



IVC GENERAL CATALOG
1990 - 1991



IMPERIAL VALLEY COLLEGE 1990 - 1991

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

**P.O. BOX 158
Highway 111 and Aten Road
IMPERIAL, CALIFORNIA 92251-0158
Phone 619-352-8320
IMPERIAL COUNTY**

IMPERIAL VALLEY COLLEGE

ACCREDITED

by

Accrediting Commission for Junior Colleges
Western Association of Schools and Colleges
The State Department of Education
American Welding Society
Commission on Peace Officers Standards and Training
California Board of Registered Nursing
California Board of Vocational Nurse and Psychiatric Examiners

A
MEMBER
of

California Community and Junior College Association

APPROVED
for
The Veterans Administration

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IMPERIAL VALLEY COLLEGE
1990 - 1991 SCHOOL CALENDAR

1990

| | | | |
|-----------|----|-----------|---|
| August | 14 | Tuesday | Registration |
| | 15 | Wednesday | Registration |
| | 27 | Monday | Faculty Service Day (Orientation) |
| | 28 | Tuesday | Fall Semester Classes Begin |
| September | 3 | Monday | Holiday (Labor Day) |
| November | 12 | Monday | Holiday (Veteran's Day) |
| | 22 | Thursday | Recess (Thanksgiving) |
| | 23 | Friday | Recess (Thanksgiving) |
| December | 17 | Monday | Final Exams Begin |
| | 21 | Friday | Last Day of Final Exams |
| | 24 | Monday | Last Day of Fall Semester Recess (Christmas) |

1991

| | | | |
|----------|------|---------------|---|
| January | 4 | Friday | Last Day of Recess (Christmas) |
| | 7-11 | Monday-Friday | Instructional Flex Days (No Classes) |
| | 14 | Monday | Spring Semester Classes Begin |
| | 21 | Monday | Holiday (King's Birthday) |
| February | 15 | Friday | Holiday (Lincoln's Birthday) |
| | 18 | Monday | Holiday (Washington's Birthday) |
| March | 15 | Friday | Instructional Flex Day (No Classes) |
| | 28 | Thursday | Instructional Flex Day (No Classes) |
| | 29 | Friday | Holiday (Good Friday) |
| April | 1 | Monday | Recess (Spring) |
| | 5 | Friday | Last Day of Recess (Spring) |
| May | 3 | Friday | Instructional Flex Day (No Classes) |
| | 22 | Wednesday | Final Exams Begin |
| | 27 | Monday | Holiday (Memorial Day) |
| | 29 | Wednesday | Last Day of Final Exams |
| | 30 | Thursday | Instructional Flex Day (No Classes) |
| | 31 | Friday | Instructional Flex Day (No Classes) |
| June | 1 | Saturday | Graduation (Service Day) |

IMPERIAL VALLEY COLLEGE
DEADLINE DATES

FALL SEMESTER 1990

| | | | |
|-----------|-------|---------------|---|
| August | 27 | Monday | Residence Determination Date, Fall Semester 1990 |
| August | 28 | Tuesday | First Day of Classes |
| September | 7 | Friday | Last Day to Add or Register Last Day to Apply for Tuition Refund |
| September | 10 | Monday | First Census Day |
| September | 21 | Friday | Last Day to Apply for Graduation and Certificates |
| October | 5 | Friday | Last Day to Remove Incompletes for Spring 1990 and Summer 1990 |
| October | 29 | Monday | Second Census Day |
| November | 21 | Wednesday | Last Day to Drop with a "W" Grade |
| December | 17-21 | Monday-Friday | Final Examinations |
| December | 21 | Friday | Last Day of Fall Semester 1990 |

SPRING SEMESTER 1991

| | | | |
|----------|-------|----------|---|
| January | 13 | Sunday | Residence Determination Date, Spring Semester 1991 |
| January | 14 | Monday | First Day of Classes |
| January | 25 | Friday | Last Day to Add or Register Last Day to Apply for Tuition Refund |
| February | 4 | Monday | First Census Day |
| February | 8 | Friday | Last Day to Apply for Graduation and Certificates |
| February | 22 | Friday | Last Day to Remove Incompletes for Fall 1990 |
| March | 25 | Monday | Second Census Day |
| April | 26 | Friday | Last Day to Drop with a "W" Grade |
| May | 22-24 | Wed-Fri | Final Examinations |
| May | 28-29 | Tues-Wed | Final Examinations |
| June | 1 | Saturday | Graduation Day |

THE BOARD OF TRUSTEES
IMPERIAL COMMUNITY COLLEGE DISTRICT

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Trustee from area which includes Brawley Union High School District

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

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Trustee from area which includes Central Union High School District

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| | |
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M.A., Northern Arizona University

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Deputy Superintendent
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Ph.D., United States International University

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M.B.S., University of Colorado

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M.A., Northern Arizona University

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M.S., Indiana State University

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M.A., University of Michigan
M.Div., Saint John's Provincial Seminary

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Chairperson of Division of Agriculture & Automotive Tech
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M.A.V.E., Consortium of California State Universities
and Colleges

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B.S., M.A., Ph.D., St. Louis University

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M.A., San Jose State University
Ph.D., California Institute of Asian Studies

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B.A., University of California, Santa Barbara
M.A., California State University, Dominguez Hills

EMERITUS FACULTY

LEONARD, THOMAS
Psychology
1964-72

NOVAK, RUTH
Dean of Counseling
1958-72

HINSHAW, JOHN
Mathematics
1942-73

UPSON, JOHN
English
1966-77

GARTIN, HERBERT
Psychology
1966-78

MOORE, ERNEST
Business
1970-78

SPENCER, TERREL
Superintendent/President
1963-78

BARKER, MICHAEL
Anthropology
1968-79

WHITE, HOWARD
Law Enforcement
1969-79

SWANN, MARIE
English
1964-80

WEISSMAN, HARRY
English
1969-80

BARKALOW, N.C.
Law Enforcement
1974-81

FINLEY, LUTHER
Engineering
1960-81

FINNEY, DEE
Physical Education
1967-81

GENTRY, GLENN A.
Work Experience
1967-81

KOSKI, RAUHA K.
Nursing
1974-81

OVERMAN, RUTH
Business
1965-81

SAMUELS, CARMEN
Nursing
1971-81

SAMSON, WALTER
History
1963-82

ANDERSON, LESLIE
Law Enforcement
1967-83

LEWIS, STANLEY H.
Ag/Heavy Equipment Mechanics
1969-83

LANFORD, CONWAY
Counseling
1970-84

LARSSON, HAROLD
Astronomy
1966-84

TOPPER, IRENE
Nursing
1976-84

BACON, JEANNE
Physically Limited
1973-85

BRUNGARDT, MARTHA
Nursing
1972-85

DUFF, JACK
Counseling
1981-85

RODDEN, ROSE
Health Education
1974-86

STEARNS, HAROLD
Speech
1973-86

STONE, JAMES
Mathematics/Music
1966-86

BANKS, STANLEY
Sociology
1966-87

SPEER, WILLIAM
English
1961-87

AKERS, H. RUSSELL
Physically Limited
1973-87

BERNARD, WILLIS C.
Art
1969-88

MOORE, ROBERT
Business
1970-88

PAULSON, CLARENCE A.
Business
1960-88

RICE, PAULINE BENOIT
Foreign Language/Humanities
1963-88

CHAMPAGNE, PHILIP
Welding
1971-89

FUESLER, JACK
Music
1964-89

MELLINGER, ELWOOD
Agriculture
1961-89

LOWE, JUANITA
Art
1961-90

SAXE, ELLEN
Nursing
1981-90

THORNBURG, WILLIAM
VP for Business Services
1967-90

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.

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.

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.

A recommendation that such a county-wide community college district be established in Imperial County was submitted to the State Department of Education and was approved on July 10, 1959. The County Superintendent of Schools then set a date for an election at which all qualified voters residing within the boundaries of the seven high school and unified school districts were eligible to vote. The election was held on October 6, 1959;

and by an overwhelming vote of twelve to one, the Imperial Valley Junior College District was established. This was followed by the election of the members of the Junior College District Board of Trustees, one of whom comes from each of the seven high school or unified school districts represented in the area served by the Imperial Junior College District.

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

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

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

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

On January 13, 1971, the Board of Trustees 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 included a library, science laboratories, fine arts rooms, student activities building, academic classrooms, administration and faculty offices, social science rooms, physical education shower and locker rooms, and agricultural education classrooms and shop. The new campus opened in 1962.

A steady growth pattern began in April of 1967 with the addition of the multipurpose building. The building was designed to house sporting and theater events, and was comparable to any such community college structure in the State. Three other projects followed which were completed through community donations: The Janey Jackson Memorial Fountain, 1969; the renovation of the Holtville Train Depot, located in the cactus garden, 1971; and the Meyer Center for Business and Commerce. The Meyer Center was dedicated February 20, 1972, at ceremonies commemorating the 50th anniversary of the Imperial Community College District. Also recognized the same day was the opening of the archaeological museum at 442 Main Street in El Centro in buildings donated by H. P. Meyer and the new agriculture-welding complex. The museum was later named the Barker Museum, honoring Michael Barker, deceased. Mr. Barker was an IVC archaeology instructor.

Other building projects which followed were: Associated Students Activities Building, 1971; the new Library/Media Center, 1975, which was later named the Spencer Library Media Center, honoring Terrel Spencer, President Emeritus; the swimming pool complex, 1975; remodeling of

the Student Union and the cafeteria into the College Center complex, 1977; and the preschool, 1981, which was constructed off Highway 111 on a section of the campus named Rider Park, honoring Amos R. Rider, deceased. Mr. Rider served as the first custodian and maintenance supervisor at the new campus in 1961. Additionally, a modernization of facilities to remove architectural barriers to the handicapped was completed in 1982.

On September 17, 1982, ceremonies were held to commemorate the 20th anniversary of the beginning of class instruction. From less than one thousand students a year in the early sixties, the college now enrolls approximately five thousand students each year.

In 1987, the college celebrated its 25th anniversary at its current location by recognition ceremonies and programs relating to the signing of the U.S. Constitution two hundred years ago.

A 2.5 million dollar General Obligation Bond for IVC was approved by 73% of the voters in November, 1987. The monies developed by the Bond have allowed the college to do major campus refurbishing and other general improvements such as: Constructing and opening the Health Technologies Building in 1988; more than doubling the number of parking spaces; improving campus lighting; opening an off-campus center in El Centro for the External Campus program; providing a women's softball field; rejuvenating classrooms, the library, the college center, the counseling center, the print shop; doubling the size of the Meyer Center for Business and Commerce; and computerizing the energy control system.

With the completion of construction for the Childhood Education Center scheduled for 1991, the college is preparing to provide higher educational opportunities for the increasing number of students both on and off campus.

MISSION AND GOALS

The urban isolation experienced by Imperial Valley College has created the opportunity for the institution to become a leader in instituting a wide range of educational programs, services, and innovations.

In view of this privileged role, the over-riding mission of Imperial Valley College is to serve our community today and in the future. We are both a leader for new ideas and a servant fulfilling the population's needs. Our offerings must reflect community interests and also present new ideas that will be of significance in the years ahead.

To fulfill this mission, we must know our constituency well. It is a unique one with highly diverse interests and educational backgrounds. The area is predominantly agricultural with a large minority population, and statistically, it is a low economic sector with Imperial Valley College providing the best opportunity for advanced education and training for many of the residents.

As an educational institution, our primary responsibility is to offer high quality instruction with open access to all adults. Through our offerings, Imperial Valley College seeks to enrich the lives of our students, be it vocationally, academically, or avocationally. We must be sensitive to the individual and to

his/her needs, with the belief that educated people build a strong community.

Our offerings must extend outside of the classroom. Through counseling, special programs, presentations and services, Imperial Valley College strives to contribute to the lives of as many citizens of Imperial County as possible.

The goals for Imperial Valley College are as follows:

1. Provide quality teaching that is responsive and sensitive to the individuals served through the integrated efforts of all the staff. The college exists for the benefit of the student and our programs must be relevant to his/her needs.

PROCESS - Close communication between departments, personal contact between staff and students, input by community and staff at all levels of operation, accessibility of services and personnel, diverse programs designed for a diverse population, staff training and sharing of ideas.

2. Provide a quality vocational and professional education for students. A major emphasis at Imperial Valley College is to equip the student with marketable skills and to allow members of the work force to upgrade their skills.

PROCESS - Two-year degree programs, certificate programs with specific focus, continuing education courses.

3. Develop a well-rounded formal academic program. Imperial Valley College offers an associate degree program comparable to that offered by colleges throughout the United States.

PROCESS - Staff commitment to high standards and intellectual development, strong transfer program with lower division courses, developmental program to prepare students for the mainstream of college work with special attention to students whose native language is not English, preparatory classes and learning aids for students deficient in educational skills.

4. Provide enrichment and special interest programs. Education offers a means to expand horizons and grow intellectually and spiritually. These special offerings may form part of a program or be ends in themselves.

PROCESS - Short-term programs, continuous courses in the arts and culture, encouragement of student presentations and participation, flexibility of schedules and course loads.

5. Provide integrated support services for educational programs and student activities. Successful education is more than time in a classroom; it is an integrated experience.

PROCESS - Strong counseling program, laboratories that supplement class work, a full-time library, creative and supportive student activities personnel, open cooperation and communication between areas.

6. Provide services to the community at large. As a leading educational institution, Imperial Valley College recognizes a responsibility to go beyond the campus and the course.

PROCESS - Special cultural and informational presentations open to all, entertainment, availability of resources and facilities, exchange of ideas and information with community groups, wide publicity of events and services.

7. Maintain high standards through assessment, development, evaluation, improvement, and accountability. The commitment to excellence is an ongoing process. To fulfill its many responsibilities, our college must be current with its community and dedicated to improving its services.

PROCESS - Timely needs surveys and community input, encouragement of substantiated development, meaningful evaluations of all aspects of the college program and subsequent improvements, accountability in pursuing our goals efficiently.

8. Prepare students to make contributions, through knowledge, to the quality of life in the Imperial Valley. Education creates opportunities and makes choices possible. Improvement of self-concept heightens respect for others and for the environment. Ultimately, it builds a solid community, a strong nation, a better world.

PROCESS - Diverse offerings that serve the needs of our diverse community; honesty and respect for all involved, dedication to instilling high ideals and standards.

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 and other courses provide a 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. Thus students have an opportunity to begin their advanced education while still residing at home. Not only can this opportunity be of great financial assistance, but it offers an excellent transition between the high school campus and the large, often impersonal, four-year college campus. The intimate, though scholarly, atmosphere of the college; the opportunity for each student to know 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 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 goals and systematically includes those courses of study that will be of the greatest benefit.

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 to prepare 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 five programs designed with specific types of students in mind: students who can devote only evenings to school; students who cannot fully participate in regular classes on the main campus; students who can coordinate their college study with a program of employment; the outstanding high school 11th and 12th grade students who can profit by special work at the college level; and physically limited students.

1. The Evening College

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

Although evening college programs require more time to complete than the day programs, students find that with adequate planning and the assistance of a counselor, they are able to attain their higher education goals in a surprisingly short time.

2. The External Campus

The External Campus program provides Imperial County residents practical and convenient access to college courses for credit in all communities at approximately 98 locations. The network of centers throughout the district provides daytime and evening classes staffed by part-time faculty, members of the main campus faculty, and one counselor.

The goal of the off-campus program is to offer expanded delivery capability, flexibility, and quality instruction to the 14 communities comprising the Imperial Valley College District. These community-based classes help solve the problems of isolation experienced by Imperial Valley residents. All classes are scheduled in frequent cycles throughout the year in such areas as: Office Technician, Legal Assistant, Hospital Nursing Assistant, Emergency Medical Technician,

Microcomputer Operations, Spanish, ESL classes, Administration of Justice, and Fire Science.

Innovations include special training projects funded by the Private Industry Council for a variety of agencies in the County. Classroom facilities are made available through various agencies, churches, school districts, and San Diego State University, Imperial Valley campus.

3. Cooperative Work Experience

Cooperative Work Experience is a cooperative educational program between Imperial Valley Community College and community employers. The college provides the organization, the coordination of class facilities, and the personnel for the program. The employers provide places to work (work stations) and on-the-job training which has educational value for the students. The units of credit earned may be used to meet the requirements of a certificate or a degree.

4. Attendance of Local High School Students

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

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

Students must attend high school for the minimum school day.

Admission of 11th and 12th Grade High School Students

The president of any two-year community college may admit to the community college as a special part-time student any 11th or 12th grade high school student whose admission is recommended by the high school principal. A principal of a high school may recommend a high school student as a special part-time student pursuant to rules and regulations which may be adopted by the governing board of the district maintaining the high school. A principal of a high school shall not recommend a number of high school students in excess of 15 percent of the total number of 11th and 12th grade students enrolled in the high school at the time of recommendation.

The student is authorized attendance at community college as a special part-time student pursuant to this section and shall receive credit for community college courses completed in the same manner as if regularly enrolled at the community college unless, upon agreement between the two districts, the student receives high school credit for the course completed.

Each special part-time student shall attend high school classes for at least the minimum school day. (E.C. 76001)

Admittance of Pupil Who Has Completed 11th Grade to Summer Session: Crediting Summer Session Attendance

The president of any two-year community college may admit to the summer session of the community college as a special student any high school student who has completed 11th grade and whose admission to summer session is recommended by the principal of the high school in which the student completed the 11th grade. A principal of a high school may recommend such a student as a special student pursuant to rules and regulations which may be adopted by the governing board of the district maintaining the high school. A principal of a high school shall not recommend a number of students who have completed the 11th grade in excess of 5 percent of the total number of students in the high school who have completed the 11th grade immediately prior to the time of recommendation.

The attendance of a student at community college as a special summer session student pursuant to this section shall be credited to the district maintaining the community college for the purposes of allowances and apportionments from the State School Fund and the student shall receive credit for community college courses completed, in the same manner as if a regularly enrolled community college student. (E.C. 76002)

5. Disabled Student Programs and Services

The Disabled Student Programs and Services program is designed to provide supportive services to students with physical disabilities, learning disabilities, and health problems. The program provides preferential registration, counseling, class scheduling, tutoring, mobility assistance, interpreting, braille transcribing, adaptive physical education, special parking, and nursing assistance.

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 out-lined 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/she 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

Initial Membership: A person may attain initial membership if the person has:

1. Completed 12 units in a maximum of 3 semesters.
2. A cumulative grade point average of 3.25. No units acquired more than two years prior to application for initial membership shall be used.

Continuing Membership: An initial member may attain continuing membership by:

1. Achieving for the previous semester not less than 3.25 GPA in courses of recognized college standing,
OR
2. Maintaining a cumulative GPA of 3.25 or better in courses of recognized college standing.

Continuing members will receive one semester's grace for every semester of earning continuing membership. If the continuing member's GPA falls below 3.25 but remains above 2.5 (either per semester or cumulative), he/she may apply one semester's grace earned to maintain continuing membership for the semester the earned GPA would apply. There shall be no two consecutive grace periods.

Permanent Member: Any person who has completed a minimum of 60 units of recognized college courses with a minimum of 30 units completed at a community college who applies for permanent membership and who meets either of the following requirements:

1. A person who has maintained a cumulative grade point ratio of 3.5 or above in all recognized college work.
2. Any continuing member who has maintained a cumulative GPA of 3.25 or better in all recognized college work and has been a member of AGS, Inc., for a minimum of two semesters.

Any courses completed two years prior to application for permanent membership, whether at a community college or other institution of higher education, shall not be used to prohibit any person from becoming a permanent member.

FINANCIAL ASSISTANCE

Imperial Valley College believes that no student who has the ability to profit from instruction should be denied an education due to a lack of financial means.

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

The college participates in available federal financial aid programs.

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

Further information regarding financial assistance may be secured from the Financial Assistance Office located in the Counseling Center.

EXPENSES

All Fees and Tuition are due and payable at the time of registration. Registration in courses WILL NOT be finalized until the college has received full payment.

FEEES

Enrollment Fee

| | |
|--------------------|------------------|
| 10 units or more | \$50.00 |
| Less than 10 units | \$ 5.00 per unit |

Parking Fee

| | |
|-------------------------|---------|
| First vehicle | \$10.00 |
| Each additional vehicle | \$ 5.00 |

NOTE: Students enrolled solely in off-campus classes are not required to pay the parking fee.

EXPLANATION OF FEES

The Enrollment Fee mandated by the California State Legislature, with the approval of the Governor, requires all California Community Colleges to charge students an Enrollment Fee each semester. The legislature has also provided for financial assistance and fee waivers for low income students who cannot afford to pay this fee and who qualify according to State guidelines. Information for financial assistance and fee waivers can be obtained from the Financial Assistance Office.

The Parking Fee provides administrative and operating funds for parking and transportation-related facilities.

TUITION

Nonresidents and international students are required to pay tuition charges of \$96.00 per unit in addition to the fees outlined above.

The college will accept payment from nonresident and international students in cash, Western Union money orders, traveler's checks, and bank drafts. Personal checks cannot be accepted. Payment of nonresident and international student tuition cannot be deferred.

OTHER FEES/CHARGES

Nonsufficient Funds Check Charge

There will be a charge of \$10.00 for checks returned to the college because of insufficient funds.

REFUND POLICY

Upon completion of refund request form, reimbursement in full will be made for the following:

1. Fee or tuition collected in error
2. Fee or tuition for a discontinued class

A student refund request form must be completed and filed prior to the close of late registration in order to receive reimbursement for the following:

1. Enrollment Fee
2. Parking Fee
3. Tuition

PARKING PERMIT

ALL vehicles parked on campus must have a valid parking permit. If you will be bringing a vehicle to campus, please complete the vehicle registration form available in the registration packet.

ACCREDITATION

The college is officially accredited by the Accrediting Commission for Junior Colleges, Western Association of Schools and Colleges, American Welding Society, the State Department of Education, and the Commission on Peace Officers Standards and Training. Accreditation reports are available and may be reviewed at the office of the President. The University of California and other colleges and universities give full credit for transfer courses completed here.

COUNSELING AND GUIDANCE SERVICES

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 open between the hours of 8:00 a.m. and 8:00 p.m., Monday through Thursday, and 8:00 a.m. and 5:00 p.m. on Friday, during the school year. A Career Center is located in the Counseling Center and provides extensive vocational and career information.

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

STUDENT ACTIVITIES

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

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

BOOKSTORE AND COLLEGE CENTER

The college bookstore is maintained by the district through a lease arrangement with a private company. All college textbooks and necessary supplies are available. The College Center Building contains a snack and coffee bar that provides refreshments and meals for the students.

ATHLETICS

Intercollegiate competition is held in a variety of sports. IVC competes in the Pacific Coast Conference. The Pacific Coast Conference includes Grossmont, MiraCosta, Palomar, San Diego City, San Diego Mesa, and Southwestern Colleges.

LEARNING SUPPORTIVE SERVICES

Learning supportive services are designed to provide extensive programs for remediation and enrichment learning and to offer courses designed for the student to gain mastery of study skills and learning techniques. Tutorial assistance services are also available in the Learning Supportive Services Center, and the Imperial Valley College Tutors Club provides many academic enrichment activities for students interested as tutors. In addition, bilingual services exist for students with limited English-speaking ability and who desire academic assistance in lingual interpretation in their courses.

The Learning Supportive Services Center houses a variety of audiovisual equipment and media. It has an extensive inventory of slides, tapes, filmstrips, records, multimedia kits, and other instructional learning materials which supplement the broad subject range of courses offered on this campus. An extensive videocassette library has been developed which provides students with an opportunity to view educationally relevant television broadcasts and motion pictures.

REGULATIONS

ADMISSION

Admission to Imperial Valley College is governed by the laws of the State and such supplementary regulations as 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 requested to (1) ensure that an official transcript of all work taken in high school and/or institutions of higher education are on file in the Registration Office; and (2) complete the college placement tests (unless they have completed regular college courses in both English and mathematics).

All students are admitted under one of the following classifications:

1. High school graduates or equivalent certificates (General Educational Development or California High School Proficiency Examination)
2. Nongraduates of high school who are eighteen years of age.
3. High school students who are recommended by the high school principal for one to nine units of

work. (Must submit a Concurrent Enrollment Form.) Extracurricular participation is to be confined to the high school. These students must attend high school for the minimum school day.

4. College transfers who submit official transcripts (high school and college) may be granted advanced standing.
5. Prospective foreign students and students from other states may be accepted for enrollment. A tuition fee will be charged. Contact the Registration Office for current costs.

TRANSCRIPTS

Imperial Valley College furnishes two free transcripts. Thereafter, a fee of \$2.00 is charged for each additional transcript. Requests for transcripts will not be honored until all outstanding obligations to the College are met.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

All educational records of students who enroll at Imperial Valley College are kept in accordance with the provisions of the Family Educational Rights and Privacy Act of 1974.

The following information will be available in the Admissions and Counseling offices on each enrolled student: name, address, telephone, birthdate, registration number, list of classes and section numbers, instructors, units, room numbers, hours in which the student is enrolled, dates of attendance, enrollment date and completion/withdrawal date, activities participated in, and degrees awarded. Any student who does not wish his/her name included on this listing must file a petition requesting deletion from the list before the opening of the school term.

For additional information or a copy of the entire law, contact the Registration Office in the Administration Building.

AFFIRMATIVE ACTION POLICY

The District adopted an Affirmative Action Plan in 1973. The Plan was revised in 1979, 1981, 1985 and in 1990. The establishment and development of the Plan demonstrates the District's commitment to affirmative action and equal employment opportunities for all employees and prospective employees. The Plan is available in the Spencer Library Media Center, the Superintendent's office, and the Affirmative Action Officer's office.

NONDISCRIMINATION POLICY

Imperial Valley College does not discriminate in the admission nor in the offering of programs and activities because of race, color, religion, age, marital status, national origin, sex, or handicap.

The coordinator for Imperial Valley College's compliance with Section 504 of the Rehabilitation Act of 1973 is Melvin Wendrick, P.O. Box 158, Imperial, CA 92251, (619) 352-8320, Ext. 312, TTY (619) 355-4174. The Title IX officer for Imperial Valley College is Jan Magno, P.O. Box 158, Imperial, CA 92251, (619) 352-8320, Ext. 257.

RESIDENCE REQUIREMENTS

Under the Education Code, the general rule is that a student must pay nonresident tuition unless the student can qualify as a resident student or meet the requirements of certain special provisions. Since the concept of residence involves subjective intent, this catalog cannot anticipate every question that will arise in connection with determining whether such intent exists.

Each person enrolled in or applying for admission to a California Community College is, for the purposes of admission and tuition, classified as a "resident" or a "nonresident".

Students classified as a "resident" will be admitted without payment of nonresident tuition. Students classified as "nonresident" will be required to pay tuition in an amount set by the Governing Board.

1. A "resident" is a person who has resided within California for at least one year and a day prior to the term of enrollment.
2. A "nonresident" is a person who does not have residence in California for more than one year and a day prior to the term of enrollment.

The "Residence Determination Date" shall be that date immediately preceding the first day of class either semester or summer term.

Residency requires physical presence in California with an intent to make one's home here.

To determine a person's place of residence, reference is made to the following:

1. Every person who is married or 18 years of age, or older, and under no legal disability to do so, may establish residence.
2. There can be only one residence.
3. The residence can be changed only by the union of act and intent.
4. The residence of the parent with whom an unmarried minor child maintains his/her place of abode is the residence of the unmarried minor child. When the minor lives with neither parent, his/her residence is that of the parent with whom he/she maintained his/her last place of abode. The minor may establish his/her residence when both parents are deceased and a legal guardian has not been appointed.
5. The residence of an unmarried minor, who has a parent living, cannot be changed by his/her own act, by the appointment of a legal guardian, or by relinquishment of a parents' right of control, unless the student qualifies for the self-supporting exception.

Exceptions to the determination of residency as set forth above may be applied to certain factual situations. If students would otherwise be classified as nonresidents, but fit within one of the following exceptions, they may be granted resident classification until they obtain such classification.

1. Minors who remain in California after their parents have moved from the state, as long as the parents had been residents of California prior to the resident determination date.
2. Minors who have been self-supporting and in California for one year preceding the day before the term, will be granted resident classification.
3. Students who have not been adults for more than one year prior to the resident determination date, may add their pre-18-years-of-age residence to their post-18-years-of-age residence to obtain the durational requirements.
4. A child or a spouse of a member of the armed forces stationed in California will be granted resident classification. A person who is a member of the armed forces not assigned to California, for purposes of education, may be entitled to resident classification for a period of one year. During that year, the person must establish permanent California residence or the individual will be subject to nonresident tuition for any subsequent enrollment.
5. Adult aliens, present for one year and one day, will be given resident classification. Minor aliens may use the parents' durational presence to satisfy the one year and one day requirement.

Aliens who hold the following classification are to be able to establish residence using the same criteria as would be applied when evaluating any United States citizen:

- a. Career Diplomat Visa
- b. Fiance' Visa

6. 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.
7. A student who is an apprentice within the meaning of Section 3077 of the Labor Code, is entitled to resident classification.
8. 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.
9. A student may be classified as a district resident if he/she lives with a parent who earns a livelihood primarily by performing agricultural labor for hire in California and other states, and the parent has performed such labor in this state for at least two months per year in each of the two preceding years; the parent lives within the district which maintains the community college attended by the student; the parent claims the student as a personal dependent on his/her state or federal income tax returns, if he/she has sufficient income to have a personal income tax liability.
10. A student may be classified as a district resident if he/she earns a livelihood primarily by performing agricultural labor for hire in California and

other states, and he/she has performed such labor in this state for at least two months per year in each of the two preceding years.

