technologies

Mr. Gerald Perske
Chairperson of Division of Science

Mr. Walter Samson, Jr.
Chairperson of Division of Social Science

Mr. James R. Stone
Chairperson of Division of Humanities

Mr. Ernest Moore
Chairperson of Division of Business

Mr. Ray White
Chairperson of Division of Agriculture and Automotive Technology

NEW FACULTY

Bocchese, Veronica Registered Nursing
 B.S., Nursing University of Pennsylvania
 M.A., Nurses Administration Teachers College
 Columbia University, New York

Curle, David Photography
 A.A., Imperial Valley College
 B.P.A., Brooks Institute of Photography, Santa Barbara
 B.A., San Diego State University

Garrison, Julianne Registered Nursing
 A.A.S., Ulster County Community College
 B.S., Russell Sage College, Troy, New York
 M.Ed., Teachers College, Columbia University, New York

Haynes, Harper Automotive Technology

Knowlton, Roger Mathematics
 B.S., Idaho State University
 M.S., Clarkson College of Technology Potsdam, New York

Macci, Barbara Early Childhood/Psychology
 A.A., Imperial Valley College
 B.A., San Diego State University
 M.A., University of San Diego

Ruhl, Regina Registered Nursing
 B.S., Nursing University of Washington
 M.A., Cal State University, Long Beach

Schmidt, Betty Registered Nursing/Vocational Nursing
 B.S.N., Carnegie Institute of Technology, Pittsburgh, Pennsylvania
 M.S.N., University of Buffalo, New York

Topper, Irene Registered Nursing
 R.N., Hospital of Chicago School of Nursing

Valentine, Martin English
 B.A., Arizona State University, Tempe, Arizona
 M.Ed., University of Arizona

Wolski, Mary Spanish
 B.A., University of Wisconsin
 M.A., University of Wisconsin

Wolski, Wayne English
 B.A., University of Wisconsin
 M.A., University of Wisconsin

FACULTY

The following faculty members were not listed in the 1975-77 General Catalog:

Bacon, Jeanne Instructional Specialist/Physically Limited
 B.S., Kansas University
 M.S., Kansas State Teachers College

Brock, Dorrel Welding
 B.S., Southern Utah State University

Fredrickson, Janyth English
 B.A., Texas Tech University

Washburn, Kathleen Registered Nursing/Vocational Nursing
 R.N., Hillcrest Hospital School of Nursing, Waco, Texas
 B.A., San Diego State University

I. REGULATIONS

(The following paragraph should be added on page 26, preceding the paragraph on TRANSCRIPTS)

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

All educational records of students who enroll at Imperial Valley College are kept in accordance with the provisions of the Family Educational Rights and Privacy Act of 1974.

The following information will be available in the Admissions and Counseling offices on each enrolled student: name, address, telephone, birthdate, registration number, list of classes and section numbers, instructors, units, room numbers, hours in which the student is enrolled, dates of attendance, activities participated in and degrees awarded. Any student who does not wish his or her name included on this listing must file a petition requesting deletion from the list before the opening of the school term.

For additional information or a copy of the entire law, contact the Dean of Admissions Office in the Administration Building.

II. GRADING - PROBATION

Page 33 - Add the following paragraph below "CREDIT FOR UPPER DIVISION COURSE WORK" (8).

9. FORGIVENESS CLAUSE

If a student returns to college after five years of absence, he may petition for the exclusion of any given semester's 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.

III. GRADUATION REQUIREMENTS - Page 38

ASSOCIATE DEGREES (New Degrees)

- A.S. - Automotive Body Repair and Painting
- A.S. - Graphic Arts
- A.A. - Legal Assistant

IV. GENERAL EDUCATION

- b. Social Science (Page 41)
Delete Psych 43

- c. Humanities (Language, Literature, Philosophy, Fine Arts)
(Pages 42-43)
Eng 4A, 4B, 4C, 4D (Also Hum 4A, 4B, 4C, 4D) Film Criticism
Eng 30A (Also Span 28A) The Mexican-American in Literature
Eng 30B (Also Span 28B) The Mexican-American in Literature
Eng 31 (Also Span 30) Literature of the Southwest
Eng 35 The Literature of Prophecy
Span 28A (Also Eng 30) The Mexican-American in Literature

- d. Learning Skills (Pages 43-44)

2. One of the following:

Ag 28 (Also H.M. 35) Heavy Equipment Operation and Maintenance
H.R. 8 (Also Psych 8) Personal and Career Development

*L.E. 23 Defensive Tactics

*L.E. 25 Firearms

Psych 8 (H.R. 8) Personal and Career Development

IV. OCCUPATIONAL CURRICULA (Page 47)

CERTIFICATES

Automotive Body Repair and Painting
Graphic Arts - Multi Media
Graphic Arts - Printing
Occupational Work Experience

V. CHANGES IN COURSES OF INSTRUCTION (Page 49 of the General Catalog)

- Ag 45 Vegetable Production (3) 3 hrs. Lec.
(Change in course title and lec./lab. hrs.)
- Ag 46 Ornamental Plant Identification and Materials (3) 3 hrs. Lec.
(Change in lec./lab. hrs.)
- Ag 69ABCD College Rodeo (2-2-2-2) 10 hrs. Lab.
(New course)
Prerequisites: Students must provide all their own equipment, supplies, insurance, and membership or entrance fees. Course designed to give students the chance to participate in the sport of rodeo on the college level. (Same as P. E. 39ABCD)
- Anthro 8 Indians of the Southwest (3) 3 hrs. Lec.
(New course)
A study of the natural and human ecology of the Southwest as applied to aboriginal life; Early Man in the Southwest, especially the Cochise culture; Meso-American influences, foundations and development of the Anasazi, Sinagua, Hohoka, and Mogollon cultures. Intercultural relations, trade, ceramics, pueblo life, religion, art, and agriculture. Cultural extensions into California. Rise of modern societies, as the Zuni, Hopi, Navajo, and Apache, and contemporary life.
- Anthro 30AB Archaeometry: The Application of Physical Science to Archaeological Problems (3) 2 hrs. Lec.
(New course) 4 hrs. Lab.
Prerequisites: Anthro 3 or a college-level physical science course and the permission of the instructor. The application of physical science to solve archaeological problems such as chronology, the composition of materials, the provenience of raw materials, and the composition of soil.
- Art 18A Watercolor Painting (3) 2 hrs. Lec.
(New course) 4 hrs. Lab.
Prerequisite: Art 20A. The study of watercolor painting with emphasis upon color, composition, and pictorial expression. Exploration of various techniques employing the medium of watercolor.
- Art 18B Watercolor Painting (3) 2 hrs. Lec.
(New course) 4 hrs. Lab.
Prerequisite: Art 18A. Continuation of watercolor painting. Stress is on achieving confidence and fluency in the medium. Students are encouraged to expand the range of the experience acquired to include other water-based media.

- Art 20A and Art 20B Drawing (Change in course titles)
- Art 21A and Art 21B Painting (Change in course titles)
- Art 29 Jewelry (3) 2 hrs. Lec.
(New course) 4 hrs. Lab.
An introduction to the study of jewelry with emphasis on the practical and technical skills of jewelry fabrication. Experience in traditional techniques and exploration in creative design and contemporary techniques.
- Auto Tech 70 Auto Body Repairing and Painting (5) 3 hrs. Lec.
Add-\$10.00 material fee. 6 hrs. Lab.
- Auto Tech 81 Brake Licensing and Air-conditioning (2) 1½ hrs. Lec.
(New course) 1½ hrs. Lab.
Prerequisites: Auto Tech 53 or permission of the instructor. This course is designed for those students who wish to pass the brake licensing State test by learning State laws, brake adjusting and repair procedures and trade servicing of automotive air-conditioning.
- Avia 2 Instrument Ground School (3) (New course) 3 hrs. Lec.
Prerequisite: Private pilots certificate.
This course is designed to prepare private and commercial pilots for the F.A.A. instrument written examination. It also serves as a reference course for all pilots and prepares those who are studying for the F.A.A. commercial written examination.
- Bus 22 Machine Transcription (1) 3 hrs. Lab.
(Change in course description)
Prerequisite: Bus 40 and ability to type 40 wpm, or demonstrated knowledge of English grammar by test. Use of dictating-transcribing machine.
- Bus 32AB Dictation and Transcription Lab (3) 1 hr. Lec.
(Change in course description) 4 hrs. Lab.
Prerequisite: A minimum dictation rate of 60 wpm. Review of theory with increasing emphasis on dictation and transcription speed building to produce mailable copy on business dictation.
- Bus 50 Introduction to Data Processing (3) 3 hrs. Lec.
(Change in course description)
An introductory course designed to teach the basic understanding of data processing systems, to survey unit-record machines, to familiarize the student with the electronic computer as the basis for data processing systems and to

teach basic Fortran IV.

