

1973 - 75
GENERAL
CATALOG

IMPERIAL
VALLEY
COLLEGE



IMPERIAL VALLEY COLLEGE
P. O. Box 158
IMPERIAL, CALIFORNIA 92251
(Educational Material)

IMPERIAL VALLEY COLLEGE

1973 - 75

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

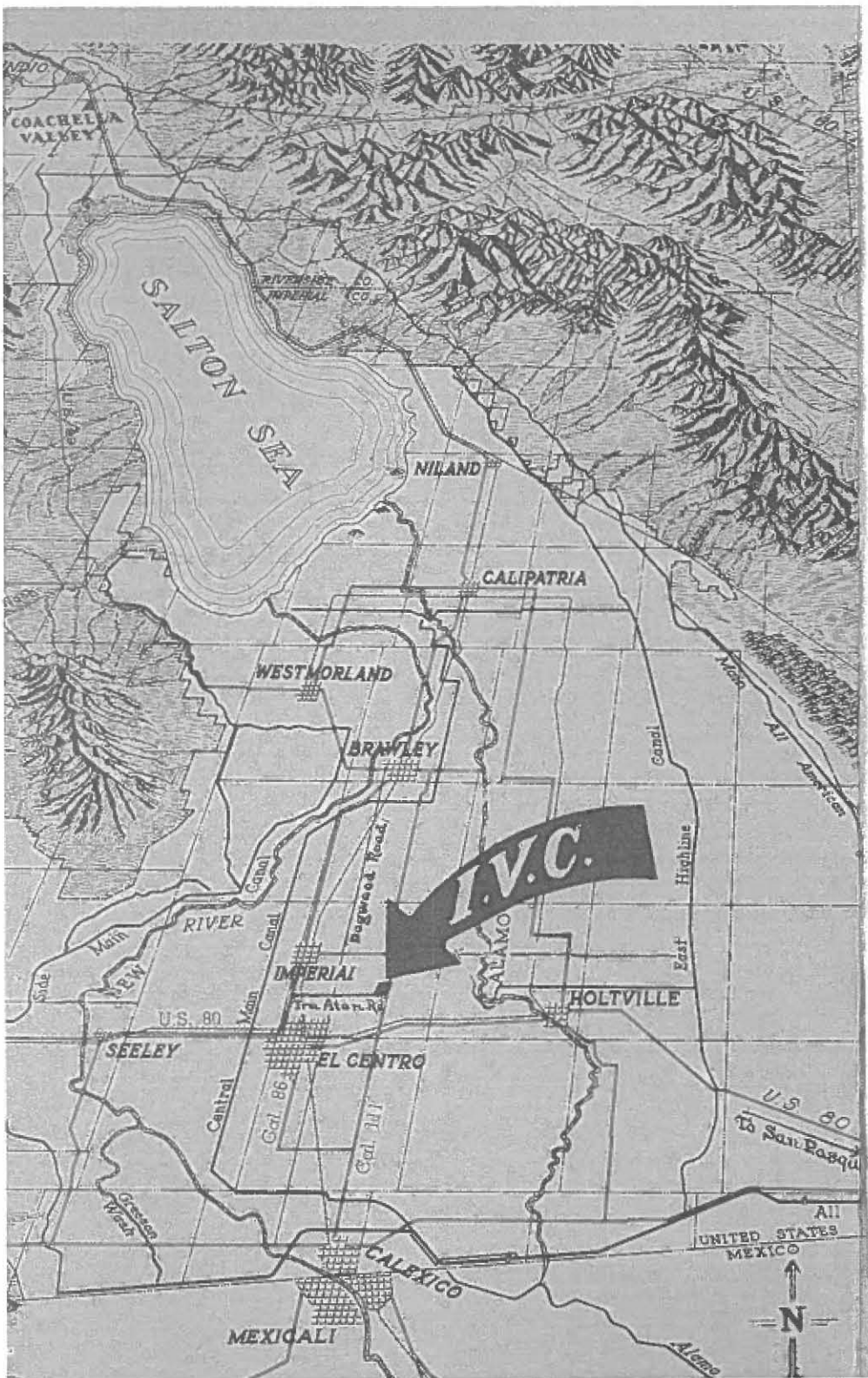


TABLE OF CONTENTS

| | |
|--|------------|
| COLLEGE CALENDAR | 4 |
| GENERAL INFORMATION | 6 |
| Personnel | 6 |
| Location | 12 |
| History | 12 |
| Facilities | 14 |
| Library | 14 |
| Objectives and Philosophy | 14 |
| Types of Courses and Programs | 16 |
| Evening College | 18 |
| Work Experience Program | 18 |
| Honors Program for High School Seniors | 18 |
| Degrees | 19 |
| Scholastic Honors | 19 |
| Financial Aids | 21 |
| Expenses | 21 |
| Accreditation | 21 |
| Counseling Services | 21 |
| Student Activities | 22 |
| Bookstore and Snack Bar | 22 |
| Athletic Eligibility | 22 |
| REGULATIONS | 24 |
| Admission | 24 |
| Transcripts | 25 |
| Residence Requirements | 25 |
| Study List Limitations | 28 |
| Changes in Class Schedules | 28 |
| Scholarship Grading System | 28 |
| Semester Grade Reports | 31 |
| Probation | 31 |
| Provisional Status | 32 |
| Attendance and Automatic Withdrawals | 33 |
| Withdrawal from College | 33 |
| Academic Dismissal | 33 |
| Physical Education | 34 |
| Changes in the Catalog | 35 |
| GRADUATION REQUIREMENTS | 36 |
| CREDIT FOR CORRESPONDENCE AND EXTENSION COURSES | 41 |
| TRANSFER REQUIREMENTS | 42 |
| OCCUPATIONAL CURRICULA | 42 |
| COURSES OF INSTRUCTION | 44 |
| MAJORS | 127 |
| CERTIFICATE PROGRAMS | 158 |
| INDEX | 166 |

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 Junior College Association
and the
California Junior College Association — Southern Region

APPROVED

by

The Veterans Administration

CALENDAR

FALL SEMESTER 1973-74

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 5-6
Preference enrollment.

September 10
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 21
Last day to add classes.

October 1
Census.

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

October 19
Last day to make up Spring semester, 1973,
incomplete grades.

October 22
Veterans Day (classes dismissed).

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 22-23
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 20 - January 1
Christmas recess.

January 2
Classes resume.

January 17-24
Fall semester final examinations.

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 24
End of fall semester.

CALENDAR

SPRING SEMESTER 1974

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 24-25
Preference registration.

January 28
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

February 8
Last day to add classes.

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 18
Census.

March 8
Last day for students to file petition for June
graduation.

Last day to make up fall semester, 1973,
incomplete grades.

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

April 8-12
Spring recess.

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

May 27
Memorial Day (classes dismissed).

May 31 - June 7
Spring semester final examinations.

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 8
Commencement.

THE BOARD OF TRUSTEES

IMPERIAL COMMUNITY COLLEGE DISTRICT

MR. WALTER M. ANDERSON

Trustee from area which includes Calexico Union High School District

MR. MILTON W. CARR

Trustee from area which includes Calipatria Unified School District

MR. WILLIAM COLE

Trustee from area which includes Central Union High School District

MS. ANNIE GUTIERREZ

Trustee from area which includes Holtville Unified School District

MRS. CAROLINE WINDER

Trustee from area which includes San Pasqual Valley Unified School District

MR. ED C. WIEST

Trustee from area which includes Brawley Union High School District

MR. HOWARD WORTHINGTON

Trustee from area which includes Imperial Unified School District



ADMINISTRATION

DR. TERREL SPENCER
Superintendent - President

MR. JOHN A. DePAOLI, JR.
Deputy Superintendent and Dean of Instruction

MR. ROBERT MOORE, JR.
Associate Superintendent — Business

MR. DEAN A. LEPTICH
Dean of Student Personnel Services

MR. DALE GARES
Dean of Admissions and Registrar

MR. JAMES D. HAMMOND
Dean of Counseling

MR. WILLIAM RUDOLPH
Dean of Vocational-Technical Education

MR. JAMES D. WALKER
Director of Evening College

DIVISION CHAIRMEN

MR. STANLEY E. ALBERDA

Head Librarian

MRS. DOROTHY T. FINNEY

Chairman of Division of Health, Physical Education, and Recreation

MR. ROBERT M. FRYE

Chairman of Division of Behavioral Science

MRS. ROSANNE R. HILLHOUSE

Chairman of English Division

MS. KAY HACHMUTH

Chairman of Division of Mathematics and Engineering

MRS. RAUHA K. KOSKI

Chairman of Division of Nursing

MR. GERALD K. PERSKE

Chairman of Division of Science

MR. WALTER L. SAMSON, JR.

Chairman of Division of Social Science

MR. JAMES R. STONE

Chairman of Division of Humanities

MR. BLAINE R. THOMPSON

Chairman of Division of Business

MR. RAY A. WHITE

Chairman of Division of Agriculture and Automotive Technology

DIRECTORS AND COORDINATORS

MR. GLENN A. GENTRY

Work Experience Coordinator

MR. HECTOR LOPEZ

Financial Assistance Counselor

THE FACULTY

- AKERS, H. RUSSELL Instructional Specialist
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 Evening College
A.A., Imperial Valley College
B.A., M.S., California State University
- 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 University
- BARKER, MICHAEL A. Anthropology
B.S., Brigham Young University
M.A., UCLA
- BERNARD, WILLIS C. Art
B.S., Massachusetts College of Art
- BILLINGS, ROBERT Physical Education
B.S., University of Texas
M.S., Southwest Texas State
- BRUNGARDT, MARTHA Registered Nursing
B.S.N., M.S., University of Arizona
- CHAMPAGNE, PHILIP Welding, Automotive Technology
B.A., M.A., Arizona State University
- DePAOLI, JOHN, JR. Deputy Supt., Dean of Instruction
B.A., M.A., UCLA
- FARRAR, LLOYD History
B.A., Oberlin College
M.A., Columbia University
- FARRIER, PAUL History
B.A., M.Ed., M.A., University of Arizona
- FEHRENBACH, WALOMA Registered Nursing
B.S.N.E., Loma Linda University
- FIELDS, MAX Physical Education
B.A., Whittier College
M.A., California State Polytechnic College
- FINLEY, LUTHER Engineering
B.S., M.A., Arizona State University
I.Ed.D., Bradley University
- FINNEY, DOROTHY T. Physical Education
Chairman of Division of Health, Physical Education and Recreation
B.A., Santa Barbara State College
- FRYE, ROBERT M. Psychology
Chairman of Division of Behavioral Science
B.S., M.A., Bradley University
- FUESLER, JACK B. Music
A.A., Norfolk Junior College
B.M.E., M.M., Northwestern University

THE FACULTY

- GALAMGAM, ADELAIDA Assistant Librarian
E.T.C., Ilocos Norte Normal School
B.S.E., Central Philippine College
M.S., Ed., University of Southern California
- GARES, V. DALE Dean of Admissions - Registrar
B.A., M.A., Adams State College
- GARTIN, HERBERT Psychology, Human Relations
B.A., M.Ed., University of Arizona
- GENTRY, GLENN A. Work Experience Coordinator-Instructor
B.S., New Mexico State University
M.S., University of Arizona
- GREY, VERNA Registered Nursing
B.S., Union College
- GRIFFIN, WILLIAM A. Business
B.S., University of North Dakota
M.A., Colorado State College
- HACHMUTH, KAY Mathematics
Chairman of Mathematics and Engineering Division
B.A., Texas Women's University
M.S., University of Utah
- HAMMOND, JAMES Dean of Counseling
B.S., Arizona State College
M.A., Northern Arizona University
- HANN, RICHARD K. Philosophy
A.B., Chico State College
M.A., San Francisco State College
- HAUER, ROYAL English
B.A., UCLA
M.A., San Fernando Valley State College
- HAWKINS, DOROTHY J. Vocational Nursing
R.N., Mercy College of Nursing
A.S., Imperial Valley College
- HEBERT, ROGER Physical Education
B.A., American International College
M.A., Boston University
- HILLHOUSE, ROSANNE R. English
Chairman of Division of English
B.A., M.A., Oxford University
- JERGE, MICHAEL J. Business, Economics
B.A., M.B.A., University of Arizona
- JOHNSON, JEAN Physical Education
B.A., University of Kentucky
- KELSOE, LEON Physical Education
B.A., M.Ed., Whittier College
- KOSKI, RAUHA K. Chairman of Division of Nursing
B.A., Northern Michigan University
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
- LEPTICH, DEAN A. Dean of Student Personnel Services
B.A., M.A., San Diego State College

THE FACULTY

- LEWIS, STANLEY Agriculture, Automotive Technology
B.S., M.S., New Mexico State University
- LOPEZ, HECTOR Financial Assistance Counselor
B.A., M.A., Northern Arizona University
- LOWE, JUANITA Art
B.S., M.A., Western Carolina College
- MCCORMICK, JOHN M. English
B.A., Long Beach State
M.A., Northern Arizona University
- MEEK, ALFRED Registered Nursing
B.S., Cal Poly College
B.S., M.S., Fresno State College
- MELLINGER, ELWOOD J. Agriculture
B.S., M.A., Michigan State University
- MILLER, DONALD Physical Education
B.A., Denver University
M.A., Sacramento State College
- MOORE, ERNEST Business
B.S., University of Maryland
M.B.A., University of Chicago
- MOORE, ROBERT Associate Superintendent-Business
B.S., Auburn University
M.A., Fresno State College
- MURANO, ORLANDO Spanish
B.A., M.A., UCLA
- NAGEL, BETTY A. Vocational Nursing
R.N., Butterworth Hospital School of Nursing
- ORENSZTEIN, ARMAND Mathematics
B.S., M.S., University of Illinois
M.A., University of California at Riverside
- ORTEGA, ALICIA Q. Spanish, French
B.A., M.A., San Diego State College
- OVERMAN, RUTH Business
B.A., M.A., Arizona State University
- 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
Chairman of Division of Science
B.S., M.S., University of Nevada
- RICE, PAULINE BENOIT French, Humanities, English
B.A., Rice University
M.A., Baylor University
- RICHWINE, HAROLD J., JR. Chemistry
B.S., Shippensburg State College
M.S., Bucknell University
- RUDOLPH, WILLIAM D. Dean of Vocational-
Technical Education
B.S., M.B.A., Indiana University
- SAMSON, WALTER L., JR. History
Chairman of Division of Social Science
B.S., Wisconsin State College
M.A., University of Wyoming

THE FACULTY

- SAMUELS, CARMEN Registered Nursing
B.S., Indiana University
M.S., De Paul University
- SMITH, MARGARET A. Psychology, Sociology
B.A., San Diego State College
M.A., United States International University
- 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
- STANDIFORD, SANDRA Counselor
B.A., University of Missouri at Kansas City
M.S., California State College at Los Angeles
- STONE, JAMES R. Music
Chairman of Division of Humanities
B.E., University of North Carolina
B.M., Westminster Choir College
M.M., University of Southern California
- SWANN, MARIE B. English
B.S., Ed. M., University of Oklahoma
- THOMPSON, BLAINE R. Business
Chairman of Division of 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. Director of Evening College
B.S., Minot State College
M.S., North Dakota State University
- 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 Counselor for the Physically Limited
B.A., Sacred Heart Seminary, Detroit, Michigan
M.A., University of Michigan
- WHITE, HOWARD Law Enforcement
California Highway Patrol (Ret.)
- WHITE, RAY A. Automotive Technology
Chairman 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
- 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-one 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.

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 new Coachella Valley Junior College District.

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

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-

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.

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.

Located in the center of the campus, the library functions as an integrated instructional materials center having a great variety of books and non-book materials. It has over 28,000 fully cataloged volumes, subscriptions to over 300 periodicals and newspapers, magazine indexes, pamphlet files containing much transitory, ephemeral materials; and a growing collection of magazine issues on microfilm. New materials are being added regularly.

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.

Recently, the college 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.

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.

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

The major purpose of the college is to further the development of the talents of all students by helping them to select appropriate 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.

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 three programs designed with specific types of students in mind. They are the students who can devote only evenings to school, the students who can coordinate their college study with a program of employment, and the outstanding high school seniors who can profit by special work at the college level.

The Evening College

The Evening College, which is 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 it takes longer than the day program, students find that with adequate planning with the assistance of a counselor, in a surprisingly short time, the goals they establish in the field of higher education can be attained through the Evening College.

Work Experience Program

Students may earn college credit for work experience. The student must be enrolled for eight or more units of credit which may include Work Experience. The work must take place at work stations approved by the college. This may be in business, industry or public service agencies which are willing to enter into training agreements with the college.

Sixteen units of Work Experience education may be allowed toward graduation with the Associate Degree.

Honors Program for High School Seniors

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

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

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

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

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

For information relating to the Honors Program, contact the Counseling Office.

Concurrent High School and College Enrollment

The students will spend a minimum of four periods in high school. The physical education requirements will be met within that four period schedule. Students are restricted to a spectator's role in college student activities, and 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.

The high school has the choice of selecting whether his college class(es) may count as high school credit or as college credit.

The cost of participation will be assumed by the students and their parents. There is no tuition nor other fees and the students are not eligible to join the Imperial Valley College Associated Students. Transportation provisions are to be made 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 occupational-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 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 AIDS

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 Counselor.

EXPENSES

There is no tuition charge for full-time students who are legal California residents. Tuition for foreign students and for students who are legal residents of other states is \$27.00 per unit to a maximum of \$810.00 per academic year. 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.

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 Adminis-

tration Building and students are requested to contact the counseling office at any time between the hours of 8:00 a.m. and 4:00 p.m.

Counseling services are also provided by the Evening College for those students who need assistance. The Counseling Center is open in the evening between the hours of 6:00 and 10:00 p.m.

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 Canyons, College of the Desert, Mira-Costa, 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 and tennis.

ATHLETIC ELIGIBILITY

Conference eligibility rules provide that to participate in interscholastic sports, the student must have satisfied the following requirements:

1. Must have begun regular attendance not later than the end of the registration period as specified in the college catalog (no later than first week).
2. Must be doing passing work in at least 10 units of work, in addition to physical education (if required), at the

time the certified list in which he is a member is issued. Physical education activity courses including athletics may not be included in the 10 units of work required.