No one factor is decisive; however, the institution may look for certain objective manifestations of subjective intent on the part of one asserting that residence status has been established, or has been maintained in spite of an absence from the state.

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, last year's state and federal income tax information, a current charge account or credit, or a checkbook.

The burden is on the student to demonstrate clearly both physical presence in California and intent to establish California residence.

A student who does not answer all of the questions on the Residence Questionnaire or on the Supplemental Residence Questionnaire, if one is used, may be classified as a nonresident.

STUDY LIST LIMITATIONS

A regular full-time program is 12 to 18 units. An average of 15 to 16 units must be taken to graduate in two years or four semesters.

The maximum load allowed for students is 18 units, including an activity course in physical education. Exceptions to this rule will be made by special permission of the administration (through the petition process) when there is clear evidence of successful scholastic performance.

A student who is currently enrolled in another school or college (including correspondence school or independent study) must report this enrollment to the Registration Office. The total number of units carried during a semester for all college work may not exceed the 18 unit limit.

SHORT-TERM CLASSES

Enrollment procedure for short-term classes are the same as for regular classes. However, listed below are items which pertain to short-term classes only and should be noted:

1. Students may enroll in short-term classes up to one-fifth of the way through the class.
2. The last day to drop a short-term class with a "W" grade is three-fifths of the way through the class.
3. Fees may be refunded up to one-fifth of the way through the class.
4. Units and grades for the student will be recognized for the semester in which the class ends.

Thus, if the class begins during the fall semester, crosses over and ends in the spring semester, the units and grades will be recorded for the spring semester.

CHANGES IN CLASS SCHEDULES

When registering, it is expected that a student's registration schedule shall not be completed on a trial basis; therefore, students are expected, at the time they file their registration, to make no further change. If a change must be made, students may add classes within a designated period at the beginning of each semester. Changes will be made by obtaining an add card and approval of the instructor and then filing with the Registration Office.

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.

An overall grade point average of 2.0 (C) or higher must be earned in all work undertaken.

1. GRADES

- A Superior
- B Better Than Average
- C Average
- D Below Average
- F Failing
- I Incomplete

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

An incomplete (I) grade, which is not made up by the end of the sixth week of the next regular semester, shall be converted to a letter grade. The letter grade shall be used in computing grade point average.

2. CREDIT GRADE

Certain courses designated by the appropriate divisions may be taken for a Cr grade. Students must declare their intentions to the instructor by the sixth week of the semester.

- a. Cr will reflect a letter grade of C or higher.
- b. NC will reflect incompleteness of a credit class.
- c. Cr grades are permissible in the student's major field at Imperial Valley College if permitted or allowed by the division or department.

- 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 taken on a credit basis may be applied toward a degree.
- f. The Cr grade will satisfy completion of prerequisite for sequence class.

3. WITHDRAWAL GRADES

W-Withdrawal

A student may withdraw from any course or from the college with a "W" grade by the end of the 14th week (or 75% of a term, whichever is less) of the semester by filing a drop card in the Registration Office. After the 14th week (or 75% of a term, whichever is less), a student may withdraw from any course, or from the college, but a letter grade must be assigned.

Any instructor may withdraw a student during the first fourteen weeks (or 75% of a term, whichever is less) for excessive absences or for disciplinary reasons.

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

| First 75% of class | "W" Grade |
|--------------------|-----------|
| Last 25% of class | "W" Grade |

All withdrawals are official after being processed by the Registrar's Office. Instructors may file a drop card with or without the student's signature through the 14th week (or 75% of a term, whichever is less) of the semester and it will be processed. Students will also have the opportunity to file a drop card through the 14th week (or 75% of a term, whichever is less) and it will be processed. A drop card filed by a student will be valid with or without the instructor's signature. If the instructor's signature does not appear, the instructor will be notified by the Registrar's Office.

Students may be allowed to withdraw from a class or classes in extenuating circumstances after the last day of the 14th week (or 75% of a term, whichever is less) by petition of the student or his/her representative after consultation with the instructor(s).

Extenuating circumstances are verified cases which are clearly beyond the control of the student; i.e., documented cases of serious accident, serious illness, or transfer of a student by military order.

4. PROFICIENCY ENROLLMENT

Once a student has completed a proficiency in a subject area with a satisfactory grade, he/she may not take a lower proficiency level in that subject area. For example: A student cannot enroll in English 2B after having successfully completed English 1A. (This does not apply to vocational refresher courses.)

5. REPEATED CLASSES

Procedure for Repeated Classes:

- a. A student wishing to repeat a class in which a grade of D or F was received must complete a NOTICE OF REPEATED CLASS CARD. This card must be returned to the Registrar's Office prior to the completion of the repeated class.

The Registrar's Office will process Repeated Class cards and approved Student Petitions so that grade, units, and grade points of the original class will not be used in computing total units and grade point averages.

- b. Under special circumstances, a student may repeat a course for which a grade of C or better has been recorded. Repetition of these courses is permitted through the Student Petition process. Grades awarded for courses repeated under this provision shall not be counted in calculating a student grade point average.

6. 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
- NC - 0 grade points per unit;
units not charged against the student
- I - 0 grade points per unit;
units not charged against the student
- W - 0 grade points per unit;
units not charged against the student

The grade point average is computed by dividing total grade points earned by total units attempted less Cr units. Thus, in any given semester, if the grade points earned total 28 and the total units attempted less Cr units equals 14, the grade point ratio is 2.00.

7. CREDIT BY EXAMINATION

An enrolled student may petition to take an examination in lieu of course work between the sixth and fourteenth weeks of each semester. A maximum of 25 units may be used toward graduation through this process. No more than 15 units per semester will be authorized. The fee will be \$20.00 per unit plus \$10.00 for administrative costs for each examination administered. The credit by examination petition is available in the Registration Office.

8. ADVANCED PLACEMENT - NURSING

Students with previous nursing education and/or work experience may be eligible for advanced placement in the nursing curriculum. Credit may be granted for previous general education courses taken within five years. General education courses taken longer than five years ago will be evaluated on an individual basis. Evaluation of all previous academic and work experience is done on an individ-

ual basis by the nursing faculty. Details are available in the nursing office.

9. MILITARY CREDIT

A Guide to the Evaluation of Educational Experiences in the Armed Services, American Council on Education is used to evaluate military school credit.

- a. Presentation of the DD214 (minimum of 180 days active duty to include basic training) to the Veterans Assistant may allow the veteran 4 units of credit for basic training in the military service of the United States of America (2 units for physical education and 2 units for health education).
- b. Additional military credit will be considered by petition and presentation of proper documentation.
- c. Total number of units of military credit is not to exceed 16.

10. CREDIT FOR UPPER DIVISION COURSE WORK

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

11. ACADEMIC RENEWAL

A policy to exclude substandard grades without repeating classes. A student may petition for Academic Renewal only once after a five year lapse of time and after completing 12 units with a 2.0 grade point average or higher.

Either substandard grades (D's or F's) or an entire semester may be excluded. A maximum of two semesters or 30 units may be disregarded. A counselor must be consulted to petition for Academic Renewal. Once Academic Renewal has been done, it may not be reinstated.

SEMESTER GRADE REPORTS

An end-of-the-semester grade report will be issued to the student by the Registration Office.

STUDENT CONDUCT

It is assumed that the entry of a student into Imperial Valley College constitutes the student's acceptance of the Standards of Student Conduct and the regulations published by the college. The Standards may be found in the Handbook for Faculty Advisors and Student Leaders, which is available in the Office of Student Life and Community Services.

ACADEMIC PROBATION

Academic Probation is a system of monitoring student progress in order to identify students who are experiencing difficulty in making satisfactory progress toward an appropriate educational objective, and providing special assistance to students in reassessing their educational objectives and guiding them to accomplish these goals.

Students who are placed on probation will be identified as early as possible at the termination of each semester and will be referred to the Counseling Center.

There are two types of Academic Probation:

Scholastic Probation

Any student who completes more than six units in any semester and earns less than a 2.00 grade point average will be placed on Scholastic Probation. A student will remain on Scholastic Probation until the student's grade point average is 2.00 or better.

Lack-of-Progress Probation

At the end of each semester, any student who has accumulated a recorded enrollment in 12 or more units may not receive more than 50 percent of those units in nonacademic grades (W, NC) and will be placed on Lack-of-Progress Probation until the completed units are 50 percent or more of the student's recorded enrollment.

PROVISIONAL STATUS

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

1. 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. Student is not a high school graduate.

Students on provisional status shall develop, with a counselor, a course of study commensurate with their ability. They are required to hold periodic conferences with a counselor and their program may be regulated by a counselor according to their aptitudes and achievement.

Provisional status is removed when students have successfully completed 12 units of work.

PETITION AND HEARING PROCESS

Formerly and currently enrolled IVC students are entitled to seek and receive responses to any questions related to their educational programs in accordance with the Imperial Community College District educational philosophy.

Petition Process

The petition process is used to request exceptions to the rules and regulations in order to meet the student's special needs or circumstances.

Petition Procedure

The student will use a petition form (available in the Registration Office and Counseling Center) and submit his/her request to the Registrar who will review the

request and provide a resolution. If the student is not satisfied with the resolution, a request may be made to the Registrar for a hearing before the appropriate committee.

Hearing Process

There are three established areas which may require hearing procedures for students and campus organizations seeking responses to educational questions or issues. These are:

1. Standards of Student Conduct
2. Access to Student Records and Challenge Procedure
3. Grievance Procedure Policy in Matters of Nondiscrimination

Hearing Procedure

Students and campus organizations are requested to summarize their concerns or issues in writing and submit them to the Registrar who is designated coordinator of the hearing procedures.

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 readmission be desired, the student's status will be the same as that of any other student who desires to add a class.

Regular attendance in all classes is expected of all students enrolled. Instructors are expected to take a student's attendance record into account in computing grades. A student may be excluded from further attendance in a class during any semester when 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 Registration Office for the procedures to be followed. (See "Withdrawal grades")

ACADEMIC DISMISSAL

Academic Dismissal is a system of forced interruption in attendance at Imperial Valley College in those instances where a student is unable to maintain satisfactory progress in achieving academic programs within the limit of available resources of the college.

Students are subject to the following two types of academic dismissal:

Scholastic Dismissal

Scholastic Dismissal occurs at the end of the Spring semester when a student has previously been placed on Scholastic Probation, and has a cumulative grade point

average of 1.75 or less in the last three consecutive semesters of enrollment. The dismissed student will not be allowed to enroll during the next semester or the current summer session (except by special approval upon petition to the Admissions, Registration and Petition's Committee).

Lack-of-Progress Dismissal

Lack-of-Progress Dismissal occurs at the end of the Spring semester when a student has previously been placed on Lack-of-Progress Probation, and has 50% or more of recorded enrollment of "W", "I", or "NC" in the last three consecutive semesters of enrollment. The dismissed student will not be allowed to enroll during the next semester or the current summer session (except by special approval upon petition to the Admissions, Registration and Petition's Committee).

ELIGIBILITY AND CERTIFICATION OF VETERAN ENROLLMENT

Imperial Valley College will certify students for Veteran Benefits who are not on Scholastic or Lack-of-Progress Dismissal status.

Students who have previously been placed on Scholastic Probation and have a cumulative grade point average of 1.75 or less in the last three consecutive semesters of enrollment and are eligible for certification of Veteran Benefits will be dismissed at the end of each semester as a veteran student (lose veteran certification) as required under Veterans Administration approval criteria regulations.

Students who have previously been placed on Lack-of-Progress Probation and have 50% or more of recorded enrollment of "W", "I", or "NC" in the last three consecutive semesters of enrollment will be dismissed at the end of each semester as a veteran student (lose veteran certification) as required under Veterans Administration approval criteria regulations.

PHYSICAL EDUCATION

Students under 21 years of age and registered for more than eight units shall be required to register and complete successfully a physical education activity class each semester for four semesters (a maximum of four P.E. activity classes is required).

Exemptions may be granted for:

1. Physical disability (medical excuse required)
2. Age, twenty-one or over
3. Postgraduate standing
4. Completion of basic or recruit training and 180 days active service in any of the Armed Forces of the United States

Students in physical education activity classes are required to dress appropriately. Appropriate dress for activity classes includes tennis shoes, shorts, sweat pants or jogging apparel, and tee shirts or a similar top for vigorous activity.

Students who fail to enroll or are dropped by their instructor from a physical education activity class will be required to reduce their class load to eight units or less.

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 be graduated under the catalog in effect at the time of initial enrollment provided a continuous enrollment status is maintained during each semester (excluding summer sessions).

GRADUATION REQUIREMENTS

ASSOCIATE DEGREES

Upon completion of the following requirements, students at Imperial Valley College will be granted the degree of 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 4th week of each semester and the 1st week of summer session. A \$10.00 nonrefundable fee must accompany the petition for graduation.

Additional Associate Degree(s) or Major(s) may be earned if the student completes those required courses and units beyond the prior degree(s) or major(s). Courses used in one major may be utilized in other majors as they apply. If a student breaks continuous enrollment, he/she will also be responsible for additional graduation requirements or required courses in the major as designated by the current catalog in effect.

The requirements for graduation represent State and institutional minimum general requirements as well as 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 their outlook, and contribute to the realization of the well-balanced whole person.

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 after the Courses of Instruction.

- A.S.-Administration of Justice
- A.S.-Agricultural Business Management/Transfer
- A.S.-Agricultural Engineering Technology
- A.S.-Agricultural Science/Transfer
- A.S.-Alcohol and Drug Studies
- A.A.-Anthropology
- A.A.-Art
- A.S.-Automotive Body Repair and Painting
- A.S.-Automotive Technology
- A.S.-Banking-Administrative Services
- A.S.-Banking-Credit Administration
- A.S.-Banking-General Operations
- A.S.-Banking-Secretarial

- A.A.-Behavioral Science
- A.S.-Bilingual-Bicultural Studies
- A.S.-Bus. Off. Tech.: Accounting Technician
- A.A.,A.S.-Bus. Off. Tech.: Administrative Secretary
- A.S.-Bus. Off. Tech.: Office Technician
- A.A.-Bus. Off. Tech.: Word Processing Technician
- A.A.,A.S.-Business Supervision
- A.A.,A.S.-Business Transfer
- A.A.-Cinematography
- A.A.,A.S.-Computer Information Systems
- A.A.,A.S.-Early Childhood Education
- A.S.-Engineering
- A.A.-English
- A.S.-Fire Science
- A.A.-Foreign Language
- A.A.,A.S.-General Business
- A.A.,A.S.-General Major
- A.A.,A.S.-General Science
- A.A.-Govern. Management Public Service Admin.
- A.S.-Graphic Arts
- A.A.-Humanities
- A.A.,A.S.-Individual Interdisciplinary
- A.S.-Journalism
- A.A.-Legal Assistant
- A.A.-Liberal Studies (Elementary Teacher Prep.)
- A.A.,A.S.-Life Science
- A.A.,A.S.-Marketing-Sales Technology
- A.A.,A.S.-Mathematics
- A.A.-Music
- A.S.-Nursing (Associate Degree-Registered)
- A.S.-Nursing (Licensed Vocational)
- A.A.-Patient Services Administration
- A.S.-Physical Education
- A.A.,A.S.-Physical Science
- A.A.,A.S.-Psychology
- A.A.-Real Estate
- A.S.-Recreation
- A.A.-Rehabil. Tech. for the Physically Limited
- A.A.,A.S.-Social Science
- A.S.-Water Treatment Technology
- A.S.-Welding Technology

II. UNITS, GRADE POINT AVERAGE, RESIDENCE AND FINANCIAL OBLIGATIONS REQUIREMENTS

- A. Sixty (60) units plus physical education, if required.
- B. Grade point average of 2.0 or better for all college work.
- C. Completion of a minimum of forty-five (45) units in residence, or completion of at least the last fifteen (15) units at Imperial Valley College.

In-residence units refer to those units taken at Imperial Valley College in which a student is enrolled, attends class sessions of one semester's duration, and receives a passing grade. Credit by examination, extension credits, military credits, and/or credit by petition do not qualify a student for in-residence units.

Units toward an Associate in Arts or Associate in Science degree at Imperial Valley College must be from a college or university which, at the time the units were completed, was accredited by one of the regional accredita-

tion agencies recognized by the most current COPA edition.

- D. Settlement of all financial obligations to the college.

III. INSTITUTIONAL REQUIREMENTS

- A. American Institutions (select one sequence)
 1. Hist 17A & Hist 17B
 2. Poly Sci 1 & Poly Sci 2
 3. Hist 17A & Poly Sci 1
 4. Hist 17B & Poly Sci 2
 5. Soc Sci 52
- B. Health Education: HE 1 or HE 3 (Veterans only)
- C. Physical Education, if required

IV. STATE COMPETENCY REQUIREMENTS

- A. Math Competency: Satisfactory score on Placement Test or Math 51
- B. Reading Competency: Satisfactory score on Placement Test or Eng 12B

V. GENERAL EDUCATION

A minimum of eighteen (18) semester units, including a minimum of three (3) semester units in each of the first three areas or divisions (a, b, c) and the same minimum in each part of d. The remainder of the unit requirement (3 units) is also to be selected from among these four areas or divisions (a, b, c and d) as determined by student's option.

A general education course may be used to satisfy both a general education requirement and a major requirement.

- a. Natural Science (3 units required)

- Ag 5 Man and His Environment
- Ag 14 Entomology
- Ag 40 Soils
- Anat 6 Human Anatomy & Physiology for Health Occupations
- Anat 8 Human Anatomy
- Anat 10 Human Anatomy & Physiology
- Anthro 1 Physical Anthropology
- Astron 21 Principles of Astronomy
- Bio 3 Principles of Biological Science
- Bio 21 General Microbiology
- Chem 1A General Inorganic Chemistry
- Chem 2A Introduction to Chemistry
- Env Sci 5 (also Ag 5) Man and His Environment
- Geog 1 Physical Geography
- Geol 1A Physical Geology
- Geol 11 General Geology: An Intro. to Geology
- Geol 12 Introduction to Historical Geology
- Geol 14 General Paleontology, Dinosaurs, Sabretooths and Man
- Nat Sci 51 Survey of the Earth Sciences
- Phy Sci 25 Introduction to Physical Science
- Phys 4A Principles of Physics
- Physio 1 Human Physiology
- Zool 1A General Zoology

b. Behavioral & Social Science (3 units required)

Ag 30 Food & Fiber in a Changing World
 ADS 9 Introduction to Counseling
 ADS 50 Human Services in a Changing Society
 Anthro 2 Cultural Anthropology
 Anthro 3A Introduction to Archaeological Site Surveying
 Anthro 3B Introduction to Archaeological Excavations
 Anthro 4 California Indians
 Anthro 6 Indians of North America
 Anthro 8 Indians of the Southwest
 ECE 20 Developmental Psychology of Children
 ECE 21 Early Childhood Socialization: Children, Family and Community
 ECE 22 Advanced Developmental Psychology and Observation
 ECE 27 Understanding Exceptional Children
 ECE 34 Infant/Toddler Development
 Econ 1 Principles of Economics
 Econ 2 Principles of Economics
 Geog 2 Cultural Geography
 Geog 3 Economic Geography
 Hist 30 Mexican and the American Southwest
 HR 9 Introduction to Counseling
 PL 1 Understanding Exceptional Students
 Poly Sci 3 Comparative Politics
 Poly Sci 14 Intro. to International Relations
 Psych 1A Introduction to Psychology
 Psych 1B Learning
 Psych 2 Biological Psychology
 Psych 3 Psychology of Adjustment
 Psych 4 Psychology of Human Sexuality
 Psych 5 Psychology of Effective Behavior
 Psych 9 Introduction to Counseling
 Psych 14 Abnormal Psychology
 Psych 17 Social Psychology
 Psych 20 Developmental Psychology of Children
 Psych 21 Early Childhood Socialization: Children, Family and Community
 Psych 22 Advanced Developmental Psychology and Observation
 Psych 27 Understanding Exceptional Students
 Psych 30 Psychology of Adolescence
 Psych 35 Developmental Psychology: Conception to Death
 Sociol 1 Introductory Sociology
 Sociol 2 Contemporary Social Problems
 Sociol 17 Social Psychology
 Sociol 33 Marriage and the Family
 Sociol 50 Human Services in a Changing Society

c. Humanities (3 units required)

Anthro 14 Primitive Art
 Art 3A/3B History & Appreciation of Art
 Art 4 History & Appreciation of Modern Art
 Drm Art 5A/5B History of World Drama
 Eng 1B Introduction to Literature
 Eng 41 Survey of American Literature
 Eng 42A/42B Survey of World Literature
 Eng 43A/43B Survey of English Literature
 +Eng 46A/46B The Mexican American in Literature
 Eng 47 Intro. to the Bible as Literature
 Eng 54 Intro. to Film History & Criticism
 Fr 1 Elementary French
 ***Fr 1A/1B Elementary French
 Fr 2 Elementary French
 ***Fr 2A/2B Elementary French

Fr 3 Intermediate French
 Fr 4 Intermediate French
 Fr 10 Intermediate Conversational French
 Fr 11 Intermediate Conversational French
 **Fr 20A/20B French Drama - Reading and Performance
 Ger 1 Elementary German
 Ger 2 Elementary German
 Hist 4A/4B History of Western Civilization
 Hum 1A/1B The Humanities & Western Culture
 Hum 25 Introduction to The Humanities
 Hum 26 The Humanities
 *Mus 17AD Chamber Singers
 *Mus 18AD Chamber Orchestra
 Mus 20A/20B History & Literature of Music
 Mus 30 Intro. to Music Literature & Listening
 Mus 31 Intro. to Twentieth-Century Music
 Phil 1A/1B Introduction to Philosophy
 Phil 11 Ethics
 Phil 25 Religions of the Modern World
 Ph 5 Introduction to Photography
 PL 10 Beginning Communication with the Deaf
 PL 11 Intermediate Communication with the Deaf
 PL 12 Advanced Communication with the Deaf
 Span 1 Elementary Spanish
 **Span 1A/1B Elementary Spanish
 Span 2 Elementary Spanish
 **Span 2A/2B Elementary Spanish
 Span 3 Intermediate Spanish
 Span 4 Intermediate Spanish
 **Span 5A/5B Beg. Conversational Spanish and Culture
 Span 20A/20B Bilingual Spanish
 Span 23 Bilingual Oral Spanish
 Span 25 Intro. to Spanish American Literature
 +Span 28A/28B The Mexican American in Literature
 +Span 42 Intro. to Mexican American Studies

d. Language and Rationality

1. English Composition (3 units required)
 Eng 1A Reading & Composition
 or
 Eng 2B Basic English Composition

2. Communication & Analytical Thinking (3 units required)
 Bus 15 Introductory Calculus with Applications
 Bus 26 Elementary Statistics
 CIS 1 Intro. to Information Systems
 CIS 10 Programming in Cobol I
 CIS 12 Programming in Basic
 CIS 14 Programming in Fortran
 Eng 11 Reading IV: Analytical & Critical Reading
 Eng 50 Advanced Composition
 Eng 52 Introduction to Linguistics
 Eng 53AB Creative Writing
 Eng 55 Intro. to Technical & Report Writing
 Jrn 1 Introduction to Journalism
 Math A Intermediate Algebra
 Math 2 Advanced Algebra & Trigonometry
 Math 3A Analytic Geometry & Calculus
 Math 10A Mathematics for Elementary School Teachers
 Math 12 Elementary Statistics

Math 15 Introductory Calculus with Applications
 Math 47 Programming in Fortran
 Math 57 Programming in Basic
 Math 58 Computer Programming in Pascal
 Phil 10 Logic
 Psych 13 Elementary Statistics
 Sp 1 Oral Communication

+Ethnic Studies Course
 *1 Unit Course
 **2 Unit Course
 ***2.5 Unit Course

CREDIT FOR CORRESPONDENCE AND EXTENSION COURSES

A student may petition to have a maximum of six units or 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 requirements must be met in order to attain full junior standing at a state university, the University of California, or other institutions 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 their Imperial Valley College work so that these requirements will be met. Additional information is available in the Counseling Center.

Transferable courses to the California State University system and/or the University of California system are indicated by (CSU, UC) following the catalog description. Students are advised to contact their counselor to determine which specific courses are applicable to their educational objective.

A student planning to transfer to the California State University system can, at their request, have the general education requirements certified by Imperial Valley College. In order to meet this certification, a student must complete thirty-nine (39) units of selected general education in one of five areas: English communi-

cation and critical thinking; physical universe and its life forms; arts, literature, philosophy, and foreign language; social, political, and economic institutions; and understanding life and self-development. With the certification of general education completed by Imperial Valley College, a student can transfer to a California State University assured that no further general education will be required in the lower division area.

The Specific General Education Pattern for the California State University system follows:

A. ENGLISH COMMUNICATION & CRITICAL THINKING (9 units)

1. Oral English (1 course required)
 Speech 1 (3)
2. Written English (1 course required)
 English 1A (3)
3. Critical Thinking (1 course required)
 Eng 11 (3) Phil 10 (3)
 Eng 50 (3) Speech 10 (3)

B. PHYSICAL UNIVERSE AND ITS LIFE FORMS (9 units with at least one lab course marked with an L)

1. Life Science (1 course required)
 Ag 14 (L) (3) Bio 3 (L) (4)
 Anat 8 (L) (4) Bio 21 (L) (5)
 Anat 10 (L) (5) Physio 1 (L) (4)
 Anthro 1 (3) Zool 1A/1B (L) (4-4)
2. Physical Science (1 course required)
 Ag/Env Sci 5 (3) Geol 11 (3)
 Ag 40 (3) Geol 12 (3)
 Astron 21 (3) Geol 12L (1)
 Chem 1A/1B (L) (5-5) Geol 13 (3)
 Chem 2A (L) (4) Geol 14 (3)
 Chem 5 (L) (4) Phys 4A/4B/4C (L) (4-4-4)
 Chem 12 (L) (5) Phys Sci 25 (L) (4)
 Geog 1 (3) Phys Sci 25 (L) (4)
 Geol 1A (L) (4)
3. Math (1 course required)
 Math 2 (5) Math 12/Bus 26/
 Math 3A/3B (5-5) Psych 13 (3-3-3)
 Math 4 (5) Math 15/Bus 15 (4-4)
 Math 10A/10B (3-3)

C. ARTS, LITERATURE, PHILOSOPHY, AND FOREIGN LANGUAGE (9 units selected from 3 subject areas)

- | | | | |
|------------------------|-----------|--------------|-----------|
| Art 3A/3B | (3-3) | Hum 1A/1B | (3-3) |
| Art 4 | (3) | Hum 25 | (3) |
| Drm Art 5A/5B | (3-3) | Hum 26 | (3) |
| Eng 1B | (3) | Mus 20A/20B | (3-3) |
| Eng 41 | (3) | Mus 30 | (3) |
| Eng 42A/42B | (3-3) | Mus 31 | (3) |
| Eng 43A/43B | (3-3) | Phil 1A/1B | (3-3) |
| Eng 45AD | (3) | Phil 11 | (3) |
| Eng 46AB/ Span 28AB | (3-3) | Phil 25 | (3) |
| Eng 47 | (3) | Span 1 | (5) |
| Eng 54 | (3) | Span 1A/1B | (2.5-2.5) |
| Fr 1 | (5) | Span 2 | (5) |
| Fr 1A/1B | (2.5-2.5) | Span 2A/2B | (2.5-2.5) |
| Fr 2 | (5) | Span 3 | (5) |
| Fr 2A/2B | (2.5-2.5) | Span 4 | (5) |
| Fr 3 | (4) | Span 20A/20B | (5-5) |
| Fr 4 | (4) | Span 23 | (3) |
| Fr 10 | (3) | Span 25 | (3) |
| | | Span 42 | (3) |

| | |
|------------|-------|
| Fr 11 | (3) |
| Ger 1 | (4) |
| Ger 1A/1B | (2-2) |
| Ger 2 | (4) |
| Hist 4A/4B | (3-3) |

D. SOCIAL, POLITICAL, AND ECONOMIC INSTITUTIONS (9 units)

1. American Institutions (6 units required - choose a sequence below)
 - a. Hist 17A/17B (3-3)
 - b. Poly Sci 1-2 (3-3)
 - c. Hist 17A/Poly Sci 1 (3-3)
 - d. Hist 17B/Poly Sci 2 (3-3)
2. Select one course from a subject area not completed in Part 1, Section D shown above

| | | | |
|----------|-----|-------------|-------|
| Ag 30 | (3) | Hist 30 | (3) |
| Anthro 2 | (3) | Poly Sci 3 | (3) |
| Anthro 4 | (3) | Poly Sci 14 | (3) |
| Anthro 6 | (3) | Psych 1A/1B | (3-3) |
| Anthro 8 | (3) | Psych 3 | (3) |
| Econ 1 | (3) | Soc 1 | (3) |
| Econ 2 | (3) | Soc 2 | (3) |
| Geog 2 | (3) | Soc 10 | (3) |
| Geog 3 | (3) | | |

E. UNDERSTANDING LIFE AND SELF-DEVELOPMENT (3 units)

| | | | |
|--------------|-----|----------|-----|
| HE 1 | (3) | Psych 16 | (3) |
| HR 8/Psych 8 | (3) | Psych 35 | (3) |
| Psych 4 | (3) | Soc 33 | (3) |

Transfer Credit

In state universities, 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, 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 courses used to complete the certificate.
3. File a certificate petition with the Registrar not later than the end of the fourth week of each semester and the first week of the summer session.