COSMETOLOGY

The A. S. Degree will be awarded to graduates of cosmetology schools who meet the following criteria and complete the following program:

CRITERIA

1. Graduate of a school of cosmetology that prepared students for a State Board of Cosmetology Examination.
2. Present California Cosmetologist License.
3. Present enrollment at Imperial Valley College.

Program to be completed

Blanket credit for cosmetology courses completed 45 units
(Corresponds to number of Cosmetology course units in IVC
Cosmetology Major.)

Subject Area and General Education courses to meet college
requirements for graduation 20 units

Physical Education and Mathematics, if required

Applicants for this degree must verify items 1 and 2 of the criteria with the instructor of Cosmetology and the Dean of Vocational-Technical Education. Check with Counseling Department for procedure to follow.

Drm Art 18 Classic Theatre: The Humanities in Drama (3)
(New course) Thirteen 3 hr. programs;
Five 3 hr. class meetings
(Same as Eng 18.)

E.C.E. 26 Psychology of Parenthood (3) 3 hrs. Lec.
(New course)
(Same as Psych 26.)

Econ 2 Principles of Economics (3) 3 hrs. Lec.
(Delete the prerequisite of Econ 1 or consent of
the instructor)

Electronics 1B Electronics Assembly and Fabrication (3)
(Change in course) 2 hrs. Lec.

Electronics 2 - See Page 40 3 hrs. Lab.

Prerequisite: Electronics 1A. A course to familiarize the electronics student with the tools, hardware, and procedures used in the assembly and fabrication of electronics systems.

Electronics 5 Practical Digital Electronics (3) 3 hrs. Lec.
(New course)
Prerequisite: Electronics 2. Theory and application of switching networks and nonlinear solid-state systems; includes circuits, truth tables, and elementary digital circuit analysis.

Engr 19 Statics and Dynamics (6) 6 hrs. Lec.
(New course)
Prerequisites: Phys 4A and Math 3B. Using vector mechanics for analyzing and solving practical problems dealing with force systems, static equilibrium requirements, centroids, friction, moments of inertia of area and mass, centers of gravity, shear and moment diagrams. 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. (Same as Engr 15 and Engr 16.)

Engr 66 Statics and Dynamics (6) 6 hrs. Lec.
(New course)
Prerequisite: Math 2 and Engr 61B or Engr 10. Analyzing and solving practical problems dealing with force systems, static equilibrium requirements, centroids, friction, moments of inertia of area and mass, centers of gravity, shear and moment diagrams. 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.

Eng 2 Introduction to Linguistics (3) 3 hrs. Lec.
(Change in course description and title)
Introduction to the various branches of linguistics: language classification, dialectal variation, psycholinguistics, sociolinguistics, semantics. Specific work on English sounds, grammar, and dialects, including comparisons of English with Spanish. Recommended for teachers, teacher aides, students of foreign languages, and anyone interested in extending his knowledge of language. Suitable for English speaking and bilingual students.

- Eng 18 Classic Theatre: The Humanities in Drama (3)
(New course) Thirteen 3 hr. programs;
Five 3 hr. class meetings
A study of drama and literature of selected European authors of the 17th, 18th, and 19th centuries. Thirteen televised plays each preceded by a lecture providing background and interpretation. Discussion meetings with local instructor.
- Eng 35 The Literature of Prophecy (3)
(New course) 3 hrs. Lec.
Intensive study of the literature of prophecy.
- Eng 40 Beginning English as a Second Language (4) 4 hrs. Lec.
(Change in course description) 1 hr. Lab.
Prerequisite: Designated score on placement test. A beginning course in English designed for the student who has not had any formal English classes in the United States. The course will cover grammar and simple sentence writing. Some beginning composition, with emphasis on capitalization and punctuation, will be introduced in the latter part of the semester.
- Eng 40A Beginning English as a Second Language (2)
(Change in course description) 2 hrs. Lec.
½ hr. Lab.
Prerequisite: Designated score on placement test or permission of instructor. This course covers the first half semester's work of Eng 40 (4 units) and is offered for the convenience of night students who cannot attend more than one night a week. This course, together with Eng 40B, is equivalent to Eng 40. Not open to students who have completed Eng 40.
- Eng 40B Beginning English as a Second Language (2)
(Change in course description) 2 hrs. Lec.
½ hr. Lab.
Prerequisite: Eng 40A or permission of instructor. This course covers the second half semester's work of Eng 40 (4 units) and is offered for the convenience of night students who cannot attend class more than one night per week. Satisfactory completion of Eng 40A and 40B is the equivalent of credit for Eng 40, and qualifies the student to enroll in Eng 41 or Eng 41A. Not open to students who have completed Eng 40.
- Eng 43A Beginning Oral English for Bilinguals (3) 3 hrs. Lec.
(Change in course title and description)
Prerequisites: To be taken concurrently with Eng 40 or by permission of instructor. A conversational course

designed for the beginning ESL student. The course will cover the fundamentals of the English sound system. Listening and speaking will be encouraged through basic dialogs to be learned, through simple stories to be listened to, and through questions to be answered orally.

- Eng 43B Intermediate Oral English for Bilinguals (3)
(Change in course description) 3 hrs. Lec.
Prerequisites: To be taken concurrently with Eng 41 or by permission of instructor. A conversational course designed for the intermediate student. Students will utilize oral English by creating their own dialogs and presenting them, and by speaking on posters or other visual materials. Differences between the students' native language and English and how these differences affect the students' oral English will be discussed.
- Eng 43C Advanced Oral English for Bilinguals (3) 3 hrs. Lec.
(New course)
Prerequisites: To be taken concurrently with Eng 42 or by permission of instructor. An intensive course in oral American English for students who have learned English as a second language. It is intended for students who may read well and have a good grasp of grammar but who still need more practice in manipulating oral structures. Satisfies part of the graduation requirement in communications.
- Eng 44 Phonetics for Bilinguals (2) 2 hrs. Lec.
DELETE THIS COURSE
- Eng 45 Beginning Vocabulary Building and Spelling for ESL (3)
(New course) 3 hrs. Lec.
1 hr. Lab. to be arranged
Prerequisites: This course may be taken concurrently with Eng 40 or by permission of the instructor. A beginning level of vocabulary will be offered. Some spelling techniques will be taught and vocabulary will be used in both oral and written sentences.
- Eng 46AB Intermediate and Advanced Vocabulary Building and Spelling for ESL (3) 3 hrs. Lec.
(New course) 1 hr. Lab. to be arranged
Prerequisites: This course can be taken concurrently with Eng 41 and Eng 42, or by permission of the instructor. Two levels of vocabulary will be offered, intermediate and advanced. In the second semester, more advanced spelling techniques will be taught and more advanced vocabulary will be used in both oral and written sentences. This course can be taken for two semesters.