3. After the first semester of attendance, must have passed in at least 10 units, in addition to physical education (if required), in his last semester of attendance. Physical education activity courses including athletics may not be included in the 10 units of required work.
4. Must be a high school graduate, or at least 19 years of age by August 31 of the year he enters junior college.
5. Must be in good standing.

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 \$27.00 per unit, not to exceed a total of \$810.00 per academic year, 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 \$27.00 per unit, not to exceed a total of \$810.00 per academic year, 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-district" 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, 1972 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.

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 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 an important assignment such as a term paper, final examination, or experiment is missing, or for medical or other sufficient reason. Removal of an "Incomplete" establishes whatever grade is warranted, so long as the work is made up before the end of the sixth week of the following semester; otherwise, the final grade is automatically recorded as an F.

2. 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 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 first fifteen weeks of 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 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.
- 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 file a form, the grade and units in the previous and present 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.

- Presentation of the DD214 by petition may allow the veteran 4 units of credit (cr) (2 units for physical education and 2 units for health education).
- 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**.

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. This report also serves as a priority card for registration for the next semester.

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

PHYSICAL EDUCATION

District policy requires that every physically able student enrolled for more than 8 units, regularly attend a physical education class each semester until credit for four semesters has been earned.

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

Exemptions from the participation requirement may be granted for the following reasons only:

- (1) Physical disability
- (2) Age, twenty-one or over
- (3) Postgraduate standing
- (4) Enrollment in 8 or fewer units
- (5) Completion of basic or recruit training in any of the Armed Forces of the United States. College credit may be granted (P.E. 16A-D, H.E. 3). See counselor.

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 of page 127.

- A.S.—Agricultural Business
- A.S.—Agricultural Chemical Technology
- A.S.—Agriculture Engineering
- A.S.—Animal Science
- 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.S.—Bookkeeping
- A.A., A.S.—Business Transfer
- A.A., A.S.—Business Supervision
- 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 Clerical
- A.A., A.S.—General Major
- A.A., A.S.—General Science
- A.A., A.S.—Human Relations
- A.S.—Industrial Power Technology
- 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.S.—Welding Technology

II. STATE AND INSTITUTIONAL REQUIREMENTS

- A. Sixty units plus physical education if required.
- B. Grade point average of 2.0 of 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

GRADUATION REQUIREMENTS

- C. Physical Education (if required) See page 34 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
- Geol 1B Historical Geology
- Geol 2 Introduction to 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 3 Introduction to World Prehistory
- Bus 6 Introduction to Business
- Econ 1A Principles of Economics
- Econ 1B Principles of Economics
- Econ 40 Contemporary Economic Issues
- 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
- Poly Sci 3 Comparative Politics

GRADUATION REQUIREMENTS

- Poly Sci 14 Introduction to International Relations
 - **Poly Sci 51 The Constitution in Action
 - **Poly Sci 53 Contemporary World Affairs
 - Psych 1A General Psychology
 - Psych 40 Developmental Psychology of Children
 - Psych 41 Social Psychology
 - Soc Sci 51 Introduction to American Society
 - Soc Sci 53 Introduction to Economics
 - Soc Sci 54 Introduction to Geography
 - Sociol 1 Principles of Sociology
 - Sociol 33 Marriage and the Family
- #### 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
 - Dram Arts 5 History of World Drama
 - Eng 1B Introduction to Literature
 - **Eng 3 (Also Hum 3) Introduction to Film Criticism
 - **Eng 4 (Also Hum 4) Advanced Film Criticism
 - Eng 15A American Literature
 - Eng 15B 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-B Modern Prose Fiction
 - Eng 28A The Mexican-American in Literature
 - Eng 33 The Literary Artist as Social Critic
 - Eng 36 The Bible as Literature
 - 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
 - **Ger 10 Conversational German
 - **Ger 11 Conversational German
 - **Hum 3 (Also Eng 3) Introduction to Film Criticism

GRADUATION REQUIREMENTS

- **Hum 4 (Also Eng 4) Advanced 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
- Span5A Spanish Conversation and Composition
- **Span 10 Conversational Spanish
- **Span 11 Conversational Spanish
- Span 20A Beginning Spanish for Bilinguals
- Span 21 Spanish for Bilingual Students
- Span 22 Spanish for Bilingual Students
- Span 25 Introduction to Spanish-American Literature for Bilinguals
- Span 28A The Mexican-American in Literature
- Span 40 Spanish Civilization
- Span 41 Spanish-American Civilization
- **Span 51A Everyday Spanish

d. Learning Skills

1. Eng 1A Reading and Composition
or
Eng 51 The Communication Process and
2. One of the following:
 - Art 20A Elementary Drawing
 - Art 22A Design
 - Art 24A Ceramic Sculpture
 - Art 28 Technical Ceramics
 - Bus 17 (See also Math 17) Math for Business Analysis
 - **Bus 21 Elementary Typewriting
 - Bus 40 Introduction to Data Processing
 - Bus 62 (See also Soc Sci 62) Personal Finance
 - Dr Art 20A Fundamentals of Acting
 - Engr 18A Plane Surveying
 - Engr 72A Surveying for Engineering Technology
 - Eng 31 Creative Writing
 - Eng 32 Advanced Composition
 - Eng 40Y English as a Second Language

GRADUATION REQUIREMENTS

- Eng 42A (Also Jrn 42A) Survey of Journalism
- Eng 43 Oral English for Bilingual Students
- Eng 47 Technical and Report Writing
- **Eng 48 Power Reading
- **Eng 60A Reading Development
- Eng 61 Vocabulary Building
- *Eng 63 Library Resources
- Math C Plane Trigonometry
- Math 2 Advanced Algebra and Trigonometry
- Math 3A Analytic Geometry and Calculus
- Math 12 Elementary Statistics
- Math 17 (Also Bus 17) Mathematics for Business Analysis
- Math 18 Introduction to Mathematics
- Phil 10 Logic
- Psych 52 Psychology of Effective Behavior
- Soc Sci 62 (See also Bus 62) Personal Finance
- Span 24 Introduction to Spanish Literature for Bilinguals
- Sp 1 Oral Communication
- Sp 11 Oral Interpretation
- Sp 51 Basic Speech

*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.

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

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 127), 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

Electronics

Basic

Intermediate

Finance and Credit

Secretary Certificate—Bank Service

General Certificate—Bank Service

Administrative Certificate in Bank Operations

Credit Administration Certificate in Banking

Fire Science

Human Relations

Law Enforcement

Basic Library Technician

Rehabilitation Technician for the Physically Limited

Real Estate

Nursing — Vocational

Welding

Requirements for certificates are listed on page 158.

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 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 38. 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.

(Same as H.M. 35.) 6 hrs. Lab.

- 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)** 6 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)** 6 hrs. Lab.
Prerequisite: Art 20A. A continuation of 20A.
- Art 21A Intermediate Drawing and Painting (3)** 6 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 21B Intermediate Drawing and Painting (3)** 6 hrs. Lab.
Prerequisite: Art 21A. A continuation of 21A.
- Art 22A Design (3)** 2 hrs. Lec.
3 hrs. Lab.
Fundamentals of design and composition; theory of color. Includes organization and utilization of basic elements through design problems.
- Art 22B Design (3)** 2 hrs. Lec.
3 hrs. Lab.
Prerequisite: Art 22A. Intermediate studies of elements and principles of art with emphasis on three-dimensional design theory.
- Art 23A Ceramics (3)** 6 hrs. Lab.
An introduction to ceramics; basic methods of forming, decorating, glazing and firing.
- Art 23B Ceramics (3)** 6 hrs. Lab.
Prerequisite: Art 23A. A continuation of Art 23A with an emphasis on the work on the potter's wheel.
- Art 23C Ceramics (3)** 6 hrs. Lab.
Prerequisite: Art 23B with a grade of C or better. A continuation of Art 23B with special emphasis on glaze formulating and decorating techniques.

- Art 24AB Ceramic Sculpture (3-3)** 6 hrs. Lab.
A course in basic ceramic sculpture techniques with emphasis on the human form.
- Art 25A Life Drawing (3)** 6 hrs. Lab.
Prerequisites: Art 20A and 20B with a grade of C or better. Many types of drawing and painting techniques are used to further the student's skill, and development of visualization by drawing from the human figure.
- Art 25B Life Drawing (3)** 6 hrs. Lab.
Prerequisite: Art 25A. A continuation of Art 25A. Art 25B includes exploration of painting techniques using varied media.
- Art 26 Design in Crafts (3)** 6 hrs. Lab.
An introduction to the study of several traditional crafts with an emphasis on creative design and individual exploration. Experiences in metal jewelry, batik and tie-dye, printmaking, fibers, sand casting and enameling.
- Art 27 Creative Handweaving (3)** 6 hrs. Lab.
An exploratory course structured as an introduction to the craft of non-loom weaving. Its emphasis is on the exploration of texture and color using contemporary and traditional techniques. Experiences in the design and structure of wall hangings, tapestries, rugs, body ornaments and accessories will acquaint the student with basic weaving techniques, fibers and ancient and modern hand looms. Additional study in spinning and dyeing yarns.
- Art 28 Technical Ceramics (3)** 2 hrs. Lec.
3 hrs. Lab.
Prerequisites: Art 23C or permission of instructor. A study of the raw materials used in compounding clay bodies and glazes. Specific problems of glaze calculations and techniques of glaze appreciation.
- Art 30A Introduction to Art (2)** 1½ hrs. Lec.
1½ hrs. Lab.
An exploratory course intended for non-art majors; provides a basis for an understanding of the fundamental art principles. Offers experience in creative expression.

Art 30B Introduction to Art (2) 1½ hrs. Lec.
1½ hrs. Lab.

Prerequisite: Art 30A. A continuation of Art 30A which is an exploratory course intended for non-art majors; provides a basis for an understanding of the fundamental art principles. Offers experience in creative expression.

Art 31 Crafts (3) 2 hrs. Lec.
3 hrs. Lab.

A basic craft course exploring the use of art materials, media, techniques and methods. Recommended for students planning to become elementary teachers or recreation directors.

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

Art 43 Introduction to Photography (3) 2 hrs. Lec.
3 hrs. Lab.

(Same as Jrn 43.)

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 (3) 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. \$2.00 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. \$2.00 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. \$2.00 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. \$2.00 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. \$2.00 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. \$2.00 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. \$2.00 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.)

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 6 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 10A 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 10B 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 10B may be taken before Bus 10A.

Bus 11 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 17 Mathematics for Business Analysis (3) 3 hrs. Lec.
(Same as Math 17.)**Bus 18 Intermediate Shorthand for Bilinguals (3) 2 hrs. Lec.
3 hrs. Lab.**

Prerequisites: Dictation ability of 60 wpm and bilingual English and Spanish. A review of Gregg Shorthand theory. Speed building through dictation and transcription in both English and Spanish. (Same as Span 18.)

**Bus 20 Alphabetic Shorthand (3) 2 hrs. Lec.
3 hrs. Lab.**

Prerequisite: Knowledge of typing keyboard. A beginning course in shorthand. Theory and dictation practice for students who have had no previous training. The course is designed to meet needs of personal, and in some cases, vocational usage.

**Bus 21 Elementary Typewriting (2) 2 hrs. Lec.
3 hrs. Lab.**

Designed to impart the fundamental skills and knowledge of typing. The student is introduced to the basic concepts of typewriting production. Not open to students who have had previous instruction in typewriting.

**Bus 22AB Proficiency—Exit Typewriting (2-2) 1 hr. Lec.
4 hrs. Lab.**

Prerequisite: Bus 21 or the ability to type 20 wpm. Designed to bring students to an office-level skill. Emphasis is placed on business letters, manuscripts, tabulation and statistical work. Bus 22B may be taken by those students who do not attain office-level proficiency in Bus 22A.

Bus 23 Business Correspondence in Spanish (3) 3 hrs. Lec.
(Same as Span 23.)**Bus 24 Office Procedures (3) 2 hrs. Lec.
3 hrs. Lab.**

Prerequisite: Bus 22A-B or the ability to type 50 wpm. An integrated course oriented towards production techniques that meet the standards of the business community. Covers the full range of office duties stressing those competencies required of the general office worker.

**Bus 25 Office Machines (3) 2 hrs. Lec.
3 hrs. Lab.**

Prerequisite: Satisfactory score on mathematics placement test or completion of Math 51 with a C or better grade. Develops skills required for rapid and accurate operation of calculating machines.

**Bus 26 Elementary Shorthand (3) 2 hrs. Lec.
3 hrs. Lab.**

The beginning course in Gregg Shorthand. Theory and dictation practice. Not open to students with previous instruction in shorthand. Designed for the needs of professional secretaries.

**Bus 27A Dictation and Transcription Lab (3) 1 hr. Lec.
4 hrs. Lab.**

Prerequisite: Either Bus 26A or Bus 28 or one year of high school shorthand. A minimum dictation rate of 60 wpm is required. Review of theory with emphasis on dictation and transcription speed building to produce mailable copy on business dictation.

**Bus 27B Dictation and Transcription Lab (3) 1 hr. Lec.
4 hrs. Lab.**

Prerequisite: Bus 27A with a minimum dictation level of 70 wpm. Continued development of dictation and transcription skills for mailable copy.

- Bus 28 Gregg Shorthand Review (2)** 2 hrs. Lec.
2 hrs. Lab.
Prerequisite: Knowledge of Gregg Shorthand. A review course of Gregg Shorthand theory. Theory and dictation practice for students to develop these skills to the entry level required for the dictation-transcription course.
- Bus 29 Machine Transcription (1)** 3 hrs. Lab.
Prerequisite: Ability to type 40 wpm. Use of dictating-transcribing machine.
- Bus 30 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 31 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 34 Public Relations Techniques (3)** 3 hrs. Lec.
(Same as Jrn 34.)
- Bus 37 Business Management (3)** 3 hrs. Lec.
A study of the organizing and merchandising problems of a business; financial problems; business management.
- Bus 38 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 40 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 41 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 44 Computer Programming I (3)** 3 hrs. Lec.
Prerequisite: Bus 40. 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 45 Computer Programming II (3)** 3 hrs. Lec.
Prerequisite: Bus 44. 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 46 Data Processing Systems (3)** 3 hrs. Lec.
Prerequisite: Bus 45. 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 47 Programming 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 49AB Computer Operations Lab (1-1)** 2 hrs. Lab.
Prerequisite: Concurrent enrollment in Bus 44 or Bus 45. Course designed to provide an opportunity for additional experiences with software and hardware related to the curricula of Bus 44 and Bus 45.
- Bus 50A 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 50B Practical Bookkeeping (3)** 3 hrs. Lec.
Prerequisite: Bus 50A 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 52 Practical Salesmanship (3) 3 hrs. Lec.**
The practical background of salesmanship; the duties and functions of a salesman in the selling of ideas, services, and products. Includes the place and importance of salesmen in the marketing structure of the U.S. economy.
- Bus 53 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 10 or the equivalent.
- Bus 54 Essentials of Business Correspondence (2) 2 hrs. Lec.**
Prerequisite: Ability to type. Bus 76 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 11.
- Bus 55 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 62 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 62.)
- Bus 63 Records Management (3) 3 hrs. Lec.**
Lecture and supervised individual and group procedural activity designed to acquaint students with progressive filing and records management rules, procedures and techniques. Alphabetic, numeric, geographic and subject filing are studied.
- Bus 65 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 66 Analysis of Financial Statements (5) 3 hrs. Lec. 2 hrs. Lab.**
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 67 Installment Credit (3) 3 hrs. Lec.**
In this class, emphasis is placed on establishing the credit obtained in checking information; servicing the loan and calculating the amount due. Other topics discussed are inventory financing and special loan programs. Business development advertising in the relations aspect of installment lending.
- Bus 68 Financing Business Enterprises (3) 3 hrs. Lec.**
Stress is placed on the difference between lending and investing. Investing in a corporation and financing a corporation or the different aspects of the same subject. In this course, the material is presented from a viewpoint of a corporate treasurer who must safe-guard the financial future of his corporation.
- Bus 69 Agricultural Finance (3) 3 hrs. Lec.**
This course emphasizes general principal associations with evaluation of management and the use of capital rather than stressing the examination of land and labor resources which are more closely aligned with agricultural production. An understanding of agricultural financing should help the banker in satisfying the credit needs of modern agriculture.
- Bus 76 Grammar & Usage (3) 3 hrs. Lec.**
(Same as Eng 76)
- Bus 82 Law Office Procedures and Practices for Secretaries (3) 3 hrs. Lec.**
Practical instruction and exercises for secretaries; forms of pleadings; procedures for various actions (probate, divorce, and civil litigation); the law library and legal research; dictation of legal documents.
- Bus 83A 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 83B Medical Terminology for Secretaries (3) 3 hrs. Lec.
Continuation of Bus 83A in greater depth.

Bus 90 Real Estate Principles (3) 3 hrs. Lec.
An analysis of the principles of real estate in California; history of California real estate, property, contractors, agency, listings, real estate financing, deeds, liens and encumbrances, escrows and title insurance, land descriptions, real estate mathematics, and real estate licensing and state regulations.

Bus 91 Real Estate Practices (3) 3 hrs. Lec.
Prerequisite: Bus 90 or employment in the real estate field as a licensee. An analysis of the problems related to the establishing and conducting of a real estate business; the real estate business, the real estate office, listings, valuation of listings, prospecting, advertising, the selling process, closing the sale, financing real estate, exchanges and specialized brokerages, income properties, property management and leasing, taxes and real estate deals, land utilization, and professional and public relations.

Bus 92A Legal Aspects of Real Estate (3) 3 hrs. Lec.
Prerequisite: Bus 90 or employment in the real estate field as a licensee. A practical applied study of California Real Estate Law intended to be of help in avoiding legal difficulties which can arise in connection with real estate transactions.

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.

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.

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.

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.

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.)

ECONOMICS

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

Prerequisite: Econ 1A 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.

Econ 40 Contemporary Economic Issues (3) 3 hrs. Lec.

Prerequisites: Not open to students who have taken Econ 1A or Econ 1B. A comprehensive one-semester course that describes modern economics. Primarily for interested citizens who wish a general introduction to modern economic analysis.

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.