Certificates are offered in the following areas:

- Administration of Justice
- Agricultural Engineering Technology
- Agriculture Business Management
- Alcohol and Drug Studies
- Field Archaeology
- Automotive Body Repair and Painting
- Automotive Technology
- Banking
 - Administrative Certificate in Bank Operations
 - Credit Administration Certificate in Banking
 - General Certificate-Bank Service
 - Secretary Certificate-Bank Service
- Business Office Technologies
 - Accounting Technician
 - Administrative Secretary
 - Office Technician
 - Word Processing Technician
- Business Supervision
- Crop Science
- Early Childhood Education
- Electronics
- Emergency Medical Technician I
- Emergency Medical Technician II
- Fire Science
- Governmental Management Public Service Admin.
- Graphic Arts - Multi Media, Printing
- Health Assistant
- Home Health Aide
- Human Relations
- Information Systems
- Legal Assistant
- Library Technician - Basic
- Marketing-Sales Technology
- Nutrition Management-Dietary Manager
- Nutrition Management-School Food Services Manager
- Patient Services Administration Specialist
- Pharmacy Technician
- Real Estate
- Recreation
- Rehabilitation Technician for the Physically Limited
- Vocational Nursing
- Waste Water Technology
- Water Treatment Technology
- Welding
- Work Experience-Occupational

COURSES OF INSTRUCTION

CALIFORNIA ARTICULATION NUMBER (CAN)

The California Articulation Number (CAN) identifies some of the transferable, lower division, introductory (preparatory) courses commonly taught within each academic discipline on California college campuses.

The system assures that CAN courses on one participating campus will be accepted "in lieu of" the comparable CAN course on another participating campus. For example: CAN ECON 2 on one campus will be accepted for CAN ECON 2 on another participating campus.

The following courses at Imperial Valley College have been designated as CAN courses:

| CAN Course | IVC Course | CAN Course | IVC Course |
|-------------|------------|-------------|-------------|
| CAN Anth 2 | Anthro 1 | CAN H EC 14 | ECE 22 |
| CAN Anth 4 | Anthro 2 | CAN Hist 2 | Hist 4A |
| CAN Art 2 | Art 3A | CAN Hist 4 | Hist 4B |
| CAN Art 4 | Art 3B | CAN Hist 8 | Hist 17A |
| CAN Bus 2 | Bus 1A | CAN Hist 10 | Hist 17B |
| CAN Bus 4 | Bus 1B | CAN Math 18 | Math 3A |
| CAN Bus 6 | CIS 1 | CAN Math 20 | Math 3B |
| CAN Bus 8 | Bus 5A | CAN Math 22 | Math 4 |
| CAN Chem 2A | Chem 1A | CAN Math 34 | Bus/Math 15 |
| CAN Chem 4 | Chem 1B | CAN Phil 6 | Phil 10 |
| CAN Chem 6 | Chem 2A | CAN Phys 8 | Phys 4A |
| CAN Chem 12 | Chem 5 | Phys Seq B | Phys 4A+B+C |
| CAN Econ 2 | Econ 1 | CAN Psych 4 | Psych 1A |
| CAN Econ 4 | Econ 2 | CAN Soc 2 | Sociol 1 |
| CAN Engl 8 | Eng 43A | CAN Soc 4 | Sociol 2 |
| CAN Engl 10 | Eng 43B | CAN Stat 2 | Math 12/ |
| CAN Govt 2 | Poly Sci 2 | | Bus 26/ |
| CAN H EC 2 | NU 2 | | Psych 13 |
| CAN H EC 12 | Sociol 33 | | |

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

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 long-range program plans.

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.

Course descriptions followed by the notation (CSU, UC) indicate that the course is transferable to the California State University system, to the University of California system, or both. A student should contact his/her counselor to determine which courses are applicable to his/her educational objective.

The prerequisites for any course may be waived by the instructor and the Vice President for Academic Services.

Unless specifically exempted by statute, every course, course section or class, the average daily attendance of which is to be reported for state aid, wherever offered and maintained by Imperial Community College District, shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets such prerequisites as may be established pursuant to Chapter 11, Division 2, Part VI, Title 5 of the California Administrative Code commencing with Section 51820 (Board of Trustees Resolution No. 5682).

SUMMER SESSION (When Offered)

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.

ADMINISTRATION OF JUSTICE

**ADM JUS 21 (3)
INTRODUCTION TO THE ADMINISTRATION OF JUSTICE
3 Hrs. Lec.**

Prerequisite: Eng 2A or consent of the instructor. The course will cover the philosophy of Administration of Justice in America and identify its various subsystems. It will examine the roles and role expectations of criminal justice agents and their interrelationship in society. The concepts of crime causations, punishment and rehabilitation are introduced. This basic course provides a better understanding of the criminal justice system and orients the student to career opportunities. Ethnic, education and training for professionalism in the system are discussed. (CSU) (UC credit limited. See a counselor.)

**ADM JUS 22 (3)
POLICE FIELD OPERATIONS
3 Hrs. Lec.**

Prerequisite: Twelfth grade reading and writing level (recommended). The development, function and techniques of patrol; observation skills; development, traffic and preliminary investigative duties, handling complaints and requests for service, public and community relations and basic crime prevention. The mechanics of field interviews, search and arrests, notetaking and police report essentials. Familiarization with basic police equipment and handling of community crime incidents. (CSU)

ADM JUS 24 (3)
TRAFFIC CONTROL AND VEHICLE CODE
3 Hrs. Lec.

The study of traffic control and Vehicle Code problems. This course is designed to familiarize the student with the California Vehicle Code and interpret the various sections, thereby gaining and demonstrating the working knowledge of the Code. The student will demonstrate proper traffic control procedures as it relates to the Vehicle Code. (CSU)

ADM JUS 26 (3)
TRAFFIC ACCIDENT INVESTIGATION AND REPORTING
3 Hrs. Lec.

Prerequisite: Twelfth grade reading and writing level (recommended). This course is designed to provide the student with the basic knowledge required to investigate, interview, and complete a traffic accident report. Emphasis on investigation, interrogation, and report writing that is required by law enforcement officers in the course of their duties. (CSU)

ADM JUS 28 (3)
WILDLIFE LAW ENFORCEMENT
3 Hrs. Lec.

This course is designed to provide the students with the basic knowledge necessary to understand the importance of wildlife law enforcement as an essential tool of wildlife management in the perpetuating, protecting, and managing of fish, wildlife, and other natural resources. (CSU)

ADM JUS 29 (3)
REPORT WRITING FOR ADMINISTRATION OF JUSTICE
3 Hrs. Lec.

Prerequisite: Eng 2A or consent of the instructor. This course is designed to provide the student with a basic knowledge of how to conduct a successful preliminary investigation of a crime and how to recognize and record that information. Emphasis on practical aspects of report preparation and writing required by law enforcement officers in the course of their duties. Techniques of communicating facts, information and ideas effectively in a simple, clear and logical written form for use in the criminal justice system. (CSU)

ADM JUS 30 (3)
CRIMINOLOGY
3 Hrs. Lec.

This course explores the nature of crime, measurement and research of crime, the extent of crime, major theories of crime causation, criminal typologies, criminal justice system response to crime, and societal reaction to crime. (Same as Sociol 30) (CSU)

ADM JUS 31 (3)
CONCEPTS OF PROBATION AND PAROLE
3 Hrs. Lec.

A survey of the historical development of probation and parole from early court procedures through modern practices with an emphasis on the operation of probation and parole agencies in California including such topics as probation and parole laws and procedures. (CSU)

ADM JUS 33 (3)
CONCEPTS OF CRIMINAL LAW
3 Hrs. Lec.

Prerequisite: Eng 2A or consent of the instructor. The course covers the historical development of law and constitutional provisions; definitions and the classification 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 are presented. Crimes against persons, property, government crimes and organized crime are discussed. (CSU, UC)

ADM JUS 34 (3)
CRIMINAL INVESTIGATION
3 Hrs. Lec.

Fundamentals of investigation; techniques of crime scene recording and search; collection and preservation of physical evidence; modus operandi processes; sources of information; interview and interrogation; follow-up and case preparation. (CSU)

ADM JUS 35 (3)
LEGAL ASPECTS OF EVIDENCE
3 Hrs. Lec.

Prerequisite: Adm Jus 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. (CSU)

ADM JUS 36 (3)
PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM
3 Hrs. Lec.

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. (CSU, UC)

ADM JUS 37 (3)
JUVENILE CONTROL
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. (CSU)

ADM JUS 38 (3)
POLICE COMMUNITY RELATIONS
3 Hrs. Lec.

Through interaction and study, the student will become aware of the relationship and role expectations among the various agencies and the public. Emphasis will be placed upon professional image and the development of positive relationships between members in the criminal justice system and the public. Concepts of human relations as they apply to administration of justice issues, future trends, and training will be discussed. (CSU, UC)

ADM JUS 39 (3)
ARREST AND FIREARMS
3.1 Hrs. Lec.

Prerequisite: Eng 2B or above strongly recommended. Designed to satisfy the training standards set forth by the Commission on Peace Officers Standards and Training (POST) as required by Penal Code Section 832 for Peace Officers; includes laws of arrest, search and seizure, methods of arrest, discretionary decision making and, where applicable, use and care of firearms; mandatory for all peace officers who do not possess a basic certificate awarded by POST. Supply fee may be charged. (CSU)

ADM JUS 40 (.5-3)
ADVANCED OFFICERS COURSE
1 Hr. Lec.

Prerequisite: Permission of the instructor. This course is designed to permit law enforcement personnel to be trained and/or study relevant topics within the field of Administration of Justice. (May be repeated for additional credit with new content.) (CSU)

ADM JUS 43 (5)
RESERVE OFFICERS CLASS LEVEL II
5 Hrs. Lec.

Prerequisites: Eng 2B or higher. Satisfactorily pass Adm Jus 39 and POST examinations. A basic overview in condensed version designed to prepare a student to be accepted by a law enforcement agency as a Level II Reserve Officer.

ADM JUS 44 (4)
RESERVE OFFICERS CLASS LEVEL I
4 Hrs. Lec.

Prerequisites: Eng 2B or higher. Satisfactory completion of Adm Jus 39 and Adm Jus 43, including POST examinations. A basic overview course in condensed version designed to prepare a student to be accepted by a law enforcement agency as a Module C Reserve Officer.

AGRICULTURAL ENGINEERING TECHNOLOGY

AGET 28 (4)
POWER EQUIPMENT OPERATION AND MAINTENANCE
3 Hrs. Lec. 3 Hrs. Lab.

Selection, operation, adjustment and the maintenance of wheel and track type equipment commonly used in agriculture and industry. (CSU) (UC credit limited. See a counselor.)

AGET 33A (5)
FARM POWER
3 Hrs. Lec. 6 Hrs. Lab.

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

AGET 33B (5)
FARM POWER
3 Hrs. Lec. 6 Hrs. Lab.
Prerequisite: Aget 33A or 2 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. (Same as Auto Tech 55) (CSU)

AGET 34 (4)
POWER TRANSMISSION SYSTEMS
3 Hrs. Lec. 3 Hrs. Lab.

Theory of operation and maintenance of power transmitting devices, such as transmissions, clutches, hydrostatic drives, differentials, and drive trains used in both wheel and track type equipment. (CSU)

AGET 35 (3)
FLUID POWER
2 Hrs. Lec. 2 Hrs. Lab.
(Same as Auto Tech 57) (CSU)

AGET 37 (3)
SMALL GASOLINE ENGINES
2 Hrs. Lec. 2 Hrs. Lab.
(Same as Auto Tech 59) (CSU)

AGET 39 (4)
FUNDAMENTALS OF DIESEL POWER
3 Hrs. Lec. 3 Hrs. Lab.
The study of diesel engine theory, design, construction, and repair of heavy diesel power units. (CSU)

AGET 50 (1-3)
APPLIED MATHEMATICS
1-3 Hrs. Lec.
(Same as Auto Tech 50, Math 50, PL 50 and Weld 50) (Nondegree Applicable)

AGET 75 (3)
BASIC SHOP SKILLS
3 Hrs. Lec.
(Same as Auto Tech 75, Weld 75)

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 (3)
MAN AND HIS ENVIRONMENT
3 Hrs. Lec.
(Same as Env Sci 5) (CSU, UC)

AG 14 (3)
ENTOMOLOGY
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. (CSU, UC)

AG 15 (1)
PESTICIDE SAFETY
1 Hr. Lec.
Pesticide safety training for employees who handle and use chemical pesticides. (Nondegree Applicable)

AG 20 (3)
ANIMAL SCIENCE
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. (CSU, UC)

AG 21 (3)
FEEDS AND FEEDING
3 Hrs. Lec.
Prerequisite: Ag 20 or permission of the instructor. The basic principles of animal nutrition as they are applied to livestock feeding; the composition and use of feed stuffs 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. (CSU)

AG 22 (3)
INTRODUCTION TO AGRICULTURAL ECONOMICS
3 Hrs. Lec.

Introduction to the economic aspects of agricultural management. The role of agricultural resources in economic growth. Survey of trade, policy, and marketing activities of agriculture. (CSU)

AG 23 (3)
ANIMAL DISEASES
3 Hrs. Lec.

The symptoms, diagnosis and treatment of animal diseases. (CSU)

AG 24 (3)
HORSE HUSBANDRY
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. (CSU)

AG 25 (3)
AGRICULTURAL BUSINESS MANAGEMENT
3 Hrs. Lec.

Changes occurring in agriculture, careers in commercial agricultural business and public agricultural service agencies, development and growth of farm-related industries, kind of agricultural businesses, operational characteristics of commercial agricultural industries. (CSU) (UC credit limited. See a counselor.)

AG 26 (3)
AGRICULTURAL BUSINESS ORGANIZATION AND MANAGEMENT
3 Hrs. Lec.

Prerequisite: Ag 25. 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 investments, mortgage and working capital requirements, credit and collections, business with banks, failures and reorganization. Emphasis on California farm-related industries. (CSU) (UC credit limited. See a counselor.)

AG 27 (3)
AGRICULTURAL SALES AND SERVICE MANAGEMENT
3 Hrs. Lec.

Supervision of people who sell agricultural products and services. Selecting, training, directing and evaluating personnel. Methods of payment, use of advertising, pro-motion, incentives and service. (CSU)

AG 29 (3)
COMPUTER APPLICATIONS IN AGRICULTURE
2 Hrs. Lec. 2 Hrs. Lab.

Introduction to terminology, programs, and commands used in computer application programs as applied to agriculture business and production. (CSU)

AG 30 (3)
FOOD AND FIBER IN A CHANGING WORLD
3 Hrs. Lec.

Relationship of agriculture and natural resources to society. Where do our food and fiber come from? How does agriculture affect the dynamics of our society? What are the issues and opportunities in agriculture now and in the future? (CSU)

AG 32 (3)
IRRIGATION AND DRAINAGE
2 Hrs. Lec. 2 Hrs. Lab.

Prerequisite: Ag 40 or permission of the instructor. Fundamental principles and practices of irrigation. Soil-moisture relationships, water measurement, methods of irrigation, crop requirements, farm irrigation structures. Pumps and pumping and problems of the irrigation farmer. Land preparation and irrigation methods, problems of irrigation, crop requirements, farm irrigation structures including investigation of drainage problems. Types of drainage systems and layout of farm drains, and drainage requirements for land reclamation and irrigated agriculture. (CSU)

AG 36 (3)
AGRICULTURAL CONSTRUCTION
2 Hrs. Lec. 2 Hrs. Lab.

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

AG 38 (3)
POWER ELECTRICITY
2 Hrs. Lec. 2 Hrs. Lab.

Fundamentals of electric wiring; circuit layout and problems, motor and branch circuit protection, safe use of electricity, motor maintenance, wiring buildings and homes. (CSU)

AG 40 (3)
SOILS
2 Hrs. Lec. 3 Hrs. Lab.

Prerequisites: Math X and Chem 2A. Physical, chemical and biological properties of soils as related to agriculture. Principles of soil-plant interrelations; development of the soil as a natural body, soil moisture, effect of management practices on soil properties; composition, and use of fertilizers. (CSU, UC)

AG 41 (3)
FERTILIZERS
3 Hrs. Lec.

Prerequisite: Ag 40. The nature of fertilizers and soil amendments, their properties, methods of application, and reaction upon soils and plants. Composition, value and use of fertilizer materials and soil correctives. Methods employed in the manufacture, distribution, and application of fertilizers. (CSU)

AG 42 (4)
INTRODUCTION TO CROP SCIENCE
3 Hrs. Lec. 3 Hrs. Lab.

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

AG 43 (4)
FIELD AND CEREAL CROPS
3 Hrs. Lec. 3 Hrs. Lab.

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

AG 44A (2)
VEGETABLE GARDENING - COOL WEATHER
6 Hrs. Lab.

Organic and inorganic production in vegetable gardening. Cultural practices, harvesting, grading and processing,

marketing, disease and pest control of California vegetable crops. (CSU)

AG 44B (2)
VEGETABLE GARDENING - WARM WEATHER
6 Hrs. Lab.

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

AG 45 (3)
VEGETABLE PRODUCTION
3 Hrs. Lec.

Prerequisite: Ag 40 or permission of the instructor. Principles involved in seasonal truck crop production, including the scope, value, harvesting, packaging and marketing of the major truck crops grown in California. (CSU)

AG 46 (3)
ORNAMENTAL PLANT IDENTIFICATION AND MATERIALS
3 Hrs. Lec.

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

AG 47 (3)
NURSERY PRACTICES
2 Hrs. Lec. 3 Hrs. Lab.

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

AG 48 (3)
TREES, SHRUBS AND VINES
3 Hrs. Lec.

Selection, planting, training, pruning and cultural practices of trees, shrubs, and vines in California - including citrus and grapes. (CSU)

AG 49 (3)
WEEDS AND WEED CONTROL
3 Hrs. Lec.

Common and noxious weeds of California, their identification, life history, and control. Chemicals and equipment used for weed control on cultivated land, in irrigated ditches, on the range, and on wasteland. Poisonous weeds, their effects and prevention. (CSU)

AG 51A (1)
APPLIED CROP MANAGEMENT
1 Hr. Lec.

The study and evaluation of cropping, and harvesting methods and management practices during fall months. (CSU)

AG 51B (1)
APPLIED CROP MANAGEMENT
1 Hr. Lec.

The study of field management practices during spring months. (CSU)

AG 51C (1)
APPLIED CROP MANAGEMENT
1 Hr. Lec.

The study and evaluation of cropping methods and crop rotation practices. (CSU)

AG 51D (1)
APPLIED CROP MANAGEMENT
1 Hr. Lec.

The study and evaluation of cropping methods for the Imperial Valley. (CSU)

AG 65 (3)
CONTROL OF INSECTS AND OTHER PESTS
3 Hrs. Lec.

Identification and methods of control of principle insect, rodent, disease, and other pests of crops. Use of pesticide application equipment. Health hazards in use of pesticides.

ALCOHOL AND DRUG STUDIES

ADS 9 (3)
INTRODUCTION TO COUNSELING
3 Hrs. Lec.
(Same as HR 9/Psych 9) (CSU)

ADS 10 (3)
SOCIOLOGY OF MINORITY GROUPS
3 Hrs. Lec.
(Same as Sociol 10) (CSU, UC)

ADS 11A (3)
PRACTICUM
1 Hr. Lec. 6 Hrs. Lab. field experience per week
(Same as HR 11A/Psych 11A) (CSU)

ADS 11B (3)
PRACTICUM
1 Hr. Lec. 6 Hrs. Lab. field experience per week
(Same as HR 11B/Psych 11B) (CSU)

ADS 15 (3)
SOCIAL AND PSYCHOLOGICAL DYNAMICS OF DRUG USE
3 Hrs. Lec.
(Same as Psych 15/Sociol 15) (CSU)

ADS 50 (3)
HUMAN SERVICES IN A CHANGING SOCIETY
3 Hrs. Lec.
History, philosophy and the development of thought in social work. A content area designed to identify and analyze the primary helping services in urban and rural America. Observation and reporting techniques will be emphasized. This course will identify new programs and careers in the emerging Human Services field. (Same as Sociol 50) (CSU)

ADS 51 (3)
ALCOHOLISM: INTERVENTION, TREATMENT AND RECOVERY
3 Hrs. Lec.
This course will serve as an introduction to assessment and treatment approaches to alcoholism and drug abuse. Alcoholism will be studied in its social and clinical context. Attention will be given to the basic theoretical approaches to the disease. This course will examine the various components of intervention, treatment and recovery. (CSU)

ADS 52 (3)
PHYSIOLOGICAL EFFECTS OF ALCOHOL AND DRUGS
3 Hrs. Lec.

The course is designed to provide the student with information on the processing systems of the body and how they react to alcohol and drugs. This course will seek to explain where and how drugs act and why. The course will bring about an understanding of how drugs influence consciousness, mood, and feeling. It will enable students to understand that both the internal and external environments have important effects on the well-being of the individual. (CSU)

ADS 53 (3)
GROUP LEADERSHIP AND GROUP PROCESS
3 Hrs. Lec.

Prerequisite: ADS 9/Psych 9/HR 9. This course will introduce the student to group theory and process, and how groups affect the whole social scene. It will examine membership in and leadership of various kinds of groups, emphasizing group process. Consideration will be given to goals and strategies of social change and the necessity for social change in relation to personal and social values. The factors involved in problems of communications, effective emotional responses and personal growth also will be highlighted, emphasizing the group process as a means of changing behavior. (Same as Psych 53) (CSU)

ADS 54 (3)
FAMILY COUNSELING APPROACHES TO ALCOHOL AND DRUG ABUSE
3 Hrs. Lec.

A course designed to present basic ideas and theories about family dynamics, particularly as they apply to the family of the substance abuser, and to explore strategies for counseling the client's family. The approach is highly experiential in format and students will participate in exercises frequently to incorporate new skills and theory. (CSU)

ADS 55 (3)
CRISIS INTERVENTION AND REFERRAL TECHNIQUES
3 Hrs. Lec.

Prerequisite: ADS 9/Psych 9/HR 9 or permission of the instructor. Techniques used for brief therapy crisis intervention, intake interviewing and referral will be studied and practiced. Special attention will be given to the process of intervention, admitting, and recording of information as it pertains to alcohol and drug abuse clients. Through an experiential format, participants will learn and practice skills in brief therapy, different levels of client communication and intake interviewing. (Same as Psych 55) (CSU)

ADS 56 (3)
PROGRAM MANAGEMENT TECHNIQUES
3 Hrs. Lec.

This course will introduce students to basic management principles as applied to Substance Abuse programs. Topics will include funding, budgeting and policy development as well as issues related to staff selection, supervision and program evaluation. (CSU)

ADS 57ABCD (1-3, 1-3, 1-3, 1-3)
CURRENT ISSUES IN DRUG ABUSE
1-3 Hrs. Lec.

A variety of one-unit courses covering current, specialized areas in alcohol and drug abuse. As the field changes, the semester offerings will vary. Such topics as Women and Alcoholism, Alcoholism, Sexuality and Intimate Relationships, Cross-cultural Counseling Tech-

niques, Adult Children of Alcoholics, Substance Abuses and the Law, and Counseling the Adolescent Abuser will be included. (CSU)

ANATOMY

ANAT 6 (3)
ANATOMY AND PHYSIOLOGY FOR HEALTH OCCUPATIONS
3 Hrs. Lec.

Introductory study of the structure and function of the human organism. Class is structured for health occupation students. It is not acceptable for pre-medical, pre-dental, pre-chiropractic, pre-physical therapy or registered nursing students, and it is not open to students who have completed Anat 8 or Anat 10 with a grade of "C" or better.

ANAT 8 (4)
HUMAN ANATOMY

2 Hrs. Lec. 6 Hrs. Lab.
Prerequisite: High school biology with a grade of C or better or Zool 1A or Bio 3 or a current California LVN license. Systems of the human body and their interrelationships. (CSU) (UC credit limited. See a counselor.)

ANAT 10 (5)
HUMAN ANATOMY & PHYSIOLOGY
3 Hrs. Lec. 6 Hrs. Lab.

Prerequisites: One year of high school chemistry and biology or one semester each at the college level or a current California LVN license. A study of the structure and function of the human organism. Emphasis is on the circulatory, respiratory, excretory, nervous, reproductive, and digestive systems. (CSU) (UC credit limited. See a counselor.)

ANTHROPOLOGY

ANTHRO 1 (3) (CAN ANTH 2)
PHYSICAL ANTHROPOLOGY
3 Hrs. Lec.

The process and cause of human evolution; mankind's place in nature and the study of primates; the biological variability of living peoples and their genetic background. (CSU, UC)

ANTHRO 2 (3) (CAN ANTH 4)
CULTURAL ANTHROPOLOGY
3 Hrs. Lec.

A study of culture and its relationships to biology and to natural environment. Stresses the origin and evolution of culture, and the part that culture assumed in human biological maintenance. Examines types of social organizations and economic systems, religions and arts. (CSU, UC)

ANTHRO 3A (3)
INTRODUCTION TO ARCHAEOLOGICAL SITE SURVEYING
2 Hrs. Lec. 5 Hrs. Lab.

Historical development of archaeology and the importance of site surveying; archaeological theory - Middle Range Theory; methods in site surveying; types of sites; laboratory preparation; use and care of field equipment. (CSU)

ANTHRO 3B (3)
INTRODUCTION TO ARCHAEOLOGICAL EXCAVATIONS
2 Hrs. Lec. 5 Hrs. Lab.

Prerequisites: Anthro 3A and Anthro 3C. Determine a site to be excavated; laws pertaining to excavations; laying out a site with alidade and rod; testing; pit versus trench excavations; stratigraphy; record keeping;

screening and collecting; photography; preparation of laboratory and museum materials; pollen, soils, and C 14 tests. (CSU)

ANTHRO 3C (3)
ADVANCED ARCHAEOLOGICAL SURVEY
2 Hrs. Lec. 5 Hrs. Lab.

Prerequisite: Anthro 3A. Conduct independent surveys, or lead small survey crew; devise research designs; write reports from field notes, maps, photographs and prior records; conduct record and literature searches and catalogue specimens. (CSU)

ANTHRO 3D (3)
ADVANCED ARCHAEOLOGICAL EXCAVATIONS
2 Hrs. Lec. 5 Hrs. Lab.

Prerequisite: Anthro 3B. Design a field excavation project; select proper equipment; organize a field crew. Conduct record and literature searches; micromapping the project area; pit or trench technique; conduct the dig; screening, selecting, and bagging artifacts and natural samples. Laboratory analysis and curation; photography; dating; report writing are included. (CSU)

ANTHRO 4 (3)
CALIFORNIA INDIANS
3 Hrs. Lec.

The geography of California; tribal and linguistic regions; Native economy and diverse economic areas; Sacramento and San Joaquin Valleys; the Delta; transverse ranges; foothill country; Coast Range, Peninsular Ranges, and Sierra Nevada; the deserts. Influence of environment on cultural developments; influences of Western civilization on Native life. (CSU, UC)

ANTHRO 6 (3)
INDIANS OF NORTH AMERICA
3 Hrs. Lec.

Early migration across Beringia to the New World; demography and ecology of the Amerindian cultures in Alaska, Canada and the United States. Effect of European contact; reactionary movements today. (CSU, UC)

ANTHRO 8 (3)
INDIANS OF THE SOUTHWEST
3 Hrs. Lec.

Geography and ecology of the Southwest; Early man migrations; Desert culture; growing influence of Mesoamerica; development of Anasazi, Hohokam and Mogollon cultures. Classic civilizations and engineering feats. Decline and the origins of Zuni, Hopi, Navajo, and Apache cultures. (CSU, UC)

ANTHRO 16A (3)
PREHISTORIC CERAMICS
1 Hr. Lec. 2 Hrs. Lab.

Traces of origins and developments of ceramics in the Old and New Worlds. Emphasis on the materials, techniques and ceramic products of the Southern California Indians, especially the Lower Colorado River groups. (CSU)

ANTHRO 16B (3)
ADVANCED PREHISTORIC CERAMICS
1 Hr. Lec. 2 Hrs. Lab.

Prerequisite: Anthro 16A. Advanced study of prehistoric pottery composition and forms; various firing techniques using pit construction; decorative motifs used by the Yuman and Shosone cultures. (CSU)

ART

ART 3A (3) (CAN ART 2)
HISTORY AND APPRECIATION OF ART
3 Hrs. Lec.

A survey of the developments in art in painting, sculpture, architecture, and the minor arts from the birth of art to the Renaissance. (CSU, UC)

ART 3B (3) (CAN ART 4)
HISTORY AND APPRECIATION OF ART
3 Hrs. Lec.

A continuation of Art 3A extending from the Renaissance to contemporary times. May be taken before or concurrently with Art 3A. (CSU, UC)

ART 4 (3)
HISTORY AND APPRECIATION OF MODERN ART
3 Hrs. Lec.

Art 4 is a broad analytical survey of painting, sculpture and architecture from 1900 up to the present. Emphasis is placed upon the development of styles of painting and their relationship to each other. (CSU, UC)

ART 5 (3)
WOMEN ARTISTS
3 Hrs. Lec.

Prerequisite: Art 3A or 3B or 4. A survey of the great Women Artists of history from the Ancient World through the Twentieth Century. Some of the artists to be discussed are: Elizabetta Sirani, Judith Leyster, Elizabeth Vigee LeBrun, Mary Cassatt, Kathe Kollwitz, Frida Kahlo, Georgia O'Keeffe, Helen Frankenthaler. The course will also address the special issues and problems concerning the study of women artists, past and present. (CSU)

ART 18A (3)
WATERCOLOR PAINTING
2 Hrs. Lec. 4 Hrs. Lab.