- Eng 49 ESL Limited-English Skills (1) 1 hr. Lec.
(New course) 1 hr. Lab to be arranged
Prerequisites: Eng 41 and/or permission of the instructor, based in part on an ESL placement test. This class will help students not yet fluent in English to understand another class taught entirely in English (e. g. welding, auto tech, music, typing, data processing, etc.). Emphasis will be placed on the vocabulary of the target class and on listening activities based on cassette recordings of material from the target class. The class will also include specific tutoring (bilingual); lab work with taped lectures and instructions from the target class; simulated classroom activities; practice with asking questions in English; use of the DART Program (where it is available); work with the text(s) of the target class. The course will be specifically tailored to the target class being taught that year.
- Fr 1 Elementary French (4) 4 hrs. Lec.
1 hr. Lab. plus 1 hr. individual
lab for students to be arranged
- Fr 1A Elementary French (2) 2 hrs. Lec.
 $\frac{1}{2}$ hr. Lab. plus $\frac{1}{2}$ hr. individual
lab for students to be arranged
- Fr 1B Elementary French (2) 2 hrs. Lec.
 $\frac{1}{2}$ hr. Lab. plus $\frac{1}{2}$ hr. individual
lab for students to be arranged
- Fr 2 Elementary French (4) 4 hrs. Lec.
1 hr. Lab. plus 1 hr. individual
lab for students to be arranged
- Fr 2A Elementary French (2) 2 hrs. Lec.
 $\frac{1}{2}$ hr. Lab. plus $\frac{1}{2}$ hr. individual
lab for students to be arranged
- Fr 2B Elementary French (2) 2 hrs. Lec.
 $\frac{1}{2}$ hr. Lab. plus $\frac{1}{2}$ hr. individual
lab for students to be arranged
- Fr 3 Intermediate French (4) 4 hrs. Lec.
1 hr. Lab. plus 1 hr. individual
lab for students to be arranged
- Fr 4 Intermediate French (4) 4 hrs. Lec.
1 hr. Lab. plus 1 hr. individual
lab for students to be arranged

- Fr 10 Intermediate Conversational French (2) 2 hrs. Lec.
1 hr. individual lab for students to be arranged
- Geol 14 General Paleontology, Dinosaurs, Sabretooths, and Man (3) 3 hrs. Lec.
(New course)
Prerequisites: Geol 10, Geol 12, or Zool 1B. The history of life on earth from microbe to man as seen in the fossil record. The origins and evolution of invertebrates, vertebrates, and plant life. Study of extinction and its causes. Emphasis on paleo-ecology and knowledge from the past applied to the present and future. Fossil fuels, their origin and distribution. A general education course intended for non-majors.
- G. A. 11 Graphic Communication II (3) 2 hrs. Lec.
(New course) 1 hr. Lab.
2 hrs. Lab. to be arranged
Prerequisite: G. A. 10. A continuation in the preparation of art and mechanicals for reproduction in the graphic art field. Emphasis is on advertising and studio skills. An in depth study of reproduction art in conjunction with offset printing.
- G. A. 12 Composition, Layout and Paste-up (3) 2 hrs. Lec.
(New course) 3 hrs. Lab.
Prerequisite: G. A. 10. A course designed to cover basic methods of composition as it applies to the printing industry, including copysetting, proofreading and paste-up techniques. This course will cover effective uses of related material, techniques, creative thinking and innovative practices through the use of demonstrations, projects and laboratory experiences.
- G. A. 21 Offset Printing II (3) 2 hrs. Lec.
(New course) 1 hr. Lab.
2 hrs. Lab. to be arranged
An advanced course in lithographic presswork which allows the student to apply the lithographic theory and experience he has gained by operating equipment using sheets 4 x 6 in. up to 11 x 17 in. with emphasis in loading and setting feeds, conveyor mechanism, and guides, the proper preparation of stock and packing clamps, the mounting of plates and blankets, the setting of dampeners, ink rollers, fountain, and grippers. Pressure adjustments are stressed. Camera operations for the lithography process are introduced.

G. A. 22 Photography and Platemaking (3) 2 hrs. Lec.
 (New course) 2 hrs. Lab.
 Current techniques and equipment in photography and platemaking as final preparation before offset printing. Covers effective use of materials and techniques in darkroom, stripping and platemaking departments.

G. A. 23 Bindery, Cutting and Distribution (2) 1 hr. Lec.
 (New course) 2 hrs. Lab.
 This course offers instruction in finishing operations on printed materials, training in the operation of folding machines, slitting, perforating, and trouble-shooting, training in the operation of hand and power cutters, special trimming, trimming of booklets and printed matter, cutting of blank stock, collating machine, stapling and stitching, hole punching, jogging and padding procedures.

G. A. 30 Graphics Plant Operation and Management Fundamentals (3)
 (New course) 3 hrs. Lec.

A course designed to acquaint the student with all phases of the small printing shop operation. The course emphasis will be production control, cost control, estimating and quoting, sales and general management techniques used in the day to day operation. Covers effective use of techniques, creative thinking, innovative practices through the use of projects, problem presentations, and experiences directly related to the subject matter.

HEALTH AIDE

Under the Health Aide program, change these items to read as follows:

1. Change Hospital Nurse Aide Orderly to Hospital Nursing Assistant.

Page 101 - Change this paragraph to read as follows:

Students are admitted each semester. An admissions committee will review all applications. Early application (through the college counseling department) is recommended, since the number of students who can be admitted is limited. Admission requirements include a health examination, writing of the college placement tests and an interview with a member of the Health Aide faculty. Applicants with prior education in nursing (R.N., L.V.N., or Health Aide) may apply for credit by examination and/or advanced placement. This will be determined on an individual basis. A grade of C or better in all Program

courses is required for successful completion of the Health Aide Program. An overall 2.0 grade point average is required in order to receive a Certification of Completion.

HA 15A Hospital Nursing Assistant (9) 3 hrs. Lec.
 (Change in course title and addition to 18 hrs. Lab.
 course description)

Prerequisites: Enrollment in the Health Aide Program. A course for those intending to work as aides in a variety of health agencies---acute hospital, convalescent hospital, community health, mental health, developmentally disabled/mental retardation. Seven (7) weeks will be taught as a "core course" for all enrolled. Topics will include the role and functions of the health aide, legal and ethical responsibilities, communication skills, community resources for health care. Basic knowledge of nutrition, personal hygiene safety, comfort and rest, growth and development will be studied. College laboratory periods will allow for practice in the procedural skills needed in these areas. Nine (9) weeks will consist of supervised laboratory experiences in various health agencies according to the student's area of chosen specialty. Weekly lecture-discussion classes will continue within the specialty areas. The final two (2) weeks will consist of "sharing" and review classes at the college for all enrolled. Students who complete the course will receive a standard Red Cross First Aid Certificate and will be qualified in cardio-pulmonary resuscitation (CPR). Students of the Community Health Aide portion of the Health Aide Program will receive certification by the State of California as a Home Health Aide/Homemaker.

H. R. 8 Personal and Career Development (1-3) 1-3 hrs. Lec.
 (New course)

This course examines the process a student would follow in making a realistic career decision. Students planning to enter professions involving helping other people such as education, social work, counseling, psychology, community work, and related areas, in addition to students who are undecided about their own future, would profit from the course. Self-awareness will be appraised by testing and discussing interests, aptitudes, abilities, limitations, needs, and life goals. Students will explore the world of work in terms of occupational outlook, wages, training required opportunities for advancement, and life styles. (Same as Psych 8)

H. R. 11 Practicum (3) 1 hr. Lec.
 10 hrs. work experience

Omit the following sentence from course description:
 "This course shall be offered on a credit basis only"

- H. R. 60 Career Planning (1-3) 1-3 hrs. Lec.
Change in units and change in lecture hours.
- H. R. 65ABCD The Student in Contemporary College Affairs (1-1-1-1)
1 hr. Lec.
Add "ABCD" to H. R. 65
- H. R. 66 Student Personnel Services in Higher Education (3)
(New course) 3 hrs. Lec.
Comprehensive study of organization, administration, and evaluation of student personnel services in higher education. Particular emphasis in services afforded in the community college.
- Ind Stu 48AB or 88AB Physically Limited Program (1-6)
Add "AB" to Ind Stu 48 and Ind Stu 88 to read Ind Stu 48AB and Ind Stu 88AB.
- Ind Stu 89ABCD Individual Studies for the Learning Center
Add "ABCD" to the course number and add units to read 1-1-1-1.
- Jrn 5 Introduction to Photography (3) 2 hrs. Lec.
3 hrs. Lab.
Course description should be listed under Vis Com 5 as a cross reference class.