(Same as Engr 11)

ELECTRONICS

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

Prerequisites: Electricity 1 (Engr 11) or satisfactory score on the electronics screening examination and completion of Math 51 or satisfactory score on the placement examination. Course covers the fundamentals of passive circuit elements such as resistance, capacitance and inductance and their use and effect in electronics circuitry. The active element for circuit operation is the vacuum tube. Basic transistor theory is covered very briefly. Lecture emphasis is on graphical and mathematical analysis. Practical experiments in the laboratory on circuits up to and including push-pull amplifiers reinforce the knowledge attained in lecture. (Same as Engr 81A.)

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

Prerequisite: Electronics 1A (Engr 81A). A continuation of the practical laboratory experiments in basic electronics. Includes various types of oscillators, multi-vibrators, modulation and demodulation, superheterodyne receiver construction, alignment and troubleshooting. Introduction to semi-conductor circuitry in experiments on time control and photo electric effects. (Same as Engr 81B.)

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

Prerequisites: Electronics 1A and 1B (Engr 81A and 81B) or satisfactory grade on electronics screening examination. Study of the transistor and other special semi-conductor devices. Graphical and mathematical analysis of the characteristics of these devices is covered in lecture. Practical experiments in the laboratory involve measuring the various parameters affecting transistor operation and constructing circuitry utilizing the transistor and other devices. (Same as Engr 82.)

Electronics 3 FCC 2nd Class Radiotelephone License Preparation (3) 3 hrs. Lec.
Prerequisites: Electronics 2 (Engr 82) or satisfactory score on electronics screening examination. A course recommended for those who require or desire a 2nd Class FCC Radiotelephone License. The scope of the course includes all the elements that will appear on the FCC licensing examination. (Same as Engr 83.)

Electronics 4 FCC 1st Class Radiotelephone License Preparation (3) 3 hrs. Lec.
Prerequisites: Electronics 2 (Engr 82), a 2nd Class FCC Radiotelephone License, or satisfactory score on screening examination. A course recommended for those who require or desire a 1st Class FCC Radiotelephone License. Scope of the course includes those additional elements that are included in the FCC 1st Class Radiotelephone examination. (Same as Engr 84.)

ENGINEERING

Engr 2A Engineering Drawing (3) 1½ hrs. Lec.
4½ hrs. Lab.
Prerequisite: Engr 21 or equivalent, or permission of the instructor. Geometric construction, sketching, dimensioning, theory of orthogonal projections and auxiliaries.

Engr 2B Mechanisms (3) 1½ hrs. Lec.
4½ hrs. Lab.
Prerequisite: Engr 2A. Sectioning, tolerance, piping, structural and mechanical design, velocities and accelerations in machines, cams, gears and gear teeth.

Engr 3 Descriptive Geometry (3) 1½ hrs. Lec.
4½ hrs. Lab.
Prerequisite: Engineering 2A or 2B. An advanced course in drawing: three dimensional location of points, lines and planes; surface and intersection problems with engineering applications and vector geometry.

Engr 5 Strength of Materials (3) 3 hrs. Lec.
Prerequisite: Engr 15. Review of vectors, components of forces, force moments, equilibrium, centroids and moments of inertia of an area. Stress and strain for beams, columns, bars and shafts. Bending moments combined with torque.

Engr 6 Properties of Materials (3) 1 hr. Lec.
5 hrs. Lab.
Prerequisites: Phys 2A and Math C. Study of properties of materials, technical methods of testing, structural uses, and methods of manufacture.

Engr 10 Engineering Problems (3) 3 hrs. Lec.
Prerequisite: Math 2 or Engr 61B. An applied course in geometry, algebra, and trigonometry with applications to problems in engineering.

Engr 11 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. (Same as Electricity 1)

Engr 12 Architectural Drafting I (3) 1 hr. Lec.
5 hrs. Lab.
Prerequisite: Engr 2A or eligibility for Engr 2A. The course offers: basic elements in planning various areas of a residential structure and combining these areas into a composite functional plan; basic techniques and procedures needed in preparing architectural floor plans, foundation plans and pictorial drawings; local building regulations and California Building Code.

Engr 13 Architectural Drafting II (3) 1 hr. Lec.
5 hrs. Lab.
Prerequisites: Engr 12 or equivalent. Technical architectural residential design including location plans, sectional drawings, foundation plans of various types, framing plans, specifications, electrical and air-conditioning plans, plumbing diagrams and modular construction plans, building codes. History of architecture.

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: Physics 4A. Using vector algebra for analyzing and solving practical problems. Problems dealing with force systems, static equilibrium requirements, centroids, friction, moments of inertia of area and mass, centers of gravity, 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 hr. 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.
(Same as Electronics 1A.) 4 hrs. Lab.
- Engr 81B Basic Electronics (2)** 1 hr. Lec.
(Same as Electronics 1B.) 3 hrs. Lab.
- Engr 82 Transistors and Semi-conductors (5)** 3 hrs. Lec.
(Same as Electronics 2.) 4 hrs. Lab.
- Engr 83 FCC 2nd Class Radiotelephone License Preparation** 3 hrs. Lec.
(Same as Electronics 3.)
- Engr 84 FCC 1st Class Radiotelephone License Preparation** 3 hrs. Lec.
(Same as Electronics 4.)

ENGLISH

Students with a reading level of 11th or 12th grade are strongly advised to enroll in English 48, Power Reading, during their FIRST SEMESTER. Students with a reading level BELOW 11th grade are urged to enroll in English 60, 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 60AB is strongly recommended. Eng AB does not fulfill basic requirements for graduation.

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

Designed for the individual who wishes to increase his capacity to enjoy movies. An inquiry into the quality of artistic vision which is the sole property of the film as an art form. A broad selection of films is critically examined. Open to all students. (Same as Hum 3.)

Eng 4A Advanced Film Criticism (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 and/or 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 Advanced Film Criticism (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 Advanced Film Criticism (2)**1 hr. Lec.****2 hrs. Lab.**

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

Eng 4D Advanced Film Criticism (2)**1 hr. Lec.****2 hrs. Lab.**

This course will focus on the feature film of social observation, the documentary and/or 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, 4A, 4B and 4C. (Same as Hum 4D.)

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

Prerequisite: Eng 1B, but this prerequisite will be waived for those who had an overall high school average of B or better and who received an A or B in junior or senior high school English or in advanced placement courses. A study of the works of major American writers up to the late 19th century.

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

Prerequisite: Same as for Eng 15A. A study of major American writers of the late 19th and 20th centuries. May be taken before Eng 15A.

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

Prerequisite: Same as for Eng 15A. 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: Same as for Eng 15A. 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 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 Dram Art 23.)

Eng 25 Introduction to Aspects of 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 28A 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 28B The Mexican-American in Literature (3) 3 hrs. Lec.
A continuation of Eng 28A with emphasis on contemporary Mexican-American writers. Eng 28B may be taken before Eng 28A. (Same as Span 28B.)

Eng 30 Literature in the Southwest (3) 3 hrs. Lec.
Prerequisites: Eng AB or eligibility for Eng 1A or permission of the 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 31 Creative Writing (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 32 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 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 40X English as a Second Language (4) 4 hrs. Lec.
1 hr. Lab.**

Prerequisite: Designated score on placement test or satisfactory completion of Eng 56. An intermediate course in English comprehension, speech and basic conversational skills. Intensive oral practice. Those foreign students taking English as a Second Language, Eng 40X and 40Y normally will be limited to a 12-unit maximum in the study load.

English as a Second Language is **not** intended for the beginner. It is a course in intermediate English, taught by foreign language methods and designed especially for meeting those problems native Spanish-speakers have with both speaking and writing English. (Native-speakers of Chinese, Arabic, Hindi, etc., also find this course particularly helpful.)

Inglés como Segundo Idioma **no** es para principiantes. Es una materia en Inglés Intermedio, enseñado con métodos bajo los cuales se enseñan idiomas extranjeros y diseñado especialmente para aquellos que el Español siendo su idioma nativo experimentan dificultades hablando y escribiendo Inglés. (Aquellos cuyas lenguas son Chino, Árabe, Indu, etc., también encontrarán ésta materia estremadamente útil.)

**Eng 40XA English as a Second Language (2) 2 hrs. Lec.
½ hr. Lab.**

Prerequisites: Designated score on placement test or satisfactory completion of Eng 56. The course covers the first half semester's work of Eng 40X (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 40XB, is equivalent to English 40X. Not open to students who have completed Eng 40X.

**Eng 40XB English as a Second Language (2) 2 hrs. Lec.
½ hr. Lab.**

Prerequisite: Satisfactory completion of Eng 40XA. This course covers the second half semester's work of 40X (4 units) and is offered for the convenience of night students who cannot attend class more than one night a week. Satisfactory completion of Eng 40XA and 40XB is the equivalent of Eng 40X and qualifies the student to enroll in Eng 40Y or 40YA. Not open to students who have completed Eng 40X.

**Eng 40Y English as a Second Language (4) 4 hrs. Lec.
1 hr. Lab.**

Prerequisite: Eng 40X or Eng 40XA and Eng 40XB or equivalent. English reading, grammar and composition. Satisfactory completion of this course qualifies the student for enrolling in Eng A or Eng 51. This course satisfies part of the graduation requirement in communications.

**Eng 40YA English as a Second Language (2) 2 hrs. Lec.
½ hr. Lab.**

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

**Eng 40YB English as a Second Language (2) 2 hrs. Lec.
½ hr. Lab.**

Prerequisites: Satisfactory completion of Eng 40YA. This course covers the second half semester's work of Eng 40Y (4 units) and is offered for the convenience of night students who cannot attend class more than one night a week. Satisfactory completion of Eng 40YA and 40YB is the equivalent of Eng 40Y and qualifies the student to enroll in Eng A or Eng 51. Not open to students who have completed Eng 40Y.

**Eng 40W Phonetics for Bilinguals (2) 2 hrs. Lec.
2 hrs. Lab.**

Prerequisites: Eng 40X or permission of the 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 41 Mass Communications (3) 3 hrs. Lec.
(Same as Jrn 41)**Eng 42A Survey of Journalism (3) 3 hrs. Lec.**
(Same as Jrn 42A)**Eng 42B Survey of Journalism (3) 3 hrs. Lec.**
(Same as Jrn 42B)**Eng 48 Oral English for Bilingual Students (3) 3 hrs. Lec.**
An intensive course in oral American English for students who have learned English as a second language. 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 45ABCD Newspaper Production (1-3/1-3/1-3/1-3) 4 hrs. Lab.
(Same as Jm 45ABCD)

Eng 47 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 48 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 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, etc.) 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 53 Selected Literature (3) 3 hrs. Lec.
Reading of short stories, novels, plays, and poetry. Some writing required. Emphasis on reading for personal satisfaction rather than on literary analysis. Satisfies part of the general education requirement in communications.

Eng 55AB Everyday English (2) 2 hrs. Lec.
Prerequisites: Students are required to have completed at least a beginning course in English or by permission of the instructor. A course designed to give the non-transfer student a basic ability in everyday English. The course will emphasize vocabulary building, conversational skills and listening comprehension.

Eng 56AB Advanced Everyday English (2) 2 hrs. Lec.
Prerequisites: Eng 55 or permission of instructor. A course designed to give the bilingual student continued extensive practice in everyday English and to assist him in acquiring the skills necessary for his vocational and academic courses. The course will emphasize vocabulary building, oral and reading comprehension.

Eng 60AB 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. Development of individual reading interests is encouraged.

Eng 61 Vocabulary Building (3) 3 hrs. Lec.
A concentrated study of affixes, roots, word origins, language change, varieties of meaning, the dictionary, and vocabulary in the various content areas.

Eng 63 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.

Eng 65 Spelling (1) 1 hr. Lec.
Diagnosis of specific spelling problems and prescription of remedies; investigation of the basic spelling rules.

Eng 76 Grammar and Usage (3) 3 hrs. Lec.
A review of the parts of speech and the structure of the sentence. Work is also done on the improvement of English usage. (Same as Bus 76.)

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 80 Introduction to Fire Protection (3) 3 hrs. Lec.
Philosophy and history of fire protection; history of loss of life and property by fire; review of municipal fire defenses; study of the organization and function of federal, state, county, and private fire protection agencies; survey of professional fire protection career opportunities.

Fire Science 81 Introduction to Fire Suppression (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 80 and 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 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.

**Fr 1 Elementary French (4) 4 hrs. Lec.
1 hr. Lab.**

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. The student must plan for an additional hour of individual language laboratory.

**Fr 1A Elementary French (2) 2 hrs. Lec.
½ hr. Lab.**

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. Students must plan for additional one-half hour weekly of individual laboratory work.

**Fr 1B Elementary French (2) 2 hrs. Lec.
½ hr. Lab.**

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

**Fr 2 Elementary French (4) 4 hrs. Lec.
1 hr. Lab.**

Prerequisite: Fr 1 or placement by examination. Continuation of Fr 1. The student must plan for an additional hour of individual language laboratory.

**Fr 2A Elementary French (2) 2 hrs. Lec.
½ hr. Lab.**

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. Students must plan for additional one-half hour work weekly for individual laboratory work.

Fr 2B Elementary French (2)**2 hrs. Lec.**
½ hr. Lab.

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

Fr 3 Intermediate French (4)**4 hrs. Lec.**
1 hr. Lab.

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. The student must plan for an additional hour of individual language laboratory.

Fr 4 Intermediate French (4)**4 hrs. Lec.**
1 hr. Lab.

Prerequisite: Fr 3 or placement by examination. Continuation of Fr 3. The student must plan for an additional hour of individual language laboratory.

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

Prerequisite: Fr 2, or three years high school French, or by examination and consent of instructor. Practical conversational skills are developed through oral drills, laboratory work and guided conversations on assigned readings and topics. Practice in simple dialogues and plays.

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 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 Everyday French: Beginning Conversational French**(3) 3 hrs. Lec.**

An elementary course in conversational French. This course is not designed to meet the academic requirements for transfer students, but for those who desire to acquire sufficient knowledge of the spoken language in order to communicate more easily while traveling in France and Europe. An introduction to various aspects of French culture and civilization is included.

Fr 51B Everyday French: Beginning Conversational French**(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.

Destructive and constructive work of water, ice, and wind; earthquakes and the earth's interior; volcanoes and geysers; rocks and rock formations; mineral resources, coral islands; origin and history of the larger topographic features.

Geol 1B Historical Geology (4)**3 hrs. Lec.**
3 hrs. Lab.

Origin of the earth; measurement of geologic time; the geologic periods; typical fossils and organic evolution; organic and structural studies connected with important events in the development of the earth to the present time; ancient geography; geologic maps and structure sections. Geol 1B may be taken before Geol 1A.

Geol 2 Introduction to Geology (4)**3 hrs. Lec.
3 hrs. Lab.**

A survey of the whole field of physical and historical geology including a study of earth materials, processes, and history as revealed in an examination of rocks and fossils. Intended as a general education course for non-majors. The course is not open to those who have credit in Geol 1A or Geol 1B.

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

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. The student must plan for an additional half hour of individual language laboratory.

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 3 or Ger 10. This course is a continuation of Ger 10.

HEALTH, PHYSICAL EDUCATION AND RECREATION

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.

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 (2)**2 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.

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. 5 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 (1-1-1-1)** 2 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. 11ABCD 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. 12ABCD Combative Sports for Men (1-1-1-1)** 2 hrs. Lab.
A study of the art of self-defense through boxing, wrestling, and judo. Includes weight lifting.
- P.E. 14ABCD Rhythmic Gymnastics, Women (1-1-1-1)** 2 hrs. Lab.
Gymnastic skills done in rhythm. Includes free exercise movements and routines using balls, hoops, ropes, wands, and clubs.
- 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. 16 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. 16 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. 17ABCD Physical Fitness, Men (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. 19ABCD 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 Karate.

P.E. 20ABCD Bicycling, Coed (1-1-1-1) 2 hrs. Lab.

Designed to provide physical exercise, recreation and transportation.

P.E. 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 (Same as P.E. 23) Physical Education activity requirement for one semester.

P.E. AB 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. 30 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. 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 teams. 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 ten 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 ten 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 ten 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 ten 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.

P.E. 41A 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.

P.E. 41B 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. 42 Sports Officiating for Women (2)**2 hrs. Lec.**

To familiarize prospective physical education majors and minors with the rules of team and individual sports for girls.

P.E. 43 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.

P.E. 44 Introduction to Physical Education (2)**2 hrs. Lec.**

Principles of physical education, organization of physical education; areas of specialization within the field.

Rec 45 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.

Rec 49 Recreation for Special Groups (4)**3 hrs. Lec.****3 hrs. Lab. to be arranged**

Prerequisites: Rec 45, P.E. 11A and P.E. 43. 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 70 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 75 Outdoor Recreation (3)**2 hrs. Lec.****3 hrs. Lec.**

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)

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.

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 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.

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 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 1-2 hrs. Lec.

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 chairman. 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 chairman 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 Criticism (2)** 1 hr. Lec.
2 hrs. Lab.
(Same as Eng 3)
- Hum 4A Advanced Film Criticism (2)** 1 hr. Lec.
2 hrs. Lab.
(Same as Eng 4A)
- Hum 4B Advanced Film Criticism (2)** 1 hr. Lec.
2 hrs. Lab.
(Same as Eng 4B)
- Hum 4C Advanced Film Criticism (2)** 1 hr. Lec.
2 hrs. Lab.
(Same as Eng 4C)
- Hum 4D Advanced Film Criticism (2)** 1 hr. Lec.
2 hrs. Lab.
(Same as Eng 4D)

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, vocation 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, K-12 educational institutions, and child care centers.

H.R. 60 Career Planning (1) 1 hr. Lec.

A course designed to assist the student to make an evaluation of his aptitudes, abilities and interests through the use of standardized measures and self-rating scales; to study career choices commensurate with his personal profile analysis; to survey occupational information with emphasis on worker requirements, training, and method of job entry; and to formulate plans for the training necessary to enter the chosen career.

H.R. 61 College Study Techniques (1) 1 hr. Lec.

A course in the methods of efficient study which is designed to assist the student in adjusting to the demands of college study and the improvement of learning skills. Includes a survey of the learning processes and the development of the techniques of listening, taking useful notes, outlining, scheduling, learning to concentrate and remember the use of texts, the preparation for examinations, and the use of the library.

H.R. 62 Personal and Social Development (1) 1 hr. Lec.

A course, utilizing group dynamics, designed to encourage and develop insight into collegiate and modern problems of adjustment, the utilization of personal potential, and the understanding of individual and group processes of development.