The study of watercolor painting with emphasis upon color, composition and pictorial expression. Exploration of various techniques employing the medium of watercolor. (CSU) (UC credit limited. See a counselor.)

ART 18B (3)
WATERCOLOR PAINTING
2 Hrs. Lec. 4 Hrs. Lab.

Prerequisite: Art 18A. Continuation of watercolor painting. Stress is on achieving confidence and fluency in the medium. Students are encouraged to expand the range of the experience acquired to include other water-based media. (CSU) (UC credit limited. See a counselor.)

ART 20A (3)
DRAWING
2 Hrs. Lec. 4 Hrs. Lab.

A basic course in drawing involving analysis of line, form, tone, texture and color as essential media of expression. (CSU) (UC credit limited. See a counselor.)

ART 20B (3)
DRAWING
2 Hrs. Lec. 4 Hrs. Lab.

Prerequisite: Art 20A. A continuation of 20A. (CSU) (UC credit limited. See a counselor.)

**ART 21A (3)
PAINTING**

2 Hrs. Lec. 4 Hrs. Lab.

Prerequisites: Art 20A and 20B. A continuation of the development of composition and the various techniques employed in drawing and painting. Includes figure drawing, landscape, and still-life. Painting covers styles of painting from the Neo-classic to the present day. (CSU) (UC credit limited. See a counselor.)

**ART 21B (3)
PAINTING**

2 Hrs. Lec. 4 Hrs. Lab.

Prerequisite: Art 21A. A continuation of 21A. (CSU) (UC credit limited. See a counselor.)

**ART 22A (3)
DESIGN**

2 Hrs. Lec. 3 Hrs. Lab.

Fundamentals of design and composition; theory of color. Includes organization and utilization of basic elements through design problems. (CSU) (UC credit limited. See a counselor.)

**ART 22B (3)
DESIGN**

2 Hrs. Lec. 3 Hrs. Lab.

Intermediate studies of elements and principles of art with emphasis on three-dimensional design theory. (CSU) (UC credit limited. See a counselor.)

**ART 23A (3)
CERAMICS**

2 Hrs. Lec. 4 Hrs. Lab.

An introduction to ceramics; basic methods of forming, decorating, glazing and firing. (CSU) (UC credit limited. See a counselor.)

**ART 23B (3)
CERAMICS**

2 Hrs. Lec. 4 Hrs. Lab.

Prerequisite: Art 23A. A continuation of Art 23A with emphasis on the potter's wheel. (CSU) (UC credit limited. See a counselor.)

**ART 23C (3)
CERAMICS**

2 Hrs. Lec. 4 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. (CSU) (UC credit limited. See a counselor.)

**ART 25A (3)
LIFE DRAWING**

1 Hr. Lec. 5 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. (CSU) (UC credit limited. See a counselor.)

**ART 25B (3)
LIFE DRAWING**

6 Hrs. Lab.

Prerequisite: Art 25A. A continuation of Art 25A. Art 25B includes exploration of painting techniques using varied media. (CSU) (UC credit limited. See a counselor.)

ART 28 (3)

TECHNICAL CERAMICS

2 Hrs. Lec. 3 Hrs. Lab.

Prerequisite: Art 23C or permission of the instructor. A study of the raw materials used in compounding clay bodies and glazes. Specific problems of glaze calculations and techniques of glaze application. (CSU) (UC credit limited. See a counselor.)

ART 33 (3)

GALLERY DISPLAY

1 Hr. Lec. 4 Hrs. Lab.

Theories, techniques and practices of art gallery exhibition including experience in care and preservation of art and seeing an exhibition from beginning to end; methods of locating shows, booking shows, communicating with artists, unpacking and returning exhibitions. (CSU)

ART 40 (2)

EXPLORATION OF PAINTING TECHNIQUES

1 Hr. Lec. 2 Hrs. Lab.

An exploratory course which provides opportunities to work with the various painting techniques. Basic painting assignments to develop individual application of techniques. Initial exercises in color usage and structure of the painting. Suggestions and evaluation of student work will take place on an individual basis. (CSU) (UC credit limited. See a counselor.)

ASTRONOMY

ASTROM 21 (3)

PRINCIPLES OF ASTRONOMY

3 Hrs. Lec.

Prerequisite: Math X or equivalent with grade of "C" or higher. An introduction to the principles of astronomy including physical evolution, tools of the astronomer, the sky, the solar system, the stars, the galaxies, and the universe. (CSU, UC)

AUTOMOTIVE BODY AND PAINT

AUTO BODY 70 (5)

AUTO BODY REPAIRING AND PAINTING

3 Hrs. Lec. 6 Hrs. Lab.

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

AUTO BODY 71 (5)

ADVANCED AUTO BODY REPAIRING AND PAINTING

3 Hrs. Lec. 6 Hrs. Lab.

Prerequisite: Auto Body 70 or permission of the instructor. Covers auto body repairing and repainting. Use of modern tools and equipment, step-by-step procedures for handling typical jobs. (CSU)

AUTO BODY 72 (5)

AUTO AND LIGHT TRUCK MAJOR COLLISION REPAIRING

3 Hrs. Lec. 6 Hrs. Lab.

Prerequisites: Auto Body 71 and/or concurrently Weld 30 and Weld 32, or permission of the instructor. Covers major collision repair including extensive frame and undercarriage damage, using modern equipment with step-by-step procedures. (CSU)

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. Enrollment in automotive technology courses requiring a prerequisite is not allowed unless the prerequisite automotive technology course is passed with a "C" grade or better.

AUTO TECH 50 (1-3)

APPLIED MATHEMATICS

1-3 Hrs. Lec.

(Same as Aget 50, Math 50, PL 50 and Weld 50) (Nondegree Applicable)

AUTO TECH 51 (5)

ENGINE TECHNOLOGY

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. (Same as Aget 33A) (CSU)

AUTO TECH 52 (3)

MANUAL TRANSMISSIONS AND POWER TRAINS

2 Hrs. Lec. 3 Hrs. Lab.

Design, construction and mechanical function of clutches, manual transmissions, overdrives and power transmitting mechanisms. (CSU)

AUTO TECH 53 (5)

BRAKES AND SUSPENSION

3 Hrs. Lec. 6 Hrs. Lab.

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. (CSU)

AUTO TECH 54 (3)

CARBURETORS, FUEL INJECTION AND EXHAUST SYSTEMS

2 Hrs. Lec. 3 Hrs. Lab.

Advanced study of automotive fuel systems (carburetors, fuel pumps, intake manifolds, exhaust system and emission controls). Basic diagnosis and service procedures on systems. (CSU)

AUTO TECH 55 (5)

ADVANCED GASOLINE ENGINES AND LIGHT DUTY DIESEL ENGINE REBUILDING

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. (Same as Aget 33B) (CSU)

AUTO TECH 56 (3)

DIAGNOSTICS

2 Hrs. Lec. 3 Hrs. Lab.

Prerequisites: Auto Tech 54 and Auto Tech 60. Trouble shooting the various components of the automobile using various test instruments. To include the study and servicing of various automotive smog devices. (CSU)

AUTO TECH 57 (3)

FLUID POWER

2 Hrs. Lec. 2 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 Aget 35) (CSU)

AUTO TECH 58 (3)

AUTOMOTIVE AIR-CONDITIONING

2 Hrs. Lec. 3 Hrs. Lab.

The course is designed to impart knowledge and information needed by the student to enter and make progress in employment on a productive basis in the automotive air-conditioning service industry. (CSU)

AUTO TECH 59 (3)

SMALL GASOLINE ENGINES

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 Aget 37) (CSU)

AUTO TECH 60 (5)

ELECTRICAL, STARTING, CHARGING, IGNITION AND RELATED ELECTRICAL SYSTEMS

3 Hrs. Lec. 6 Hrs. Lab.

Advanced study of automotive electrical systems. Basic diagnosis and service procedures on the various systems. (CSU)

AUTO TECH 61A (5)

AUTOMATIC TRANSMISSIONS

3 Hrs. Lec. 6 Hrs. Lab.

Design, construction, mechanical and hydraulic function and repairs of the automatic transmission. (CSU)

AUTO TECH 61B (5)

ADVANCED AUTOMATIC TRANSMISSIONS

3 Hrs. Lec. 6 Hrs. Lab.

Prerequisites: Auto Tech 61A, Auto Tech 52, or one of the above with concurrent enrollment in the other. Advanced study using four major domestic and foreign automatic transmissions, with emphasis on practical rebuilding of automatic transmissions, including locking torque converters and 4-speed overdrive and front wheel drive transaxles. Applied shop practices for advanced students who wish to refine technical skills prior to obtaining employment in the industry. (CSU)

AUTO TECH 65 (3)

BASIC MACHINE SHOP TECHNOLOGY

2 Hrs. Lec. 3 Hrs. Lab.

A general course designed for students desiring to work in the various areas of automotive technology involving machine shop operations. Skill is developed in the operation of lathes, milling machines, drill presses, grinders, shapers, hand and bench tools, and heat treating. The proper use of materials, safety and care of equipment is emphasized. (CSU)

AUTO TECH 66 (3)

ADVANCED MACHINE SHOP TECHNOLOGY

2 Hrs. Lec. 3 Hrs. Lab.

Prerequisite: Auto Tech 65 or permission of the instructor. A course designed to develop advanced skills in the operation of lathes, milling machines, drill presses, grinders, shapers and sewing machines. The proper use of

materials, safety and care of equipment is included. (CSU)

AUTO TECH 75 (3)
BASIC SHOP SKILLS
3 Hrs. Lec.

This is a comprehensive course in tool usage, nomenclature and terminology of tools and equipment for the beginning student in the technologies. The course is for the student who has not developed a background in industrial technology, as well as for the bilingual student who wants to improve his/her technical vocabulary. (Same as Aget 75, Weld 75)

AUTO TECH 90ABC (3-3-3)
ADVANCED AUTO TECH SHOP PRACTICE
1 Hr. Lec. 4 Hrs. Lab.

Prerequisite: Successful completion of at least 14 units in automotive technology or permission of the instructor. Auto Tech applied shop practices is for advanced students who wish to refine technical skills prior to obtaining employment in the industry. (CSU)

BIOLOGY

BIO 3 (4)
PRINCIPLES OF BIOLOGICAL SCIENCE
3 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. (CSU) (UC credit limited. See a counselor.)

BIO 21 (5)
GENERAL MICROBIOLOGY
3 Hrs. Lec. 6 Hrs. Lab.

Prerequisites: One year each of high school chemistry and biology or one semester each at the college level or a current California LVN license. Provides students with fundamental concepts of the structure and physiology of nondisease and disease producing microorganisms with particular attention to bacteria. Basic techniques for culturing, staining, counting and identifying micro-organisms. Designed to meet the requirement to enter one of the medical fields as well as general education. (CSU, UC)

BIO 22 (4)
MICROBIOLOGY FOR ADVANCED PLACEMENT OF NURSING STUDENTS
2 Hrs. Lec. 6 Hrs. Lab.

Prerequisites: One year of high school chemistry and biology or one semester each at the college level or a current California LVN license. For students currently accepted for advanced placement by the IVC Nursing Department. Provides the student with fundamental concepts of the structure and physiology of nondisease and disease producing microorganisms with lesser emphasis on nondisease producers than Bio 21. Basic techniques for culturing, staining, and identifying bacteria. (Nondegree Applicable)

BUSINESS

BUS 1A (4) (CAN BUS 2)
PRINCIPLES OF ACCOUNTING
4 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Satisfactory score on the mathematics placement test or completion of Math 51 with a grade of C or better. Introduction to the theory, practice, and 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. (CSU, UC)

BUS 1B (4) (CAN BUS 4)
PRINCIPLES OF ACCOUNTING
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. (CSU, UC)

BUS 2 (3)
INTRODUCTION TO BUSINESS
3 Hrs. Lec.

A basic beginning college course that introduces U.S. business and industry. Includes the nature and importance of business, forms of business ownership, organization, management, finance, marketing, government and legal regulations, pricing and taxes. (CSU)

BUS 3 (3)
BUSINESS MANAGEMENT
3 Hrs. Lec.

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

BUS 4 (3)
PRINCIPLES OF MARKETING
3 Hrs. Lec.

A course of study designed to introduce students to the organization and operation of marketing activities, including the study of the marketing mix, markets, promotion and strategic planning. (CSU)

BUS 5A (3) (CAN BUS 8)
BUSINESS LAW
3 Hrs. Lec.

Course of study that covers the following areas of business law that relate to business: Sources and classification of the law, courts, and court procedures, crimes and torts, governmental regulation and administrative agencies, law of contracts, sales contracts under UCC, agency, and the legal forms of business organization. (CSU) (UC credit limited. See a counselor.)

BUS 5B (3)
BUSINESS LAW
3 Hrs. Lec.

Course of study that covers the following areas of business law that relate to business: Basic concepts of commercial paper, to include requirements, negotiability, holder rights, secured transactions, rights and duties of debtors and creditors, bankruptcy, real property, wills, trusts, and insurance. (CSU) (UC credit limited. See a counselor.)

BUS 6 (3)
MANAGEMENT CONCEPTS OF SUPERVISION
3 Hrs. Lec.

A study of supervisory management concepts that include definition of supervision and management, description of supervisory management functions and a supervisor's role in managing organizational resources, staffing, methods of performance appraisal, problem-solving and decision-making techniques, motivation, conflict resolution, compensation, leadership, communication, health and safety, training and development, labor relations, discipline, and how to cope with change. (CSU)

BUS 7 (3)
HUMAN RELATIONS IN MANAGEMENT
3 Hrs. Lec.

Study of Human Relations as they apply to management. Topics covered include model of organizational behavior, social systems and organizational culture, communications management, motivation, performance appraisal, employee attitudes and their effects, leadership and supervision, nature of participation, interpersonal dynamics, management of change, organizational development ethics, social responsibility, labor relations, equal employment opportunity, stress and counseling. (Same as HR 7) (CSU)

BUS 8 (2)
HUMAN RESOURCES MANAGEMENT
2 Hrs. Lec.

This course describes the critical issues facing human resource management professionals now and in the future and how to effectively deal with them. The critical areas of human resource management are to include personnel planning; staffing; appraising and compensating employees; employee training and development; career planning and career management programs; quality of work life and productivity; occupational safety and health; and employee rights and unionization are discussed. Case studies and experimental exercises are used to enhance the learning environment. (CSU)

BUS 10A (3)
PRACTICAL BOOKKEEPING
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 and accrual basis.

BUS 10B (3)
PRACTICAL BOOKKEEPING
3 Hrs. Lec.

Prerequisite: Bus 10A or permission of the 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 13 (3)
APPLIED BUSINESS LAW
3 Hrs. Lec.

A one-semester course covering courts and court procedures, contracts, sales contracts, bailments, negotiable instruments, agency and employment, partnerships, corporations, insurance and property. Not open to students who have completed Bus 5 or the equivalent.

BUS 14 (3)
PRACTICAL SALESMANSHIP
3 Hrs. Lec.

A practical approach to the study of salesmanship. Topics covered include an overview of personal selling and classification of sales jobs, the sales environment, the sales personality, the sales process, and other subject areas important to sales work such as understanding the firm and building good customer relationships. (CSU)

BUS 15 (4) (CAN MATH 34)
INTRODUCTORY CALCULUS WITH APPLICATIONS
4 Hrs. Lec.
(Same as Math 15) (CSU) (UC credit limited. See a counselor.)

BUS 19 (3)
PERSONAL DEVELOPMENT FOR EMPLOYMENT
3 Hrs. Lec.

A thorough study of the process and practice of obtaining employment in the business world. Designed to meet the special needs of students in the fields such as: Marketing-Distribution; Business Supervision; Secretarial-Clerical; Accounting-Bookkeeping; and Data Processing, etc. Skills development in the areas of job search, employer contact, resume writing, interviewing techniques, interview follow-up, proper dress, and job-holding practices. (CSU)

BUS 20 (3)
ELEMENTARY TYPEWRITING
2 Hrs. Lec. 3 Hrs. Lab.

Designed to impart the fundamental skills and knowledge of typewriting. The student is introduced to the basic concepts of typewriting production. (CSU)

BUS 21ABC (3-3-3)
PROFICIENCY-EXIT TYPEWRITING
1 Hr. Lec. 4 Hrs. Lab.

Prerequisite: Bus 20 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 21B may be taken by those students who do not attain office-level proficiency in Bus 21A. Bus 21C may be taken by those students who do not attain office-level proficiency in Bus 21B. (CSU)

BUS 22A (3)
WORD PROCESSING
2 Hrs. Lec. 3 Hrs. Lab.

Prerequisite: Ability to type 40 wpm, Bus 40, or permission of the instructor. Designed to teach students to use various word processing equipment and software including the minicomputer, microcomputer, and machine transcription equipment. (CSU)

BUS 22B (3)
WORD PROCESSING
2 Hrs. Lec. 3 Hrs. Lab.

Prerequisite: Bus 22A, ability to type 40 wpm, or permission of the instructor. The course is designed to develop skills in the advanced functions of word processing. Using the advanced functions, the student will develop the skills to complete the cycle of creating, editing, and printing a document on the mainframe computer and the microcomputer. Communication skills including proofreading, grammar, spelling, and acceptable formatting will be emphasized in the course. (CSU)

BUS 23 (3)
OFFICE MACHINES

2 Hrs. Lec. 3 Hrs. Lab.

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

BUS 24 (3)
RECORDS MANAGEMENT

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. (CSU)

BUS 25 (3)

KEYBOARDING: SPEED AND ACCURACY

2 Hrs. Lec. 3 Hrs. Lab.

Prerequisite: Bus 20 or the ability to type 20 net words per minute. An individualized diagnostic, prescriptive method of developing accuracy and speed. Emphasis is placed on development of keyboarding speed and accuracy ratings between 20-90 net words per minute. (CSU)

BUS 26 (3)
ELEMENTARY STATISTICS

3 Hrs. Lec.

(Same as Math 12 and Psych 13) (CSU, UC)

(CAM STAT 2)

BUS 27AC (1-3, 1-3, 1-3)
BUSINESS MICROCOMPUTER SOFTWARE

1-3 Hrs. Lec.

These variable-length course(s) are designed to meet the occupational needs of those who will be using microcomputers. It provides modeling/interactive instruction in use of the computer operation software and business application software; such as, electronic spreadsheets, data management, word processing, graphics and fundamentals of dBASE language-derived programs.

BUS 28A (3)
CERTIFIED PROFESSIONAL SECRETARY I

3 Hrs. Lec.

Prerequisite: Must key 50 characters per minute, Bus 39 or permission of the instructor. This course provides the opportunity to learn about and experience, in mock form, the first three sections of the Certified Professional Secretary examination. Discussion of eligibility requirements, efficient test-taking principles, the application process, and study aids will be part of the course. (Nondegree Applicable)

BUS 28B (3)
CERTIFIED PROFESSIONAL SECRETARY II

3 Hrs. Lec.

Prerequisite: Must key 50 characters per minute, Bus 39 or permission of the instructor. This course provides the opportunity to learn about and experience, in mock form, the second three sections of the Certified Professional Secretary examination. An overview of the Certified Professional Secretary exam will include fees, eligibility requirements, test dates and sites, preparation for the exam and organization for study. (Nondegree Applicable)

BUS 31AB (3-3)
SHORTHAND THEORY-SPEEDBUILDING

2 Hrs. Lec. 3 Hrs. Lab.

Prerequisite: Ability to keyboard 20 wpm or concurrently enrolled in Bus 20. A basic course in Gregg Shorthand. Theory and dictation practice. Designed for the needs of professional secretaries. (Formerly Bus 31) (CSU)

BUS 32AB (3-3)
DICTATION & TRANSCRIPTION LAB

1 Hr. Lec. 4 Hrs. Lab.

Prerequisites: Ability to keyboard 30 wpm or concurrently enrolled in Bus 21AC, Bus 31 or one year of high school shorthand. Minimum dictation rate of 60 wpm. Review of theory with increasing emphasis on dictation and transcription speed building to produce mailable copy of business dictation. (CSU)

BUS 39 (3)
OFFICE PROCEDURES

2 Hrs. Lec. 3 Hrs. Lab.

Prerequisite: Bus 21AC or the ability to type 50 wpm. An integrated course oriented toward 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. (CSU)

BUS 40 (3)
GRAMMAR AND USAGE

3 Hrs. Lec.

A review of the parts of speech, the structure of the sentence, and punctuation. Exercises to improve English usage will begin with the writing of various sentence types and progress to the writing of single descriptive and expository paragraphs. Concurrent enrollment in Bus 41 and/or Eng 2AB is strongly recommended. Satisfies part of the graduation requirement in the area of office technology.

BUS 41 (3)
ESSENTIALS IN BUSINESS CORRESPONDENCE

2 Hrs. Lec.

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

BUS 42 (3)
BUSINESS COMMUNICATIONS

3 Hrs. Lec.

Prerequisite: Keyboarding skills. This course will teach the skills and strategies necessary to be an effective business communicator in both writing and speaking. Written and oral assignments regarding memorandums, letters, and reports for business will be required. (CSU)

BUS 43 (3)
BUSINESS CORRESPONDENCE IN SPANISH

3 Hrs. Lec.

Recommended for bilingual students with Bus 42 or equivalent. Practice in letter form and style, business vocabulary, spelling, and punctuation. Emphasis on differences and similarities in English and Spanish business correspondence. (CSU)

BUS 44 (1-2)
BUSINESS COMMUNICATION SKILLS

1-2 Hrs. Lec.

Designed to upgrade business communication skills needed in today's high-tech business office. Emphasis on creating written assignments with clear, concise business vocabulary, appropriate grammar, and standard formats.

BUS 51 (2)
MICROCOMPUTER KEYBOARDING

1 Hr. Lec. 2 Hrs. Lab.

Designed to impart the fundamental touch operation of the alphabetic, numeric, and 10-key keyboards. The course helps students reach optimum skill within a limited amount of time in the efficient use of computer terminals, information processors, and microcomputers. (CSU)

BUS 66 (.5)
EFFECTIVE CUSTOMER SERVICE

.5 Hr. Lec.

This course is designed to develop the student's skills in understanding and dealing with customers in a variety of customer service situations. Class discussion focuses on the principles of effective customer service, generating positive customer relations, customer behavior styles, employee coping strategies, communication techniques, dealing with angry customers, and effective telephone techniques. Case studies, simulations, video presentations, and diagnostic instruments are used to supplement class discussion. (Nondegree Applicable)

BUS 80 (3)
MEDICAL TERMINOLOGY

3 Hrs. Lec.

(Same as HT 3) (CSU)

BUS 81 (3)
MEDICAL TRANSCRIPTION

2 Hrs. Lec. 2 Hrs. Lab.

(Same as HT 4) (CSU)

BUS 82 (3)
PATIENT INFORMATION SYSTEMS

2 Hrs. Lec. 2 Hrs. Lab.

(Same as HT 5)

BUS 83 (3)
MEDICAL INSURANCE

3 Hrs. Lec. 2 Hrs. Lab.

(Same as HT 6) (CSU)

BUS 84 (3)
PATIENT ADMINISTRATION SERVICES

3 Hrs. Lec.

(Same as HT 7) (CSU)

BUS 85 (2)
MANAGEMENT OF PATIENT SERVICES

2 Hrs. Lec.

(Same as HT 8) (CSU)

BUS 86 (3)
ADVANCED MEDICAL TRANSCRIPTION

2 Hrs. Lec. 2 Hrs. Lab.

(Same as HT 11) (CSU)

BUS 89 (3)
LAW OFFICE PROCEDURES AND PRACTICES FOR SECRETARIES

3 Hrs. Lec.

Practical instruction and exercises for secretaries. Emphasis on forms of pleadings; procedures for various actions (civil procedure, real estate, probate and conservatorships, family law); the law library and legal research; dictation of legal documents. (CSU)

BUS 90 (3)
REAL ESTATE PRINCIPLES

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. (CSU)

BUS 91 (3)
REAL ESTATE PRACTICES

3 Hrs. Lec.

Course of study that covers the following topics: Real Estate Industry, Elements and Relationships of Real Estate Agency, Organization of Real Estate Office, Prospecting Methods and Listings Development, Basic Selling and Advertising Techniques, Preparation and Content of Real Estate Purchase Contract, Escrow and Title Insurance, Elements of Real Estate Financing, Sources of Funds, Taxation, Appraisal and Valuation, Property Management and Leasing, Real Estate Investment, and Specialized Transactions. (CSU)

BUS 92A (3)
LEGAL ASPECTS OF REAL ESTATE

3 Hrs. Lec.

Prerequisite: Bus 90 or employment in the real estate field as a licensee. A practical study of California Real Estate Law that includes: classes and elements of real property, laws of fixtures, land titles estates, and other interests in real property, methods of ownership of real property, acquisition and transfer of real property, land descriptions, contracts for the sale of land. Liens, restrictions on the use of property, leases, rights, duties and responsibilities for real estate brokers, consummation of transactions, probate proceedings, and rights and duties of adjoining owners. (CSU)

BUS 93 (3)
REAL ESTATE FINANCE

3 Hrs. Lec.

Prerequisite: Bus 90 or employment in the real estate field as a licensee. A practical study of Real Estate Finance that includes: Mortgage Money Market, Mathematics of Real Estate Finance, Financial Statement Analysis, Legal Aspects of Real Estate Finance, Loan Applications, Appraisal, Financing Institutions, Construction Financing, Tax Ramifications, Financing of Shopping Centers, Office Buildings, and Alternative to Mortgage Financing. (CSU)

BUS 94A (3)
REAL ESTATE APPRAISAL

3 Hrs. Lec.

Prerequisite: Bus 90 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. (CSU)

BUS 95 (3)
REAL ESTATE ECONOMICS
3 Hrs. Lec.

Prerequisites: Bus 90, 91, and 92A, recommended Bus 93 and 94A. 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. (CSU)

CHEMISTRY

CHEM 1A (5) (CAN CHEM 2)
GENERAL INORGANIC CHEMISTRY
3 Hrs. Lec. 6 Hrs. Lab.

Prerequisite: High school algebra or satisfactory score on the math placement exam, high school chemistry, Chemistry 2A or equivalent. Basic principles and calculations of chemistry with emphasis on stoichiometry and dimensional analysis applied to various problem types. Fundamental principles and theory of atomic and molecular structure as related to type of bonding and molecular geometry. Study of kinetic molecular theory and the first law of thermodynamics, periodic relationships of elements, physical states of matter, solution chemistry, oxidation-reduction, introductory kinetics, and equilibrium studies are also investigated. The laboratory is an introduction to classical experimentation and how it applies to lecture topics as well as certain instrumental studies. (CSU, UC)

CHEM 1B (5) (CAN CHEM 4)
GENERAL INORGANIC CHEMISTRY
3 Hrs. Lec. 6 Hrs. Lab.

Prerequisite: Chem 1A with a minimum grade of C. Detailed study of the 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 and biochemical reactions. Laboratory exercises related to electrochemical studies and qualitative analysis. (CSU, UC)

CHEM 2A (4) (CAN CHEM 6)
INTRODUCTION TO CHEMISTRY
3 Hrs. Lec. 3 Hrs. Lab.

Prerequisite: Introductory high school algebra or its equivalent. Elementary principles of general and inorganic chemistry with an introduction to organic and biochemistry. Previous science background is not required. This course is recommended for students who need only a one-semester general chemistry course, and also for students entering paramedical and allied health fields. This course will satisfy the prerequisite for Chemistry 1A. (CSU) (UC credit limited. See a counselor.)

CHEM 5 (4) (CAN CHEM 12)
QUANTITATIVE ANALYSIS
2 Hrs. Lec. 6 Hrs. Lab.

Prerequisite: Chem 1B. Theory and practice of volumetric, gravimetric and electrochemical methods of analysis with an introduction to instrumental techniques of analysis. (CSU, UC)

CHEM 12 (5)
ORGANIC CHEMISTRY
3 Hrs. Lec. 6 Hrs. Lab.

Prerequisite: Chem 1A. A study of various reaction mechanisms as they pertain to both aliphatic and aromatic compounds. Stereochemical properties of compounds are investigated and related to structure. This course is intended for students majoring in chemistry, pre-medical and biology majors. (CSU, UC)

COMPUTER INFORMATION SYSTEMS

CIS 1 (3) (CAN BUS 6)
INTRODUCTION TO INFORMATION SYSTEMS
3 Hrs. Lec.

An introductory course designed to teach the basic understanding of computer information systems, to survey computer hardware and software. To give the student hands-on experience on common business applications and to introduce the student to programming. (Formerly Bus 50) (CSU) (UC credit limited. See a counselor.)

CIS 10 (3)
PROGRAMMING IN COBOL I
3 Hrs. Lec.

Prerequisite: CIS 1. 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. (Formerly Bus 52) (CSU) (UC credit limited. See a counselor.)

CIS 11 (3)
PROGRAMMING IN COBOL II
3 Hrs. Lec.

Prerequisite: CIS 10. A second semester course in electronic digital computer programming designed for student achievement of technological proficiency input and output devices, machine-aided coding, program optimizing, basic file maintenance, computer problem planning and report writing. (Formerly Bus 53) (CSU) (UC credit limited. See a counselor.)

CIS 12 (3)
PROGRAMMING IN BASIC
3 Hrs. Lec.

Prerequisite: CIS 1 recommended. A practical course covering the fundamentals of BASIC programming language as adapted to a variety of different applications. (Same as Math 57) (Formerly Bus 57) (CSU) (UC credit limited. See a counselor.)