LEGAL ASSISTANT

New courses under the Legal Assistant Program are listed below as follows:

- L. A. 1 Introduction to Legal Assistants (3) 3 hrs. Lec.
Introductory course in formalizing the career of the legal assistant. An introduction to law, social forces and the law, comparison of the role of the legal assistant and the lawyer, and an introduction to legal terminology and bibliography. (Includes law office management and legal ethics).
- L. A. 2 Library Science and Legal Writing (3) 3 hrs. Lec.
Prerequisite: L. A. 1. An introductory course in working in the legal library. Research and drafting and writing

- legal documents.
- L. A. 3 Civil Procedures I (3) 3 hrs. Lec.
An introductory course in basic civil procedures, court systems, procedures as they apply to the principles of federal, state, and civil laws.
- L. A. 5 Tort Law (3) 3 hrs. Lec.
Prerequisite: L. A. 1. A study of the fundamental principles of the law of torts, an examination of the techniques of investigation involved in the lawyer's handling of tort claims. A study of the various forms of pleadings involved in tort claims.
- L. A. 6 Criminal Law (3) 3 hrs. Lec.
Prerequisite: L. A. 1. Structures, definitions, and the most frequently used sections of the Penal Code and other criminal statutes. Elements of crimes and defenses.
- L. A. 7 Corporations and Taxation (3) 3 hrs. Lec.
Prerequisite: L. A. 1. Principles of agency, principal and third parties, formation and management of California corporations, the rights and liabilities of stockholders, and corporate reorganization and dissolution, regulations of state and federal government relating to income, deductions, exemptions, depreciation, and capital gains and losses.
- L. A. 8 Civil Discovery and Evidence (3) 3 hrs. Lec.
Prerequisites: L. A. 1 and L. A. 3. An examination of the rules of civil evidence and the admissibility of such evidence in court. Depositions, interrogations, admissions, notices to produce, and related rules of discovery and evidence.
- L. A. 9 Family Law (3) 3 hrs. Lec.
Prerequisite: L. A. 1. Law and procedure relative to marriage, community property, dissolution, parent and child relationships- including adoption.
- L. A. 10 Bankruptcy - Creditor/Debtor (3) 3 hrs. Lec.
Prerequisite: L. A. 1. A study of the bankruptcy laws and

procedures. A study of creditors rights, debtors exemptions, and secured transactions.

L. A. 11 Real Estate Law for Legal Assistants (3) 3 hrs. Lec.

Prerequisite: L. A. 1. Legal background in property ownership, with special reference to the law of California as it applies to community property. Conveyances, deeds, trust deeds, mortgages, homesteads and estates, etc.

L. A. 12 Wills/Trusts/Probate (3) 3 hrs. Lec.

Prerequisite: L. A. 1. A study of the fundamental principles of the law of wills and trusts including simple will and trust forms. An examination of the organization and jurisdiction of a California Probate Court including gift, inheritance and estate taxes, and practice in documentation.

Mus 18ABCD Chamber Orchestra (2-2-2-2) 1 hr. Lec.
2 hrs. Lab. plus 1 hr. to be arranged
(Change in lecture hours)

NURSING - REGISTERED

Page 122 of the General Catalog - Revise these paragraphs to read as follows:

The Registered Nurse Program (four semesters and one summer session in length) prepares the student to receive the Associate of Science degree from the College and be eligible to write the examination given by the California Board of Registered Nursing to obtain licensure as a registered nurse. The program prepares men and women to give direct nursing care to patients in hospitals, clinics, and similar community health-care agencies. Courses in general education and nursing are taken at the college campus. Nursing laboratory experiences are offered at selected area hospitals and other health agencies under the guidance of nursing faculty members.

Students are admitted once a year in September. A Nursing Admissions Committee will review all applications. Early application (previous to February) is recommended, since the number of students who can be admitted is limited. Admission requirements include high school graduation (or its equivalent), a year of high school chemistry and biology (or their college equivalent), eligibility to take the Eng 1A course (as determined by college placement tests), physical and dental examinations (including specified immunizations) and an interview with a member of the nursing faculty.

Applicants with prior education in nursing (R. N., V. N. or Health Aide) may apply for credit by examination and/or advanced placement. This will be determined on an individual basis.

For continuation in the program, a grade of C or better is required in all Board of Registered Nursing required courses---nursing, anatomy, physiology, microbiology, English, communication elective and the two psychology courses. An overall 2.00 grade point average (C=2.00) must be maintained in order to enroll in each succeeding semester of the program. The college graduation requirements in health education is waived for R.N. students. The nursing faculty reserves the right to recommend that a student be asked to withdraw from the nursing program at any time if academic, clinical, health or personal standards are not maintained.

CURRICULUM

First Year

	Units 1st S.	Units 2nd S.
*R.N. 1A-2, Registered Nursing	8	8
*R.N. 1B, Development of Contemporary Nursing..	1	
**Anat 10, Anatomy-Physiology	5	
(Anat 8 and Physio 1 may be substituted)		
**Psych 1A, General Psychology	3	
Physical Education, if required	1	1
**Bio 21, General Microbiology		4
**Psych 35, Developmental Psychology: Conception to Death		3
	<u>17-18</u>	<u>15-16</u>

SUMMER SESSION

(Six Weeks)

***Sociol 1, Principles of Sociology	3
***Eng 1A, Reading and Composition.....	<u>3</u>
	6

Second Year

*R.N. 3 & 4A Registered Nursing.....	11	11
R.N. 4B, Nursing Trends and Opportunities		1
Learning Skills (Communication) elective	3	
****Soc Sci 52, Introduction to American Government		3
Physical Education, if required	1	1
Humanities Elective		3
	<u>14-15</u>	<u>18-19</u>

*Must be taken in this sequence.

**Courses to be taken preceding or during the semester indicated.

***Courses must be completed before registration of R.N. 3.

****Students expecting to transfer to a state senior college are advised to take six units of "American Institutions" electives instead.

- R. N. 1A Registered Nursing 1A (8) 4 hrs. Lec.
(Change in course no., description, & lab hrs.) 12 hrs. Lab.
Delete the following sentence from the description:
"Historical foundations and trends of nursing and health care."
R. N. 1B Development of Contemporary Nursing (1) 1 hr. Lec.
(New course)
Prerequisite: Admission to ADRN Program. R. N. 1A taken concurrently. Historical influences in nursing and health care. Contemporary status of registered nurses. Cultural and social components of nursing.
- R. N. 2 Registered Nursing 2 (8) 4 hrs. Lec.
(Change in units, lab hrs., & course descript.) 12 hrs. Lab.
Prerequisites: R. N. 1A, R. N. 1B, and Psych 1A. Using the concepts of growth and development, physiological and psychological responses to trauma and disease are studied as are the common health problems encountered by individuals of all ages. Special needs of individuals before, during and after surgery included. Inter-relatedness of emotions and organic disease introduced. Experiences concurrent in the hospitals and other community agencies, experience in participating with the interdisciplinary psychiatric team with emphasis on the role of the nurse in interacting with individuals or groups with mental health problems.
- R. N. 3 Registered Nursing 3 (11) 5 hrs. Lec.
18 hrs. Lab.
(Change in units, lab hours and course description)
Prerequisites: R.N. 1A, R.N. 1B, and R.N. 2. Role of the family in society and the helping role of the nurse with emphasis on meeting needs of individuals during the maternal cycle---preceding, during and following normal and abnormal birth. Interrelatedness of mental health, handicapping conditions of children and interference with sexual needs studied. Community resources that contribute to the welfare of mothers, children and the family unit. Experiences in working with the family in the hospital, community agencies and the home.

- R. N. 4A Registered Nursing 4A (11) 5 hrs. Lec.
18 hrs. Lab.
(Change in course number, units, lab hours, and course description)
Prerequisites: R.N. 1A, R.N. 1B, R.N. 2 and R.N. 3. Development of attitudes and skills required to plan, carry out and evaluate comprehensive nursing care of individuals of all ages with complex health problems in the hospital and the home. Experience in working with individuals and/or groups in mental health crises. Experience in the nursing leadership role. The need for patient teaching, rehabilitation, health maintenance and community resources are stressed.
- R. N. 4B Nursing Trends and Opportunities (1) 1 hr. Lec.
(New course)
Prerequisites: R.N. 1A, R.N. 1B, R.N. 2, and R.N. 3. R.N. 4A taken concurrently. Contemporary problems and trends in nursing. Legal and ethical aspects. Legislation affecting health care. Organizations and publications. Career opportunities. Personal responsibility for professional growth.
- R. N. 24 Current Trends in Nursing - An Update (3) 3 hrs. Lec.
(New course)
Prerequisites: R.N. 4, V.N. 56, or equivalent. Introduction to newer concepts and trends of nursing care. The changing patterns of health care, nursing service and nursing education, and the social and economic trends related to employment in the health care field. will be explored. (Same as V.N. 24.)
- R. N. 25 Body Fluids and Electrolytes and Acid-Base Balance (3) 3 hrs. Lec.
(New course)
Prerequisites: R.N. 4, V.N. 56 or equivalent. This course is designed to provide an understanding of the general concepts of body fluids and electrolytes and their role in maintaining health and how deviations from the normal quantity and composition will affect the well-being of the individual. (Same as V.N. 25.)
- R. N. 26 Intravenous Therapy Technique (2) 30 hrs. Lec.
(New course) 12 hrs. Lab.
Prerequisites: R.N. 4, V.N. 56 or equivalent. A course of instruction in intravenous therapy and the practice of venipunctures. (Same as V.N. 26.)