H.R. 65 The Student in Contemporary College Affairs (1-3) 1 hr. Lec.

Prerequisite: Each student in the course is expected to be active in extra-curricular and co-curricular activities which could include committee work, club membership, program planning, and general service. Any student interested in enrollment will be accepted and responsibilities may be selected in consultation with the instructor by the student after enrollment. Designed to develop leadership qualities in students desiring to better understand the principles of publicity, finance, organization procedures, group dynamics, and human relations. The course shall be offered as a credit class.

H.R. 75 Interviewing and Counseling (3) 3 hrs. Lec.

A study of the theory, process and practice of interviewing and counseling in the community service situations. The course is designed to assist the student in gaining knowledge for the development of skills to deal with the interviewee in a variety of situations.

H.R. 72 Small Group Leadership (3) 3 hrs. Lec.

Gaining of knowledge and skills in small group leadership leading to effectiveness in interpersonal relations and increased understanding of small group behavior, with emphasis on facilitating effective communication.

H.R. 73 Practicum (2) 6 hrs. Lab

Prerequisites: H.R. 72, Psych 1A, Social 1A, Psych 3 or concurrent enrollment, or by permission of instructor. A course designed to provide opportunity for the student in Human Relations to gain experiences under supervised conditions.

JOURNALISM**Jrn 34 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 press kit. Publicizing events. (Same as Bus 34)

Jrn 41 Mass Communications (3) 3 hrs. Lec.

Survey of mass media; their interrelationships, their problems and responsibilities. Relationship of the mass media to the individual. (Same as Eng 41)

Jrn 42A Survey of Journalism (3) 3 hrs. Lec.

Instruction in all phases of journalistic writing: definition of news, news writing, feature writing, organizational structure of a newspaper, advertising. (Same as Eng 42A.)

Jrn 42B Survey of Journalism (3) 3 hrs. Lec.

Prerequisite: Jrn 42A. Study of instruction in and all phases of journalistic writing with practice in gathering, evaluating and writing basic types of news stories; and in make-up and layout of a newspaper. A continuation of Jrn 42A with additional emphasis on make-up, lay-out of a newspaper. (Same as Eng 42B.)

Jrn 43 Introduction to Photography (3) 2 hrs. Lec. 3 hrs. Lab.

Prerequisites: Art 22A or similar course is recommended. 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 Art 43)

Jrn 45ABCD Newspaper Production (1-3/1-3/1-3/1-3) 4 hrs. Lab.

Includes reporting, editing, preparing copy for the printer, and proofreading in production of the college newspaper. Will be offered on a credit basis. (Same as Eng 45ABCD.)

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. 23.)
- 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 Enf 27 Jail Operation & Management (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.
- 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 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 45 Basic Law Enforcement Orientation (12) 20 hrs. Lec.**
A basic fourteen-week course for police officers who do not have equivalent training. The course follows the prescribed outline issued January, 1970 by the Commission of Peace Officers Standard and Training. The course is restricted to those already employed by local law enforcement agencies. A student completing this course may not take the following courses for credit: Law Enf 21; Law Enf 22; Law Enf 23; Law Enf 25; and Law Enf 34.

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.

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 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.

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

Prerequisite: 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 and linear programming. (Same as Bus 17)

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.

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

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.

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.
3 hrs. Lab.
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: Music 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 15A Elementary Voice (1)** 3 hrs. Lab.
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 (1)** 3 hrs. Lab.
Prerequisite: Mus 15A or its equivalent. A continuation of Mus 15A.
- Mus 16 Intermediate Voice (1)** 3 hrs. Lab.
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 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 25ABCD Stage Band (1-1-1-1)** 1 hr. Lec.
1 hr. 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) 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 (1-1-1-1-1) 3 hrs. Lab.

Open to all students who have an interest in learning to sing and who enjoy music. Breath control, tone placement, articulation and enunciation; rehearsal and performance of choral music.

Mus 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.

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 (through the college counseling department) 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. or L.V.N.) 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.

CURRICULUM

First Year

| | Units 1st S. | Units 2nd S. |
|---------------------------------------|-----------------|-----------------|
| *R.N. 1-2, Registered Nursing | 7 | 7 |
| *Anat 10, Anatomy-Physiology | 5 | |
| **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 |
| | 16 | 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 |
| | 17 | 17 |

*Must be taken in this sequence.

**Courses to be taken preceding or during the semester indicated.

***Courses must be taken before registration of R.N. 3.

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 nursing 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. 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 patients 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 of mentally ill patients.

R.N. 3 Registered Nursing 3 (10)

**5 hrs. Lec.
15 hrs. Lab.**

Prerequisites: R.N. 1, 2. Concepts of maternal and infant health preceding, during and following normal birth with special emphasis on the role of the family. Community resources that contribute to welfare of mothers, children and family stressed. Nursing needs of complications of pregnancy and the newborn studied. Common health problems of children and young adults studied. Selected learning experiences in the care of children provided in various settings. Pharmacology, diet therapy and mental health concepts continue to be integrated throughout.

R.N. 4 Registered Nursing 4 (10)

**5 hrs. Lec.
15 hrs. Lab.**

Prerequisites: R.N. 1, 2, 3. Development of skills and attitudes required to plan, carry out and evaluate total nursing care of patients of all ages with complex health prob-

lems in the home and the hospital. Opportunity given to work with groups of patients and to participate in nursing team leadership. 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.

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 in September of even-numbered years. A Nursing 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 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. or L.V.N.) 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.

CURRICULUM

| | Units 1st Sem | Units 2nd Sem | Units 3rd Sem |
|--|------------------|------------------|------------------|
| V.N. 50 Medical-Surgical Nursing I .....10 | | | |
| 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 | | | |

V.N. 50 Medical-Surgical Nursing I (10) 10 hrs. Lec.

Prerequisite: Enrollment in Nursing Program. Introduction to the relationship that exists between the nurse and 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, circulatory, and communicable diseases. The normal as well as the abnormal will be studied. The vocational nurse's responsibility toward prevention of disease and rehabilitation. Application of these principles during nursing care experience with patients of all ages. The basic skills required to meet the immediate needs of the patient. Includes study of gross anatomy and physiology as well as the emotional, physical, psychological impact of illness on a patient and his family and the nursing care implications as they relate to the patient. Medications and diet are integrated throughout.

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 as related to the total patient needs as well as the specific diseases and disorders. Encouragement to adapt knowledge independently to patient situations. Introduction to nursing care plans as a means of communication and continuity of patient care. Nursing care planning for patients with excretory, integumentary and respiratory system disorders. Basic nutritional theory and its relationship in health and disease.

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. 53, V.N. 54.)

V.N. 55 Medical-Surgical Nursing III (10) 10 hrs. Lec.

Prerequisite: V.N. 52. 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 digestive, endocrine and nervous systems. 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****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.

PHYSICALLY LIMITED

- P.L. 1 Survey of Physical Defects (3)** 3 hrs. Lec.
Physical defects commonly found among physically limited-handicapped persons, including impairments of the central nervous system, orthopedic handicaps, blindness and visual problems and hearing and speech defects.
- P.L. 2 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. 3 Intermediate Communication with the Deaf (3)** 3 hrs. Lec.
Prerequisites: P.L. 2 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. 4 Beginning Braille (3)** 3 hrs. Lec.
Fundamentals of Braille; practice in reading and writing Braille; methods and techniques for teaching Braille.
- P.L. 5 Intermediate Braille (3)** 3 hrs. Lec.
Prerequisites: P.L. 4 or equivalent. Further training in the fundamentals of Braille; practice in reading and writing Braille; methods and techniques for teaching Braille.
- P.L. 6 ABCD 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.

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.

PHYSICS

- Phys 2A General Physics (4)** 3 hrs. Lec.
3 hrs. Lab.
Prerequisites: Algebra; trigonometry strongly recommended. Principles of mechanics and heat. Statics, uniform motion, accelerated motion, work and energy, impulse and momentum, fundamentals of heat and heat flow, properties of gases.
- Phys 2B General Physics (4)** 3 hrs. Lec.
3 hrs. Lab.
Prerequisite: Phys 2A. Simple harmonic motion, sound, doppler effect, acoustical phenomena, electrostatics, current electricity, Ohm's Law, light, spectroscopy, geometric optics, modern physics.
- Phys 4A Principles of Physics (4)** 3 hrs. Lec.
4 hrs. Lab.
Prerequisite: Credit for or concurrent enrollment in Math 3A. This course is designed to give an understanding in the fundamental principles of mechanics.
- Phys 4B Principles of Physics (4)** 3 hrs. Lec.
4 hrs. Lab.
Prerequisite: Phys 4A and credit or concurrent enrollment in Math 3B. This course is designed to give an understanding of the fundamental principles of physics in the areas of electricity and magnetism.
- Phys 4C Principles of Physics (4)** 3 hrs. Lec.
4 hrs. Lab.
Prerequisites: Phys 4B and completion of Math 3B. This course is designed to give an understanding of the fundamental principles of physics in the area of heat, wave motion, sound, light, and modern physics.

PHYSIOLOGY

- Physio 1 Human Physiology (4)** 2 hrs. Lec.
6 hrs. Lab.
Prerequisites: Chemistry and Biology or Anatomy at either high school or collegiate level. The functions of the human body; emphasis on the circulatory, muscular, and nervous systems.

POLITICAL SCIENCE

Poly Sci 1 Introduction to Political Science (3) 3 hrs. Lec.

An introduction to the theories, principles and problems of modern political life and the methods of studying and acquiring political knowledge. Illustrative materials drawn primarily from the American experience. This course and either Poly Sci 2 or Hist 17B will meet graduation requirements in American institutions.

Poly Sci 2 American Government and Politics (3) 3 hrs. Lec.

The origin, development and operation of local, state and national political institutions in the United States emphasizing the contemporary operations of the American political system. This course and either Poly Sci 1 or Hist 17A will meet graduation requirements in American Institutions. May be taken before Poly Sci 1.

Poly Sci 3 Comparative Politics (3) 3 hrs. Lec.

Prerequisite: Poly Sci 1 or 2. A comparative study of modern political systems. Emphasis upon patterns of political action and problems of decision-making in various cultural contexts.

Poly Sci 14 Introduction to International Relations (3) 3 hrs. Lec.

An introductory course stressing the techniques of analysis of the basic factors making for conflict and adjustment in contemporary international relations. Problems of nationalism and imperialism, elements of national power, causes of war, methods of seeking peace, the role of international organizations, and the foreign policies of the major powers will be considered. Emphasis will be upon contemporary developments.

PSYCHOLOGY

Psych 1A General Psychology (3) 3 hrs. Lec.

Prerequisite: Twelfth grade reading level ability is recommended for success in this course. An introduction to the fundamental principles and concepts which are basic to an understanding of human behavior. Includes consideration of behavior development, learning, biological basis of behavior, conflict and ineffective behavior, mental hygiene, and motivation and emotion.

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.

Psych 40 Development 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.

Psych 41 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.

Psych 52 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.

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 62 Personal Finance (3) 3 hrs. Lec.
(Same as Bus 62.)**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 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.

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.

**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. Pronunciation, oral practice, study of Spanish and Spanish-American culture and civilization, and basic grammar of the Spanish language as well as initiation into reading, writing, and oral understanding. Not open to students with a speaking knowledge of Spanish. (See Span 21.)

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

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.

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. 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 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.

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.

Span 5A Spanish Conversation and Composition (3)

3 hrs. Lec.

Prerequisites: Span 4 and at least one course in Conversational Spanish or by examination. Either Span 5A or Span 5B may be taken separately. Students who have had four years of high school Spanish may be enrolled by consent of instructor. Advanced Spanish. Study and discussion of literary selections. Imitation of short written selections and original student compositions. Grammar review of the indicative mode, especially the future and the conditional tenses.

Span 5B Spanish Conversation and Composition (3)

3 hrs. Lec.

Prerequisites: Span 4 and at least one course in Conversational Spanish or by examination. Either Span 5A or Span 5B may be taken separately. Students who have had four years of high school Spanish may be enrolled by consent of the instructor. Advanced Spanish. Study and discussion of literary selections. Imitation of short written selections and original student compositions. Review of the subjective mode, prepositions. Preterit and imperfect indicative.

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 18)

Span 20A Beginning Spanish for Bilinguals (4)

4 hrs. Lec.

Prerequisites: Must have a speaking knowledge of the language such as one might find in a typical home where Spanish is spoken. This course is for the bilingual student interested in learning to read and write Spanish.

Span 20B Beginning Spanish for Bilinguals (4) 4 hrs. Lec.
Prerequisites: Span 20A. A continuation of 20A.

Span 21 Spanish for Bilingual Students (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 Spanish for Bilingual Students (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 23)

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 28A.)

Span 28B The Mexican-American in Literature (3) 3 hrs. Lec.
(Same as Eng 28B)

Span 30 Literature in the Southwest (3) 3 hrs. Lec.
(Same as Eng 30)

Span 40 Spanish Civilization (3) 3 hrs. Lec.
A general survey of the physical, racial, historical and artistic influences—Oriental, Jewish, and African—which have molded Spanish culture from prehistory to present time. Illustrated lectures, outside readings and written reports on assigned topics. Conducted in English.

Span 41 Spanish-American Civilization (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.

Span 51A Everyday Spanish: Beginning Conversational Spanish (2) 2 hrs. Lec.
A course designed to give the non-transfer student a basic ability in everyday Spanish. The course will emphasize vocabulary-building, conversational skills, and listening comprehension.

Span 51B Everyday Spanish: Beginning Conversational Spanish (2) 2 hrs. Lec.
Prerequisite: Span 51A. Continuation of Span 51A.

Span 52 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."

SPECIAL STUDIES

| | |
|--|-----------------|
| Special Studies 51 Vocational Education (1-3) | 1-3 hrs. |
| Special Studies 52 Humanities (1-3) | 1-3 hrs. |
| Special Studies 53 English (1-3) | 1-3 hrs. |
| Special Studies 54 Natural Science (1-3) | 1-3 hrs. |
| Special Studies 55 Social Science (1-3) | 1-3 hrs. |
| Special Studies 56 Business (1-3) | 1-3 hrs. |
| Special Studies 57 Health, Physical Education, and Recreation (1-3) | 1-3 hrs. |
| Special Studies 58 Behavioral Science (1-3) | 1-3 hrs. |

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.

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 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.

WELDING TECHNOLOGY

Weld 30 Arc Welding (3)**2 hrs. Lec.****3 hrs. Lab.**

Theory, practice and application of arc welding processes. Flat, horizontal, vertical and overhead positions. Mild steel, stainless steel and cast iron. Electrode classification and application. Joint design and mechanical testing.

Weld 32 Oxy-Acetylene Welding (3)**2 hrs. Lec.****3 hrs. Lab.**

Theory, practice and application of joining metals by the oxyacetylene process. Includes metal cladding, cutting and bronze welding.

Weld 34 Inert Gas Shielded Arc Welding (3)**2 hrs. Lec.****3 hrs. Lab.**

Theory, practice, and application of Tungsten-Inert-Gas and Metallic-Inert-Gas processes on aluminum, stainless steel, mild steel, and other exotic metals.

Weld 36A Advanced Welding (3)**2 hrs. Lec.****3 hrs. Lab.**

Prerequisites: Weld 30 and Weld 32 or Weld 34 or approval of the instructor. Application of welding process to production techniques. Emphasis is upon the welding industry and its position in American society. Projects will be developed both individually and collectively. Experience is provided, in advance form, in Arc, Tig, Mig and Gas.

Weld 36B Advanced Welding (3)2 hrs. Lec.
3 hrs. Lab.

Prerequisites: Weld 36A or by permission of instructor. Emphasis is in the field of metal fabrication with concentration on design, layout, fitting, and welding of metal projects. Advanced forms of Arc, Tig, Mig, and Gas welding are included with a study of the mechanisms of welding equipment.

Weld 36C Advanced Welding (3)2 hrs. Lec.
3 hrs. Lab.

Prerequisites: Weld 36B or by permission of instructor. Emphasis is in the field of the study of metals and metallurgy of welds. Studies are concentrated on the testing of metals, the atomic structure of metals, the effects of heat on metals, and the effects of welding on metals.

Weld 50 Shop Mathematics (3)

3 hrs. Lec.

(Same as Ag 50, Auto Tech 50, Math 50)

WORK - EXPERIENCE

Work Experience Education is a cooperative educational program by Imperial Valley Community College and the community employers. The college provides the organization, the coordination, 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.

**W.E. Gen. 62A Practical Psychology
in Business Life (3)**1 hr. Lec.
10 hrs. Lab.

Psychology and its application to employees and employers. Emphasis is placed on the capacity and efficiency of accomplishing designated tasks. Laboratory work will be arranged with the employer. The work may be in any occupation, but must have educational value for the student.

W.E. Gen. 62B Your Personal Efficiency (3)1 hr. Lec.
10 hrs. Lab.

Increased efficiency of the employee through improved word power and ability to remember. Securing an appropriate position and increasing efficiency in that job. Laboratory work will be arranged with the employer. The work may be in any occupation, but must have educational value for the student.

W.E. Gen. 62C Human Relations and Motivation (3)1 hr. Lec.
10 hrs. Lab.

Human relations and motivations as studied from the employee's and employer's perspective. Laboratory work will be arranged with the employer. The work may be in any occupation, but must have educational value for the student.

**W.E. Gen. 62D Personality Health
for Personal Leadership (3)**1 hr. Lec.
10 hrs. Lab.

Personality health and its relation to successful work. Personal leadership development among employees and employers. Laboratory work will be arranged with the employer. The work may be in any occupation, but must have educational value for the student.

**W.E. Gen. 62E Manpower and Work Experience (3)
(Summer only)**2 hrs. Lec.
30 hrs. Lab.

Historical background of present institutional and legal forces that affect labor; employee procurement, labor-management relations, and the collective bargaining process. Laboratory work will be arranged with the employer. The work may be in any occupation, but must have educational value for the student.

**W.E. Voc. 63A Practical Psychology
in Business Life (4)**1 hr. Lec.
15 hrs. Lab.

Psychology and its application to employees and employers. Emphasis is placed on the capacity and efficiency of accomplishing designated tasks. Laboratory work will be arranged with the employer. The work must be in the field of the student's planned course of occupational training.