CIS 14 (3)
PROGRAMMING IN FORTRAN
3 Hrs. Lec.

(Same as Math 47) (Formerly Bus 55) (CSU) (UC credit limited. See a counselor.)

CIS 21AC (1-1-1)
COMPUTER APPLICATIONS LAB
2 Hrs. Lab.

Corequisite: Enrollment in a course requiring computer support. A hands-on lab class which supports those courses requiring computer completed assignments. The student may be involved using word processing, programming, integrated software programs or decision support applications. (Formerly Bus 56AC) (CSU) (UC credit limited. See a counselor.)

CIS 22 (3)
MICROCOMPUTER OPERATIONS: BOOKKEEPING AND ACCOUNTING
2 Hrs. Lec. 2 Hrs. Lab.

Prerequisite: Bus 1A or Bus 10B or permission of the instructor. A practical course in which students will have an opportunity to utilize a variety of computerized financial software and to complete a "practice set" thereby gaining microcomputer bookkeeping and accounting skills. (Formerly Bus 58) (CSU)

CIS 23 (1)
MICROCOMPUTER OPERATIONS: HARDWARE AND SOFTWARE
1 Hr. Lec.

An introductory course designed to familiarize computer users with the basic microcomputer system components, essential disk operating system commands, and computer terminology. Additionally, the student will become acquainted with the types of software typically used on microcomputer systems. (Formerly Bus 59) (CSU)

CIS 25 (1)
MICROCOMPUTER OPERATING SYSTEMS: DOS
1 Hr. Lec.

Designed to familiarize computer users with the system software commands that control the computer. These commands cover management of internal communications, error checking, money usage, data storage, data retrieval, data deletion and device configuration. (CSU)

CIS 30 (1)
WORD PROCESSING: WORDPERFECT
1 Hr. Lec.

Prerequisite: 35 wpm typing speed. Hands-on practice with WordPerfect word processing software on the micro-computer.

CIS 35A (1)
SPREADSHEET: LOTUS 123
1 Hr. Lec.

Prerequisite: CIS 23 or permission of the instructor. A beginning course in the creation and use of spreadsheet applications as a management tool. "What is" analysis and graphic presentations will be presented. (CSU)

CIS 35B (1)
SPREADSHEET: LOTUS 123
1 Hr. Lec.

Prerequisite: CIS 35A or permission of the instructor. A sequence to the CIS 35A course. This course develops expertise in work sheet applications, teaches use of graphic presentations in work sheets, develops data base use in spreadsheets and develops use of functions and macros. (CSU)

CIS 40A (1)
DATA BASE: dBASE
1 Hr. Lec.

Prerequisite: CIS 1 or CIS 23 or permission of the instructor. A course designed to present the basic data base concepts and to have the student become acquainted with business data base applications and their implementation. (CSU)

DISABLED STUDENT PROGRAMS AND SERVICES

PL 1 (3)
UNDERSTANDING EXCEPTIONAL STUDENTS
2 Hrs. Lec. 2 Hrs. Lab.

Prerequisite: Psych 20/ECE 20 or Psych 1A. A psycho-educational approach to the study of exceptional students including physical, mental, emotional, sensory,

speech, and learning disabilities. Designed for parents, as well as for teachers and paraprofessionals working with exceptional students. Surveys the entire exceptional spectrum from gifted to retarded through observation, participation and lecture. Students will learn how to develop teaching strategies for all the exceptions. (Same as ECE 27/Psych 27) (CSU)

PL 2AB (2-2)
PRACTICUM EXPERIENCE TO WORK WITH THE PHYSICALLY LIMITED PERSON

1 Hr. Lec. 3 Hrs. Lab.

Prerequisites: PL 1 and completion or concurrent enrollment in Psych 1A or Psych 5 and Option A, B or C as indicated in the Rehabilitation Technician Major/Certificate, or by demonstrated competency. A course designed to extend the experience of Rehabilitation Technician majors who wish to explore a specific area of contact with physically limited individuals. Experience may be gained on the college campus or in the field with deaf, blind, or orthopedically handicapped individuals. This course may be repeated to provide experience in a second area. Course may be taken for credit or letter grade. (CSU)

PL 3 (1-6)
SURVEY OF CAMPUS LIFE FOR THE PHYSICALLY LIMITED
1-6 Hrs. Lec.

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. (CSU)

PL 4AB (2-2)
LIVING WITH A HEARING LOSS
2 Hrs. Lec.

A course designed to help reduce the communication barriers often present when a person has a hearing loss. The nature of each loss, the use of hearing aids, factors influencing lipreading ability, and problems arising from living with a hearing loss will be discussed. The course is designed specially for the mature person who has an acquired hearing loss.

PL 6ABCD (1-4, 1-4, 1-4, 1-4)
PERSONAL AND SOCIAL ADJUSTMENT FOR THE PHYSICALLY LIMITED

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.

PL 7ABCD (1-4, 1-4, 1-4, 1-4)
ACADEMIC SUPPORT SERVICES

2-8 Hrs. Lab.

This course is designed to provide academic support services to the physically limited and adaptive learning students who are taking classes in the area of natural science and math; behavioral and social science area; humanities, fine arts and foreign language area; English and speech area; and vocational-occupational area. In addition, the course is designed to assist students in developing their basic skills.

PL 8ABCD (1-4, 1-4, 1-4, 1-4)
COUNSELING AND GUIDANCE SUPPORT SERVICES
2-8 Hrs. Lab.

This course is designed to provide counseling and guidance support services to physically limited and adap-

tive learning students by means of diagnostic testing, assistance with vocational education classes, assessment of individualized progress, and personal, academic, and vocational counseling. Students are transitioned into college through assistance with registration, financial aid, career planning, and ultimately into employment and/or baccalaureate programs.

PL 10 (4)
BEGINNING COMMUNICATION WITH THE DEAF
5 Hrs. Lec.

An introduction to American Sign Language and Signed English designed to provide basic communication skill and increased awareness of the psychology of an individual with a severe hearing impairment. This course will include definitions of hearing loss, history of deaf education and culture, communication issues, and legal rights, as well as emphasizing vocabulary development, syntax and idiomatic expressions used by the "typical" deaf adult. (CSU)

PL 11 (4)
INTERMEDIATE COMMUNICATION WITH THE DEAF
5 Hrs. Lec.

Prerequisite: Completion of PL 10 with a "C" grade or higher, or permission of the instructor. Sign language vocabulary enrichment and fingerspelling drill to increase speed, accuracy and rhythm in expressive and receptive ability. Emphasis will be placed upon clarity of performance and appropriateness of vocabulary. Ethics, certification, role, and procedures of professional interpreting will be examined. Provides introductory sign-to-voice and voice-to-sign interpreting practice. (CSU)

PL 12 (3)
ADVANCED COMMUNICATION WITH THE DEAF
3 Hrs. Lec.

Prerequisite: Completion of PL 11 with a "C" grade or higher, or permission of the instructor. Continues development of interpreting/transliterating skills. Students will have directed practice in interpreting in a variety of communication situations. Techniques of facial expression, body movement, and spatialization as it relates to American Sign Language will be studied. (CSU)

PL 13ABCD (2-2-2-2)
COMMUNICATION WITH THE DEAF IN THE COLLEGE CLASSROOM
1 Hr. Lec. 2 Hrs. Lab.

Prerequisite: Completion of PL 12 with a "C" grade or higher, or permission of the instructor. Develops students' knowledge of interpreting in an educational setting. Directed study will be done of vocabulary, correct interpretation of idiomatic or technical terms, and problem solving in the interpreting process. Laboratory hours will provide practical application of sign-to-voice techniques and experiential development of sign-to-voice skills. (CSU)

PL 15A (4)
COMMUNICATION SKILLS FOR PL STUDENT
4 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Need for basic instruction based on placement tests and individual interview. A course at the beginning level for the Physically Limited student needing basic instruction in comprehension, vocabulary, sentence structure, and study skills. Emphasis will be on word attack, word recognition, comprehension, contextual clues, parts of speech, basic sentence structure, vocabulary building, and study skills related to

reading and writing communication. (Nondegree Applicable)

PL 15B (4)
COMMUNICATION SKILLS FOR THE PL STUDENT
4 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Successful completion of PL 15A with reading test scores below level required for an appropriate reading or writing class. A course at the beginning level for the Physically Limited student needing basic instruction in comprehension, vocabulary, sentence structure, and study skills. Emphasis will be on word attack, word recognition, comprehension, contextual clues, parts of speech, basic sentence structure, vocabulary building, and study skills related to reading and writing communication. (Nondegree Applicable)

PL 23ABCD (2-2-2-2)
TACTILE ART FOR THE PHYSICALLY LIMITED
4 Hrs. Lab.

This course is designed to enrich the aesthetic experience of the physically limited. Students will explore various art medias and methods.

PL 24ABCD (1-1-1-1)
GENERAL AND APPLIED MUSIC FOR THE VISUALLY HANDICAPPED
2 Hrs. Lab.

A course to provide experience with general music in terms of listening skills, elements, basic structure and style. Application of skills involving sensitivity to rhythm, pitch, sound and structure of music with individual and group participation in singing and in rhythmic accompaniment. Course designed for the visually handicapped.

PL 27ABCD (2-2-2-2)
CURRENT ISSUES
2 Hrs. Lec.

This course develops a set of skills that will improve the ability to comprehend, analyze and apply conversational techniques to current issues.

PL 33 (3)
INTRODUCTION TO AUDIOLOGY
3 Hrs. Lec. 1 Hr. Lab.

This course includes an introduction to the science of hearing, fundamentals of acoustics as they apply to audiometric testing, basic anatomy and physiology of the hearing mechanism, pathologies causing impaired hearing, interrelationship of hearing to speech and language development, and familiarization with audiologic assessment and clinical procedures. (CSU)

PL 34 (3)
AUDIOMETRY AND HEARING CONSERVATION
3 Hrs. Lec. 1 Hr. Lab.

Prerequisite: PL 33 recommended. This course includes identification audiometry, preschool hearing screening, industrial audiometry, and the role of the audiometrist, nurse-audiometrist and speech-hearing therapist in the total conservation of hearing program. (CSU)

PL 35 (.5)
COMPUTER ACCESS EVALUATION
1 Hr. Lab.

Prerequisite: A student must be eligible for services and instruction from the Disabled Student Programs and Services through appropriate verification of a primary disability by certificated personnel and be able to

benefit from the programs and services offered by the High Tech Center. This course is designed to help students with a disability or multiple disabilities, to understand their computer usage capabilities and to determine, through an instructor evaluation, the appropriate hardware and software. (Nondegree Applicable)

PL 36 (1)
ADAPTED KEYBOARDING
1 Hr. Lab.

Prerequisite: A student must be eligible for services and instruction from the Disabled Student Programs and Services through appropriate verification of a primary disability by certificated personnel and be able to benefit from the programs and services offered by the High Tech Center. This course is designed to teach keyboarding basics to disabled students who must use adaptive learning technologies for successful access to the keyboard or screen and/or unable to complete successfully in mainstream typing classes. (Nondegree Applicable)

PL 37 (3)
COMPUTER ACCESS I
2 Hrs. Lec. 2 Hrs. Lab.

Prerequisites: A student must be eligible for services and instruction from the Disabled Student Programs and Services through appropriate verification of a primary disability by certificated personnel and be able to benefit from the programs and services offered by the High Tech Center. PL 36 is required if a student does not have adequate touch typing skills (approximately 20 wpm). Designed for students with visual, physical, language impairment, learning disabilities or deafness. This course provides training in the use of computer access technologies which enhance a disabled student's ability to access and use microcomputers. (Nondegree Applicable)

PL 38 (3)
COMPUTER ACCESS II
2 Hrs. Lec. 2 Hrs. Lab.

Prerequisites: A student must be eligible for services and instruction from the Disabled Student Programs and Services through appropriate verification of a primary disability by certificated personnel and be able to benefit from the programs and services offered by the High Tech Center. Successful completion of PL 37 or instructor approval required. This course is designed for disabled students who have successfully completed Computer Access I. Students will enhance their computer access skills through the completion of assignments and/or projects. (Nondegree Applicable)

PL 39 (3)
COMPUTER ACCESS PROJECTS
4 Hrs. Lab.

Prerequisite: A student must be eligible for services and instruction from the Disabled Student Programs and Services through appropriate verification of a primary disability by certificated personnel and be able to benefit from the programs and services offered by the High Tech Center. Instructor permission is required. The course is designed for students with a disability who require access to specialized adaptive technologies in order to complete assignments for other classes in which they are concurrently enrolled. (Nondegree Applicable)

PL 50 (1-3)
APPLIED MATHEMATICS
1-3 Hrs. Lec.
(Same as Aget 50, Auto Tech 50, Math 50 and Weld 50)
(Nondegree Applicable)

DRAMATIC ART

DRM ART 5A (3)
HISTORY OF WORLD DRAMA
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. (CSU, UC)

DRM ART 5B (3)
HISTORY OF WORLD DRAMA
3 Hrs. Lec.

Covers the period from Ibsen to the present. Drm Art 5B may be taken before Drm Art 5A. (CSU, UC)

DRM ART 20AB (3-3)
FUNDAMENTALS OF ACTING
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. (CSU) (UC credit limited. See a counselor.)

DRM ART 21 (3)
INTERMEDIATE ACTING
2 Hrs. Lec. 3 Hrs. Lab.

Prerequisite: Drm Art 20AB. A continuation of Drm Art 20AB with further emphasis on fundamental acting skills. Laboratory hours to be arranged. (CSU) (UC credit limited. See a counselor.)

DRM ART 22ABCD (1-1-1-1)
REHEARSAL AND PERFORMANCE
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. (CSU) (UC credit limited. See a counselor.)

EARLY CHILDHOOD EDUCATION

ECE 20 (3)
DEVELOPMENTAL PSYCHOLOGY OF CHILDREN
3 Hrs. Lec.

A study of the developmental stages of children from conception through adolescence including the principle theories of development and their application. (Same as Psych 20) (CSU) (UC credit limited. See a counselor.)

ECE 21 (3)
EARLY CHILDHOOD SOCIALIZATION: CHILDREN, FAMILY AND COMMUNITY
3 Hrs. Lec.

Study of the child in the family and community in relation to social, cultural, economic, ethnic, and geographical influences on his/her growth and development. Community resources as they relate to the education, health, welfare, recreational and other activities of the child. (Same as Psych 21) (CSU)

ECE 22 (3) (CAN H EC 14)
ADVANCED DEVELOPMENTAL PSYCHOLOGY AND OBSERVATION
3 Hrs. Lec.

Advanced study of the principle theories of developmental psychology, including the study of assessment and observation as tools for understanding behavior and development. (Same as Psych 22) (CSU)

ECE 23 (3)
EARLY CHILDHOOD CURRICULUM I
3 Hrs. Lec.

A study of preschool curriculum and its application in the preschool environment. Students will learn to develop and write curriculum plans which incorporate developmental goals. Implementation of lesson plans at local preschools is required. (CSU)

ECE 24 (3)
EARLY CHILDHOOD CURRICULUM II
3 Hrs. Lec.

Advanced study and application of the preschool curriculum including techniques for enriching the preschool environment for creative expression. The value of play as an integral part of the preschool program and the use of interest centers and multicultural experiences for preschools is studied and applied in the preschool setting. (CSU)

ECE 25 (3)
FIELD EXPERIENCE
1.5 Hrs. Lec. 10 Hrs. Field Experience
Prerequisites: ECE/Psych 20, 21, 22 and 23. Supervised field work in an early childhood program under the direction of a Master Teacher and college supervisor. The students will learn to assess, develop and implement preschool curriculum in a supervised setting. (CSU)

ECE 26 (3)
PRINCIPLES OF PARENTING
3 Hrs. Lec.
This course is a study of the developmental tasks of parenting. It includes family dynamics, parenting skills, adjustment to new roles and family structures, values clarification and family communication. It is designed for parents, prospective parents and child care providers. (Same as Psych 26) (CSU)

ECE 27 (3)
UNDERSTANDING EXCEPTIONAL STUDENTS
2 Hrs. Lec. 2 Hrs. Lab.
(Same as Psych 27/PL 1) (CSU)

ECE 28 (3)
ADMINISTRATION AND SUPERVISION IN EARLY CHILDHOOD EDUCATION
3 Hrs. Lec.
Prerequisites: ECE 20, 21, 22, 23, 24, 25. This course incorporates basic management principles for preschools including curriculum development and implementation, personnel management, facility maintenance, budgeting, parent involvement, community relations, program evaluation and professional ethics. (CSU)

ECE 34 (3)
INFANT/TODDLER DEVELOPMENT
3 Hrs. Lec.
This course will cover the fundamental principles of prenatal and infant development from conception to age two. Emphasis is placed upon developing activities appropriate to the development level of the child based upon the student's understanding of infant/toddler

development. The course is designed for caregivers and parents. (CSU)

ECE 46 (3)
MULTILINGUAL AND MULTICULTURAL CURRICULUM FOR YOUNG CHILDREN
3 Hrs. Lec.

General introduction to life styles, values, and socio-economic conditions of children from multilingual families with special emphasis on ways in which these factors affect the teaching and learning process. Students are introduced to strategies, materials and resources designed to help them enhance the multilingual and multicultural experience of the children. (CSU)

ECE 48 (3)
ADVANCED MANAGEMENT FUNCTIONS FOR THE OPERATION OF AN EARLY CHILDHOOD CENTER
2 Hrs. Lec. 3 Hrs. Lab.

Prerequisites: ECE 20, 21, 22, 23, 24, 25. This course is designed for those who plan to be directors in any child care center, both public and private, in the state of California. Principles and practices of program planning, budgeting and personnel administration for agencies servicing children and families. (CSU)

ECONOMICS

ECON 1 (3) (CAN ECON 2)
PRINCIPLES OF ECONOMICS
3 Hrs. Lec.
An introduction to economic concepts and the principles of economic analysis. Emphasis on economic institutions, issues of public policy, and macroanalysis in national income, money and banking, and economic stabilization. (CSU, UC)

ECON 2 (3) (CAN ECON 4)
PRINCIPLES OF ECONOMICS
3 Hrs. Lec.
An introduction to economic concepts and the principles of economic analysis. Emphasis on economic institutions, issues of public policy, and microanalysis in the direction of production and the allocation of resources through the price-system. (CSU, UC)

EDUCATION

ED 1 (2)
INTRODUCTION TO EDUCATION
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. (CSU)

ELECTRICITY

ELECTRICITY 1 (3)
BASIC ELECTRICITY
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. (CSU)

ELECTRONICS

ELECTRO 1A (4)
BASIC ELECTRICITY AND ELECTRONICS
3 Hrs. Lec. 3 Hrs. Lab.
Prerequisite: Math X or equivalent with a grade of "C" or better. An introduction to the study of electricity and electronics. Basic theories of the physical phenomena involved in circuitry-related devices and measurement instruments. (CSU)

ELECTRO 1B (4)
ELECTRONICS
3 Hrs. Lec. 3 Hrs. Lab.
Prerequisite: Electro 1A with a grade of "C" or better. A continuation of Electronics 1A. Topics will include: semiconductor devices, amplifiers and solid state components. (CSU)

ELECTRO 2A (3)
ADVANCED ELECTRONICS
2 Hrs. Lec. 3 Hrs. Lab.
Prerequisite: Electro 1B with a grade of "C" or better. Advanced concepts in electronics. Topics will include: additional devices included in circuits, instrumentation, various system designs, successive "generations". (CSU)

ELECTRO 2B (3)
ADVANCED ELECTRONICS
2 Hrs. Lec. 3 Hrs. Lab.
Prerequisite: Electro 2A with a grade of "C" or better. A continuation of Electro 2A. The advanced study of applied digital electronic systems such as those found in computing, audiovisual and other electromechanical equipment. (CSU)

EMERGENCY MEDICAL TECHNICIAN

EMT 1A/AD (5.5)
EMERGENCY MEDICAL TECHNICIAN 1/AMBULANCE
5 Hrs. Lec. 1.7 Hrs. Lab.
A course for individuals who will come in contact with sick or injured persons in an emergency situation. Although aimed primarily for ambulance attendants, the course would be of valuable assistance to all emergency service personnel in law enforcement, fire fighting, hospital emergency rooms and rescue units. Topics considered will include the role and responsibilities of the Emergency Medical Technician, medical-legal responsibilities and community resources for health and social care. Students will be taught to evaluate diagnostic signs and determine the extent of injuries. Procedures for dealing with life-threatening emergencies are presented: pulmonary and cardiopulmonary resuscitation, control of hemorrhage. Other medical and environmental problems, childbirth and lifting and moving techniques will also be considered. Students will receive clinical laboratory experiences in hospital emergency rooms and on ambulance calls. The course is approved by the California Department of Health for EMT training. One hundred and seventeen hours required for completion of course: 87 Hrs. Lec. (five hours weekly); and 30 Hrs. Lab. (CSU)

EMT 1A(R)/AD (1.5)
EMERGENCY MEDICAL TECHNICIAN 1/AMBULANCE - REFRESHER
1.5 Hrs. Lec. .4 Hr. Lab.
Prerequisites: EMT 1/A and current CPR certification. A course for individuals whose EMT 1/A course completion certificates will expire within the next six months

(certification may not be expired more than twelve months). The course will review life support measures, cardiopulmonary resuscitation and the use of emergency medical equipment and supplies. Specific problems related to Imperial County will be discussed. Thirty-six hours required for completion of course: 28 Hrs. Lec. ; 8 Hrs. Lab. (CSU)

EMT 1/FS (5)
EMERGENCY MEDICAL TECHNICIAN 1/FIRE SCIENCE
5 Hrs. Lec. 1 Hr. Lab.
A course to prepare fire service personnel to render prehospital basic life support services, including cardiopulmonary resuscitation, to sick and injured persons under field emergency conditions. Preparation of the patient for transport is covered; however, actual transportation of patients in ambulances is not covered. (Certification as an EMT 1/A is required by law to work on an ambulance in California. EMT 1/FS certification does not meet this requirement.) Topics covered include the role and responsibilities of the EMT, medico-legal aspects of emergency care, and patient evaluation. Students will learn how to take and evaluate vital signs, medical history, and field physical exam. Procedures for dealing with life-threatening emergencies are presented. Control of hemorrhage, childbirth, stroke, burns, and extrication are included. This course is approved by the State Board of Fire Services. One hundred five hours required for completion of course: 87 Hrs. Lec. (5 hours weekly); 18 Hrs. Lab. (CSU)

EMT 1/FS(R) (1)
EMERGENCY MEDICAL TECHNICIAN 1/FIRE SCIENCE - REFRESHER
1.1 Hrs. Lec. .3 Hr. Lab.
Prerequisite: Certification as a California EMT 1 or EMT 1/FS or EMT 1/PS which will expire in the next six months or has been expired less than twelve months. This is a recertification course for persons who hold a California EMT 1/A, EMT 1/FS or EMT 1/PS which will expire in the next six months or has expired within the last twelve months. The student will review material covered in the EMT 1 course, including field patient evaluation, cardiopulmonary resuscitation, airway maintenance, oxygen therapy, shock, hemorrhage, application of dressings, bandages and splints, immobilization techniques, extrication, lifting and moving techniques, emergency incident management, triage, and emergency childbirth. Discussion of new developments in emergency medical services will be included. Students intending to work on an ambulance must recertify as an EMT 1/A, which is a different course. Twenty-six hours required for completion of course: 20 Hrs. Lec.; 6 Hrs. Lab. (CSU)

EMT 2/A (7)
EMERGENCY MEDICAL TECHNICIAN 2/A
6 Hrs. Lec. 3 Hrs. Lab.
Prerequisites: Have a valid California Emergency Medical Technician 1 (1/A, FS, PS or CHP) Certificate. Have one year experience as a practicing EMT. Have permission of EMT Instructor/Coordinator. Successful completion of application packet. A course designed to teach professional public safety personnel limited advanced life support skills. The course will teach the student to treat critically ill and injured patients in the pre-hospital setting using all the basic life support skills learned in EMT 1, and advanced skills such as intravenous infusion, defibrillation, MAST suit application and esophageal intubation. The course is an intensive one, requiring the student's total dedication to successful completion of the course, and the realization that more than usual study and TBA requirements must be met. (CSU)

EMT 2/B (5)**EMERGENCY MEDICAL TECHNICIAN 2/B**

3 Hrs. Lec. 6 Hrs. Lab.

Prerequisite: Successful completion of EMT 2/A. This course is a continuation of EMT 2/A. It is designed to teach professional public safety personnel limited advanced life support skills not covered in EMT 2/A. It enables the student to put all laboratory and didactic materials together in clinical and field experiences. The student will be able to perform total patient assessment and care, using state and county guidelines for limited advanced life support systems. Students must be aware of the intensity of the course that requires dedication to complete all clinical and field experiences. In addition to class and clinical time, students must complete ten (10) LALS runs with the ambulance to successfully complete the course. (CSU)

EMT 2(R)/AD (2)**EMERGENCY MEDICAL TECHNICIAN 2/REFRESHER**

2 Hrs. Lec.

Prerequisite: Have a valid California Emergency Medical Technician 2 Certificate. A course designed for the active EMT 2 who wishes to recertify for another two-year period. This course will revise all prehospital treatment and protocols as delineated by the State of California Administrative Code, Title 22 - Social Security, Division 9 - Prehospital Emergency Medical Services, Chapter 3 - Emergency Medical Technician 2. The course is an intensive one, requiring the total concentration of the students for successful completion and the realization that more study and TBA requirements must be met.

EMT 10 (2)**EMERGENCY MEDICAL TECHNICIAN - FIRST RESPONDER**

2 Hrs. Lec.

A course for individuals who must provide first aid, including recognition of and immediate care for injury or sudden illness or medical emergencies, prior to the availability of medical care by licensed or certified health care professionals. This course is primarily for firefighters and law enforcement personnel and satisfies requirements under Title 22, Division 9, Section 1.5 of the California Administrative Code, requiring regularly employed public safety personnel to be trained to administer first aid, including CPR, within 1 year of employment. Topics considered will include components of the local EMS system, roles and responsibilities of first responders, introduction to legal aspects with introduction to anatomy and physiology. Students will be taught an introduction to vital and diagnostic signs and determination of extent of injuries. Procedures for dealing with life-threatening emergencies are presented, as they pertain to the first responder, including CPR and control of hemorrhage. Other medical and environmental emergencies will be presented along with child-birth, disorders specific to infants and children, and communicable diseases. 36 hours are required for course completion. (Nondegree Applicable)

ENGINEERING**ENGR 5 (3)****STRENGTH OF MATERIALS**

3 Hrs. Lec.

Prerequisite: Engr 15. Axial stress; stress and strain relations; torsional stress and deformation; shear and moment diagrams; bending stresses; shear stresses; compound stresses; transformation of stresses; failure theory; deflection of beams; buckling; statically

indeterminate structures; introduction to component design. (CSU) (UC credit limited. See a counselor.)

ENGR 11 (3)**ELECTRICAL NETWORK ANALYSIS**

3 Hrs. Lec.

Prerequisites: Physics 4A, Math 3A with "C" or better. Corequisites: Physics 4B and Math 3B. Circuit analysis by reduction methods, source transformations, loop and nodal analysis, Op-Amp model for networks, transient analysis, alternating current circuits, impedance, power and phasor diagrams. (CSU)

ENGR 15 (3)**STATICS**

3 Hrs. Lec.

Prerequisite: Physics 4A with "C" or better. Corequisite: Math 3B. Force systems; equilibrium; structures; distributed forces; friction; virtual work; moments of inertia; vector algebra. (CSU) (UC credit limited. See a counselor.)

ENGR 16 (3)**DYNAMICS**

3 Hrs. Lec.

Prerequisite: Engr 15. Kinetics of a particle; central force motion; systems of particles; work and energy; impulse and momentum; moments and products of inertia; Euler's equations of motion; vibration and time response; engineering applications. (CSU) (UC credit limited. See a counselor.)

ENGR 19 (6)**STATICS AND DYNAMICS**

6 Hrs. Lec.

Prerequisites: Physics 4A and Math 3A with a "C" or better. Corequisite: Math 3B. This course is a combination of Engr 15 and Engr 16. (CSU) (UC credit limited. See a counselor.)

ENGLISH**New Students**

The Nelson-Denny Reading Test will be required of all new students who desire to register for their initial reading or writing class. The test is administered in the Counseling Center and in the Reading/Writing Lab.

Students will be recommended to initially register in a reading class and writing class for tentative enrollment prior to placement testing.

| Nelson-Denny Reading Scores | | Writing Class(es) Initial Placement |
|-----------------------------|------|-------------------------------------|
| Below | 6.0* | Eng 4 |
| 6.0 | 8.9 | Eng 3A |
| 9.0 | 13.9 | Eng 2A |
| 14.0 | 16.9 | Eng 1A |
| *grade equivalency | | |

| | | |
|--------------------|------|--------|
| Below | 6.0* | Eng 4 |
| 6.0 | 8.9 | Eng 3A |
| 9.0 | 13.9 | Eng 2A |
| 14.0 | 16.9 | Eng 1A |
| *grade equivalency | | |

| Nelson-Denny Reading Scores | | Reading Class(es) Initial Placement |
|-----------------------------|------|-------------------------------------|
| 3.6 | 5.9* | Eng 14A |
| 6.0 | 8.9 | Eng 13A |
| 9.0 | 11.9 | Eng 12A |
| 12.0 | 16.9 | Eng 11 |
| *grade equivalency | | |

| | | |
|--------------------|------|---------|
| 3.6 | 5.9* | Eng 14A |
| 6.0 | 8.9 | Eng 13A |
| 9.0 | 11.9 | Eng 12A |
| 12.0 | 16.9 | Eng 11 |
| *grade equivalency | | |

During the first two weeks of classes, students will be given an additional test (Holistic Writing Test) to determine their writing abilities. The results of this writing test will help determine the final placement of students in the writing classes.