NURSING - REGISTERED

(Graduates of Hospital Diploma Schools of Nursing)

The A.S. Degree will be awarded to graduates of hospital diploma schools of nursing who meet all of the following criteria and complete the following program:

Criteria

1. Graduate of a state-accredited hospital school of nursing which had a curriculum covering the five basic areas of nursing (medicine, surgery, obstetrics, pediatrics, psychiatry).
2. Present California Registered Nurse Licensure.
3. Present enrollment at Imperial Valley College.

Program to Be Completed

Blanket credit for previous R.N. courses completed... 40 units
(Corresponds to number of R.N. course units in IVC Registered Nurse Program.)

General Education courses to meet college requirements for graduation 20 Units

(In order to allow the graduate to articulate with baccalaureate programs in nursing, it is strongly recommended that the following courses be taken within the general education requirements: Anatomy 8, Human Physiology 1, Microbiology 21, Psychology 1A, Sociology 1, Psychology 35).

Applicants for this degree must verify items 1 and 2 of the Criteria with the Nursing Director. Check with Counseling Department for procedure to follow.

NURSING - VOCATIONAL

In the second paragraph under this section, change the last sentence to read as follows:

For continuation in the program a grade of C or better is required in all specified courses below and an overall 2.0 grade point average (G=2.0) must be maintained in order to enroll in each succeeding semester of the program.

V. N. 24 Current Trends in Nursing - An Update (3)
(New course) (Same as R.N. 24) 3 hrs. Lec.

V. N. 25 Body Fluids and Electrolytes and Acid-Base Balance (3)
(New course) (Same as R.N. 25.) 3 hrs. Lec.

V. N. 26 Intravenous Therapy Technique (2)
(New course) (Same as R.N. 26) 30 hrs. Lec.
12 hrs. Lab.

PHYSICAL EDUCATION

Change this paragraph (page 130 of the general catalog) to read as follows:

Unless exempt, each student is required by district policy to schedule one activity course each semester. A student may take A-B-C-D sections of the same course, may repeat any section for required credit, but not in the same semester.

P. E. 6ABCD Life-Saving (2-2-2-2) 1½ hrs. Lec.
1½ hrs. Lab.
(Change in course title)

P. E. 7 Water Safety Instructor Training (2)
(New course) 1 hr. Lec.
2 hrs. Lab.

Prerequisites: Advanced Life-saving card for W.S.I. A course designed to acquaint the student with the basic principles of instructing beginning, intermediate, and advanced water safety skills. It will also prepare the student to teach basic rescue and advanced life-saving, C. P. R., and basic first aid as it applies to water safety procedures. Successful completion of this course may include certification as an American Red Cross Water Safety Instructor and as a C.P.R. Instructor.

P. E. 11ABCD Volleyball, Coed (1-1-1-1) 2 hrs. Lab.
(Add "ABCD" to course number)

P. E. 13ABCD Soccer, Coed (1-1-1-1) 2 hrs. Lab.
(Add "ABCD" to course no., change in units, delete lab hrs. TBA)

P. E. 22ABCD Raquet Ball and Handball (1-1-1-1) 2 hrs. Lab.
(Add "ABCD" to course no., change units to read 1 1-1-1)

P.E. 23ABCD Basketball for Women (1) (New course) 2 hrs. Lab.
Designed for women students interested in basketball. To offer basic and advanced fundamentals, team play, and strategy.

P. E. 24ABCD Basketball for Men (1) (New course) 2 hrs. Lab.

An introduction to the fundamental skills and strategy of the game. Rules and class competition are included in the course

- P. E. 28ABCD Dance Theater (2-2-2-2) 3 hrs. Lab.
(Change in course title) 1 hr. by arrangement
- P. E. 29ABCD Jazz Dance (1-1-1-1) 2 hrs. Lab.
(Change in course title)
- P. E. 39ABCD College Rodeo (2-2-2-2) 10 hrs. Lab.
(New course)
(Same as Ag 69ABCD.)
- P. E. 40ABCD Synchronized Swimming, Women (1-1-1-1) 2 hrs. Lab.
(Change in course number)
- P. E. 45ABCD Women's Athletics (2-2-2-2) 5 hrs. Lab.
(Add "ABCD" to course number, change laboratory hours.)
- P. E. 53 Theory of Basketball, Coed (2) 2 hrs. Lec.
(New course)
This course is designed for physical education majors, recreation majors, and potential coaches. Coaching techniques and theories, history, rules, and current and possible future trends in the game will be offered.
- P. E. 56 Care and Prevention of Athletic Injuries (2) 2 hrs. Lec.
(New course)
This course is designed for the coach, coach trainer, physical education and recreation student. Emphasizes the screening and conditioning of athletes, prevention, care and treatment of athletic injuries; includes techniques of applying supportive materials, rehabilitation of injuries and use of therapeutic modalities. Organization of a new athletic training program.
- P. E. 62 Physical Education for Special Olympics (3) 2 hrs. Lec.
(New course) 2 hrs. Lab.
plus 2 hrs. Lab. to be arranged
A course designed to train college students to condition and prepare mentally retarded persons for competition in Special Olympics.
- P. L. 2AB Practicum Experience to Work with the Physically Limited Person (2) 6 hrs. Lab.
(Course change)

Prerequisites: P. L. 1 and completion or current enrollment in Psych 1A and Sociol 1. A course designed to extend the experience of Rehabilitation Technician majors who wish to explore a specific area of contact with physically limited individuals. Experience may be gained on the college campus or in the field with deaf, blind, or orthopedically handicapped individuals. This course may be repeated to provide experience in a second area. Course may be taken for a credit or a letter grade.

- P. L. 22ABCD The Art of Conversation (2) 2 hrs. Lec.
(New course)
The development of a set of skills that will improve conversation abilities and skills.
- P. L. 23ABCD Tactile Art for the Physically Limited (2) 4 hrs. Lab.
(New course)
This course is designed to enrich the aesthetic experience of the physically limited. Students will explore various art medias and methods.
- P. L. 24ABCD General and Applied Music for the Visually Handicapped (1) 2 hrs. Lab.
(New course)
A course to provide experience with general music in terms of listening skills, elements, basic structure and style. Application of skills involving sensitivity to rhythm, pitch, sound and structure of music with individual and group participation in singing and in rhythmic accompaniment. Course designed for the visually handicapped.
- Psych 3 Psychology of Personal and Social Adjustment (3) 3 hrs. Lec.
(Delete the prerequisite.)
- Psych 8 Personal and Career Development (1-3) 1-3 hrs. Lec.
(New course) (Same as H. R. 8)
- Psych 21 Early Childhood Development: Children, Family and Community (3) 3 hrs. Lec.
(Change in course title)
- Psych 26 Psychology of Parenthood (3) 3 hrs. Lec.
(New course)
This course is designed to provide parents and parents-to-be with practical down-to-earth methods of being good parents. While it is based on sound psychological principles, its content will not be theoretical but practical, giving examples and illustrations on aspects of sound parenthood.

Psych 35 Developmental Psychology: Conception to Death (3)
 (New course) 3 hrs. Lec.
 Prerequisites: None (Psych 1A recommended). A study of the psychological development of human beings from conception to death, covering prenatal development, infancy, toddlerhood, preschoolers, middle childhood, adolescence, and adulthood including old age and death. The course will cover major theories of development, current research, and problem areas of both a social and psychological nature.