W.E. Voc. 63B Your Personal Efficiency (4)1 hr. Lec.
15 hrs. Lab.

Increased efficiency of the employee through improved word power and ability to remember. Securing an appropriate position and increasing efficiency in that job. Laboratory work will be arranged with the employer. The work must be in the field of the student's planned course of occupational training.

W.E. Voc. 63C Human Relations and Motivation (4) 1 hr. Lec.
15 hrs. Lab.

Human relations and motivation as studied from the employee's and employer's perspective. Laboratory work will be arranged with the employer. The work must be in the field of the student's planned course of occupational training.

W.E. Voc. 63D Personality Health for Personal Leadership (4) 1 hr. Lec.
15 hrs. Lab.

Personality health and its relation to successful work. Personal leadership development among employees and employers. Laboratory work will be arranged with the employer. The work must be in the field of the student's planned course of occupational training.

W.E. Voc. 63E Manpower and Work Experience (4)
(Summer only) 2 hrs. Lec.
40 hrs. Lab.

Historical background of present institutional and legal forces that affect labor; employee procurement, labor-management relations, and the collective bargaining process. Laboratory work will be arranged with the employer. The work must be in the field of the student's planned course of occupational training.

ZOOLOGY

Zool 1A General Zoology (4) 2 hrs. Lec.
6 hrs. Lab.

Prerequisite: Any year course in a high school laboratory science or the equivalent. Introduction to basic principles of animal biology with reference to structure, functions, classification, heredity, and the environment of animals in general and of invertebrates in particular.

Zool 1B General Zoology (4) 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.

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 25 Introduction to Agricultural Business Management(3)
 - Ag 26 Agricultural Business Organization Management(3)
 - Ag 14 Entomology(3)
 - Ag 40 Soils(3)
 - Ag 41 Fertilizers(3)
 - Ag 49 Weeds and Poisonous Plants(3)
- II. Acceptable courses for the major (6 units from the following courses)
 - Bus 10A Business Law(3)
 - Bus 25 Office Machines(3)
 - Bus 38 Principles of Marketing(3)
 - Bus 50A Practical Bookkeeping(3)
 - W.E. Voc 63A Practical Psychology in Business Life(4)
 - W.E. Voc 63B Your Personal Efficiency(4)
 - W.E. Voc 63C Human Relations and Motivation(4)
 - W.E. Voc 63D Personality Health for Personal Leadership(4)
 - W.E. Voc 63E Manpower and Work Experience(4)

AGRICULTURAL CHEMICAL TECHNOLOGY

Twenty-two units required for the major

I. Required courses for the major

| | | |
|--------|----------------------------------|-----|
| Ag 14 | Entomology | (3) |
| Ag 31A | Farm Machinery | (3) |
| Ag 40 | Soils | (3) |
| Ag 41 | Fertilizers | (3) |
| Ag 49 | Weeds and Poisonous Plants | (3) |

II. Acceptable courses for the major (3 units from the following courses)

| | | |
|--------------|--|-----|
| Ag 30 | Agricultural Mechanics | (3) |
| Ag 31B | Farm Machinery | (3) |
| Ag 32 | Irrigation and Drainage | (3) |
| Ag 33A | Farm Power | (5) |
| Ag 65 | Control of Insects and Other Pests | (3) |
| Bot 1A | General Botany | (4) |
| Chem 2A | Introduction to Chemistry | (4) |
| Eng 47 | Technical and Report Writing | (3) |
| Weld 30 | Arc Welding | (3) |
| Weld 32 | Gas Welding | (3) |
| W.E. Voc 63A | Practical Psychology in Business Life | (4) |
| W.E. Voc 63B | Your Personal Efficiency | (4) |
| W.E. Voc 63C | Human Relations and Motivation | (4) |
| W.E. Voc 63D | Personality Health for Personal Leadership | (4) |
| W.E. Voc 63E | Manpower and Work-Experience | (4) |

AGRICULTURAL ENGINEERING

Twenty-two units required for the major

I. Required courses for the major

| | | |
|-----------------|------------------------------|-------|
| Ag 30 | Agricultural Mechanics | (3) |
| Ag 31AB | Farm Machinery | (3-3) |
| Ag 33A | Farm Power | (5) |
| or Auto Tech 51 | Automotive Technology | (5) |
| Weld 30 | Arc Welding | (3) |
| Weld 32 | Gas Welding | (3) |

II. Acceptable courses for the major (2 units from the following courses)

| | | |
|--------------|--|-----|
| Ag 33B | Farm Power | (5) |
| Ag 35 | Fluid Power | (4) |
| Ag 36 | Agricultural Construction | (3) |
| Engr 2A | Engineering Drawing | (3) |
| Engr 2B | Engineering Drawing | (3) |
| Engr 18A | Plane Surveying | (3) |
| Engr 18B | Plane Surveying | (3) |
| Engr 21 | Technical Drawing | (3) |
| Engr 23 | Slide Rule & Computations | (1) |
| Engr 30 | Orientation to Engineering | (2) |
| Engr 55 | Strengths of Materials | (3) |
| Engr 61A | Technical Mathematics | (3) |
| Engr 61B | Technical Mathematics | (3) |
| Engr 65 | Statics | (3) |
| Engr 47 | Technical & Report Writing | (3) |
| Math 3A | Analytic Geometry and Calculus | (5) |
| Math 3B | Analytic Geometry and Calculus | (5) |
| Math 4 | Calculus and Differential Equations | (4) |
| Phys 4A | Principles of Physics | (4) |
| Phys 4B | Principles of Physics | (4) |
| Phys 4C | Principles of Physics | (4) |
| W.E. Voc 63A | Practical Psychology in Business Life | (4) |
| W.E. Voc 63B | Your Personal Efficiency | (4) |
| W.E. Voc 63C | Human Relations and Motivation | (4) |
| W.E. Voc 63D | Personality Health for Personal Leadership | (4) |
| W.E. Voc 63E | Manpower and Work Experience | (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) |

II. Acceptable courses for the major (10 units from the following courses)

| | | |
|--------------|--|-------|
| Ag 14 | Entomology | (3) |
| Ag 30 | Agricultural Mechanics | (3) |
| Ag 31AB | Farm Machinery | (3-3) |
| Ag 33A | Farm Power | (5) |
| Ag 42 | Plant Science and Forage Crops | (4) |
| Chem 2A | Introduction to Chemistry | (4) |
| Weld 30 | Arc Welding | (3) |
| Weld 32 | Gas Welding | (3) |
| W.E. Voc 63A | Practical Psychology in Business Life | (4) |
| W.E. Voc 63B | Your Personal Efficiency | (4) |
| W.E. Voc 63C | Human Relations and Motivation | (4) |
| W.E. Voc 63D | Personality Health for Personal Leadership | (4) |
| W.E. Voc 63E | Manpower and Work Experience | (4) |

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 | Automotive 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) |
| Weld 30 | Arc Welding | (3) |
| Weld 32 | Gas Welding | (3) |
| W.E. Voc 63A | Practical Psychology in Business Life | (4) |
| W.E. Voc 63B | Your Personal Efficiency | (4) |
| W.E. Voc 63C | Human Relations and Motivation | (4) |
| W.E. Voc 63D | Personality Health for Personal Leadership | (4) |
| W.E. Voc 63E | Manpower and Work Experience | (4) |

BANKING—ADMINISTRATIVE SERVICES

Twenty-three units required for the major

I. Required courses for the major

| | | |
|--------|--|-----|
| Bus 65 | Principles of Bank Operations | (3) |
| Bus 1A | Principles of Accounting I | (4) |
| Bus 1B | Principles of Accounting II | (4) |
| Bus 31 | Human Relations in Management | (3) |
| Bus 30 | Management Concepts of Supervision | (3) |

II. Acceptable courses for the major (select any two courses)

| | | |
|---------|-------------------------------|-----|
| Bus 10A | Business Law | (3) |
| Bus 11 | Business Correspondence | (3) |
| Econ 1A | Principles of Economics | (3) |
| Sp 1 | Oral Communications | (3) |

BANKING—CREDIT ADMINISTRATION

Twenty-three units required for the major

| | | |
|--------|--|-----|
| Bus 65 | Principles of Bank Operations | (3) |
| Bus 1A | Principles of Accounting I | (4) |
| Bus 1B | Principles of Accounting II | (4) |
| Bus 66 | Analysis of Financial Statements | (3) |
| | (Prerequisite: Bus 1A & 1B) | |
| Bus 67 | Installment Credit | (3) |

II. Acceptable courses for the major (select any two courses)

| | | |
|---------|-------------------------------------|-----|
| Bus 10A | Business Law | (3) |
| Econ 1A | Principles of Economics | (3) |
| Sp 1 | Oral Communications | (3) |
| Bus 11 | Business Correspondence | (3) |
| Bus 31 | Human Relations in Management | (3) |
| Bus 68 | Financing Business Enterprise | (3) |
| Bus 69 | Agricultural Finance | (3) |

BANKING—SECRETARIAL

Twenty-two to 27 units required for the major

I. Required courses for the major

| | | |
|---------|---|-----|
| Bus 65 | Principles of Bank Operations | (3) |
| Bus 76 | Grammar and Usage | (3) |
| Bus 22A | Proficiency-Exit Typing (1) | (2) |
| 22B | Proficiency-Exit Typing (1) | (2) |
| Bus 27A | Dictation and Transcription Lab (2) | (3) |
| 27B | Dictation and Transcription Lab (2) | (3) |
| Bus 54 | Business Correspondence | (2) |
| Bus 10A | Business Law | (3) |

II. Acceptable courses for the major (6 units from the following courses)

| | | |
|--------|---------------------------------------|-----|
| Sp 1 | Oral Communications | (3) |
| Bus 25 | Office Machines | (3) |
| Bus 40 | Introduction to Data Processing | (3) |
| Bus 31 | Human Relations in Management | (3) |
| Bus 24 | Office Procedures | (3) |

(1) Minimum skill level of 60 net words per minute required to qualify for major. If skill level attained in Bus 22A, student is excused from Bus 22B.

(2) Minimum skill level of 90 words per minute required to qualify for major. If attained in Bus 27A, student is excused from Bus 27B.

***BANKING—GENERAL OPERATIONS**

Twenty-two to 25 units required for the major

I. Required courses for the major

| | | |
|---------|-------------------------------------|-----|
| Bus 65 | Principles of Bank Operations | (3) |
| Bus 76 | Grammar and Usage | (3) |
| Bus 10A | Business Law | (3) |
| Bus 25 | Office Machines | (3) |
| Bus 22A | Proficiency-Exit Typing (1) | (2) |
| Bus 22B | Proficiency-Exit Typing (1) | (2) |
| Bus 50A | Practical Bookkeeping (2) | (3) |

II. Acceptable courses for the major (select any two courses)

| | | |
|--------|---------------------------------------|-----|
| Sp 1 | Oral Communications | (3) |
| Bus 54 | Business Correspondence | (2) |
| Bus 40 | Introduction to Data Processing | (3) |
| Bus 31 | Human Relations in Management | (3) |
| Bus 24 | Office Procedures | (3) |

(1) Minimum skill level 40 words per minute required to qualify for major. If skill level attained in Bus 22A, student is excused from Bus 22B.

(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 3 | 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 40 | Developmental Psychology of Children | (3) |
| Psych 41 | Social Psychology | (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 1A | 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.

BOOKKEEPING

Twenty units required for the major

I. Required courses for the major

| | | |
|----------|---------------------------------------|-----|
| Bus 22AB | Proficiency-Exit Typewriting | (2) |
| Bus 25 | Office Machines | (3) |
| Bus 50A | Practical Bookkeeping | (3) |
| Bus 50B | Practical Bookkeeping | (3) |
| Bus 63 | Records Management | (3) |
| Bus 40 | Introduction to Data Processing | (3) |

II. Acceptable for the major (3 units from the following courses)

| | | |
|--------|----------------------------|-----|
| Bus 37 | Business Management | (3) |
| Bus 53 | Applied Business Law | (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 10A | Business Law | (3) |
| Econ 1A | Principles of Economics | (3) |
| Econ 1B | Principles of Economics | (3) |

II. Acceptable for the major (3 units from the following courses)

| | | |
|---------|---|-----|
| Bus 6 | Introduction to Business | (3) |
| Bus 10B | Business Law | (3) |
| Bus 11 | Business Correspondence | (3) |
| Bus 17 | Mathematics for Business Analysis | (3) |
| Bus 25 | Office Machines | (3) |
| Bus 40 | Introduction to Data Processing | (3) |

GENERAL BUSINESS

Twenty units required for the major

I. Required courses for the major

| | | |
|---------|---------------------------------------|-----|
| Bus 6 | Introduction to Business | (3) |
| Bus 37 | Business Management | (3) |
| Bus 38 | Principles of Marketing | (3) |
| Bus 40 | Introduction to Data Processing | (3) |
| Bus 50A | Practical Bookkeeping | (3) |

II. Acceptable courses for the major

| | | |
|----------|---|-----|
| Bus 22AB | Proficiency-Exit Typewriting | (2) |
| Bus 25 | Office Machines | (3) |
| Bus 52 | Practical Salesmanship | (3) |
| Bus 63 | Records Management | (3) |
| Bus 54 | Essentials of Business Correspondence | (2) |

BUSINESS SUPERVISION

Twenty-one units required for the major

I. Required courses for the major

| | | |
|---------|--|-----|
| Bus 6 | Introduction to Business | (3) |
| Bus 37 | Business Management | (3) |
| Bus 40 | Introduction to Data Processing | (3) |
| Bus 50A | Practical Bookkeeping | (3) |
| Bus 53 | Applied Business Law | (3) |
| Bus 30 | Management Concepts of Supervision | (3) |
| Bus 31 | Human Relations in Management | (3) |

CLERICAL*

Eighteen units required for the major

I. Required courses for the major

| | | |
|----------|------------------------------------|-----|
| Bus 22AB | Proficiency-Exit Typewriting | (2) |
| Bus 25 | Office Machines | (3) |
| Bus 29 | Machine Transcription | (1) |
| Bus 63 | Records Management | (3) |

II. Acceptable courses for the major

| | | |
|---------|---|-----|
| Bus 24 | Office Procedures | (3) |
| Bus 40 | Introduction to Data Processing | (3) |
| Bus 50A | Practical Bookkeeping | (3) |
| Bus 53 | Applied Business Law | (3) |
| Bus 54 | Essentials of Business Correspondence | (2) |

*To qualify for the clerical major, the student must have a typing skill of 40 words a minute.

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 40 | Introduction to Data Processing | (3) |
| Bus 44 | Computer Programming I | (3) |
| Bus 45 | Computer Programming II | (3) |
| Bus 46 | 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 Drafting 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) |
| Engr 11 | Fundamentals of Electricity | (3) |
| Engr 12 | Architectural Drafting I | (3) |
| Engr 13 | Architectural Drafting II | (3) |
| Engr 14 | Architectural Drafting III | (3) |
| Engr 82 | Intermediate Electronics | (4) |
| 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

| | | |
|---------|------------------------------------|-----|
| Eng 1A | Reading and Composition | (3) |
| Eng 1B | Introduction to Literature | (3) |
| Eng 17A | Survey of English Literature | (3) |
| Eng 17B | Survey of English Literature | (3) |

II. Acceptable courses for the major (6 units from the following courses)

| | | |
|---------|--|-----|
| Eng 3 | Introduction to Film Criticism | (2) |
| Eng 4A | Advanced Film Criticism | (2) |
| Eng 4B | Advanced Film Criticism | (2) |
| Eng 4C | Advanced Film Criticism | (2) |
| Eng 4D | Advanced Film Criticism | (2) |
| Eng 15A | American Literature | (3) |
| Eng 15B | American Literature | (3) |
| Eng 16A | World Literature | (3) |
| Eng 16B | World 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 28A | The Mexican-American in Literature | (3) |
| Eng 28B | The Mexican-American in Literature | (3) |
| Eng 30 | Literature in the Southwest | (3) |
| Eng 31 | Advanced Composition | (3) |
| Eng 32 | Creative Writing | (3) |
| Eng 33 | The Bible as Literature | (3) |
| Eng 36 | The Literary Artist as Social Critic | (3) |

III. Recommended as electives (do not fulfill major requirements)

| | | |
|------------|---------------------------------------|-----|
| Art 3A | History and Appreciation of Art | (3) |
| Art 3B | History and Appreciation of Art | (3) |
| Drm Art 5A | History of World Drama | (3) |
| Drm Art 5B | History of World Drama | (3) |
| Hum 25 | The Humanities | (3) |
| Hum 26 | The Humanities | (3) |
| Jrn 41 | Mass Communications | (3) |
| Jrn 42A | Survey of Journalism | (3) |
| Jrn 42B | Survey of Journalism | (3) |
| Mus 30 | Music Structure and Style | (3) |
| Phil 1A | Introduction to Philosophy | (3) |
| Phil 1B | Introduction to Philosophy | (3) |
| Phil 10 | Logic | (3) |
| Phil 11 | Ethics | (3) |
| Sp 1 | Oral Communication | (3) |

FIRE SCIENCE

I. Required courses for the major

| | | |
|-------------|---|-----|
| Fire Sci 80 | Introduction to Fire Protection | (3) |
| Fire Sci 81 | Introduction to Fire Suppression | (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) |

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 | Spanish Civilization | (3) |
| Span 41 | Spanish-American Civilization | (3) |

Some requirements 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 | Spanish Civilization | (3) |
| Span 41 | Spanish-American Civilization | (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 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) |
| Geol 1B | Physical Geology | (4) |
| Geol 2 | Introduction to 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) |

HUMAN RELATIONS

Eighteen units required for the major

I. Required courses for the major

| | | |
|----------|--|-----|
| H.R. 72 | Small Group Leadership | (3) |
| H.R. 73 | Practicum | (2) |
| Psych 1A | General Psychology | (3) |
| Sociol 1 | Principles of Sociology | (3) |
| Psych 3 | Psychology of Personal and Social Adjustment | (3) |

II. Acceptable courses for the major

| | | |
|------------|--|-----|
| Anthro 2 | Cultural Anthropology | (3) |
| Bus 40 | Introduction to Data Processing | (3) |
| Law Enf 21 | Survey of Law Enforcement | (3) |
| Psych 1B | Advanced General Psychology | (3) |
| Sociol 2 | Contemporary Social Problems | (3) |
| Sociol 33 | Marriage and the Family | (3) |
| Psych 40 | Developmental Psychology of Children | (3) |
| Sp 1 | Oral Communication | (3) |