Students wishing clarification of their placement evaluation may discuss their placement results and the appeals process with their counselor.

Students Previously Completing Reading or Writing Classes

Students who receive a grade of "C" or higher in any of the reading or writing classes are automatically entitled to the next class level in the sequence; for example, students completing Eng 3A with a "C" or better are moved to Eng 3B; those completing Eng 2A with a "C" or better will be moved to Eng 2B. Students receiving less than a "C" grade are required to repeat the class before advancing to the next level.

Other Recommendations

New students should consult an Imperial Valley College counselor for assistance in understanding the placement procedure prior to registering in the reading or writing classes.

Concurrent enrollment in reading and writing classes is highly recommended.

ENG 1A (3)**READING AND COMPOSITION**

3 Hrs. Lec.

Prerequisites: Satisfactory score on reading and writing placement tests and instructor recommendation. 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. (CSU, UC)

ENG 1B (3)**INTRODUCTION TO LITERATURE**

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. (CSU, UC)

ENG 2A (3)**BASIC ENGLISH COMPOSITION**

3 Hrs. Lec.

Prerequisites: Assignment by placement test and instructor recommendation. Preparation for Eng 2B. Provides developmental instruction in paragraph and short essay writing and in reading comprehension and analysis approaching the college level. The course follows in sequence from Eng 3B and is taught simultaneously with Eng 2B. Concurrent enrollment in Eng 12A is strongly recommended. (Nondegree Applicable)

ENG 2B (3)**BASIC ENGLISH COMPOSITION**

3 Hrs. Lec.

Prerequisites: Assignment by placement test and instructor recommendation. Preparation for Eng 1A. The course seeks to improve the student's mastery of the short essay and to teach reading comprehension and analysis at the college level. The course follows in sequence from, and is taught simultaneously with, Eng 2A. Concurrent enrollment in Eng 12B is strongly recommended. (CSU)

ENG 3A (3)**WRITING FUNDAMENTALS**

3 Hrs. Lec.

Prerequisites: Assignment by placement test and instructor recommendation. Preparation for Eng 3B. Intensive instruction in grammar and punctuation and the writing of short paragraphs. Designed for the student needing to acquire basic writing skills and to overcome language transfer interference. Follows in sequence from Eng 4. Taught simultaneously with Eng 3B. Concurrent enrollment in Eng 13A strongly recommended. (Nondegree Applicable)

ENG 3B (3)**WRITING FUNDAMENTALS**

3 Hrs. Lec.

Prerequisites: Assignment by placement test and instructor recommendation. Preparation for Eng 2A or Eng 51. A review of grammar and punctuation and instruction in the writing of paragraphs and topic sentences. Designed for the student needing to review basic writing skills. The course follows in sequence from, and is taught simultaneously with, Eng 3A. Concurrent enrollment in Eng 13B is strongly recommended. (Nondegree Applicable)

ENG 4A (4)**ADVANCED GRAMMAR AND COMPOSITION FOR BILINGUALS**

4 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Satisfactory completion of Eng 5 or Eng 5B or appropriate score on ESL Placement Test. Advanced composition and grammar are emphasized. Satisfactory completion of this course qualifies the student for enrollment in Eng 4B. (CSU) (UC credit limited. See a counselor.)

ENG 4B (3)**THE WRITING PROCESS FOR BILINGUALS**

3 Hrs. Lec.

Prerequisite: Completion of Eng 4A or teacher recommendation. The Writing Process for Bilinguals would be based on small group and individual instruction using lessons for prewriting, brainstorming, and listing; rough draft read-arounds and peer-editing; review of grammar, mechanics, and usage; vocabulary, spelling, and format protocol; journal writing; and small and large group sharing of successful models for effective writing. Satisfactory completion of this course qualifies the student for enrollment in Eng 3A. (CSU) (UC credit limited. See a counselor.)

ENG 5 (4)**INTERMEDIATE GRAMMAR AND COMPOSITION FOR ESL**

4 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Appropriate score on placement test or satisfactory completion of Eng 6. Eng 5 is an intermediate course in grammar and composition which takes the ESL student from simple present and past tense usage to more complicated grammatical structures. Basic skills for simple compositions in English are also taught. (CSU) (UC credit limited. See a counselor.)

ENG 5A (2)**INTERMEDIATE GRAMMAR AND COMPOSITION FOR ESL**

2 Hrs. Lec. 1/2 Hr. Lab.

Prerequisite: Designated score on placement test or satisfactory completion of Eng 6B. The course covers the first half semester's work of Eng 5 (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 5B, is equivalent to Eng 5. Not open to students who have completed Eng 5. (CSU) (UC credit limited. See a counselor.)

ENG 5B (2)
INTERMEDIATE GRAMMAR AND COMPOSITION FOR ESL
2 Hrs. Lec. 1/2 Hr. Lab.

Prerequisite: Satisfactory completion of Eng 5A. This course covers the second half semester's work of Eng 5 (4 units) and is offered for the convenience of night students who cannot attend class more than one night per week. Satisfactory completion of Eng 5A and 5B is equivalent to Eng 5 and qualifies the student to enroll in Eng 4 or Eng 4A. Not open to students who have completed Eng 5. (CSU) (UC credit limited. See a counselor.)

ENG 6 (4)
BEGINNING GRAMMAR AND COMPOSITION FOR ESL
4 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Designated score on placement test. A beginning course in English designed for the student who has not had any formal English classes in the United States. The course will cover grammar and simple sentence writing. Capitalization and punctuation will be emphasized through some beginning composition writing in the latter part of the semester. (Nondegree Applicable)

ENG 6A (2)
BEGINNING GRAMMAR AND COMPOSITION FOR ESL
2 Hrs. Lec. 1/2 Hr. Lab.

Prerequisite: Designated score on placement test or permission of the instructor. This course covers the first half semester's work of Eng 6 (4 units) and is offered for the convenience of night students who cannot attend class more than one night per week. This course will emphasize vocabulary building, conversational skills and listening comprehension. This course, together with Eng 6B, is equivalent to Eng 6. Not open to students who have completed Eng 6. (Nondegree Applicable)

ENG 6B (2)
BEGINNING GRAMMAR AND COMPOSITION FOR ESL
2 Hrs. Lec. 1/2 Hr. Lab.

Prerequisite: Eng 6A or permission of the instructor. This course covers the second half semester's work of Eng 6 (4 units) and is offered for the convenience of night students who cannot attend class more than one night per week. Satisfactory completion of Eng 6A and 6B is the equivalent to Eng 6 and qualifies the student to enroll in Eng 5 or Eng 5A. Not open to students who have completed Eng 6. (Nondegree Applicable)

ENG 7 (4)
BASIC ESL/CIVICS
4 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Designated score on placement test. A course designed for nonnative speakers who have no knowledge of English and whose literacy in their native language is minimal. Basic English will give students the necessary literacy skills to enter Eng 6 and further an awareness for civic responsibility. (Nondegree Applicable)

ENG 11 (3)
READING IV: ANALYTICAL AND CRITICAL READING
3 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Successful completion of Eng 12B and/or ability to read at the 12th grade level. Designed to help adequate readers become superior readers. Recommended for college transfer students who wish to develop the critical reading and thinking skills necessary for all types of college level reading. Students are required to enroll in 1/2 unit reading lab: Eng 66C. (CSU)

ENG 12A (3)
READING III: INTERMEDIATE DEVELOPMENT
3 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Successful completion of Eng 13B and/or the ability to read at the 9th grade level. A course at the upper intermediate reading level designed to refine those skills designated in Eng 13A/13B. Includes additional instruction in study skills, outlining, previewing, summarizing, and critical reading. Students are required to enroll in 1/2 unit reading lab: Eng 66A. (Nondegree Applicable)

ENG 12B (3)
READING III: INTERMEDIATE DEVELOPMENT
3 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Successful completion of Eng 12A and/or the ability to read at the 10th grade level. A course at the upper intermediate reading level for those students needing additional instruction and practice in study skills, outlining, previewing, summarizing, and critical reading as taught in Eng 12A. Students are required to enroll in 1/2 unit reading lab: Eng 66B.

ENG 13A (3)
READING II: BASIC DEVELOPMENT
3 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Successful completion of Eng 14B and/or the ability to read at the 6th grade level. A course at the lower intermediate level for the student needing intensive instruction in comprehension, vocabulary and study skills. Emphasis will be on fundamental understanding of texts, and increasing word knowledge. Students are required to enroll in 1/2 unit reading lab: Eng 65C. (Nondegree Applicable)

ENG 13B (3)
READING II: BASIC DEVELOPMENT
3 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Successful completion of Eng 13A with reading scores below the required level for Eng 12A (grade 9). A course at the lower intermediate level for the student needing additional instruction in comprehension, vocabulary and study skills. Emphasis will be on fundamental understanding of texts, and increasing word knowledge. Students are required to enroll in 1/2 unit reading lab: Eng 65D. (Nondegree Applicable)

ENG 14A (3)
READING I: DEVELOPMENT FOR BILINGUALS
3 Hrs. Lec. 1 Hr. Lab.

Prerequisites: Reading level below the 6th grade. Assignment by placement test and recommendation of the instructor. Course designed to develop reading efficiency of bilingual students. Phonics comprehension, word analysis, vocabulary building will be included, as well as those study skills directly related to reading. Students are required to enroll in 1/2 unit reading lab: Eng 65A. (Nondegree Applicable)

ENG 14B (3)
READING I: DEVELOPMENT FOR BILINGUALS
3 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Successful completion of Eng 14A with reading test scores below the required level for Eng 13A (grade 6). Course designed to develop reading efficiency of bilingual students. Phonics comprehension, word analysis, vocabulary building will be included, as well as those study skills directly related to reading. Students are required to enroll in 1/2 unit reading lab: Eng 65B. (Nondegree Applicable)

ENG 22AB (3-3)
VOCABULARY BUILDING
3 Hrs. Lec.

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

ENG 24 (3)
ADVANCED VOCABULARY BUILDING AND SPELLING FOR ESL
3 Hrs. Lec.

Prerequisite: Eng 25, Eng 5 or by consent of the instructor. The student will work on English-Spanish cognates, roots and prefixes, idioms, general reading vocabulary, subject matter (e.g., psychology, history), reading vocabulary, parts of speech, dictionary skills, word connotation and usage, and listening comprehension. The emphasis will be on writing and listening more than on oral work, and on independent vocabulary building as well as on group work. (Nondegree Applicable)

ENG 25 (3)
INTERMEDIATE VOCABULARY BUILDING AND SPELLING FOR ESL
3 Hrs. Lec.

Prerequisite: Eng 5 concurrently or consent of the instructor. The intermediate ESL student will work on roots and prefixes, idioms, spelling, pronunciation, parts of speech, irregular verbs, and the learning of new words. A lot of class practice will be given in oral and written use of new words and expressions. (Nondegree Applicable)

ENG 26 (3)
BEGINNING VOCABULARY BUILDING AND SPELLING FOR ESL
3 Hrs. Lec.

Prerequisite: This course may be taken concurrently with Eng 6 or by permission of the instructor. A beginning level of vocabulary will be offered. Some spelling techniques will be taught and vocabulary will be used both in oral and written sentences. (Nondegree Applicable)

ENG 32 (3)
ADVANCED PUBLIC SPEAKING FOR BILINGUALS
3 Hrs. Lec.

Prerequisite: Eng 33 with C or better, or permission of the instructor. This course is designed to bring Eng 33 bilingual students to a near-native level of fluency and listening comprehension so that they may successfully compete with native speakers. Students will prepare, present and evaluate activities such as speeches, oral interpretations, interviews, reports, debates, and simulation games. Emphasis will be given to use of the library to provide appropriate material for topics of academic and community significance. Recommended for students concurrently enrolled in Eng 2AB and Eng 12AB. May be taken as a preparation, but not as a substitute, for Speech 1. (Nondegree Applicable)

ENG 33 (3)
BASIC PUBLIC SPEAKING FOR BILINGUALS
3 Hrs. Lec.

Prerequisite: Eng 34 or permission of the instructor. This course is designed to bring advanced ESL students to a near-native level of fluency and listening comprehension so that they may successfully compete with native speakers. Students will prepare, present and evaluate speeches, commercials, dialogs, skits, oral interpretations, debates and simulation games. (This course may be taken as a preparation, but not as a substitute, for Speech 1.) (Nondegree Applicable)

ENG 34 (3)
ADVANCED ORAL ENGLISH FOR ESL
3 Hrs. Lec.

Prerequisite: To be taken concurrently with Eng 4 or by permission of the instructor. An intensive course in oral American English for students who have learned English as a second language. It is intended for students who may read well and have a good grasp of grammar but who still need more practice in manipulating oral structures. (Nondegree Applicable)

ENG 35 (3)
INTERMEDIATE ORAL ENGLISH FOR ESL
3 Hrs. Lec.

Prerequisite: To be taken concurrently with Eng 5 or by permission of the instructor. A conversational course designed for the intermediate student of ESL. Students will utilize oral English by creating their own dialogs and presenting them, and by speaking on posters or other visual materials. Differences between the students' native language and English and how these differences affect the students' oral English will be discussed. (Nondegree Applicable)

ENG 36 (3)
BEGINNING ORAL ENGLISH FOR ESL
3 Hrs. Lec.

Prerequisite: To be taken concurrently with Eng 6 or by permission of the instructor. A conversational course designed for the beginning ESL student. The course will cover the fundamentals of the English sound system. Listening and speaking will be emphasized through basic dialogs to be learned, through simple stories to be listened to, and through questions to be answered orally. (Nondegree Applicable)

ENG 41 (3)
SURVEY OF AMERICAN LITERATURE
3 Hrs. Lec.

Prerequisite: Eng 1B is recommended. A study of the works of major American writers. (CSU, UC)

ENG 42A (3)
SURVEY OF WORLD LITERATURE
3 Hrs. Lec.

Prerequisite: Eng 1B is recommended. Study of selected literature of the Hebrews, Greeks, Romans, the Middle Ages, and the Renaissance. Emphasis on literature other than American and English. (CSU, UC)

ENG 42B (3)
SURVEY OF WORLD LITERATURE
3 Hrs. Lec.

Prerequisite: Eng 1B is recommended. 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 42A. (CSU, UC)

ENG 43A (3)
SURVEY OF ENGLISH LITERATURE
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. (CSU, UC)

(CAN ENGL 8)

ENG 438 (3)**SURVEY OF ENGLISH LITERATURE**
3 Hrs. Lec.

Prerequisite: Same as for Eng 43A. 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 43A. (CSU, UC)

ENG 46A (3)**THE MEXICAN AMERICAN IN LITERATURE**
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 backgrounds, and by contrasting and comparing 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) (CSU, UC)

ENG 46B (3)**THE MEXICAN AMERICAN IN LITERATURE**
3 Hrs. Lec.

Prerequisite: Eligibility for Eng 1A. A continuation of Eng 46A with emphasis on contemporary Mexican American writers. Conducted in English. Eng 46B may be taken before Eng 46A. (Same as Span 28B) (CSU, UC)

ENG 47 (3)**INTRODUCTION TO THE BIBLE AS LITERATURE**
3 Hrs. Lec.

Prerequisite: Eng 2B or Eng 1A recommended. A study of literature and history of the Bible. (CSU, UC)

ENG 50 (3)**ADVANCED COMPOSITION**
3 Hrs. Lec.

Prerequisite: Eng 1A. Advanced expository prose, argumentation, description and the study of prose style. (CSU, UC)

ENG 52 (3)**INTRODUCTION TO LINGUISTICS**
3 Hrs. Lec.

Prerequisite: Eng 2B, Eng 51, Eng 1A or consent of the instructor. Introduction to the various branches of linguistics: language classification, dialectal variation, psycholinguistics, sociolinguistics, semantics. Specific work on English sounds, grammar, and dialects, including comparisons of English with Spanish. Recommended for teachers, teacher aides, students of foreign languages, and anyone interested in extending his/her knowledge of language. Suitable for English speaking and bilingual students. (CSU, UC)

ENG 53AB (3-3)**CREATIVE WRITING**
3 Hrs. Lec.

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

(CAN ENGL 10)

ENG 54 (3)**INTRODUCTION TO FILM HISTORY AND CRITICISM**
2 Hrs. Lec. 2 Hrs. Lab.

The origin and development of movies as an entertainment industry, as a technological medium, and as an art form. Key films from different historical periods will be examined for their technological and artistic contributions to the art of film making. (CSU, UC)

ENG 55 (3)**INTRODUCTION TO TECHNICAL AND REPORT WRITING**
3 Hrs. Lec.

Prerequisite: Satisfactory completion of Eng 2A or Eng 2B or Eng 1A or permission of the instructor. Practical experience in writing various kinds of technical reports, descriptions, proposals, and evaluations. Writing assignments will be tailored to the interests of individual students. (CSU)

ENG 59 (3)**GRAMMAR AND USAGE REVIEW**
3 Hrs. Lec.

Prerequisite: Placement at Eng 2A level or above. Review of traditional/structural grammar; review of usage rules regarding punctuation, mechanics, capitalization; review of spelling rules; practice with summary/report writing done by the student.

ENG 60ABC (1-1-1)**LANGUAGE LABORATORY**
2 Hrs. Lab.

Prerequisite: Current enrollment in ESL. Individual language laboratory practice with prepared taped materials and texts in the language laboratory. Practice in listening comprehension and pronunciation. Grammar and sentence development through structured lessons on tapes. Supplementary course for beginning, intermediate and advanced levels in ESL. (Nondegree Applicable)

ENG 61ABCD (1-1-1-1)**INDIVIDUALIZED WRITING SKILLS**
2 Hrs. Lab.

Prerequisite: Eligibility for Eng 4A, Eng 14A, or higher by means of the ESL, Nelson-Denny, or holistic essay placement exam. This is a course designed to provide supplemental work for students in regular writing classes or for independent study. A certificated instructor diagnoses writing deficiencies and prescribes remediation. Individual assignments are given for improving problem areas in grammar, usage, rhetorical skills, and to eliminate non-English language interference. The course is designed to assist students in any course(s) requiring writing skills. The 36 required hours will be set by arrangement with the student and must be undertaken in the Reading/Writing Lab. (Nondegree Applicable)

ENG 62ABCD (1-1-1-1)**INDIVIDUALIZED READING SKILLS**
2 Hrs. Lab.

Prerequisite: Eligibility for Eng 4A, Eng 14A or higher by means of the ESL, Nelson-Denny, or holistic essay placement exam. Students wishing to improve their reading skills independently may enroll in this one unit, individualized course. The lab instructor provides assignments leading to improvement in vocabulary skills, comprehension skills, and computer-assisted reading speed improvement. (Nondegree Applicable)

ENG 63AB (1-1)**SPELLING**
1 Hr. Lec.

Diagnosis of specific spelling problems and prescription of remedies; investigation of the basic spelling rules. (Nondegree Applicable)

ENG 64 (1)**LIBRARY RESOURCES AND RESEARCH PAPER**
1 Hr. Lec.

Prerequisite: Eligibility for Eng 2A or Eng 12A. Use of the library facilities, especially the card catalog, reference books, and 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. Helpful to an 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 an area(s) of interest. (CSU, UC)

ENG 65A (.5)**READING LAB FOR DEVELOPMENTAL READING I**
1 Hr. Lab.

Corequisite: Eng 14A. The required Reading Lab component for all students enrolled in Eng 14A. Lab work, as assigned by the reading course instructor, must be completed satisfactorily along with a minimum of 18 hours of lab attendance in order to receive credit. (Nondegree Applicable)

ENG 65B (.5)**READING LAB FOR DEVELOPMENTAL READING I**
1 Hr. Lab.

Corequisite: Eng 14B. The required Reading Lab component for all students enrolled in Eng 14B. Lab work, as assigned by the reading course instructor, must be completed satisfactorily along with a minimum of 18 hours of lab attendance in order to receive credit. (Nondegree Applicable)

ENG 65C (.5)**READING LAB FOR DEVELOPMENTAL READING II**
1 Hr. Lab.

Corequisite: Eng 13A. The required Reading Lab component for all students enrolled in Eng 13A. Lab work, as assigned by the reading course instructor, must be completed satisfactorily along with a minimum of 18 hours of lab attendance in order to receive credit. (Nondegree Applicable)

ENG 65D (.5)**READING LAB FOR DEVELOPMENTAL READING II**
1 Hr. Lab.

Corequisite: Eng 13B. The required Reading Lab component for all students enrolled in Eng 13B. Lab work, as assigned by the reading course instructor, must be completed satisfactorily along with a minimum of 18 hours of lab attendance in order to receive credit. (Nondegree Applicable)

ENG 66A (.5)**READING LAB FOR DEVELOPMENTAL READING III**
1 Hr. Lab.

Corequisite: Eng 12A. The required Reading Lab component for all students enrolled in Eng 12A. Lab work, as assigned by the reading course instructor, must be completed satisfactorily along with a minimum of 18 hours of lab attendance in order to receive credit. (Nondegree Applicable)

ENG 66B (.5)**READING LAB FOR DEVELOPMENTAL READING III**
1 Hr. Lab.

Corequisite: Eng 12B. The required Reading Lab component for all students enrolled in Eng 12B. Lab work, as assigned by the reading course instructor, must be completed satisfactorily along with a minimum of 18 hours of lab attendance in order to receive credit.

ENG 66C (.5)**READING LAB FOR DEVELOPMENTAL READING IV**
1 Hr. Lab.

Corequisite: Eng 11. The required Reading Lab component for all students enrolled in Eng 11. Lab work, as assigned by the reading course instructor, must be completed satisfactorily along with a minimum of 18 hours of lab attendance in order to receive credit.

ENVIRONMENTAL SCIENCE**ENV SCI 5 (3)****MAN AND HIS ENVIRONMENT**
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) (CSU, UC)

FIRE SCIENCE**FIRE SCI 17 (1)****EMERGENCY FIRE/MEDICAL DISPATCHER**
1 Hr. Lec. .5 Hr. Lab.

Prerequisite: Current CPR card. A course to train public safety dispatchers to quickly and accurately interrogate callers requesting medical aid, fire units or rescue services, and dispatch proper emergency vehicles and personnel. Communication between field units and dispatchers, prearrival instructions, triage calls, basic life support, record keeping, FCC regulations, and roles and responsibilities of dispatcher will be covered.

FIRE SCI 60 (3)**INTRODUCTION TO FIRE TECHNOLOGY**
3 Hrs. Lec.

An introduction to fire protection; career opportunities in fire protection and related fields; history of fire protection; fire loss analysis; public, quasi-public and private fire protection services; specific fire protection functions; basic fire chemistry and physics. (CSU)

FIRE SCI 61 (3)**FUNDAMENTALS OF FIRE PREVENTION**
3 Hrs. Lec.

Organization and function of fire prevention; inspections; surveying and mapping procedures; recognition of fire and life hazards; engineering a solution of a fire hazard; enforcing the solution of a fire hazard; public education of fire prevention. (CSU)

FIRE SCI 62 (3)**FIRE PROTECTION EQUIPMENT AND SYSTEMS**
3 Hrs. Lec.

A course on the features of design and operation of fire detection and alarm systems, heat/smoke control systems, special protection and sprinkler systems, water supply and portable fire extinguishers. (CSU)

FIRE SCI 63 (3)
FUNDAMENTALS OF FIRE BEHAVIOR AND CONTROL
3 Hrs. Lec.

A course encompassing theory and fundamentals of how fires start, spread and are controlled. An in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents and fire control techniques. (CSU)

FIRE SCI 64 (3)
FUNDAMENTALS OF FIRE PROTECTION
3 Hrs. Lec.

The theory and fundamentals of fire protection, including fire protection laws, water systems and public fire protection systems; fire protection in buildings and open areas. (CSU)

FIRE SCI 65 (3)
FUNDAMENTALS OF PERSONAL FIRE SAFETY AND EMERGENCY ACTION
3 Hrs. Lec.

A course designed to provide basic skills in assessing fire dangers, handling common fire situations in the home and/or industry, basic CPR and Standard First Aid. (CSU)

FIRE SCI 73 (1)
VOLUNTEER INSTRUCTOR TRAINING
1 Hr. Lec.

Designed for volunteer fire personnel with a responsibility for training. Emphasizes the teaching and evaluation of manipulative skills employed by the fire service. (CSU)

FIRE SCI 88 (1)
AUTO EXTRICATION
1 Hr. Lec.

This course provides students with the information and skills necessary to operate within the procedures and systems utilized during an automobile extrication. Subjects covered include: auto extrication sizeup; types of incidents; safety precautions; ICS for auto extrication; types of hand and power tools; removing windows; opening doors; removing roofs; pulling steering wheels; moving foot pedals; raising dashboards; pulling seats; stabilization of vehicles; and simulated rescues of trapped victims. (CSU)

FIRE SCI 89A (2)
DRIVER/OPERATOR IA
2 Hrs. Lec.

This course is designed to provide the student with information on driver techniques for emergency vehicles and techniques of basic inspection and maintenance for emergency vehicles, including actual driving exercises under simulated emergency conditions. (CSU)

FIRE SCI 89B (2)
DRIVER/OPERATOR IB
2 Hrs. Lec.

Corequisite: Fire Sci 89A. This course is designed to provide the students with information on fire pump and component operations, water sources and distribution systems, hydraulic calculations, various pumping operations, operating foam systems, and pumping sprinkler and standpipe systems. (CSU)

FIRE SCI 90 (2)
PUMP OPERATION I
2 Hrs. Lec.

Prerequisite: Suggested completion of Fire Sci 60 or Fire Sci 62. A basic course for engineers in the fire fighting service which provides the background in general use and operation of pumping and related equipment. (CSU)

FIRE SCI 92 (2)
ARSON INVESTIGATION I
2 Hrs. Lec.

Prerequisite: Present fire fighter status, either paid or volunteer. This course is designed for the fire and police arson investigator to successfully carry out responsibilities in arson detection and investigation. (CSU)

FIRE SCI 93 (2)
ARSON INVESTIGATION II
2 Hrs. Lec.

Prerequisite: Fire Sci 92. This is an advanced arson investigator course for fire and police personnel to successfully carry out responsibilities in arson detection and investigation. (CSU)

FIRE SCI 94A (2)
FIRE COMMAND IA
2.2 Hrs. Lec.

Prerequisite: Present fire fighter status, either paid or volunteer. A course designed to provide Fire Company Officers with information and experience in command and control techniques used at the scene of an emergency. The course emphasizes decision making, the act of commanding, the authority or right to command, the personnel organization structure or area under an individual commander, and the preplanning and training requirements for effective performance as an officer. (CSU)

FIRE SCI 94B (2)
FIRE COMMAND IB
2.2 Hrs. Lec.

Prerequisite: Fire Sci 94A, present fire fighter status, either paid or volunteer. This course provides instruction in First-in Company level decision making and scene management principles for incidents involving chemicals and hazardous materials. Included are Scene Safety Procedures; Evacuation Considerations; and Identification of Materials by Container Size, Shape and Labeling. (CSU)

FIRE SCI 95ABCD (1/2-1/2-1/2-1/2)
OIL FIRE CONTROL SCHOOL I
.2 Hr. Lec. .8 Hr. Lab.

This course provides students with general information, techniques and strategies in dealing with flammable liquids and gases. Students are provided with particular exercises in controlling and then in extinguishing flammable liquid and gas fires at selected burn sites under controlled supervision. (CSU)

FIRE SCI 96 (.5)
PIPELINE TRANSPORTATION EMERGENCIES
.5 Hr. Lab.

This course is designed to create emergency support effectiveness in preventing, controlling, and terminating accidents involving pipeline transportation.

FIRE SCI 97A (2)
FIRE INSTRUCTOR TRAINING IA
2 Hrs. Lec.

Part of the California State Fire Academy curriculum. This course is designed to prepare personnel as instructors for teaching courses in fire department companies. The course covers identification of training needs, occupational analysis, measurable student objectives, development of levels of instruction.

FIRE SCI 97B (2)
FIRE INSTRUCTOR TRAINING IB
2 Hrs. Lec.

Prerequisite: Fire Sci 97A. This is the second in a two course series and is the standard State Board of Fire services accredited course that is designed to prepare personnel as instructors in Fire Science. The course covers outlines, levels of instruction, behavioral objectives, lesson plans, testing and evaluation techniques and instructional aids.

FIRE SCI 98A (2)
FIRE PREVENTION IA
2 Hrs. Lec.

A part of the California Fire Academy curriculum. This course is designed to prepare personnel in matters of fire cause and origin and fire prevention techniques. This course includes inspection techniques, properties of flammable and combustible solids, and radioactive explosives and unstable materials typically found during basic fire inspections. (CSU)

FIRE SCI 98B (2)
FIRE PREVENTION IB
2 Hrs. Lec.

A part of the California Fire Academy curriculum. This course is designed to prepare personnel in matters of fire cause and origin and fire prevention techniques. This course includes structural and life safety components, hazards associated with specific types of fires, identification of fire/smoke detection and sprinkler systems, and building and fire code information.

FRENCH

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the foreign language requirement in various majors. These high school courses will not count as college credit toward graduation. Placement will be made by examination and/or consent of the instructor. Contact the Foreign Language Department for further information.

The last year course taken by a student in the high school language sequence may be repeated in college for graduation credit, not to exceed four units of repeated foreign language work. Students are strongly advised to see the instructor before enrolling.