Psych 36 Psychology of Human Sexuality (3) 3 hrs. Lec.
 (New course)
 Prerequisites: Psych 1A or Psych 20 recommended. A study of the fundamentals of human sexuality including human biology, the psychology of sexual behavior, and the influence of culture on sexuality. In addition to covering the major theories and current research, the course will deal with emotional reactions to sexuality.

Psych 43A Introduction to Community Mental Health Services I

DELETE THIS COURSE

Psych 43B Introduction to Community Mental Health Services II

DELETE THIS COURSE

Span 12 Advanced Conversational Spanish (2) 2 hrs. Lec.
 (New course) (See page 40) 1 hr. Lab.

Span 51B Beginning Conversational Spanish and Culture (2)
 (Addition to prerequisite) 2 hrs. Lec.
 1 hr. Lab.

Prerequisites: Span 51A. or by examination and/or consent of instructor.

Span 51C Beginning Conversational Spanish and Culture (2)
 (New course) 2 hrs. Lec.
 1 hr. Lab.

Prerequisites: Span 51B or placement by exam and/or consent of instructor. Continuation of Span 51B.

Span 52 Beginning Conversational Spanish and Guitar (2)
 (Change in course number and course title) 2 hrs. Lec.
 1 hr. Lab.

Span 53 Beginning Guitar and Mexican Folk Songs for Spanish Speakers (2) 2 hrs. Lec.
 (Change in course number) 1 hr. Lab.

Span 54 Beginning Conversational Spanish for Careers: Business (2)
 (New course) 2 hrs. Lec.
 1 hr. Lab.

A course designed to give the beginning student of Spanish a basic ability in commercial Spanish. The course will emphasize vocabulary building, conversational skills, and listening comprehension.

Span 55 Beginning Conversational Spanish for Careers:
 Law Enforcement (2) 2 hrs. Lec.
 (New course) 1 hr. Lab.

Span 56A Beginning Conversational Spanish for Careers:
 Medical Professionals (2) 2 hrs. Lec.
 (Change in course title) 1 hr. Lab.

Span 56B Beginning Conversational Spanish for Careers:
 Medical Professionals (2) 2 hrs. Lec.
 (Change in course title) 1 hr. Lab.

Span 57 Beginning Conversational Spanish for Careers:
 School Personnel (2) 2 hrs. Lec.
 (New course) 1 hr. Lab.

This course is designed primarily for the English speaking teacher of elementary through high school age students, teacher aides and other school personnel working daily with Spanish speaking children. Basic cultural insights and communication skills necessary for improved success in relating to Spanish speakers in the school and classroom situation will be presented.

Span 60 Spanish Laboratory: Individual Study (1) 1 hr. Lec.
 (Change in course number) 2 hrs. Lab. to be arranged

T. A. 1 Introduction to Education (3) 3 hrs. Lec.
 (Change in course description)
 Introductory course for students interested in a career as an instructional associate or in a teaching credential. Brief overviews of philosophies, ideals, goals, new directions, problems and issues in public education today, organization of school system; financial and legal aspects of teaching, career opportunities; credentialing, degree certificate requirements, and use of instructional media in the classroom.

T. A. 2 Introduction to Instructional Associate (3)
 (Add prerequisite) 3 hrs. Lec.
 Prerequisite: T. A. 1.

- T. A. 4 Introduction to Bilingual-Multicultural Education (3) 3 hrs. Lec.
 (Change in course title and course description)
 Prerequisites: T. A. 1 and T. A. 2. A history of the development of goals and philosophy of bilingual-multicultural education. A study of various implemented programs and the role of the instructional aide in a bilingual-multicultural classroom. Also includes the techniques of teaching both Spanish and English as a second language.
- T. A. 5 Bilingual-Multicultural Curriculum and Instruction (3) 3 hrs. Lec.
 (Change in course title and course description)
 Prerequisites: T. A. 1, T. A. 2, and T. A. 4. Also includes the development and use of bilingual-multicultural materials in various subject areas and the methods of teaching all subject areas in the bilingual-multicultural classroom. A continuation of the basic program in T.A. 4.
- T. A. 6 Language Arts for Instructional Associate (3) 3 hrs. Lec.
 (Add prerequisite) Prerequisite: T. A. 2.
- T. A. 7 Creative Arts for Instructional Associate (3) 3 hrs. Lec.
 (Add prerequisite) Prerequisite: T. A. 2.
- T. A. 8 Mathematics for Instructional Associate (3) 3 hrs. Lec.
 (Add prerequisite) Prerequisite: T. A. 2.
- Vis Com 12 Advanced Motion Picture Production (3) 3 hrs. Lec.
 (Add prerequisite)
 Prerequisite: Vis Com 11 or equivalent.
- W. T. 1 Water Treatment Plant Operator I (4) 3 hrs. Lec.
 (Add prerequisite) 3 hrs. Lab.
 Prerequisite: Math 51 or satisfactory score on math placement test.
- W. T. 2 Water Treatment Plant Operator II (4) 3 hrs. Lec.
 (Add prerequisite) 3 hrs. Lab.
 Prerequisite: W. T. 1.
- W. T. 3 Waste Water Treatment I (4) 3 hrs. Lec.
 (Add prerequisite) 3 hrs. Lab.
 Prerequisite: Math 51 or satisfactory score on math placement test.

- W. T. 4 Waste Water Treatment II (4) 3 hrs. Lec.
 (Add prerequisite) 3 hrs. Lab.
 Prerequisite: W. T. 3.
- Weld 30 Arc Welding (3) 2 hrs. Lec.
 (Change in laboratory hours) 4 hrs. Lab.
- Weld 32 Oxy-Acetylene Welding (3) 2 hrs. Lec.
 (Change in laboratory hours) 4 hrs. Lab.
- Weld 34 Inert Gas Shielded Arc Welding (3) 2 hrs. Lec.
 (Change in laboratory hours) 4 hrs. Lab.
- Weld 36A Advanced Welding (3) 2 hrs. Lec.
 (Change in laboratory hours) 4 hrs. Lab.
- Weld 36B Advanced Welding (3) 2 hrs. Lec.
 (Change in laboratory hours) 4 hrs. Lab.
- Weld 36C Advanced Welding (3) 2 hrs. Lec.
 (Change in laboratory hours) 4 hrs. Lab.

COOPERATIVE WORK EXPERIENCE

Page 160 - Change the paragraph on this page to read as follows:

Cooperative Work Experience Education is a cooperative educational program by Imperial Valley Community College and the community employers. It is an approved program of activities and objectives which is evaluated by the college. The college provides the organization, the class facilities, and the personnel to coordinate the program. The employers provide places to work (work stations) and on-the-job training which has educational value for the students. Sixteen units of work experience education may be allowed toward graduation with the Associate Degree. All students are required to be entered in a certificate or degree program. General work experience courses are not approved for veteran's benefits.

VI. CHANGES IN MAJORS

AGRICULTURAL BUSINESS

Page 163 - Add the following information to acceptable courses for the major (Roman Numeral II)

Ag 45 Vegetable Production (3)

MAJORS

AGRICULTURAL CHEMICAL TECHNOLOGY

Page 164 - Add the following information to acceptable courses for the major (Roman numeral II):

Ag 45 Vegetable Production (3)

AUTOMOTIVE BODY REPAIR AND PAINTING
(New major)

Twenty-two units required for the major

I. Required courses for the major

Auto Tech 50 Shop Mathematics (if required) (3)
Auto Tech 70 Auto Body Repairing and
Painting (5)
Auto Tech 71 Advanced Auto Body Repairing and
Painting (5)
Auto Tech 53 Brakes and Suspension (3)
Auto Tech 58 Automotive Air-conditioning (3)
Weld 30 Arc Welding (3)
Weld 32 Gas Welding (3)

II. Acceptable courses for the major (5 units from the following list may be accepted as major credit if the equivalent of Auto Tech 70 has been completed in high school (2 years of high school auto body).