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 58 | Automotive Air Conditioning | (3) |
| Auto Tech 52 | Transmission Systems | (3) |

Three (3) units to be selected from the following courses:

| | | |
|--------------|--|-----|
| Ag 50 | Shop Mathematics | (3) |
| Eng 47 | Technical & Report Writing | (3) |
| Weld 30 | Arc Welding | (3) |
| Weld 32 | Gas Welding | (3) |
| W.E. Voc 63A | Practical Psychology in Business Life | (4) |
| W.E. Voc 63B | Your Personal Efficiency | (4) |
| W.E. Voc 63C | Human Relations & Motivation | (4) |
| W.E. Voc 63D | Personality Health for Personal Leadership | (4) |
| W.E. Voc 63E | Manpower and Work Experience | (2) |

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 | Criminal Law | (3) |
| L.E. 35 | Legal Aspects of Evidence | (3) |
| L.E. 36 | Principles and Procedures of Justice System | (3) |
| L.E. 38 | Police-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) |

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 | Jail Operation and Management | (3) |
| L.E. 29 | Police Report Writing | (3) |

Any Sp Studies in the Law Enforcement area

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) |

MARKETING—SALES TECHNOLOGY

Eighteen units required for the major

I. Required courses for the major

| | | |
|--------|--------------------------------|-----|
| Bus 6 | Introduction to Business | (3) |
| Bus 38 | Principles of Marketing | (3) |
| Bus 52 | Practical Salesmanship | (3) |
| Bus 53 | Applied Business Law | (3) |

II. Acceptable courses for the major (6 units from the following courses)

| | | |
|----------|------------------------------------|-------|
| Bus 1A | Principles of Accounting | (4) |
| Bus 22AB | Proficiency—Exit Typewriting | (2-2) |
| Bus 25 | Office Machines | (3) |
| Bus 50A | Practical Bookkeeping | (3) |

MACHINERY OPERATION AND MAINTENANCE

Twenty-four units required for the major

I. Required courses for the major

| | | |
|---------|--|-----|
| H.M. 35 | Heavy Machinery Operations and Maintenance | (5) |
| Ag 35 | Fluid Power | (4) |
| Ag 37 | Small Gasoline Engines | (3) |
| Weld 30 | Arc Welding | (3) |
| Weld 32 | Gas Welding | (3) |

Six (6) units to be selected from the following courses:

| | | |
|--------------|--|-----|
| Ag 50 | Shop Mathematics | (3) |
| Eng 47 | Technical & Report Writing | (3) |
| W.E. Voc 63A | Practical Psychology in Business Life | (4) |
| W.E. Voc 63B | Your Personal Efficiency | (4) |
| W.E. Voc 63C | Human Relations & Motivation | (4) |
| W.E. Voc 63D | Personality Health for Personal Leadership | (4) |
| W.E. Voc 63E | Mampower and Work Experience | (2) |

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 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) |

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 21A | Instruments | (1) |
| Mus 21B | Instruments | (1) |
| Mus 21C | Instruments | (1) |
| Mus 21D | Instruments | (1) |
| Mus 26ABCD | Rehearsal and Performance (by special arrangement with instructors) | (1-1-1-1) |
| 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

| | | |
|---------|------------------------------|-----------|
| V.N. 50 | Medical-Surgical Nursing I |(10) |
| 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) |

III. 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) |

**REHABILITATION TECHNICIAN FOR THE
PHYSICALLY LIMITED**

Twenty units required for the major

I. Required courses for the major

| | | |
|-------------------------|----------------------------------|----------|
| H.R. 73 | Practicum |(2) |
| P.L. 1 | Survey of Physical Defects |(3) |
| Psych 1A or Psych 52 | General Psychology |(3) |
| Sociol 1 | Psychology of Effective Behavior |(3) |
| | Principles of Sociology |(3) |

II. Acceptable courses for the major

| | | |
|---------|---|----------|
| P.L. 2 | Beginning Communication with the Deaf |(3) |
| P.L. 3 | Intermediate Communication with the Deaf |(3) |
| P.L. 4 | Beginning Braille |(3) |
| P.L. 5 | Intermediate Braille |(3) |
| Psych 3 | Psychology of Personal and Social Adjustment |(3) |

PHYSICAL EDUCATION

Eighteen units required for the major

I. Required courses for the major

| | | |
|----------|--|----------|
| H.E. 1 | Health Education |(2) |
| H.E. 2 | First Aid |(2) |
| P.E. 2A | Beginning Gymnastics |(1) |
| P.E. 4A | Beginning Badminton |(1) |
| P.E. 10A | Team Sports |(1) |
| P.E. 10B | Team Sports |(1) |
| P.E. 25A | Folk Dance |(1) |
| P.E. 43 | Physical Education in the Elementary School |(3) |
| P.E. 44 | Introduction to Physical Education |(2) |

II. Acceptable courses for the major

(4 units 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 & Water Safety Instructor Training |(1-1) |
| P.E. 17AB | Physical Fitness, Men |(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 45 | Introduction to Community Recreation | (3) |
| Rec 70 | Social Recreation | (3) |
| Rec 75 | Outdoor 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) |
| Geol 1B | Historical Geology | (4) |
| Geol 2 | Introduction to 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 course 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 Poisonous Plants | (3) |

II. Acceptable courses for the major
(6 units from the following courses)

| | | |
|--------------|---|-------|
| Ag 14 | Entomology | (3) |
| Ag 30 | Agricultural Mechanics | (3) |
| Ag 31AB | Farm Machinery | (3-3) |
| Ag 32 | Irrigation and Drainage | (3) |
| Ag 33A | Farm Power | (5) |
| Ag 65 | Control of Insects and Other Pests | (3) |
| W.E. Voc 63A | Practical Psychology in Business Life | (4) |
| W.E. Voc 63B | Your Personal Efficiency | (4) |
| W.E. Voc 63C | Human Relations and Motivation | (4) |
| W.E. Voc 63D | Personality Health for Personal Leadership | (4) |
| W.E. Voc 63E | Manpower and Work Experience | (4) |
| Chem 2 | Introduction to Chemistry | (4) |
| Eng 47 | Technical & Report Writing | (3) |
| Weld 30 | Arc Welding | (3) |
| Weld 32 | Gas Welding | (3) |

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 6 | Introduction to Business | (3) |
| Bus 1A | Principles of Accounting | (4) |
| Bus 10A | Business Law | (3) |

RECREATION

Eighteen units required for the major

I. Required courses for the major

| | | |
|----------|--|-----|
| P.E. 11A | Recreational Games | (1) |
| P.E. 25A | Folk Dance | (1) |
| P.E. 43 | Physical Education in the Elementary School | (3) |
| Rec 45 | Introduction to Community Recreation | (3) |
| Rec 49 | Recreation for Special Groups | (5) |
| Rec 75 | Outdoor Recreation | (3) |

II. Acceptable courses for the major
(2 units 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 | (1) |
| P.E. 10A | Team Sports | (1) |
| P.E. 10B | Team Sports | (1) |
| P.E. 17A | Physical Fitness, Men | (1) |
| P.E. 18A | Beginning Golf | (1) |
| P.E. 18B | Intermediate Golf | (1) |
| P.E. 26A | Beginning Modern Dance | (1) |
| P.E. 26B | Intermediate Modern Dance | (1) |
| P.E. 27A | Social Dance | (1) |

SECRETARIAL*

Twenty-one units required for the major

I. Required for the major

| | | |
|--------------|---------------------------------------|-----|
| Bus 22A or B | Proficiency-Exit Typewriting | (2) |
| Bus 24 | Office Procedures | (3) |
| Bus 25 | Office Machines | (3) |
| Bus 27A | Dictation and Transcription Lab | (3) |
| Bus 29 | Machine Transcription | (1) |
| Bus 11 | Business Correspondence | (3) |
| Bus 63 | Records Management | (3) |
| Bus 76 | Grammar and Usage | (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

α. 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) |

Economics

| | | |
|------------|---------------------------------|-----|
| Econ 1A | Principles of Economics | (3) |
| Soc Sci 53 | Introduction to 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) |

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) |
|------------|---|-----|

Sociology

| | | |
|-----------|-------------------------------|-----|
| Sociol 1 | Principles of Sociology | (3) |
| Sociol 33 | Marriage and the Family | (3) |

SOILS & 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)

| | | |
|--------------|---|-----|
| Chem 2A | Introduction to Chemistry | (4) |
| Engr 72 | Surveying for Engineering Technology | (3) |
| Eng 47 | Technical & Report Writing | (3) |
| Weld 30 | Arc Welding | (3) |
| Weld 32 | Gas Welding | (3) |
| W.E. Voc 63A | Practical Psychology in Business Life | (4) |
| W.E. Voc 63B | Your Personal Efficiency | (4) |
| W.E. Voc 63C | Human Relations and Motivation | (4) |
| W.E. Voc 63D | Personality Health for Personal Leadership | (4) |
| W.E. Voc 63E | Manpower and Work Experience | (4) |

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 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 52 | 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) |
| Bus 51 | Orientation to Business | (3) |
| W.E. Voc 63A | Practical Psychology in Business Life | (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 Automotive Technology, or equivalent | 5 |
| Auto Tech 52 Transmissions Systems | 3 |
| Auto Tech 53 Brakes and Suspension | 3 |
| Auto Tech 54 Electrical and Fuel Systems | 5 |
| Auto Tech 55 Gasoline and Diesel Engines | 3 |
| Auto Tech 56 Diagnostic | 3 |
| Total Units | 22 |

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 Gas 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 30 Management Concepts of Supervision | 3 |
| Bus 31 Human Relations in Management | 3 |
| Bus 65 Principles of Bank Operations | 3 |
| Select any of two of the following electives | |
| Bus 10A Business Law | 3 |
| Bus 11 Business Correspondence | 3 |
| Econ 1A 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 65 Principles of Bank Operations | 3 |
| Bus 66 Analysis of Financial Statements | 5 |
| (Prerequisite: Bus 1A & 1B) | |
| Bus 67 Installment Credit | 3 |
| Select any two of the following electives | |
| Bus 10A Business Law | 3 |
| Bus 11 Business Correspondence | 3 |
| Bus 31 Human Relations in Management | 3 |
| Bus 68 Financing Business Enterprises | 3 |
| Bus 69 Agricultural Finance | 3 |
| Econ 1A Principles of Economics | 3 |
| Sp 1 Oral Communications | 3 |
| Total Units | 25 |

GENERAL CERTIFICATE IN BANK SERVICES*

| | |
|--|-----------|
| Bus 10A Business Law | 3 |
| Bus 22A or B Proficiency—Exit Typewriting | 2 |
| Bus 25 Office Machines | 3 |
| Bus 50A Practical Bookkeeping (2) | 3 |
| Bus 65 Principles of Bank Operations | 3 |
| Bus 76 Grammar and Usage | 3 |
| Select any two of the following electives | |
| Bus 24 Office Procedures | 3 |
| Bus 31 Human Relations in Management | 3 |
| Bus 40 Introduction to Data Processing | 3 |
| Bus 54 Essentials of Business Correspondence | 2 |
| Sp 1 Oral Communications | 3 |
| Total Units | 23 |

1. Minimum skill level 40 net words per minute required to qualify for certificate. If skill level attained in Bus 22A, student is excused from Bus 22B.
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 10A Business Law | 3 |
| Bus 22A Proficiency—Exit Typewriting (1) | 2 |
| or B Dictation and Transcription Lab (2) | 3 |
| Bus 27A Dictation and Transcription Lab | 3 |
| Bus 27B Dictation and Transcription Lab | 2 |
| Bus 54 Essentials of Business Correspondence | 3 |
| Bus 65 Principles of Bank Operation | 3 |
| Bus 76 Grammar and Usage | 3 |
| Select any two of the following electives | |
| Bus 24 Office Procedures | 3 |
| Bus 25 Office Machines | 3 |
| Bus 31 Human Relations in Management | 3 |
| Bus 40 Introduction to Data Processing | 3 |
| Sp 1 Oral Communications | 3 |
| Total Units..... | 27 |

1. Minimum skill level of 60 net words per minute required to qualify for certificate. If skill level attained in Bus 22A, student is excused from Bus 22B.
2. Minimum skill level of 90 words per minute required to qualify for certificate. If attained in Bus 27A, student is excused from Bus 27B.

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 22A Proficiency-Exit Typewriting (40 wpm net)* | 2 |
| Bus 25 Office Machines | 3 |
| Bus 29 Machine Transcription | 1 |
| Bus 50A Bookkeeping | 3 |
| Bus 63 Records Management | 3 |
| Business Electives | 8 |
| Total Units | 20 |

Clerk Typist:

| | Units |
|--|-------|
| Bus 22A Proficiency-Exit Typewriting (50 wpm)* | 2 |
| Bus 24 Office Procedures | 3 |
| Bus 25 Office Machines | 3 |
| Bus 29 Machine Transcription | 1 |
| Bus 63 Records Management | 3 |
| Business Electives | 8 |
| Total Units | 20 |

Secretary Stenographer:

| | |
|---|----|
| Bus 22AB Proficiency-Exit Typewriting (60 wpm)* | 2 |
| Bus 24 Office Procedures | 3 |
| Bus 25 Office Machines | 3 |
| Bus 27A Dictation and Transcription Lab (90 wpm)* | 3 |
| Bus 29 Machine Transcription | 1 |
| Bus 54 Essentials of Business Correspondence | 2 |
| Bus 63 Records Management | 3 |
| Bus 76 Grammar & Usage | 3 |
| Total Units | 20 |

Junior Bookkeeper-Payroll Clerk

| | |
|--|----|
| Bus 50A Proficiency-Exit Typewriting (40 wpm)* | 2 |
| Bus 25 Office Machines | 3 |
| Bus 50A Bookkeeping | 3 |
| Bus 50B Bookkeeping | 3 |
| Bus 63 Records Management | 3 |
| Business Electives | 6 |
| Total Units | 20 |

*Denotes the completion-level skill required.

CERTIFICATE PROGRAMS

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 |

FIRE SCIENCE
Certificate Program

| | |
|---|-------|
| Fire Sci 80 Introduction to Fire Science | 3 |
| Fire Sci 81 Introduction to Fire Suppression | 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 |
| *Math 51 Basic Mathematics, or equivalent | 3 |
| | 21-24 |

*Math 51 or equivalent required before registration in Fire Science 83.

CERTIFICATE PROGRAMS

HEAVY MACHINERY
Certificate Program

Total of 30 units required for the certificate.
Required courses:

| | Units |
|--|--------------|
| H.M. 35 Heavy Machinery 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 |
| | 22 and |

eight (8) units to be selected from the following courses:

| | |
|---|---|
| Ag 50 Shop Mathematics | 3 |
| Weld 30 Arc Welding | 3 |
| Weld 32 Gas Welding | 3 |
| W.E. Voc 63A Practical Psychology in Business Life | 4 |
| W.E. Voc 63B Your Personal Efficiency | 4 |
| W.E. Voc 63C Human Relations & Motivation | 4 |
| W.E. Voc 63D Personality Health for Personal Leadership | 4 |

Total Units 30

HUMAN RELATIONS
Certificate Program

The satisfactory completion of the following courses will make the student eligible for a certificate in Human Relations which will prepare him for employment as counselor aide, vocation rehabilitation aide, eligibility worker, social service technician and other pre-professional positions in people-to-people services. This training should prepare the student to be sensitively aware of individual needs when dealing with people in crisis situations.

| | |
|---|---|
| H.R. 72 Small Group Leadership | 3 |
| H.R. 73 Practicum | 2 |
| Psych 1A General Psychology | 3 |
| Psych 3 Psychology of Personal and Social Adjustment | 3 |
| Sociol 1 Principles of Sociology | 3 |
| Sociol 33 Marriage and the Family | 3 |

Electives chosen from recommended or acceptable courses of the Major

Total Units 20

**LAW ENFORCEMENT
Certificate Program**

| | Units |
|---|--------------|
| L.E. 33 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 Police-Community Relations | 3 |
| L.E. 45 Basic Law Enforcement Orientation | 12 |
| Total Units | 27 |

**BASIC POST ACADEMY
Certificate Program**

| | |
|---|----|
| L.E. 45 Basic Law Enforcement Orientation (280 hours of instruction) | 12 |
| Total Units | 12 |

**BASIC LIBRARY TECHNICIAN
Certificate Program**

| | |
|---|----|
| L.T. 51 Introduction to Library Services | 3 |
| L.T. 52 Support for Technical Services | 3 |
| L.T. 53 Support for Public Services | 3 |
| L.T. 54 Introduction to Audio-Visual Services | 3 |
| L.T. 55 Cataloging and Classifying | 3 |
| Total Units | 15 |

**REHABILITATION TECHNICIAN FOR THE
PHYSICALLY LIMITED
Certificate Program**

| | |
|---|----|
| H.R. 73 Practicum | 2 |
| P.L. 1 Survey of Physical Defects | 3 |
| Sociol 1 Principles of Sociology | 3 |
| Psych 1A General Psychology | 3 |
| or | |
| Psych 52 Psychology of Effective Behavior | 3 |
| Select any two of the following electives: | |
| P.L. 2 Beginning Communication with the Deaf | 3 |
| P.L. 3 Intermediate Communication with the Deaf | 3 |
| P.L. 4 Beginning Braille | 3 |
| P.L. 5 Intermediate Braille | 3 |
| Total Units | 17 |

**REAL ESTATE
Certificate Program**

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

| | Units |
|--|--------------|
| 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 |

**VOCATIONAL NURSING
Certificate Program**

| | |
|--|----|
| V.N. 50 Medical-Surgical Nursing I | 10 |
| 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 |

**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 | 21 |

*Substitutions may be made upon approval by the instructor.