Students who have recently studied French for three years in high school are recommended to take Fr 3 and Fr 10.

FR 1 (5)
ELEMENTARY FRENCH
5 Hrs. Lec.

An intensive beginning course stressing the basic skills of listening comprehension, speaking, reading and writing to develop control of the sounds and the basic

forms and structure of French. Introduction to aspects of French culture and civilization. Students must plan for an hour of individual language laboratory by arrangement. Not open to students who have completed three years of high school French. (CSU, UC)

FR 1A (2.5)
ELEMENTARY FRENCH
2.5 Hrs. Lec.

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 5 units. Students must plan for one-half hour of individual language laboratory by arrangement. (CSU) (UC credit limited. See a counselor.)

FR 1B (2.5)
ELEMENTARY FRENCH
2.5 Hrs. Lec.

Prerequisite: Fr 1A. A continuation of Fr 1A. Students must plan for one-half hour of individual language laboratory by arrangement. (CSU) (UC credit limited. See a counselor.)

FR 2 (5)
ELEMENTARY FRENCH
5 Hrs. Lec.

Prerequisite: Fr 1 or two years of high school French or placement examination for demonstration of competency in four basic skills. Continues the development of all four language skills, emphasizing vocabulary building, increasing fluency and control of correct pronunciation, basic forms and structure. Students must plan for an hour of individual language laboratory by arrangement. (CSU, UC)

FR 2A (2.5)
ELEMENTARY FRENCH
2.5 Hrs. Lec.

Prerequisite: Fr 1B or placement by examination and consent of the 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 5 units. Students must plan for one-half hour of individual language laboratory by arrangement. (CSU) (UC credit limited. See a counselor.)

FR 2B (2.5)
ELEMENTARY FRENCH
2.5 Hrs. Lec.

Prerequisite: Fr 2A. A continuation of Fr 2A. Students must plan for one-half hour of individual language laboratory by arrangement. (CSU) (UC credit limited. See a counselor.)

FR 3 (4)
INTERMEDIATE FRENCH
4 Hrs. Lec.

Prerequisite: Fr 2 or two years of high school French or placement by examination. An intermediate course offering review and expansion of grammar and vocabulary learned in Fr 1 and Fr 2. Emphasis on communication and application of knowledge in highly functional life situations. Students must plan for one hour per week of required language laboratory practice by individual study arrangement. (CSU, UC)

FR 4 (4)
INTERMEDIATE FRENCH
4 Hrs. Lec.

Prerequisite: Fr 3 or three years of high school French or placement by examination. Continuation of Fr 3. An intermediate course emphasizing communication and application of knowledge in highly functional life situations. Students must plan for one hour per week of required language laboratory practice by individual study arrangement. (CSU)

FR 5 (3)
INTERMEDIATE FRENCH READING AND WRITING
3 Hrs. Lec.

Prerequisite: Fr 3 or three years of high school French. Intensive reading and vocabulary development based on cultural and literary materials, including critical analysis and summaries. (CSU)

FR 10 (3)
INTERMEDIATE CONVERSATIONAL FRENCH
3 Hrs. Lec.

Prerequisite: Fr 2 or two years of French in high school or by examination and consent of the instructor. (It is recommended that Fr 10 be taken concurrently with Fr 3.) Practical conversational skills are developed through listening exercises, directed conversations on assigned readings from newspaper and magazine articles, current topics, simple dialogues and plays. Emphasis on contemporary life in countries where French is spoken. Student must plan for an additional hour of individual language laboratory by arrangement. (CSU, UC)

FR 11 (3)
INTERMEDIATE CONVERSATIONAL FRENCH
3 Hrs. Lec.

Prerequisite: Fr 3 or Fr 10 or three years of French in high school or by examination and consent of the instructor. (It is recommended that Fr 11 be taken concurrently with Fr 4.) Continuation of Fr 10. Student must plan for an additional hour of individual language laboratory by arrangement. (CSU, UC)

FR 60ABC (1-1-1)
LANGUAGE LABORATORY
2 Hrs. Lab.

Prerequisite: Current enrollment in French. Individualized language laboratory practice with prepared taped materials and texts in the language laboratory. Practice in listening comprehension and pronunciation. Supplementary course for beginning, intermediate and advanced levels in French.

GEOGRAPHY

GEOG 1 (3)
PHYSICAL GEOGRAPHY
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. (CSU, UC)

GEOG 2 (3)
CULTURAL GEOGRAPHY
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. (CSU, UC)

GEOG 3 (3)
ECONOMIC GEOGRAPHY
3 Hrs. Lec.

The geography of commercial products. Distribution of production as related to climate, surface features, soils, labor supply and market areas, and the routes along which products move to consuming areas. (CSU, UC)

GEOLOGY

GEO 1A (4)
PHYSICAL GEOLOGY
3 Hrs. Lec. 3 Hrs. Lab.

Prerequisite: One year of high school science or permission of the instructor. Destructive and constructive work of water, ice and wind; earthquakes and the earth's interior; volcanoes and geysers; rocks and rock formations; mineral resources, coral islands; origin and history of the larger topographic features. (CSU) (UC credit limited. See a counselor.)

GEO 11 (3)
GENERAL GEOLOGY: AN INTRODUCTION TO GEOLOGY
3 Hrs. Lec.

Prerequisite: One semester of high school science recommended. The basic elements of physical and historical geology. Study of rocks and fossils: their meaning and origins. Origin of the earth, volcanics, tectonics, earthquakes and geologic time. The building of mountains; erosion by wind and water. Glaciers and their activities, climatic changes through time, the changing landscape. Emphasis on the geology of the Imperial Valley. (CSU) (UC credit limited. See a counselor.)

GEO 12 (3)
INTRODUCTION TO HISTORICAL GEOLOGY
3 Hrs. Lec.

Prerequisite: One semester of high school science recommended. Origin and evolution of the earth, solar system and universe. Measurement of geologic time: the geologic periods. Typical fossils and organic evolution. Survey of paleogeography and paleoecology. Biological and geological principles in an historical perspective. Emphasis on past events in Imperial Valley. (CSU) (UC credit limited. See a counselor.)

GEO 12L (1)
INTRODUCTION TO GEOLOGY LAB
3 Hrs. Lab.

Prerequisite: Geol 12 or concurrent registration in Geol 12. Origin and evolution of the earth, solar system and universe. Measurement of geologic time: the geologic periods. Typical fossils and organic evolution. Survey of paleogeography and paleoecology. Biological and geological principles in an historical perspective. Emphasis on past events in Imperial Valley. (CSU, UC)

GEO 13 (3)
GEOLOGY OF CALIFORNIA
3 Hrs. Lec.

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

GEO 14 (3)
GENERAL PALEONTOLOGY, DINOSAURS, SABRETOOTH AND MAN
3 Hrs. Lec.

Prerequisite: Geol 10, Geol 12, or Zool 1B. The history of life on earth from microbe to man as seen in the fossil record. The origins and evolution of invertebrates, vertebrates and plant life. Study of extinction and its causes. Emphasis on paleoecology and knowledge from the past applied to the present and future. Fossil fuels: their origin and distribution. A general education course intended for nonmajors. (CSU, UC)

GERMAN

GER 1 (4)
ELEMENTARY GERMAN
4 Hrs. Lec. 1 Hr. Lab.

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

GER 1A (2)
ELEMENTARY GERMAN
2 Hrs. Lec. 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. 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. Students must plan for an additional one-half hour of individual language laboratory by arrangement. (CSU) (UC credit limited. See a counselor.)

GER 1B (2)
ELEMENTARY GERMAN
2 Hrs. Lec. 1/2 Hr. Lab.

Continuation of Ger 1A. Students must plan for one-half hour of individual language laboratory by arrangement. (CSU) (UC credit limited. See a counselor.)

GER 2 (4)
ELEMENTARY GERMAN
4 Hrs. Lec. 1 Hr. Lab.

Prerequisite: 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. German culture and civilization will be introduced. Students must plan for an additional one-half hour of individual language laboratory by arrangement. (CSU, UC)

GRAPHIC ARTS

GA 10 (2)
GRAPHIC COMMUNICATION I
1 Hr. Lec. 3 Hrs. Lab.

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

GA 11 (3)
GRAPHIC COMMUNICATION II
2 Hrs. Lec. 1 Hr. Lab.

Prerequisite: GA 10. A continuation in the preparation of art and the mechanics for reproduction in the graphic arts field. Emphasis is on advertising and studio skills. An in-depth study of reproduction art in conjunction with offset printing. Student must plan for two additional hours by arrangement. (CSU)

GA 12 (3)
COMPOSITION, LAYOUT AND PASTE-UP
2 Hrs. Lec. 3 Hrs. Lab.

Prerequisite: GA 10. A course designed to cover basic methods of composition as it applies to the printing industry, including copysetting, proofreading and pasteup techniques. This course will cover effective uses of related material, techniques, creative thinking and innovative practices through the use of demonstrations, projects and laboratory experiences. (CSU)

GA 20 (3)
OFFSET PRINTING I
2 Hrs. Lec. 2 Hrs. Lab.

Study of the principles of offset presswork at the elementary level. Instruction in operation of offset presses under 11 x 17 inches. Students must print simple offset work, color work and close-register. This course will also offer instruction in the theory of offset press troubleshooting, including standard troubleshooting procedures. (CSU)

GA 21 (3)
OFFSET PRINTING II
2 Hrs. Lec. 2 Hrs. Lab.

Prerequisite: GA 20. An advanced course in lithographic presswork which allows the student to apply the lithographic theory and experience he/she has gained by operating equipment using sheets 4 x 6 in. up to 11 x 17 in. with emphasis in loading and setting feeds, conveyor mechanism and guides, the proper preparation of stock and packing clamps, the mounting of plates and blankets, the setting of dampeners, ink rollers, fountain, and grippers. Pressure adjustments are stressed. Camera operations for the lithography process are introduced. Student must plan for two additional hours by arrangement. (CSU)

GA 22 (3)
PHOTOGRAPHY AND PLATEMAKING
2 Hrs. Lec. 2 Hrs. Lab.

Current techniques and equipment in photography and platemaking as final preparation before offset printing. Covers effective use of materials and techniques in darkroom, stripping and platemaking departments. (CSU)

GA 23 (2)
BINDERY, CUTTING AND DISTRIBUTION
1 Hr. Lec. 2 Hrs. Lab.

This course offers instruction in finishing operations on printed materials, training in the operation of folding machines, slitting, perforating, and troubleshooting, training in the operation of hand and power cutters, special trimming, trimming of booklets and printed matter, cutting of blank stock, collating machine, stapling and stitching, hole punching, jogging and padding procedures. (CSU)

GA 30 (3)
GRAPHICS PLANT OPERATION AND MANAGEMENT FUNDAMENTALS
3 Hrs. Lec. 2 Hrs. Lab.

A course designed to acquaint the student with all phases of the small printing shop operation. The course emphasis will be on production control, cost control, estimating and quoting, sales and general management techniques used in the day-to-day operation. Covers effective use of techniques, creative thinking, innovative practices through the use of projects, problem presentations and experiences directly related to the subject matter. (CSU)

HEALTH ASSISTANT

The Health Assistant Program (HA 15) prepares the student to receive a Certificate of Completion from the College. In addition, the student is prepared to receive a Certificate from the California State Department of Health Services as a Certified Nurse Aide.

The Home Health Aide Program (HA 16) prepares the student to receive a Certificate of Completion from the College. In addition, the student is prepared to receive a Certificate from the California State Department of Health Services as a Home Health Aide.

An admissions committee reviews all applications. Early application is recommended since both programs accept a limited number of students. Admission requirements include an application on file, a health examination, and a Nelson-Denny Reading score of ninth grade. A grade of "C" or better in the program course is required for successful completion. Transportation to the health agencies is the responsibility of the student.

HA 15 (6)
HEALTH ASSISTANT

3 Hrs. Lec. 9 Hrs. Lab.
Prerequisite: Ninth grade reading level or Eng 12A. This course will prepare the health assistant for certification by the State of California as an entry-level worker on a health care team in a long-term care facility. The course is structured to provide theory and practical application of skills needed to function as a nurse assistant.

HA 16 (6)
HOME HEALTH AIDE

4 Hrs. Lec. 6 Hrs. Lab.
Prerequisite: Certification as a Health Assistant. This course will prepare the student for certification by the State of California as a home health aide. The curriculum is structured to provide the theory and practice skills needed to care for individuals in the home environment.

Nursing - Continuing Education
Health Assistant

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

HA 37 (1)
BASIC ARRHYTHMIA RECOGNITION
1 Hr. Lec.
(Same as RN/VN 37) (CSU)

HEALTH EDUCATION

HE 1 (3)
HEALTH EDUCATION
3 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. (CSU, UC)

HE 2 (3)

FIRST AID
3 Hrs. Lec.

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

HE 3 (2)

HEALTH EDUCATION - MILITARY SERVICE

Prerequisite: The satisfactory completion of basic or recruit training and 180 days or more active service in the military of the United States of America. The student wishing credit for military service must present his/her DD214 or equivalent supporting document to the Veterans Assistant and register for the credit. If the student registers for military credit and does not submit verification of service, he/she will be dropped as a No-Show and will not receive credit. HE 3 does not count for units toward VA, Financial Aid, or full-time student status. These are not contact hours. May receive credit only once. (CSU)

HEALTH TECHNOLOGIES

HT 1 (2)

INTRODUCTION TO HEALTH SCIENCE
2 Hrs. Lec.

In this course the educational requirements and practice demands of the varied careers within the health services are surveyed. Progress and trends in health care delivery since 1940 are presented as a background for the exploration of the current state of the art. Major health problems of the 1980's are identified and the impact of lifestyle, total environment and education on physical and emotional well-being are analyzed.

HT 3 (3)

MEDICAL TERMINOLOGY
3 Hrs. Lec.

Course of study designed to develop competency in the accurate use of medical vocabulary to include anatomy, physiology, diseases, and descriptive terms and prepare students for entry-level positions as medical transcribers, clinical editors, health insurance processors, and patient administration specialists. (Same as Bus 80) (CSU)

HT 4 (3)

MEDICAL TRANSCRIPTION

2 Hrs. Lec. 2 Hrs. Lab.

Prerequisites: HT 3/Bus 80. Ability to type 40 words per minute or permission of the instructor. Course of study designed to prepare students to transcribe data from a recording device into typewritten form using standard typewriters and/or microcomputers. Includes information placed on patient records in hospitals, doctors' offices or clinics. Upon completion of this course, the student

should be prepared to accept an entry-level position as a medical transcriptionist. (Same as Bus 81) (CSU)

HT 5 (3)

PATIENT INFORMATION SYSTEMS

2 Hrs. Lec. 2 Hrs. Lab.

Prerequisites: HT 3/Bus 80. Ability to type 40 words per minute or permission of the instructor. Course of study designed to prepare students to use memory typewriters, word processors, microcomputer processors, input/output equipment (CRTs, disc drives, printers, diskettes, magnetic tape, and various software programs) in a hospital, clinic or doctor's office. The use of a computer program to store patient data is emphasized. (Same as Bus 82) (CSU)

HT 6 (3)

MEDICAL INSURANCE

3 Hrs. Lec.

Prerequisites: HT 3/Bus 80. Ability to type 40 words per minute or permission of the instructor. Health care facilities are dependent upon third party payers for financial solvency. Medical billing guidelines are rapidly changing as are complex issues which health care facilities must concern themselves with daily. The purpose of this course is to provide students with the practice and skill necessary so that billing office personnel can promptly and accurately submit insurance claims to a variety of carriers. (Same as Bus 83) (CSU)

HT 7 (3)

PATIENT ADMINISTRATION SERVICES

3 Hrs. Lec.

Course of study designed to prepare students for entry-level positions in hospitals, clinics or doctors' offices. Extensive exposure to various areas such as preadmissions, financial advisory services, billing, collections, and outpatient accounts is emphasized. Interdepartmental communications are stressed. (Same as Bus 84) (CSU)

HT 8 (2)

MANAGEMENT OF PATIENT SERVICES

2 Hrs. Lec.

Course is designed for persons interested in patient services in hospitals, clinics or doctors' offices. Managing the flow of intra and interdepartmental information is presented. Theory of organizational behavior is reviewed and personnel supervision is included. The role of the manager/supervisor is stressed. (Same as Bus 85) (CSU)

HT 11 (3)

ADVANCED MEDICAL TRANSCRIPTION

2 Hrs. Lec. 2 Hrs. Lab.

Prerequisites: HT 4/Bus 81 and Anat 6 or permission of the instructor. An advanced course of study in transcribing medical data onto appropriate health facility forms. Advanced medical terminology is used and increased speed in transcription is required. Upon completion of this course, the student should be prepared to accept a position as an experienced transcriptionist. (Same as Bus 86) (CSU)

HT 12 (6)

PHARMACY TECHNICIAN I

5 Hrs. Lec. 3 Hrs. Lab.

Prerequisites: Math X, HT 3, and Anat 6 or permission of the instructor. The Pharmacy Technician I course is designed to develop knowledge and skill in identifying

names, dosages, strengths, and common abbreviations for drugs dispensed from the pharmacy. The student will learn to receive orders for medications, transcribe orders onto pharmacy patient profiles, and type necessary labels. Other technical and clerical functions traditionally carried out by the pharmacist will be included. (CSU)

HT 13 (6)

PHARMACY TECHNICIAN II

5 Hrs. Lec. 3 Hrs. Lab.

Prerequisite: HT 12 or permission of the instructor. The Pharmacy Technician II course continues to build upon the knowledge and skills learned in HT 12. In addition, the student will learn to facilitate the distribution of Unit Dose medications, keep accurate records, do billing procedures, inventory control, drug purchasing and parenteral admixture operations. Upon successful completion of this course, the student will receive a certificate of completion from Imperial Valley College. (CSU)

HISTORY

HIST 4A (3)

HISTORY OF WESTERN CIVILIZATION

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. (CSU, UC)

HIST 4B (3)

HISTORY OF WESTERN CIVILIZATION

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. (CSU, UC)

HIST 17A (3)

UNITED STATES HISTORY

3 Hrs. Lec.

A survey of the political and social development of the United States from the seventeenth century to 1872. This course and either Hist 17B or Poly Sci 1 will meet graduation requirements in American Institutions. (CSU, UC)

HIST 17B (3)

UNITED STATES HISTORY

3 Hrs. Lec.

A survey of the political, social, and economic maturation of the United States from the end of the Civil War to the present. This course and either Hist 17A or Poly Sci 2 will meet graduation requirements in American Institutions. May be taken before Hist 17A. (CSU, UC)

HIST 30 (3)

MEXICO AND THE AMERICAN SOUTHWEST

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. (CSU, UC)

HIST 33 (3)

HISTORY OF IMPERIAL VALLEY

3 Hrs. Lec.

A one semester survey of the history of the Imperial Valley from the earliest times to the present. The course will stress the development of communities, water resources, agriculture, and ethnic groups. (CSU)

GA 30 (3)**GRAPHICS PLANT OPERATION AND MANAGEMENT FUNDAMENTALS****3 Hrs. Lec. 2 Hrs. Lab.**

A course designed to acquaint the student with all phases of the small printing shop operation. The course emphasis will be on production control, cost control, estimating and quoting, sales and general management techniques used in the day-to-day operation. Covers effective use of techniques, creative thinking, innovative practices through the use of projects, problem presentations and experiences directly related to the subject matter. (CSU)

HEALTH ASSISTANT

The Health Assistant Program (HA 15) prepares the student to receive a Certificate of Completion from the College. In addition, the student is prepared to receive a Certificate from the California State Department of Health Services as a Certified Nurse Aide.

The Home Health Aide Program (HA 16) prepares the student to receive a Certificate of Completion from the College. In addition, the student is prepared to receive a Certificate from the California State Department of Health Services as a Home Health Aide.

An admissions committee reviews all applications. Early application is recommended since both programs accept a limited number of students. Admission requirements include an application on file, a health examination, and a Nelson-Denny Reading score of ninth grade. A grade of "C" or better in the program course is required for successful completion. Transportation to the health agencies is the responsibility of the student.

HA 15 (6)**HEALTH ASSISTANT****3 Hrs. Lec. 9 Hrs. Lab.**

Prerequisite: Ninth grade reading level or Eng 12A. This course will prepare the health assistant for certification by the State of California as an entry-level worker on a health care team in a long-term care facility. The course is structured to provide theory and practical application of skills needed to function as a nurse assistant.

HA 16 (6)**HOME HEALTH AIDE****4 Hrs. Lec. 6 Hrs. Lab.**

Prerequisite: Certification as a Health Assistant. This course will prepare the student for certification by the State of California as a home health aide. The curriculum is structured to provide the theory and practice skills needed to care for individuals in the home environment.

Nursing - Continuing Education
Health Assistant

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

HA 37 (1)**BASIC ARRHYTHMIA RECOGNITION****1 Hr. Lec.**

(Same as RN/VN 37) (CSU)

HEALTH EDUCATION**HE 1 (3)****HEALTH EDUCATION****3 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. (CSU, UC)

HE 2 (3)**FIRST AID****3 Hrs. Lec.**

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

HE 3 (2)**HEALTH EDUCATION - MILITARY SERVICE**

Prerequisite: The satisfactory completion of basic or recruit training and 180 days or more active service in the military of the United States of America. The student wishing credit for military service must present his/her DD214 or equivalent supporting document to the Veterans Assistant and register for the credit. If the student registers for military credit and does not submit verification of service, he/she will be dropped as a No-Show and will not receive credit. HE 3 does not count for units toward VA, Financial Aid, or full-time student status. These are not contact hours. May receive credit only once. (CSU)

HEALTH TECHNOLOGIES**HT 1 (2)****INTRODUCTION TO HEALTH SCIENCE****2 Hrs. Lec.**

In this course the educational requirements and practice demands of the varied careers within the health services are surveyed. Progress and trends in health care delivery since 1940 are presented as a background for the exploration of the current state of the art. Major health problems of the 1980's are identified and the impact of lifestyle, total environment and education on physical and emotional well-being are analyzed.

HT 3 (3)**MEDICAL TERMINOLOGY****3 Hrs. Lec.**

Course of study designed to develop competency in the accurate use of medical vocabulary to include anatomy, physiology, diseases, and descriptive terms and prepare students for entry-level positions as medical transcribers, clinical editors, health insurance processors, and patient administration specialists. (Same as Bus 80) (CSU)

HT 4 (3)**MEDICAL TRANSCRIPTION****2 Hrs. Lec. 2 Hrs. Lab.**

Prerequisites: HT 3/Bus 80. Ability to type 40 words per minute or permission of the instructor. Course of study designed to prepare students to transcribe data from a recording device into typewritten form using standard typewriters and/or microcomputers. Includes information placed on patient records in hospitals, doctors' offices or clinics. Upon completion of this course, the student

should be prepared to accept an entry-level position as a medical transcriptionist. (Same as Bus 81) (CSU)

HT 5 (3)**PATIENT INFORMATION SYSTEMS****2 Hrs. Lec. 2 Hrs. Lab.**

Prerequisites: HT 3/Bus 80. Ability to type 40 words per minute or permission of the instructor. Course of study designed to prepare students to use memory typewriters, word processors, microcomputer processors, input/output equipment (CRTs, disc drives, printers, diskettes, magnetic tape, and various software programs) in a hospital, clinic or doctor's office. The use of a computer program to store patient data is emphasized. (Same as Bus 82) (CSU)

HT 6 (3)**MEDICAL INSURANCE****3 Hrs. Lec.**

Prerequisites: HT 3/Bus 80. Ability to type 40 words per minute or permission of the instructor. Health care facilities are dependent upon third party payers for financial solvency. Medical billing guidelines are rapidly changing as are complex issues which health care facilities must concern themselves with daily. The purpose of this course is to provide students with the practice and skill necessary so that billing office personnel can promptly and accurately submit insurance claims to a variety of carriers. (Same as Bus 83) (CSU)

HT 7 (3)**PATIENT ADMINISTRATION SERVICES****3 Hrs. Lec.**

Course of study designed to prepare students for entry-level positions in hospitals, clinics or doctors' offices. Extensive exposure to various areas such as preadmissions, financial advisory services, billing, collections, and outpatient accounts is emphasized. Interdepartmental communications are stressed. (Same as Bus 84) (CSU)

HT 8 (2)**MANAGEMENT OF PATIENT SERVICES****2 Hrs. Lec.**

Course is designed for persons interested in patient services in hospitals, clinics or doctors' offices. Managing the flow of intra and interdepartmental information is presented. Theory of organizational behavior is reviewed and personnel supervision is included. The role of the manager/supervisor is stressed. (Same as Bus 85) (CSU)

HT 11 (3)**ADVANCED MEDICAL TRANSCRIPTION****2 Hrs. Lec. 2 Hrs. Lab.**

Prerequisites: HT 4/Bus 81 and Anat 6 or permission of the instructor. An advanced course of study in transcribing medical data onto appropriate health facility forms. Advanced medical terminology is used and increased speed in transcription is required. Upon completion of this course, the student should be prepared to accept a position as an experienced transcriptionist. (Same as Bus 86) (CSU)

HT 12 (6)**PHARMACY TECHNICIAN I****5 Hrs. Lec. 3 Hrs. Lab.**

Prerequisites: Math X, HT 3, and Anat 6 or permission of the instructor. The Pharmacy Technician I course is designed to develop knowledge and skill in identifying

names, dosages, strengths, and common abbreviations for drugs dispensed from the pharmacy. The student will learn to receive orders for medications, transcribe orders onto pharmacy patient profiles, and type necessary labels. Other technical and clerical functions traditionally carried out by the pharmacist will be included. (CSU)

HT 13 (6)**PHARMACY TECHNICIAN II****5 Hrs. Lec. 3 Hrs. Lab.**

Prerequisite: HT 12 or permission of the instructor. The Pharmacy Technician II course continues to build upon the knowledge and skills learned in HT 12. In addition, the student will learn to facilitate the distribution of Unit Dose medications, keep accurate records, do billing procedures, inventory control, drug purchasing and parenteral admixture operations. Upon successful completion of this course, the student will receive a certificate of completion from Imperial Valley College. (CSU)

HISTORY**HIST 4A (3)****HISTORY OF WESTERN CIVILIZATION****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. (CSU, UC)

HIST 4B (3)**HISTORY OF WESTERN CIVILIZATION****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. (CSU, UC)

HIST 17A (3)**UNITED STATES HISTORY****3 Hrs. Lec.**

A survey of the political and social development of the United States from the seventeenth century to 1872. This course and either Hist 17B or Poly Sci 1 will meet graduation requirements in American Institutions. (CSU, UC)

HIST 17B (3)**UNITED STATES HISTORY****3 Hrs. Lec.**

A survey of the political, social, and economic maturation of the United States from the end of the Civil War to the present. This course and either Hist 17A or Poly Sci 2 will meet graduation requirements in American Institutions. May be taken before Hist 17A. (CSU, UC)

HIST 30 (3)**MEXICO AND THE AMERICAN SOUTHWEST****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. (CSU, UC)

HIST 33 (3)**HISTORY OF IMPERIAL VALLEY****3 Hrs. Lec.**

A one semester survey of the history of the Imperial Valley from the earliest times to the present. The course will stress the development of communities, water resources, agriculture, and ethnic groups. (CSU)

HONORS

HONORS 21 (1-2)
HUMANITIES DIVISION HONORS PROGRAM
 1-2 Hrs. Lec.
 (UC credit limited. See a counselor.)

HONORS 22 (1-2)
BUSINESS DIVISION HONORS PROGRAM
 1-2 Hrs. Lec.

HONORS 23 (1-2)
SOCIAL SCIENCE DIVISION HONORS PROGRAM
 1-2 Hrs. Lec.
 (UC credit limited. See a counselor.)

HONORS 25 (1-2)
AUTOMOTIVE-AGRICULTURAL TECHNOLOGY DIVISION HONORS PROGRAM
 1-2 Hrs. Lec.

HONORS 26 (1-2)
ENGLISH DIVISION HONORS PROGRAM
 1-2 Hrs. Lec.
 (UC credit limited. See a counselor.)

HONORS 27 (1-2)
SCIENCE DIVISION HONORS PROGRAM
 1-2 Hrs. Lec.
 (UC credit limited. See a counselor.)

HONORS 28 (1-2)
MATHEMATICS-ENGINEERING DIVISION HONORS PROGRAM
 1-2 Hrs. Lec.
 (UC credit limited. See a counselor.)

HONORS 29 (1-2)
HEALTH, PHYSICAL EDUCATION AND RECREATION DIVISION HONORS PROGRAM
 1-2 Hrs. Lec.

HONORS 21-29
COURSE DESCRIPTION
 Prerequisites: Sophomore standing and admission to the program. Individual study with special guidance of instructor. Recommended for honor students in a major area offered by the division or for students requesting study in-depth in a particular area. By request of students and/or suggestion of instructor and approval of division chairperson. Interdisciplinary conference, with readings, discussion, reports.

HONORS 30AB (1-6)
FIELD STUDY
 Lec./Lab. by arrangement
 Regular class instruction for honors students in major area of study offered by a division. Interdisciplinary conference with readings, discussion, and reports. Travel to on-site study areas may be required at the student's expense. Special curriculum may be requested by the students and/or instructors, but must be approved by the appropriate division chairperson and the Vice President for Academic Services. (UC credit limited. See a counselor.)