Auto Tech 51 Automotive Technology, or equivalent (5)
Auto Tech 54 Electrical and Fuel Systems (3)
Weld 34 Inert Gas Shielded Arc Welding (3)
W. E. Cooperative Work Experience (4)

BANKING - SECRETARIAL

Page 169 - Change the required number of units for the major to read as follows:

Twenty-two to 28 units required for the major

Under required courses for the major (Roman numeral I), change the required courses for the major to read as follows:

Bus 5A Bus Law..... (3)
Bus 21A Proficiency-Exit Typing (1)..... (2)

Bus 21B Proficiency- Exit Typing (1)..... (2)
Bus 32A Dictation and Transcription Lab (2)..... (3)
Bus 32B Dictation and Transcription Lab (2)..... (3)
Bus 40 Grammar and Usage (3)
Bus 41 Essentials of Business Correspondence..... (2)
or
Bus 42 Business Correspondence..... (3)
Bus 60 Principles of Bank Operations..... (3)

CARPENTRY

Delete the following under Carp 8: If Weld 30 and Weld 32 have been satisfactorily completed, Carp 8 will be waived.

CLERICAL

Page 175 - Add the following to required courses for the major:

or Bus 41 Essentials of Business Correspondence..... (2)
Bus 42 Business Correspondence..... (3)

Under acceptable courses for the major (Roman numeral II), delete Bus 41 - Essentials of Business Correspondence

EARLY CHILDHOOD EDUCATION
(New major)

Twenty-four units are required for the major

I. Required courses for the major

E.C.E. 20 Developmental Psychology of Children..... (3)
E.C.E. 21 Early Childhood Development, Children, Family
and Community..... (3)
E.C.E. 22 Early Childhood Development I..... (3)
E.C.E. 23 Early Childhood Development II..... (3)
E&C.E. 24 Creative Learning Experiences for Pre-School
Children..... (3)
Psych 1A General Psychology..... (3)
Psych 26 Psychology of Parenthood..... (3)
Social 33 Marriage and the Family..... (3)

II. Additional courses from the following list are recommended

Psych 1B Advanced General Psychology..... (3)
Psych 2 Introduction to Physiological Psychology..... (3)
Psych 3 Psychology of Effective Behavior..... (3)
Psych 9 Interviewing and Counseling..... (3)
Psych 17 Social Psychology..... (3)
Psych 30 Psychology of Adolescence (3)

Sociol 1	Principles of Sociology.....	(3)
Sociol 2	Contemporary Social Problems.....	(3)

FIRE SCIENCE

Page 178 - Under required courses for the major, add the following:

*Math 51 Basic Mathematics, or equivalent..... (3)

*Math 51, or equivalent, required before registration in Fire Science 83.

HUMAN RELATIONS - COMMUNITY MENTAL HEALTH WORKER

Page 183 - Delete this major.

HUMAN RELATIONS - COUNSELING, SCHOOL, AND SOCIAL SERVICES

Page 184 - Delete this major.

HUMAN RELATIONS - PERSONNEL, EMPLOYMENT COUNSELING AND SUPERVISION

Page 185 - Delete this major.

HUMAN RELATIONS

(Revised Major)

Areas of emphasis: Community Mental Health Worker, Counseling, School, Social Services, Personnel, Employment Counseling and Supervision

Twenty-four units required for the major

I. Required courses for the major

Psych 1A	General Psychology	(3)
Psych 3	Psychology of Personal and Social Adjustment	(3)
Psych 9	Interviewing and Counseling	(3)
Sociol 1	Principles of Sociology	(3)

II. With the approval of his/her counselor, the student will select a minimum of twelve units (depending on areas of emphasis) from the following courses. It is considered advisable for students in certain areas of emphasis to take more than twelve units from the list below.

Anthro 2	Cultural Anthropology	(3)
Bus 6	Management Concepts of Supervision	(3)
Bus 7	Human Relations in Management	(3)

Bus 50	Introduction to Data Processing	(3)
Bus 79	Public Relations Techniques	(3)
H.R. 8	Personal and Career Development	(3)
H.R. 11	Practicum	(3)
Psych 1B	Advanced General Psychology	(3)
Psych 2	Introduction to Physiological Psychology	(3)
Psych 5	Psychology of Effective Behavior	(3)
Psych 12	Elementary Statistics	(3)
Psych 14	Abnormal Psychology	(3)
Psych 15	Social and Psychological Dynamics of Drug Use	(3)
Psych 17	Social Psychology	(3)
Psych 20	Developmental Psychology of Children	(3)
Psych 26	Psychology of Parenthood	(3)
Psych 30	Adolescent Psychology	(3)
Psych 35	Developmental Psychology: Conception to Death	(3)
Psych 36	Psychology of Human Sexuality	(3)
Psych 40	Psychology of Crisis Counseling	(3)
Psych 46	The Mentally Ill, Alcoholic, Drug Addict and the Law	(3)
Sociol 2	Contemporary Social Problems	(3)
Sociol 33	Marriage and the Family	(3)
Sociol 41	Mass Sociology and Collective Behavior	(3)
H. R. 10	Small Group Leadership	(3)

III. Strongly recommended that students who do not speak Spanish take a series of courses in conversational Spanish.

GRAPHIC ARTS
(New Major)

Twenty-two units required for the major

I. Required courses for the major

G. A. 10	Graphic Communication I	(2)
G. A. 11	Graphic Communication II	(3)
G. A. 12	Composition, Layout, and Paste-up	(3)
G. A. 20	Offset Printing I	(3)
G. A. 21	Offset Printing II	(3)
G. A. 22	Photography and Platemaking	(3)
G. A. 23	Bindery, Cutting and Distribution	(2)
G. A. 30	Graphics Plant Operation and Management Fundamentals	(3)

LEGAL ASSISTANT
(New Major)

Thirty-six units required for the major

I. Required courses for the major

Bus 5A	Business Law	(3)
L. A. 1	Introduction to Legal Assistants	(3)
L. A. 2	Library Science and Legal Writing	(3)
L. A. 3	Civil Procedures I	(3)
L. A. 5	Tort Law	(3)
L. A. 6	Criminal Law	(3)
L. A. 7	Corporations and Taxation	(3)
L. A. 8	Civil Discovery and Evidence	(3)
L. A. 9	Family Law	(3)
L. A. 10	Bankruptcy - Creditor/Debtor	(3)
L. A. 11	Real Estate Law for Legal Assistants	(3)
L. A. 12	Wills/Trusts/Probate	(3)

NURSING
(Registered)

Change the Nursing major to read as follows:

Forty units required for the major

I. A. Required courses for the major

R.N. 1A	Registered Nursing	(8)
R.N. 1B	Development of Contemporary Nursing	(1)
R.N. 2	Registered Nursing	(8)
R.N. 3	Registered Nursing	(11)
R.N. 4A	Registered Nursing	(11)
R.N. 4B	Nursing Trends and Opportunities	(1)

B. Other courses required to complete R.N. Program
(30 units required)

Anat 10	Anatomy-Physiology	(5)
Bio 21	Microbiology	(4)
Psych 1A	General Psychology	(3)
Sociol 1	Principles of Sociology	(3)
Eng 1A	Reading and Composition	(3)
*Soc Sci 52	Introduction to American Government	(3)
	Learning Skills (Communications)	
	Elective	(3)
	Humanities Elective	(3)
Psych 35	Developmental Psychology: Conception to Death	(3)

II. Acceptable courses for the major

Anat 8 (4 units) and Physio 1 (4 units) may be substituted for Anat 10.

*Students expecting to transfer to a state senior college

are advised to take six units of "American Institutions" electives instead.

NURSING
(Vocational)

Page 191 - Under recommended courses as electives, add the following course:

Psych 35	Developmental Psychology: Conception to Death	(3)
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PLANT SCIENCE

Page 193 - Under required courses for the major, add the following course:

Ag 45	Vegetable Production	(3)
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SECRETARIAL

Page 197 - Change the required number of units for the major to read "Twenty-one or 22 units required for the major"

Add the following to the required courses for the major:

Bus 41	Essentials of Business Correspondence	(2)
<u>or</u>		
Bus 42	Business Correspondence	(3)

TEACHER AIDE

Change the Teacher Aide major to read as follows:

Twenty-four units required for the major

I. Required courses for the major

T.A. 1	Introduction to Education	(3)
T.A. 2	Introduction to Instructional Associate	(3)
T.A. 3	Psychology of Personal and Social Adjustment.	(3)
T.A. 4	Introduction to Bilingual-Multicultural Education	(3)
T.A. 5	Bilingual-Multicultural Curriculum and Instruction	(3)
T.A. 6	Language Arts for Instructional Associate ...	(3)
T.A. 7	Creative Arts for Instructional Associate ...	(3)
T.A. 8	Mathematics for Instructional Associate	(3)

Delete the following: Work Experience-One semester of supervised work experience

LIBERAL STUDIES MAJOR AT IVC

Page 201 - Change the section under English (1) to read as follows:

1. English: (15 units required)

Required courses: Eng 1A, Eng 1B, Eng 2, Sp 1
 Electives: (One of the following 3-unit courses in literature: Eng 15, Eng 16A, Eng 16B, Eng 17A, Eng 17B)

Page 202 - Change the section under Social Science (3) and Humanities (4) to read as follows:

3. Social Science: (15 units required)

Required courses: Six units of American Institutions.