| | |
|-----------------------------------|--------|
| A | |
| Absence | 33 |
| Academic Dismissal | 33 |
| Accreditation | 21 |
| Activities, Student | 22 |
| Administration | 6 |
| Admission | 24 |
| Advanced Standing | 24 |
| Foreign Students | 25 |
| High School Graduates | 24 |
| Non-Graduates of | |
| High School | 24 |
| Out-of-State Students | 25 |
| Special High | |
| School Students | 24 |
| Affiliations, Institutional | 21 |
| Agriculture Courses | 44 |
| Alpha Gamma Sigma | 20 |
| Anatomy | 49 |
| Anthropology | 49 |
| Approval by Veterans | |
| Administration | 2 |
| Art Courses | 49 |
| Associated Students | 22 |
| Associate in Arts Degree | 19, 36 |
| Associate in Science | |
| Degree | 19, 36 |
| Astronomy | 52 |
| Athletics | 22 |
| Courses | 89 |
| Eligibility | 22 |
| Intercollegiate | 22 |
| Attendance | 30 |
| Automotive Technology | 52 |
| Aviation | 54 |
| Awards, Scholarship | 21 |
| B | |
| Baseball | 90 |
| Basketball | 89 |
| Biology | 54 |
| Board of Trustees | 6 |
| Bookstore | 22 |
| Botany | 55 |
| Business | |
| Courses | 55 |
| C | |
| Calendar | 4, 5 |
| California State Colleges | 42 |
| Certificate Programs | 43 |
| Certificate Requirements | 159 |
| Change in Class Schedules .. | 28 |
| Changes in the Catalog | 35 |
| Chemistry | |
| Courses | 63 |
| Correspondence & Extension | |
| Courses, Credit for | 41 |
| Cosmetology | 64 |
| Counseling and Guidance | |
| Services | 21 |
| Courses of Instruction | 44 |
| Courses, Types | 6 |
| Credit by Examination | 31 |
| Credit Classes | 29 |
| D | |
| Degrees | 19 |
| Dismissal Policies | 33 |
| Directors and Coordinators .. | 7 |
| Division Chairmen | 7 |
| Dramatic Art | 65 |
| E | |
| Economics | |
| Courses | 66 |
| Education (not a major) | 67 |
| Electricity Courses | 67 |
| Electronics Courses | 67 |
| Engineering | |
| Courses | 68 |
| English | |
| Courses | 72 |
| Enrollment, Concurrent High | |
| School and College | 19 |
| Entrance Examinations | 24 |
| Environmental Science | 79 |
| Evening College | 18 |
| Expenses | 21 |
| Extension Courses, Credit for | 41 |
| F | |
| Facilities | 14 |
| Faculty | 8 |
| Federal Work Study | 18 |
| Financial Aids | 21 |
| Fire Science | 79 |
| Football | 89 |
| Foreign Students | 25 |
| French | |
| Courses | 81 |

| | |
|----------------------------------|------------------|
| G | |
| General Education | 16 |
| Requirements at IVC | 38 |
| Requirements for Calif. | |
| State Colleges | 42 |
| Requirements for University | |
| of California | 42 |
| Geography | |
| Courses | 83 |
| Geology | 83 |
| German | 84 |
| Grade Points | 30 |
| Grade Reports, Semester | 31 |
| Grades | 29 |
| Grading System | 28 |
| Graduation Honors | 19 |
| Graduation Petition | 36 |
| Graduation Requirements | 36 |
| Grants | 21 |
| Guidance Services | 21 |
| H | |
| Health, Physical Education | |
| and Recreation | 85 |
| High School Honors Program | 18 |
| High School & College, | |
| Concurrent Enrollment | 19 |
| History | |
| Courses | 92 |
| History of College | 12 |
| Honor List, President's | 20 |
| Honors Courses | 93 |
| Honors, Graduation | 19 |
| Honors Program for High | |
| School Seniors | 18 |
| Honors, Scholastic | 19 |
| Humanities | |
| Courses | 94 |
| Human Relations Courses | 95 |
| I | |
| Incompletes | 29 |
| Institutional Affiliations | 21 |
| J | |
| Journalism | 96 |
| L | |
| Language, Foreign | |
| Courses | 81-83-84-117-121 |
| Law, Business | 55 |
| Law Enforcement | |
| Certificate Programs | 163 |
| Courses | 97 |
| Library | 14 |
| Library Technician Courses .. | 100 |
| Limitations of Study List | 28 |
| Location of College | 12 |
| M | |
| Major Requirements | 127-157 |
| Majors | 36 |
| Mathematics | |
| Courses | 100 |
| Entrance Examination | 24 |
| Graduation Requirements .. | 37 |
| Master Schedule, Changes in | 28 |
| Military Classes | 85-88 |
| Military Credit | 31-34 |
| Music Courses | 103 |
| N | |
| Natural Science | 106 |
| Newspaper, Student | 22 |
| Night Classes | 18 |
| Nursing, Registered | 106 |
| Nursing, Vocational | 109 |
| O | |
| Objectives, College | 14 |
| Occupational Curricula | 42 |
| Occupational or Vocational- | |
| Technical Courses | 16 |
| Out-of-State Students | 25 |
| P | |
| Petition for Graduation | 36 |
| Philosophy | |
| Courses | 111 |
| Imperial Valley College | 14 |
| Physical Education | |
| Courses | 85 |
| Exemptions | 35 |
| Requirements | 34 |
| Physically Limited Courses .. | 112 |
| Physical Science | |
| Courses | 112 |
| Chemistry | 63 |

INDEX

| | |
|---------------------------------|-----|
| Geology | 83 |
| Physical Science | 112 |
| Physics | 113 |
| Physics | |
| Courses | 113 |
| Physiology | 113 |
| Political Science | |
| Courses | 114 |
| President's Honor List | 20 |
| Probation | 31 |
| Program | |
| Changes | 28 |
| Evening College | 18 |
| High School Seniors Honor | 18 |
| Transfer | 16 |
| Types | 16 |
| Work Experience | 18 |
| Provisional Status | 32 |
| Psychology | |
| Courses | 18 |

R

| | |
|--|-------|
| Readmission | 34 |
| Recreation, Health, Physical Education, and | 85 |
| Real Estate Curriculum | 62-63 |
| Registered Nursing | 106 |
| Regulations | 24 |
| Repeated Classes | 30 |
| Residence Requirements | 25 |

S

| | |
|---|-----|
| Scholarship | |
| Grading System | 28 |
| Honors | 19 |
| Scholarships | 21 |
| Semester Grade Reports | 31 |
| Snack Bar | 22 |
| Social Science | |
| Courses | 116 |
| Sociology | |
| Courses | 116 |
| Spanish | |
| Courses | 117 |
| Special Studies | 122 |
| Speech Courses | 122 |
| State & Institutional Requirements | 37 |

| | |
|------------------------------|----|
| Student | |
| Activities | 22 |
| Newspaper | 22 |
| Bookstore | 22 |
| Subject Area Requirements .. | 37 |
| Summer Session | 44 |
| Study List Changes | 28 |
| Study List Limitations | 28 |

T

| | |
|---|----|
| Tennis | 90 |
| Track | 90 |
| Transcripts | 25 |
| Transfer | |
| Courses | 16 |
| Credit | 42 |
| Requirements for Four-Year Institution | 42 |
| Trustees, Board of | 6 |
| Tuition | 21 |

U

| | |
|--------------------------------|----|
| University of California | 42 |
|--------------------------------|----|

V

| | |
|--|-------|
| Veterans | |
| Credit for Military | |
| Training | 31-34 |
| Vocational Curricula | 42 |
| Vocational Nursing | 109 |
| Vocational Work Experience Course | 124 |

W

| | |
|-------------------------------|-----|
| Welding Technology | 123 |
| Withdrawal, Automatic | 33 |
| Withdrawal from College | 33 |
| Withdrawal Grades | 29 |
| Work Experience | 124 |
| Work-Study Program | 21 |
| Wrestling | 90 |

Z

| | |
|---------------|-----|
| Zoology | |
| Courses | 126 |

EMERALD VALLEY COLLEGE

ADDENDUM TO 1975 - 1975

GENERAL CATALOG

TABLE OF CONTENTS

| | |
|----------------------------------|------|
| College Calendar | iii |
| Board of Trustees | iv |
| Administration | v |
| Division Chairmen | vi |
| Directors and Coordinators | vii |
| Faculty | viii |

Changes in the Imperial Valley College
1973-1975 General Catalog

| | |
|--|------|
| I. Expenses | 1 |
| II. Tuition Refund Policy | 1 |
| III. Parking Fee | 1 |
| IV. Regulations - Admission | 1, 2 |
| V. Residence Requirements | 2 |
| VI. Grading System - Incomplete | 2 |
| VII. Grading System - Military Credit | 2 |
| VIII. Semester Grade Reports | 3 |
| IX. Physical Education | 3 |
| X. Associate Degrees | 3 |
| XI. State and Institutional Requirements ... | 3 |
| XII. General Education | 3, 4 |

TABLE OF CONTENTS (Continued)

| | |
|---|----|
| XIII. Occupational Curricula - Certificates | 4 |
| XIV. Changes in Courses of Instruction | 4 |
| through | 23 |
| XV. Changes in Majors | 23 |
| through | 25 |
| XVI. Changes in Certificate Programs | 25 |
| through | 27 |

IMPERIAL VALLEY COLLEGE
1974-75 CALENDAR

Faculty Orientation.....September 4, 5, 1974
 Registration - Night Students.....September 4, 1974
 Registration - Day Students.....September 5, 1974
 Fall Semester Break.....September 6, 1974
 Fall Semester Classes Begin.....September 9, 1974
 Veteran's Day (Holiday).....November 11, 1974
 Thanksgiving Recess.....November 28,
 and November 29, 1974
 Christmas Recess.....December 23, 1974 through
 January 1, 1975
 Final Exams.....January 15, 1975 through
 January 22, 1975
 Final day of Fall Semester.....January 22, 1975
 Spring Registration - Night Students.....January 22, 1975
 Spring Registration - Day Students.....January 23, 1975
 Spring Break.....January 24, 1975
 Spring Semester Begins.....January 27, 1975
 Washington's Birthday (Holiday).....February 17, 1975
 Spring Recess.....March 24, 1975 through
 March 28, 1975
 Memorial Day (Holiday).....May 26, 1975
 Final Exams.....May 30, 1975 through
 June 6, 1975
 Final Day of Spring Semester.....(Saturday) June 7, 1975
 Graduation.....June 7, 1975

1975 Summer School

Summer School Registration.....June 13, 1975
 Summer School Begins.....June 16, 1975
 Independence Day (Holiday).....July 4, 1975
 Final Exams.....July 25, 1975
 Last Day of Summer Session.....July 25, 1975

THE BOARD OF TRUSTEES

IMPERIAL COMMUNITY COLLEGE DISTRICT

MR. WALTER M. ANDERSON
 Trustee from area which includes Calexico Union High School
 District

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

MR. WILLIAM COLE
 Trustee from area which includes Central Union High
 School District

MS. ANNIE GUTIERREZ
 Trustee from area which includes Holtville Unified
 School District

MRS. CAROLINE WINDER
 Trustee from area which includes San Pasqual Valley
 Unified School District

MR. ED C. WIEST
 Trustee from area which includes Brawley Union High
 School District

MR. HOWARD WORTHINGTON
 Trustee from area which includes Imperial Unified
 School District

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 A. LEPTICH
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
Director of Counseling Services

MR. GEORGE STAHILI
Director of Financial Assistance and Placement Services

MR. MELVIN WENDRICK
Director of Physically-Limited Services

MR. MICHAEL McCORMICK
Director of Student Life and Community Services

DIVISION CHAIRMEN

MR. STANLEY E. ALBERDA
Head Librarian

MRS. DOROTHY T. FINNEY
Chairman of Division of Health, Physical Education, and Recreation

MR. HERBERT GARTIN
Chairman of Division of Behavioral Science

MRS. ROSANNE R. HILLHOUSE
Chairman of English Division

MS. KAY HACHMUTH
Chairman of Division of Mathematics and Engineering

MRS. RAUHA K. KOSKI
Chairman of Division of Nursing and Health Technologies

MR. GERALD K. PERSKE
Chairman of Division of Science

MR. WALTER L. SAMSON, JR.
Chairman of Division of Social Science

MR. JAMES R. STONE
Chairman of Division of Humanities

MR. BLAINE R. THOMPSON
Chairman of Division of Business

MR. RAY A. WHITE
Chairman of Division of Agriculture and Automotive Technology

DIRECTORS AND COORDINATORS

MR. GLENN A. GENTRY
Work Experience Coordinator

MR. HECTOR LOPEZ
Director of Counseling Services

MR. GEORGE STAHELI
Director of Financial Assistance and Placement Services

MR. MELVIN WENDRICK
Director of Physically-Limited Services

MR. MAX FIELDS
Director of Athletics

MR. MICHAEL McCORMICK
Director of Student Life and Community Services

THE FACULTY

AKERS, H. RUSSELL.....Instructional Specialist
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 Evening College
A.A., Imperial Valley College
B.A., M.S. California State University

ARCHULETA, JOE A. Mathematics, Electronics
B.S., Colorado University
M.A., California State University

BANKS, STANLEY G. Sociology
B.A., Macalester College
M.A., California Western University

BARKALOW, NORVAL Law Enforcement
California Highway Patrol (Ret.)

BARKER, MICHAEL A. Anthropology
B.S., Brigham Young University
M.A., UCLA

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

BRUNGARDT, MARTHARegistered Nursing
B.S.N., M.S., University of Arizona

CERDA, DANIEL English
A.A., Mira Costa College
B.A., San Diego State University
M.A., Northern Arizona University

THE FACULTY

Cerda, Ernestine English
 A.A., Mira Costa College
 B.A., San Diego State University
 CHAMPAGNE, PHILIPWelding, Automotive Technology
 B.A., M.A., Arizona State University
 DePAOLI, JOHN, JR.Deputy Supt., Dean of Instruction
 B.A., M.A., UCLA
 Ph.D., United States International University
 FARRAR, LLOYD History
 B.A., Oberlin College
 M.A., Columbia University
 FARRIER, PAUL History
 B.A., M.Ed., M.A., University of Arizona
 FEHRENBACH, WALOMA Registered Nursing
 B.S.N.E., Loma Linda University
 FIELDS, MAX Director of Athletics, Instructor
 B.A., Whittier College
 M.A., California State Polytechnic College
 FINLEY, LUTHER Engineering
 B.S., M.A., Arizona State University
 I.Ed.D., Bradley University
 FINNEY, DOROTHY T. Physical Education
 Chairman of Division of Health, Physical Education
 and Recreation
 B.A., Santa Barbara State College
 FRYE, ROBERT M. Psychology
 B.S., M.A. Bradley University
 FUESLER, JACK B. Music
 A.A., Norfolk Junior College
 B.M.E., M.M., Northwestern University
 GALAMGAM, ADELAIDA Assistant Librarian
 E.T.C., Ilocos Norte Normal School
 B.S.E., Central Philippine College
 M.S., Ed., University of Southern California
 GARES, V. DALE Dean of Admissions-Registrar
 B.A., M.A., Adams State College
 Ph.D., United States International University

THE FACULTY

GARTIN, HERBERT Psychology, Human Relations
 Chairman of Division of Behavioral Science
 B.A., M.Ed., University of Arizona
 GENTRY, GLENN A.....Work Experience Coordinator-Instructor
 B.S., New Mexico State University
 M.S., University of Arizona
 GRIFFIN, WILLIAM A. Business
 B.S., University of North Dakota
 M.A., Colorado State College
 HACHMUTH, KAY Mathematics
 Chairman of Mathematics and Engineering Division
 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
 HULST, GARYPhysical Education-Work Experience
 B.S., Morningside College
 M.A., Colorado State College
 HAUER, ROYAL English
 B.A., UCLA
 M.A., San Fernando Valley State College
 HEBERT, ROGER Physical Education
 B.A., American International College
 M.A., Boston University
 HILLHOUSE, ROSANNE R. English
 Chairman of Division of English
 B.A., M.A., Oxford University
 HUBBARD, GAILCounselor-Instructor, Physically-Limited
 B.A., University of California-Santa Barbara
 M.A., University of New Mexico
 JERGE, MICHAEL J. Business, Economics
 B.A., M.B.A., University of Arizona
 JOHNSON, JEAN Physical Education
 B.A., University of Kentucky
 KELSOE, LEON Physical Education
 B.A., M.Ed., Whittier College

THE FACULTY

ROHLOFF, SYLVIA Registered Nursing
 R.N., Buffalo Deaconess Hospital
 B.S., M.S., State University College at Buffalo

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

SAMSON, WALTER L., JR. History
 Chairman 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

SMITH, MARGARET A. Psychology, Sociology
 B.A., San Diego State College
 M.A., United States International University

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

STAHELI, GOERGE Director of Financial Assistance
 and Placement 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

STONE, JAMES R. Music
 Chairman of Division of Humanities
 B.E., University of North Carolina
 B.M., Westminster Choir College
 M.M., University of Southern California

SUCZEK, PETER Psychology, Sociology
 A.A., Diablo Valley Community College
 B.A., California State University San Jose
 M.A., University of California Santa Barbara

THE FACULTY

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

THOMPSON, BLAINE R. Business
 Chairman of Division of 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 University
 Ph.D., United States International University

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

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

WHITE, RAY A. Automotive Technology
 Chairman 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

THE FACULTY

WILSON, PATRICIA English
B.A., University of California at Santa Barbara
WISBROCK, ROLLIE Speech
B.A., M.A., San Diego State College

CHANGES IN THE IMPERIAL VALLEY COLLEGE
1973-1975 GENERAL CATALOG

I. EXPENSES (Page 21 in the GENERAL CATALOG)

There is no tuition charge for full-time students who are legal California residents. Tuition for out-of-state and out-of-country students is computed as \$30.00 per unit and that the maximum be \$450.00 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.

II. TUITION REFUND POLICY (New Addition)

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

III. PARKING FEE (New Addition)

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.

IV. REGULATIONS - Admission (Page 25 of the General Catalog)

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 \$30.00 per unit, not to exceed a total of \$900.00 per academic year, 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 \$30.00 per unit, not to exceed a total of \$900.00 per academic year, is charged.

V. RESIDENCE REQUIREMENTS (Page 28 of General Catalog)

1. A student claiming residence as a migrant worker or that his parent with whom he is living earns his livelihood primarily by performing agricultural labor for hire in California and other states may be granted residence classification if he meets the regulations specified in Section 22859.7, Education Code.

VI. GRADING SYSTEM (Page 29 of General Catalog)

Inc. Incomplete

UNFINISHED WORK, OTHERWISE PASSING indicating that an important assignment such as a term paper, final examination, or experiment is missing, (for medical or other sufficient reason). Removal of an "Incomplete" establishes whatever grade is warranted, so long as the work is made up before the end of the sixth week of the following semester; otherwise, the final grade is automatically recorded as an F.

VII. GRADING SYSTEM (Page 31 of General Catalog)

7. MILITARY CREDIT

1. Presentation of the DD214 by petition may allow the veteran 6 units of credit (or) (4 units for physical education and 2 units for health education).

- VIII. SEMESTER GRADE REPORTS (Page 31 of General Catalog)
An end-of-the-semester grade report is issued to each student by the Registrar after the semester's work has been completed.

IX. PHYSICAL EDUCATION (Page 34 of General Catalog)

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. 16A-D, H.E. 3). See Counselor.

X. ASSOCIATE DEGREES (Page 37 of General Catalog)

- A.A., A.S. - Individual Interdisciplinary
A.S. - Water Treatment Technology

XI. PART II STATE AND INSTITUTIONAL REQUIREMENTS (Page 37 of General Catalog)

- B. Grade point average of 2.0, or better of all college work.

XII. PART IV GENERAL EDUCATION (Page 40-41 of General Catalog)

- d. Learning Skills
2. Bus 17 (Also Math 17) Math for Business Analysis

2. Bus 62 (Also Soc Sci 62) Personal Finance
 P.L. 2 Beginning Communication with the Deaf
 P.L. 4 Beginning Braille
 Sp 30 Voice and Articulation Development

XIII. OCCUPATIONAL CURRICULA - CERTIFICATES (Page 43 of General Catalog)

Emergency Medical Technician
 Health Aide

XIX. CHANGES IN COURSES OF INSTRUCTION (Page 44 in General Catalog)

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 64 Horsemanship/Equitation (2) 1 hr. Lec.
 2 hrs. Lab.

The fundamentals of horsemanship and equitation, English and Western, the anatomy of the horse as it pertains to riding. Equipment utilized in training and riding, care 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 fee will be charged for those students who cannot provide their own horse.) (Same as P.E. 64)

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 B), but it is not a requirement; because of 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.

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.

Anthro 5 Introduction to World Prehistory (3)

3 hrs. Lec.

(Formerly Anthro 3, page 49 of the
General Catalog.) Same course description.

Anthro 6 Native People of North America (3)

3 hrs. Lec.

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

Bus 66 Analysis of Financial Statements (3) 3 hrs. Lec.

(Change in units and hours)

EARLY CHILDHOOD EDUCATION

E.C.E. 40 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 postnatal physiology. (Same as Psych 40)

E.C.E. 41 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.

E.C.E. 42 Early Childhood Development I (3) 3 hrs. Lec.

Interrelationships of physical, emotional, intellectual, and social growth as it relates to preschool children. Emphasis will be upon the developmental needs of the child. Observations at area schools are required.

E.C.E. 43 Early Childhood Development II (3) 3 hrs. Lec.

Prerequisite: E.C.E. 42. Interrelationships of physical, emotional, intellectual, and social growth as it relates to preschool children. Emphasis will

be upon the developmental needs of the child. Observations at area schools are required. Continuation of E.C.E. 42.

Eng 25 Introduction to English Linguistics (3)

3 hrs. Lec.

(Change in course title)

Eng 40W Phonetics for ESL Students (2)

2 hrs. Lec.

2 hrs. Lab.

(Change in course title)

Eng 55 Everyday English I (2)

2 hrs. Lec.

(Change in course title)

Eng 56 Everyday English II (2)

2 hrs. Lec.

(Change in course title)

Eng 61AB Vocabulary Building (3)

3 hrs. Lec.

(Change in course number)

Eng 65AB Spelling (1)

1 hr. Lec.

(Change in course number)

Fr 51A Everyday French: Beginning Conversational

French and Culture (3) 3 hrs. Lec.

(Addition to course title)

Fr 51B Everyday French: Beginning Conversational

French and Culture (3) 3 hrs. Lec.

(Addition to course title)

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

Geol 1A Physical Geology (4) 3 hrs. Lec.
3 hrs. Lab.
Prerequisite added: One year of high school science or permission of the instructor.

Geol 1B Historical Geology (4) 3 hrs. Lec.
3 hrs. Lab.
Prerequisite added: One year of high school science or permission of the instructor.

Geol 10 Life of the Past: An Introduction to Paleontology (3) 3 hrs. Lec.

Prerequisites: One year of high school science, or permission of the 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)

Ger 1A Elementary German (2) 2 hrs. Lec.
 $\frac{1}{2}$ hr. Lab.

Beginning course of graded lessons acquainting the student with the basic structure and pronunciation through practice in speaking, reading and writing. An additional one-half hour per week of individual language and laboratory is required. 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.

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 out-reach 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. Applications 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 2.00 grade point average is required in order to receive a Certification of Completion.

CURRICULUM

| | <u>Units</u> |
|--|-----------------------------|
| H.A. 15 A, or 15 B, or 15 C, or 15 D | 9 |
| Psych 52 Psychology of Effective Behavior | 3 |
| Eng 51 The Communication Process | 3 |
| (or Eng 1A, if eligible) | |
| P.E. Physical Education, if required | <u>1</u> |
| | 16 |
| | |
| H.A. 15 A Hospital Nurse Aide/Orderly (9) | 3 hrs. Lec. 18 hrs. Lab. |
| | |
| H.A. 15 B Community Health Aide (9) | 3 hrs. Lec. 18 hrs. Lab. |
| | |
| H.A. 15 C Developmental Disability/ Mental Retardation Aide (9) | 3 hrs. Lec. 18 hrs. Lab. |
| | |
| H.A. 15 D Mental Health Aide (9) | 3 hrs. Lec. 18 hrs. Lab. |

Prerequisite: Enrollment in 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 disable/mental retardation. Nine (9) 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. Students who complete the course will receive a standard Red Cross First Aide 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.

H.A. 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)

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

(Change to 3 units and 3 hrs. Lec.)

P.E. 17ABCD Physical Fitness (1-1-1-1) 2 hrs. Lab.

(Change in course title)

P.E. 19ABCD 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. 25 AB Folk Dance, Coed (1-1) 2 hrs. Lab.

(Addition of course number)

P.E. 39 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. 40 Structuring the Intramural Program (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 tournaments and assist in running the I.V.C. Intramural Program.

P.E. 64 Horsemanship/Equitation (2) 1 hr. Lec.
2 hrs. Lab.
(Same as Ag 64)

Rec 75 Outdoor Recreation (3) 2 hrs. Lec.
3 hrs. Lab.
(Change to 3 hrs. Lab.)

H.R. 65 The Student in Contemporary College Affairs (1-3) 1 hr. Lec.
(Change in course description, last sentence)
This course shall be offered as a credit class only.

H.R. 73 Practicum (2) 6 hrs. Lab.
(Change in course description, last sentence)
This course shall be offered as a credit class only.

INDIVIDUAL STUDIES

Ind Stu 32 Physically Limited Program (1-6) 1-6 hrs. Lec./Lab.
by arrangement
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.

Jrn 43 Introduction to Photography (3) 2 hrs. Lec.
3 hrs. Lab.
(Same as Vis Arts 43)

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

(Change in course title)
This course is designed to fulfill the requirements of Section 1020 of the Minimum Jail Standards of California.

Law Enf 45 Basic Law Enforcement Orientation (12) 20 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.

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

Prerequisites: Math X and Y, or the equivalent, or by permission of the 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.

Mus 25 ABCD Stage Band (1-1-1-1) 1 hr. Lec.
2 hr. Lab.
(Change from 1 hr. Lab. to 2 hr. Lab.)

Mus 28 ABCDEF College Chorus (2-2-2-2-2) 1 hr. Lec.
2 hrs. Lab.
1 hr. by arrangement
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 29A-F Estudiantina (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 singers and/or instrumentalists playing accordion, castanets, guitar, mandolin, string bass, tambourine.

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)

NURSING-REGISTERED
(New Addition)

The A.S. Degree will be given 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.

course completed 34 Units
(Corresponds to number of R.N. course units in I.V.C. 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 10, 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.

R.N. 5 Registered Nursing (10) 5 hrs. Lec.
15 hrs. Lab.

Prerequisites: R.N. 1, 2, 3, 4. Skills required to plan, carry out and evaluate total nursing care of patients of all ages with complex health problems. The need for patient teaching, rehabilitation and community resources are stressed. Opportunity given to work with groups of patients and to participate in nursing team leadership. Trends in nursing and health care as well as career opportunities for registered nurses discussed.

R.N. 20A Nursing the Acutely Ill I (3) 3 hrs. Lec.

Prerequisites: R.N., L.V.N. (with permission of instructor). Intensive review of the cardiovascular, pulmonary and autonomic nervous systems and the disease processes involved. A comprehensive introduction to electrocardiography and an analysis of arrhythmias will be given. Drug management, fluid and electrolyte balance, and emergency measures will be explored in detail. (Same as V.N. 20A)

R.N. 20B Nursing the Acutely Ill II (3) 3 hrs. Lec.

Prerequisites: R.N. 20A or V.N. 20A. An extension of Nursing the Acutely Ill I. Includes a review of the renal system and the disease processes involved, nursing care of the pacemaker patient and nursing assessment of the acutely ill patient. (Same as V.N. 20B)

R.N. 21 Obstetrics for Nurses (2) 1 hr. Lec.
2 hrs. Lab/Dem.

Prerequisites: R.N. or L.V.N. Review 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 pathophysiology 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, H.A. 22)

NURSING - VOCATIONAL

New Addition - Page 109

| CURRICULUM | Units |
|---|-------------------------------|
| | 1st S. |
| Psych 52 Psychology of Effective Behavior | 3 |
| V.N. 50 Medical-Surgical Nursing I | 7 |
| V.N. 51 Clinical Fundamentals | 7 |
| | 2nd S. |
| V.N. 52 Medical-Surgical Nursing II | 4 |
| V.N. 53 Maternal-Child Health Nursing | 6 |
| V.N. 54 Clinical Fundamentals | 7 |
| | 3rd S. |
| V.N. 55 Medical-Surgical Nursing III | 10 |
| V.N. 56 Clinical Fundamentals | 7 |
| V.N. 20A Nursing the Acutely Ill I (3) | 3 hrs. Lec. |
| Prerequisites: R.N., L.V.N. (with permission of instructor). (Same as R.N. 20A, formerly R.N./V.N. 10 Nursing the Acutely Ill). | |
| V.N. 20B Nursing the Acutely Ill II (3) | 3 hrs. Lec. |
| Prerequisites: R.N. 20A or V.N. 20A (Same as R.N. 20B) | |
| 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, H.A. 22)

V.N. 50 Medical-Surgical Nursing I (7) 7 hrs. Lec.

Prerequisite: Enrollment in Nursing Program. Introduction to the relationship that exists between the nurse and 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 diseases. The normal as well as the abnormal will be studied. The vocational nurse's responsibility toward prevention of disease and rehabilitation. Application of these principles during nursing care experience with patients of all ages. The basic skills required to meet the immediate needs of the patient. Includes study of gross anatomy and physiology as well as the emotional, physical, psychological impact of illness on a patient and his family and the nursing care implications as they relate to the patient. Medications and diet are integrated throughout.

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 as related to the total patient needs as well as the specific diseases and disorders. Encouragement to adapt knowledge independently to patient situations. Introduction to nursing care plans as a means of communication and continuity of patient care. Nursing care planning for patients with circulatory disorders. Basic nutritional theory and its relationship in health and disease. Discussion and study of community health.

V.N. 55 Medical-Surgical Nursing III (10) 10 hrs. Lec.

Prerequisite: V.N. 52. 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. Geriatric nursing will be discussed. 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.
(Change in course description, page 111 of General Catalog)

Psych 40 Development Psychology of Children (3) 3 hrs. Lec.
(Same as E.C.E. 40)

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.

Span 20A Beginning Spanish for Spanish Speakers (4) 4 hrs. Lec.

(Change in course title and course description) First year college Spanish for Spanish speakers. The course studies the basic grammar of Spanish, with dialogues 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 Spanish-Speakers
4 hrs. Lec.

(Change in course title)

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 51A Everyday Spanish: Beginning Conversational
Spanish and Culture (2) 2 hrs. Lec.
1 hr. Lab.

(Addition to course title and course description)

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 Everyday Spanish: Beginning Conversational
Spanish and Culture (2) 2 hrs. Lec.
1 hr. Lab.

(Addition to course title and course description)

Prerequisite: Span 51A. Continuation of Span 51A.

Span 53 Practical Spanish for Public Service
Personnel (2) 2 hrs. Lec.
1 hr. Lab.

(Change in course number)

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 vocabu-
lary. 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 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 Mus 55)

Sp 30 Voice and Articulation Development (3) 3 hrs. Lec.
plus 1 hr. to be arranged

Provides background for students entering teaching,
especially elementary. 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 produc-
tion and phonetics. Drills for the improvement
of the student's voice are presented.

Vis Arts 10 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 8 mm.,
including scripting, shooting and editing.

(Same as Eng 10)

Vis Arts 43 Introduction to Photography (3) 2 hrs. Lec.
3 hrs. Lab.

Prerequisites: Art 22A or similar course is recommended. 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 techniques. 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 Jrn 43)

Vis Arts 44 Advanced Photography (3) 2 hrs. Lec.
3 hrs. Lab.

Prerequisites: Vis Arts 43/Jrn 43 or permission of the instructor. Psych 52 is recommended. A continuation of Introduction to Photography (Vis Arts 43/Jrn 43) with emphasis on portraiture. Posing of the subject, lighting and visualization of the finished picture will be stressed, with further practice in camera operation and film processing. There will be a materials fee.

W.T. 1 Water Treatment Plant Operator I (3) 3 hrs. Lec.
3 hrs. Lab.

This course will provide information needed to operate a basic fresh-water treatment plant as efficiently as possible. Course will consist of start-up operation, daily operation, interpretation of laboratory results, and possible approaches to solving operational problems.

W.T. 2 Water Treatment Plant Operator II (3) 3 hrs. Lec.
3 hrs. Lab.

Prerequisites: W.T. 1.
Study of fresh-water maintenance, safety, sampling

laboratory procedures, hydraulics, records, analysis and presentation of data and report writing.

W.T. 3 Waste Water Treatment I (3) 3 hrs. Lec.
3 hrs. Lab.

This course will provide information needed to operate a waste-water treatment plant as efficiently as possible. Course will consist of start-up operation, daily operation, interpretation of laboratory results, and possible approaches to solving operational problems.

W.T. 4 Waste Water Treatment (3) 3 hrs. Lec.
3 hrs. Lab.

Prerequisite: W.T. 3. Study of waste-water maintenance safety, sampling, laboratory procedures, hydraulics, records, analysis and presentation of data and report writing.

Zool 10 Life of the Past: An Introduction to Paleontology (3) 3 hrs. Lec.

Prerequisites: One year of high school science, or permission of the 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 Geol 10)

XV. CHANGES IN MAJORS

Agricultural Chemical Technology

II. Acceptable courses for the major - Change to 7 units.

Agricultural Engineering

Change Auto Tech 51 to Engine Technology

Human Relations

New addition to acceptable courses for the major-
H.R. 75 Interviewing and Counseling (3)

Individual Interdisciplinary Major - New Addition

This major for an Associate Degree provides occupationally-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.

Law Enforcement

Change L.E. 33 to Concepts of Criminal Law.

Change L.E. 29 to Preliminary Investigation and Reporting.

Recreation

Change acceptable courses for the major to 3 units.

Water Treatment Technology - New Addition

Eighteen units required for the major.

I. Required courses for the major

W.T. 1 Water Treatment Plant Operator I (3)

W.T. 2 Water Treatment Plant Operator II (3)
W.T. 3 Waste Water Treatment I (3)
W.T. 4 Waste Water Treatment II (3)
*Math 51 Basic Mathematics (3)

II. Acceptable courses for the major (3 units from the following courses)

Bus 30 Management Concepts of Supervision (3)
Bus 31 Human Relations in Management (3)
Bus 37 Business Management (3)
Chem 1A General Inorganic Chemistry (5)
Chem 2A Introduction to Chemistry (4)

* Waived if competency established

XVI. CHANGES IN CERTIFICATE PROGRAMS

Automotive Technology - Certificate Program

Change Auto Tech 51 to Engine Technology

Change Total Units to 25 Units.

Credit Administration Certificate in Banking

Bus 66 Analysis of Financial Statements, change to 3 units.

Change Total Units to 23 Units.

General Certificate in Bank Services

Bus 22AB Proficiency--Exit Typewriting (2)

Secretary Certificate in Bank Service

Bus 22AB Proficiency--Exit Typewriting (2)

BUSINESS
Certificate Programs

General Clerical:

(Receptionist - File Clerk - Small Business Records)

Bus 22AB Proficiency--Exit Typewriting (2)
(40 wpm net)

Clerk Typist

Bus 22AB Proficiency--Exit Typewriting (2)
(50 wpm)

Junior Bookkeeper-Payroll Clerk

Bus 22AB Proficiency--Exit Typewriting

Emergency Medical Technician - New Addition

| | Units |
|--|-------|
| Sp. Stu. 51 Emergency Medical Technician I | 4 |
| | - |
| Total Units | 4 |

Fire Science

Total Units 21-24

Early Childhood Education

| | Units |
|--|-------|
| E.C.E. 40 Developmental Psychology of Children | 3 |
| E.C.E. 41 Early Childhood Development, Children, Family and Community | 3 |
| E.C.E. 42 Early Childhood Development I | 3 |
| E.C.E. 43 Early Childhood Development II | 3 |
| | - |
| Total Units | 12 |

Health Aide - New Addition

| | Units |
|---|-------|
| H.A. 15A, or 15 B, or 15C, or 15D Health Aide | 9 |
| Psych 52 Psychology of Effective Behavior | 3 |
| Eng 51 The Communication Process | 3 |
| P.E. Physical Education, if required | 1 |
| | - |
| Total Units | 16 |

Law Enforcement

Change L.E. 33 to Concepts of Criminal Law.

Change L.E. 38 to Community Relations.

Delete L.E. 45 Basic Law Enforcement Orientation

Add L.E. 21 Introduction to Administration of
Justice (3)

Change Total Units to 18 units.