Electives: Nine units to include courses from the following:

- a. Anthropology
- b. Economics
- c. Geography (Not Geog 1)
- d. History
- e. Political Science
- f. Sociology

4. Humanities and Fine Arts: (15 units required)

Required courses: Art 22A, Mus 7 and 3 units from humanities or philosophy

Electives: Six units selected from the following areas:

- a. Foreign Languages and Literature
- b. Humanities
- c. Music
- d. Philosophy

Note: P.E. 61, Physical Education in the Elementary School is needed by students planning to enter elementary education.

Note: GRADE POINT AVERAGE: A 2.5 cumulative grade point average is required to enter student teaching throughout the state. Some universities require a 3.0 average.

VISUAL COMMUNICATION - MOTION PICTURE PRODUCTION

Page 203 - Change this major to read as follows:

Twenty-two units required for the major

I. Required courses for the major

Vis Com 5/Jrn 5	Introduction to Photography	(3)
Vis Com 10/Eng 10	Introduction to Motion Picture Production	(3)
Vis Com 11	Intermediate Motion Picture Production	(3)
Vis Com 12	Advanced Motion Picture Production	(3)
Hum 3/Eng 3	Introduction to Film History and Criticism	(2)

Two (2) units to be selected from one of the following courses:

Hum 4A/Eng 4A	Film Criticism: Westerns, Comedies, Musicals	(2)
Hum 4B/Eng 4B	Film Criticism: Horror, Fantasy and Science Fiction	(2)
Hum 4C/Eng 4C	Film Criticism: Gangsters, Politics and Social Protest	(2)
Hum 4D/Eng 4D	Film Criticism: Documentaries, Experimental Films	(2)

II. Acceptable courses for the major (minimum of six [6] units required from the following courses, with at least one course in each of two [2] areas):

Art 22A or Art 22B	Design	(3)
Mus 30	Music Structure and Style	(3)
Drw Arts 20A or Drw Arts 20B	Fundamentals of Acting	(3)

VISUAL COMMUNICATION - PHOTOGRAPHY

Page 203 - Change this major to read as follows:

Eighteen units required for the major

I. Required courses for the major

Vis Com 5/Jrn 5	Introduction to Photography	(3)
Vis Com 6	Intermediate Photography	(3)
Vis Com 7	Advanced Photography	(3)
Vis Com 10/	Introduction to Motion Picture	
Eng 10	Production	(3)

II. Acceptable courses (6 units, three in Psychology and three in Art) chosen from the following courses:

Psych 1A or	General Psychology	(3)
Psych 5	Psychology of Effective Behavior	(3)
Art 22A or	Design	(3)
Art 22B or		
Art 3A or	History and Appreciation of Art	(3)
Art 3B		

WELDING TECHNOLOGY

Page 205 - Change this major to read as follows:

Twenty-one units required for the major

I. Required courses for the major

Weld 30	Arc Welding	(3)
Weld 32	Oxy-Acetylene Welding	(3)
Weld 34	Gas Shielded Arc Welding	(3)
Weld 36A	Advanced Welding	(3)
Weld 36B	Advanced Welding	(3)
Weld 36C	Advanced Welding	(3)

II. Acceptable courses for the major (minimum of three units required from the following courses): (Do not fulfill major requirements)

Ag 28	Heavy Equipment Operation and Maintenance	(5)
Ag 35	Fluid Power	(4)
Ag 36	Agricultural Construction	(3)
Ag 38	Electricity on the Farm	(3)

VII. CHANGES IN CERTIFICATE PROGRAMS

AUTO BODY REPAIR AND PAINTING

Twenty-two units are required to complete the Auto Body Certificate Program

Auto Tech 50	Shop Mathematics, if required	3
Auto Tech 70	Auto Body Repairing and Painting	5
Auto Tech 71	Advanced Auto Body Repair and Painting	5
Auto Tech 53	Brakes and Suspension	3
Auto Tech 58	Automotive Air-conditioning	3
Weld 30	Arc Welding	3
Weld 32	Oxy-Acetylene Welding	3

Total Units 25

The following courses may be substituted for any of the above required courses except Auto Tech 70 and Auto Tech 71:

Auto Tech 54	Electrical and Fuel Systems	3
Weld 34	Inert Gas Shielded Arc Welding	3

SECRETARY CERTIFICATE IN BANK SERVICE

Page 208 - Change this certificate program to read as follows:

Bus 5A	Business Law	3
Bus 21AB	Proficiency - Exit Typewriting (1).....	2
Bus 32A	Dictation and Transcription Lab (2)	3
Bus 32B	Dictation and Transcription Lab	3
Bus 40	Grammar and Usage	3
Bus 41	Essentials of Business Correspondence	2
or		
Bus 42	Business Correspondence	3
Bus 60	Principles of Bank Operation	3

Select any two of the following electives

Bus 7	Human Relations in Management	3
Bus 23	Office Machines	3
Bus 39	Office Procedures	3
Bus 50	Introduction to Data Processing	3
Sp 1	Oral Communications	3

Total Units 25-26

TEACHER AIDE
Certificate Program

Change to read as follows:

	Units
T. A. 1	Introduction to Education 3
T. A. 2	Introduction to Instructional Associate 3
T. A. 3	Psychology of Personal and Social Adjustment 3
T. A. 4	Introduction to Bilingual Multicultural Education 3
T. A. 5	Bilingual-Multicultural Curriculum and Instruction 3
T. A. 6	Language Arts for Instructional Associate 3
T. A. 7	Creative Arts for Instructional Associate 3
T. A. 8	Mathematics for Instructional Assoc. 3
<u>Delete Work Experience</u>	
Total Units 24	

WELDING
Certificate Program

Change to read as follows:

	Units
Weld 30	Arc Welding 3
Weld 32	Oxy-Acetylene Welding 3
Weld 34	Inert Gas Shielded Arc Welding 3
Weld 36A	Advanced Welding 3
Weld 38	Sheet Metal Fundamentals 3

Six units to be selected from the following courses:

Ag 28	Heavy Equipment Operation and Maintenance 5
Ag 35	Fluid Power 4
Ag 36	Agricultural Construction 3
Ag 37	Small Gasoline Engines 3
Ag 38	Electricity on the Farm 3

Total Units 21

OCCUPATIONAL WORK EXPERIENCE
Certificate Program
(New)

Thirty-two units required

	Units
W. E. Occ 80	Personal Efficiency 4
W. E. Occ 81	Motivation 4
W. E. Occ 82	Labor and the Economy 4
W. E. Occ 83	Laws Affecting Employees 4

Sixteen units from the student's planned course of occupational training as approved by the Dean of Vocational-Technical Education.

Total Units 32

Page 172 - BILINGUAL-BICULTURAL STUDIES MAJOR

Under "II. Recommended as electives, Group 2;" change to read as follows:

Group 2

Bio 3	Principles of Biological Science (3)
Geog 1	Physical Geography (3)
<u>or</u>	
Astron 21	Elementary Astronomy (3)
Psych 1A	General Psychology (3)
Math 10	Mathematics for Elementary School Teachers (3)

ADDITIONS

Electronics 2 Transistors and Semi-conductors (5) 3 hrs. Lec.
4 hrs. Lab.

Delete Math 3B as a prerequisite.

Span 12 Advanced Conversational Spanish (2) 2 hrs. Lec.
(New course) 1 hr. Lab.

Prerequisites: Span 11 or consent of instructor. Continuation of Span 11. Conversational skills, developed through selected topics from text, newspapers, magazines, interviews and skits. Not open to students with native ability in the language.