HUMANITIES

HUM 1A (3)
THE HUMANITIES IN WESTERN CULTURE
 3 Hrs. Lec.
 An examination of the Humanities in Western Culture from the Prehistoric through the Medieval periods. The course will focus on the art, architecture, literature, music, philosophy, and theology of these periods. (CSU, UC)

HUM 1B (3)
THE HUMANITIES IN CULTURE
 3 Hrs. Lec.
 An examination of the Humanities in Western Culture from the Renaissance through the Modern periods. The course will focus on the art, architecture, literature, music, philosophy, and theology of these periods. (CSU, UC)

HUM 25 (3)
INTRODUCTION TO THE HUMANITIES
 3 Hrs. Lec.
 An exploratory course designed to introduce students to the major disciplines in the Humanities: art, architecture, literature, music, and dance. Examination of humanistic values and how they are reflected in the arts of world cultures. (CSU, UC)

HUM 26 (3)
THE HUMANITIES
 3 Hrs. Lec.
 Prerequisite: Hum 25 or consent of the instructor. An advanced course dealing extensively in music, dance, drama, film, visual arts and architecture. Humanistic and interdisciplinary approach to study of creative expression. Requirements include diverse readings, papers and creative projects. Format includes discussions, lectures, and films. (CSU, UC)

HUMAN RELATIONS

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

HR 7 (3)
HUMAN RELATIONS IN MANAGEMENT
 3 Hrs. Lec.
 (Same as Bus 7) (CSU)

HR 8 (3)
PERSONAL AND CAREER DEVELOPMENT
 3 Hrs. Lec.
 This course examines the process a student would follow in making a realistic career decision. Students planning to enter professions involving helping relationships such as education, social work, counseling, psychology, community work, and related areas, in addition to students who are undecided about their own future, would profit from the course. Self-awareness will be appraised by testing and discussing interests, aptitudes, abilities, limitations, needs and life goals. Career awareness will be facilitated by exploring the world of work in terms of occupational outlook, wages, training

required, opportunities for advancement and life styles. (Same as Psych 8) (CSU)

HR 8A (1)
PERSONAL AND CAREER DEVELOPMENT
 1 Hr. Lec.
 This course examines the dynamics of self-awareness which are required when making a realistic career decision. Self-awareness will be appraised through an interest inventory, basic skills test, and a values survey, supported by class discussions about personal interests, abilities, aptitudes, limitations, needs, values, and goals. Additional course work will acquaint the student with basic college orientation skills which provide knowledge of services, scholastic requirements, and additional educational opportunities. (CSU)

HR 8B (1)
PERSONAL AND CAREER DEVELOPMENT
 1 Hr. Lec.
 This course will provide techniques for obtaining career information through the multi-media resources of the IVC Career Center. Career awareness will be facilitated by exploring the "world of work" through publications, occupational briefs, filmstrips, and EUREKA, the computerized California Career Information System. Factors such as career opportunity, employment, wages, advancement, and required training will be explored. (CSU)

HR 8C (1)
PERSONAL AND CAREER DEVELOPMENT
 1 Hr. Lec.
 This course examines the processes for obtaining employment in today's modern job market. Skills development in the areas of job search, employer contact, job application, resume writing, techniques of interviewing, and follow-up will be developed through practical experience. (CSU)

HR 9 (3)
INTRODUCTION TO COUNSELING
 3 Hrs. Lec.
 A study of the theory, process, and practice of interviewing and counseling in community service and other counseling situations. The course is designed to assist the student to gain knowledge and develop skills in order to help a client or interviewee in counseling situations. Theories of counseling and basic helping skills will be presented, demonstrated, and practiced. (Same as ADS/Psych 9) (CSU)

HR 11A (3)
PRACTICUM
 3 Hrs. Lec.
 Prerequisite: HR/ADS/Psych 9, Psych 1A or Soc 1. A course designed to provide opportunity for the student in Psychology, Human Relations, or Alcohol and Drug Studies to gain experience under supervised conditions such as those involving mental health, child development, youth corrections, welfare, homes for the neglected, homes for the aged, youth recreation, rehabilitation, centers for people with physical limitations, and educational settings. Students will be supervised by qualified instructional staff and professionally trained personnel. (Same as ADS 11A/Psych 11A) (CSU)

HR 11B (3)
PRACTICUM
 3 Hrs. Lec.
 Prerequisite: HR/ADS/Psych 11A. A continuation of HR/ADS/Psych 11A with emphasis in gaining further experience in the same institution or agency or a different institution or agency. (Same as ADS 11B/Psych 11B) (CSU)

HR 16 (3)
THE PSYCHOLOGY OF INTERPERSONAL RELATIONSHIPS
 3 Hrs. Lec.
 (Same as Psych 16) (CSU)

HR 61 (1)
COLLEGE STUDY TECHNIQUES
 2 Hrs. Lab.
 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, the use of texts, taking useful notes, outlining, scheduling, learning to concentrate and remember, the preparation for examinations, the use of the library, the management techniques, and interpersonal communication skills.

HR 62ABCD (1-1-1-1)
PERSONAL AND SOCIAL DEVELOPMENT
 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.

HR 63A (.5)
ORIENTATION TO IVC
 .5 Hr. Lec.
 A course required for all new matriculating students to assure that they will be acquainted with the college's programs, services, academic expectations, procedures and policies, campus grounds, and student life. Specifically addressed will be admissions, matriculation and its requirements, rules and regulations as they pertain to students, financial assistance, support services as the Learning Center, Reading/Writing Lab, Language Lab, Tutorial Services, support programs to include EOPS, Student Support Services, and Disabled Student Programs and Services, teacher/student/institution expectations, study skills, development of a preliminary Student Educational Plan, registration assistance, and campus life.

HR 63B (.5)
STUDENT EDUCATIONAL PLAN
 .5 Hr. Lec.
 Prerequisite: HR 63A. An optional course to be taken after the successful completion of HR 63A. This course expands on the foundation of information provided in HR 63A by assisting each student to compile an individual needs analysis based in part on the student profile questionnaire completed in HR 63A. Based on that needs analysis, specific information will be presented in the areas of transfer, vocational requirements, career exploration, choosing a major, decision making, campus organizations, student life, and assessment needs as necessary.

HR 65ABCD (1-1-1)
THE STUDENT IN CONTEMPORARY COLLEGE AFFAIRS
1 Hr. Lec.

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 on a credit basis only.

INDIVIDUAL STUDIES

IND STU 40 or 80 (1-3)
VOCATIONAL EDUCATION
Hours by Arrangement

IND STU 41 or 81 (1-3)
HUMANITIES
Hours by Arrangement

IND STU 42 or 82 (1-3)
ENGLISH
Hours by Arrangement

IND STU 43 or 83 (1-3)
NATURAL SCIENCE
Hours by Arrangement

IND STU 44 or 84 (1-3)
SOCIAL SCIENCE
Hours by Arrangement

IND STU 45 or 85 (1-3)
BUSINESS
Hours by Arrangement

IND STU 46 or 86 (1-3)
HEALTH, PHYSICAL EDUCATION AND RECREATION
Hours by Arrangement

IND STU 40-46 and 80-86
COURSE DESCRIPTION

Available to students on an individual basis. Course content, prerequisites, and unit credit to be determined by the Division and the Vice President of Academic Services. Courses developed in relation to student interest and staff availability. Courses numbered 80-86 are nontransferable.

IND STU 48AB or 88AB (1-6)
PHYSICALLY LIMITED PROGRAM
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. Course number 88 is non-transferable.

IND STU 49ABCD (1/2-1, 1/2-1, 1/2-1, 1/2-1)
INDIVIDUAL STUDIES/NURSING LEARNING CENTER
1-2 Hrs. Lab. by arrangement

Prerequisite: Enrollment in a Nursing Education and Health Technologies Division Program. An individualized course of independent study by students in the programs offered by the Nursing Education and Health Technologies Division. Students will use materials in the Nursing Learning Center and will have the assistance of the NLC instructor/tutors as needed. Eighteen (18) hours of independent study in the NLC per semester will earn 1/2 unit credit. Thirty-six (36) hours of independent study in the NLC per semester will earn 1 unit of credit.

IND STU 89ABCD (1-2, 1-2, 1-2, 1-2)
INDIVIDUAL STUDIES FOR THE LEARNING CENTER
2-4 Hrs. Lab.

An individualized course of study in any discipline using materials in the Learning Center. Nontransferable. (Nondegree Applicable)

JOURNALISM

JRN 1 (3)
INTRODUCTION TO JOURNALISM
3 Hrs. Lec.

Prerequisite: Eligibility for Eng 2B or Eng 1A. The course focuses on the newspaper as a vehicle for communication within a community. Students study basic components of print journalism, including types of articles, writing style, interview techniques, makeup and ethics. (CSU) (UC credit limited. See a counselor.)

JRN 2ABC (4-4-4)
NEWSPAPER PRODUCTION
3 Hrs. Lec. 2 Hrs. Lab.

Prerequisite: Jrn 1 or equivalent. Course provides a concrete introduction to principles and techniques of newspaper production through work on the student newspaper. Students assume specific staff positions with corresponding responsibilities for the paper's production. Lab work includes editing of stories, planning pages, headline writing, proofreading, and pasteup. (CSU)

LEGAL ASSISTANT

LA 21 (3)
RESEARCH AND CRIMINAL LAW
3 Hrs. Lec.

An introductory course regarding the use of the legal library, research techniques and drafting legal documents. Includes the Penal Code and other criminal statutes and provides an understanding of the elements of crimes and defenses. (CSU)

LA 22 (3)
CIVIL PROCEDURES AND FAMILY LAW
3 Hrs. Lec.

An introductory course in basic civil procedures, court systems, and procedures as they apply to federal, state, and civil laws. Includes topics in family law relative to marriage, community property, dissolution, parent-child relations, and adoption. (CSU)

LA 23 (3)
CIVIL DISCOVERY AND TORTS
3 Hrs. Lec.

A study of the fundamental principles of the law of torts and examination of the techniques of investigation involved in the lawyer's handling of tort claims, including various forms of pleadings. An examination of the rules of civil evidence and the admissibility of evidence, depositions, interrogations, admissions, notices to produce, and related rules of discovery and evidence. (CSU)

LA 24 (3)
CORPORATIONS AND BANKRUPTCY
3 Hrs. Lec.

This course covers the principles of agency, principal and third parties, formation and management of California corporations, the rights and liabilities of stockholders, and corporate reorganization and dissolution. It includes regulations of state and federal

governments relating to income, deductions, exemptions, depreciation, and capital gains and losses. It also includes a study of the bankruptcy laws and procedures with topics on creditors' rights, debtors' exemptions, and secured transactions. (CSU)

LA 25 (3)
REAL ESTATE LAW FOR LEGAL ASSISTANTS
3 Hrs. Lec.

The study of the legal background in property ownership, with special reference to the law of California as it applies to community property, conveyances, deeds, trust deeds, mortgages, homesteads, and estates, etc. (CSU)

LA 26 (3)
WILLS - TRUSTS - PROBATE
3 Hrs. Lec.

A study of the fundamental principles of the law of wills and trusts including simple will and trust forms. An examination of the organization and jurisdiction of a California Probate Court including gift, inheritance and estate taxes, and practice in documentation. (CSU)

LIBRARY TECHNICIAN

LT 51 (3)
INTRODUCTION TO LIBRARY SERVICES
3 Hrs. Lec.

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. (CSU)

LT 52 (3)
SUPPORT FOR TECHNICAL SERVICES
3 Hrs. Lec.

Prerequisite: LT 51 or consent of the instructor. An introduction to the various semi-professional tasks in the technical processes phase of library operation. (CSU)

LT 53 (3)
SUPPORT FOR PUBLIC SERVICES
3 Hrs. Lec.

Prerequisite: LT 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. (CSU)

LT 54 (3)
INTRODUCTION TO AUDIOVISUAL SERVICES
3 Hrs. Lec.

Prerequisite: LT 51 or consent of the instructor. A survey course of the processes necessary for the utilization of audiovisual materials and equipment in the library situation. (CSU)

LT 55 (3)
CATALOGING AND CLASSIFYING
3 Hrs. Lec.

Prerequisite: LT 51 and/or LT 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 nonbook materials, and is exposed

to a variety of work-experience situations where this knowledge is put to use. (CSU)

MATHEMATICS

Enrollment in math courses requiring a prerequisite is not allowed unless the prerequisite math class is passed with a "C" grade or better.

MATH X (3)
BEGINNING ALGEBRA
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 A (3)
INTERMEDIATE ALGEBRA
3 Hrs. Lec.

Prerequisite: Math X. This one semester course is equivalent to a second year algebra course offered a full year in high school. Topics covered include the real number system, polynomials, rational expressions, exponential and radical forms, linear and quadratic equations, relations, functions and graphs, systems of equations and inequalities.

SPECIAL NOTE: Mathematics courses 51, X, and A 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/she expects to transfer to identify deficiencies which must be removed or to plan the sequence of courses which must be completed.

MATH 2 (5)
ADVANCED ALGEBRA AND TRIGONOMETRY
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, exponential, logarithmic, and trigonometric functions, the complex numbers, theory of equations, and systems of equations. (CSU) (UC credit limited. See a counselor.)

MATH 3A (5) (CAN MATH 18)
ANALYTIC GEOMETRY AND CALCULUS
5 Hrs. Lec.

Prerequisite: Math 2 or equivalent. Concepts dealing with limits, continuity, differentiation and applications, integration and applications, exponential and logarithmic functions, and other transcendental functions. (CSU) (UC credit limited. See a counselor.)

MATH 3B (5) (CAN MATH 20)
ANALYTIC GEOMETRY AND CALCULUS
5 Hrs. Lec.

Prerequisite: Math 3A. Concepts dealing with methods of integration, plane analytic geometry, polar coordinates, vectors and parametric equations, and infinite series. (CSU, UC)

MATH 4 (5) (CAN MATH 22)
CALCULUS AND DIFFERENTIAL EQUATIONS
5 Hrs. Lec.

Prerequisite: Math 3B. Concepts dealing with partial differentiation, multiple integration, vector analysis and differential equations. (CSU, UC)

MATH 10A (3)
MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS
3 Hrs. Lec.

Prerequisite: Math A, the equivalent, or permission of the instructor. Recommended for students who are working towards a teaching credential in elementary education. Topics discussed are sets and relations, development of the number system from the natural numbers including whole, rational and real numbers, number theory, ratio and proportion, decimals, and percents. (CSU)

MATH 10B (3)
MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS
3 Hrs. Lec.

Prerequisite: Math 10A or permission of the instructor. Recommended for students who are working towards a teaching credential in elementary education. Covers areas of mathematics, including probability, statistics, geometry and measurements. (CSU)

MATH 12 (3) (CAN STAT 2)
ELEMENTARY STATISTICS
3 Hrs. Lec.

Prerequisite: Math A or equivalent. Graphical representation of statistical data, calculations and uses of various averages, measures of variability, introduction to probability, probability distributions, confidence intervals, sample size determination and hypothesis testing, ANOVA, linear regression and Chi-square analysis. (Same as Bus 26 and Psych 13) (CSU, UC)

MATH 15 (4) (CAN MATH 34)
INTRODUCTORY CALCULUS WITH APPLICATIONS
4 Hrs. Lec.

Prerequisite: Math A or equivalent. To prepare for courses for which calculus is recommended and/or required. To study the ideas and concepts of advanced mathematics as applied to a modern computerized society. Topics covered include precalculus concepts, functions, differentiation, integration, differential equations, and functions of several variables. (Same as Bus 15) (CSU) (UC credit limited. See a counselor.)

MATH 47 (3)
PROGRAMMING IN FORTRAN
3 Hrs. Lec.

A practical course covering the fundamentals of Fortran Programming Language as adapted to a variety of different applications. (Same as CIS 14) (CSU) (UC credit limited. See a counselor.)

MATH 50 (1-3)
APPLIED MATHEMATICS
1-3 Hrs. Lec.

A basic course in mathematics designed to meet the needs of students enrolled in the following vocational programs: Automotive Technology, Welding, Agricultural Engineering, and Physically Limited. The course is taught on a variable unit basis in three one-unit segments. The student may exit or continue at the end of each segment.

The first unit is a review of basic skills dealing with addition, subtraction, multiplication and division of whole numbers, common fractions, decimal fractions and percents.

The second unit is an introduction to or review of exponents, factors, squares and square roots. The use of measurement in both Metric and English systems will be

covered as well as measuring and calculating areas and volumes of geometric figures.

The third unit applies mathematics to the areas of agriculture, auto technology and welding. Tools for measuring, ratio and proportion, measuring area and volume, and measuring and drawing angles will be covered. This unit also introduces the student to basic algebra.

The completion of all three units will prepare the student for Math 51. This course is not open to students who have completed Math 51. (Same as Aget 50, Auto Tech 50, PL 50 and Weld 50) (Nondegree Applicable)

MATH 51 (3)
BASIC MATHEMATICS
3 Hrs. Lec.

Brief review of arithmetic including fractions, decimals, percent, square root, and an introduction to algebra. This course is not open to students having satisfactory scores on mathematics placement tests. (Nondegree Applicable)

MATH 57 (3)
PROGRAMMING IN BASIC
3 Hrs. Lec.

(Same as CIS 12) (CSU) (UC credit limited. See a counselor.)

MATH 58 (3)
COMPUTER PROGRAMMING IN PASCAL
3 Hrs. Lec.

Prerequisite: Math proficiency equivalent to Math A or permission of the instructor. Introduction to machine data organization. Design and analysis of algorithms, flowcharts and complete programs. Emphasis will be placed on the structured aspects of programming. (CSU) (UC credit limited. See a counselor.)

MATH 60 (1)
MATH LAB
2 Hrs. Lab.

Prerequisite: Concurrent enrollment in Math/Aget/Auto Tech/PL/Weld 50, Math 51 or Math X. Designed for the student needing additional help and/or personal instruction. (Nondegree Applicable)

MUSIC

MUS 7 (3)
INTRODUCTION TO MUSIC FOUNDATIONS
3 Hrs. Lec.

An introduction to basic concepts of music. The development of the skills and knowledge needed to read music, to hear music, and to use some instrument (including the voice) with skill. (CSU) (UC credit limited. See a counselor.)

MUS 8A (2)
BEGINNING MUSICIANSHIP
2 Hrs. Lec.

Prerequisite: Mus 7 or approval of the 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. (CSU, UC)

MUS 8B (2)
BEGINNING MUSICIANSHIP
2 Hrs. Lec.
Prerequisite: Mus 8A. Continuation of Mus 8A. (CSU, UC)

MUS 8C (2)
INTERMEDIATE MUSICIANSHIP
2 Hrs. Lec.
Prerequisite: Mus 8B. A continuation of Mus 8A and 8B to increase skills in sight-singing, ear-training, and keyboard harmony. (CSU, UC)

MUS 8D (2)
INTERMEDIATE MUSICIANSHIP
2 Hrs. Lec.
Prerequisite: Mus 8C. A continuation of Mus 8C. (CSU, UC)

MUS 9A (3)
BEGINNING HARMONY
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. (CSU, UC)

MUS 9B (3)
BEGINNING HARMONY
3 Hrs. Lec.
Prerequisite: Mus 9A. A continuation of Mus 9A. (CSU, UC)

MUS 9C (3)
INTERMEDIATE HARMONY
3 Hrs. Lec.
Prerequisite: Mus 9B. A comprehensive study of the theory of music to include skills and creative experiences in traditional harmony. An introduction to 20th century harmonic and melodic systems. (CSU, UC)

MUS 9D (3)
INTERMEDIATE HARMONY
3 Hrs. Lec.
Prerequisite: Mus 9C. A continuation of Mus 9C. (CSU, UC)

MUS 10A (1)
BEGINNING GROUP PIANO I
1 Hr. Lec. 2 Hrs. Lab.
A course structured to correlate those musical skills, techniques and understandings which are basic to comprehensive keyboard musicianship at the early level of study. (CSU) (UC credit limited. See a counselor.)

MUS 10B (1)
BEGINNING GROUP PIANO II
1 Hr. Lec. 2 Hrs. Lab.
Prerequisite: Mus 10A. A continuation of Mus 10A. (CSU) (UC credit limited. See a counselor.)

MUS 11A (1)
INTERMEDIATE GROUP PIANO II
1 Hr. Lec. 2 Hrs. Lab.
Prerequisites: Mus 10A and 10B or equivalent. A course structured for those students who have attained the performance skill competencies required in Beginning Group Piano. (CSU) (UC credit limited. See a counselor.)

MUS 11B (1)
INTERMEDIATE GROUP PIANO II
1 Hr. Lec. 2 Hrs. Lab.
Prerequisite: Mus 11A. A continuation of Mus 11A. (CSU) (UC credit limited. See a counselor.)

MUS 12 (1)
BEGINNING CLASS GUITAR
1 Hr. Lec. 2 Hrs. Lab.
A basic course on how to accompany with the guitar. Stress will be placed on tuning, chording, different types of strums and elementary transportation. (CSU) (UC credit limited. See a counselor.)

MUS 13 (1)
INTERMEDIATE CLASS GUITAR
1 Hr. Lec. 2 Hrs. Lab.
Prerequisite: Mus 12 or consent of the instructor. A continuation of Mus 12 with the following additions: 1. Reading music (standard musical notation); 2. A thorough presentation of bar chords including sevenths, ninths, diminished, augmented, and various altered chords; 3. Advanced picking techniques. (CSU) (UC credit limited. See a counselor.)

MUS 15A (1)
BEGINNING CLASS VOICE
1 Hr. Lec. 2 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. (CSU) (UC credit limited. See a counselor.)

MUS 15B (1)
BEGINNING CLASS VOICE
1 Hr. Lec. 2 Hrs. Lab.
Prerequisite: Mus 15A or its equivalent. A continuation of Mus 15A. (CSU) (UC credit limited. See a counselor.)

MUS 16 (1)
INTERMEDIATE CLASS VOICE
1 Hr. Lec. 2 Hrs. Lab.
Prerequisites: Mus 15A and Mus 15B or their equivalent. A continuation of Mus 15B. (CSU) (UC credit limited. See a counselor.)

MUS 17ABCD (1-1-1-1)
CHAMBER SINGERS
2 Hrs. Lec. 1 Hr. Lab.
A study and performance representative of music of all styles, sacred and secular, a cappella, and accompanied. A minimum of six outside performances required each semester. (CSU) (UC credit limited. See a counselor.)

MUS 18ABCD (1-1-1-1)
CHAMBER ORCHESTRA
2 Hrs. Lec. 1 Hr. Lab.
Prerequisite: Permission of the instructor. A study and performance of literature for a small orchestra. Performances in local communities and on campus are required. Field trips to other musical events will be included to help performers develop efficient listening and evaluating practices. Solo and ensemble rehearsals and performances are included. (CSU) (UC credit limited. See a counselor.)

MUS 19ABCD (1-1-1-1)
INSTRUMENTAL ENSEMBLE
2 Hrs. Lec. 1 Hr. Lab.

A performance organization specializing in literature for string, brass, woodwind, and percussion ensembles, or any combination thereof. Designed for musicians who wish to explore, rehearse, and perform literature of all styles and periods. (CSU) (UC credit limited. See a counselor.)

MUS 20A (3)
HISTORY AND LITERATURE OF MUSIC
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. (CSU, UC)

MUS 20B (3)
HISTORY AND LITERATURE OF MUSIC
3 Hrs. Lec.

A continuation of Mus 20A. (CSU, UC)

MUS 21ABCD (1-1-1-1)
BRASS, WOODWIND AND PERCUSSION METHODS
1 Hr. Lec. 2 Hrs. Lab.

In-depth study and performance of literature for brass, woodwind, string, and percussion instruments. (CSU) (UC credit limited. See a counselor.)

MUS 25ABCD (1-1-1-1)
STAGE BAND
2 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Mus 21AD or audition and permission of the instructor. A performance ensemble specializing in the literature of the stage and jazz band tradition. Students will be provided ensemble experiences necessary for developing and refining improvisation techniques and performance practices appropriate to jazz, rock, blues, and swing music traditions. (CSU) (UC credit limited. See a counselor.)

MUS 26ABCD (1-1-1-1)
REHEARSAL AND PERFORMANCE
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. (CSU) (UC credit limited. See a counselor.)

MUS 27ABCD (1-1-1-1)
CONCERT BAND
2 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Mus 21AD or audition and permission of the instructor. A performance organization specializing in literature for the wind band. Students will be afforded the opportunity to develop the musical skills and understanding necessary for the highest levels of expressive ensemble performance. Scheduled public performances are a part of the course obligations. (CSU) (UC credit limited. See a counselor.)

MUS 28ABCD (1-1-1-1)
COLLEGE-COMMUNITY CHORUS
2 Hrs. Lec. 1 Hr. 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, perfor-

mance and study of choral literature. Introduction to music theory as a means of learning to read music rather than learning by rote. (CSU) (UC credit limited. See a counselor.)

MUS 29ABCD (1-1-1-1)
ESTUDIANTINA

2 Hrs. Lec. 1 Hr. Lab.
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. (CSU) (UC credit limited. See a counselor.)

MUS 30 (3)
INTRODUCTION TO MUSIC LITERATURE AND LISTENING
3 Hrs. Lec.

An introduction to music literature with emphasis on the listening experience. Students study the expressive materials of music and the major forms of music literature. Emphasis placed on the skills and understanding necessary for lifelong music listening experiences. (CSU, UC)

MUS 31 (3)
INTRODUCTION TO TWENTIETH-CENTURY MUSIC
3 Hrs. Lec.

An introduction to contemporary music. Study includes twentieth-century art music, country western, and popular music with emphasis on the social and artistic factors that influence the development of each. (CSU, UC)

MUS 32ABCD (1-1-1-1)
APPLIED MUSIC
1 Hr. Lec. .5 Hr. Lab. to be arranged

Prerequisites: Declared music major, regularly enrolled in the College and be currently enrolled in, or have completed, three units in music courses numbered 8A through 9D. A course designed to provide students with a concentrated sequence of private instruction in music within a particular performing medium. One section meeting per week on campus, in addition to private instruction. As required conditions, the student must: 1. Secure a teacher approved by the College. 2. Take a minimum of one 30 minute lesson per week. 3. Meet one hour of class per week on campus for performance as scheduled and turn in weekly lesson attendance form. (CSU) (UC credit limited. See a counselor.)

MUS 33ABCD (1-1-1-1)
SYMPHONY ORCHESTRA
2 Hrs. Lec. 1 Hr. Lab.

Prerequisite: Audition and/or permission of the instructor. The study and performance of literature for full symphony orchestra in a wide variety of styles. Performances in local communities and on campus are required. (CSU)

MUS 34ABCD (1-1-1-1)
PEP BAND
4 Hrs. Lab.

Prerequisite: Ability to play a band instrument. This course will provide music students with an understanding of the ways music fills symbolic and ceremonial needs of society together with procedures and processes appropriate to maintaining music organizations focused upon meeting those needs. (CSU)

MUS 64ABCD (1-1-1-1)
COLLEGE-COMMUNITY BAND
2 Hrs. Lec. 1 Hr. Lab.

A performance organization specializing in a wide range of literature for the wind band. The primary objective will be to provide the continuing music performing experiences needed by community adults, music educators, and advanced high school students. (CSU) (UC credit limited. See a counselor.)

NATURAL SCIENCE

NAT SCI 51 (3)
SURVEY OF THE EARTH SCIENCES
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, Geog 2, Geol 1A, or Astron 1.

NURSING

Imperial Valley College offers a career ladder nursing program. Students entering the program currently have two options:

1. **Vocational Nurse** - the student is eligible to write the state board examination for licensure as a vocational nurse upon Semester I, II and III of the nursing curriculum as outlined on page 93 of the catalog.
2. **Associate Degree Nurse** - the student is eligible to write the state board examination for licensure as a registered nurse upon successful completion of the designated prerequisites and Semesters I, II, III and IV of the nursing curriculum as outlined on page 93 of the catalog.

Students who complete the Vocational Nurse requirements, including prerequisites and general education courses, will be granted a Certificate of Completion from the college. Students who complete the total program, including prerequisites and general education courses, will be granted an Associate in Science degree in Nursing from the college.

The Imperial Valley College Nursing Program is fully accredited by the California Board of Registered Nursing and the Board of Vocational Nurse and Psychiatric Technician Examiners.

Admission to the Program

All students who have completed the academic prerequisites with a grade of "C" or better and are in good health are eligible for admission. Admission requirements for beginning students are as follows:

1. Graduation from an accredited high school or the equivalent.
2. Admission to the college.
3. Completion of Eng 1A, Eng 11, and Math X.
4. A minimum GPA of 2.0 in all prerequisite course work.

5. Prior to the beginning nursing classes, students are expected to have a physical examination which includes a tuberculin skin test, X-ray when needed, and current immunizations. Forms and information are available in the Nursing Office.

Students are responsible for prerequisite requirements for general education courses. Transportation to class and to clinical laboratory is the responsibility of the student.

Application Procedure

1. Apply for admission to the college.
2. Make an appointment with the counselor to take the college placement tests in Math and English.
3. Submit two transcripts from high school and previous college work. Send one copy to the college admission office and one to the nursing office.
4. Apply for admission to the nursing program.

Students will be admitted to the program each semester. Applications will be accepted until March 1 prior to Fall admission and until August 1 for Spring admission. All students will be notified by mail approximately six weeks later.

Advanced Placement

Applicants who have had previous nursing education or nursing work experience in the following areas will be considered for advanced placement:

1. Accredited Vocational or Practical Nursing Program
2. Nurse's Aide or nonaccredited Vocational Nursing Program
3. Accredited Professional Nursing Courses
4. Accredited Psychiatric Technician Courses
5. Armed Services Nursing Courses
6. Certified Nurse Assistant Courses

Eligibility for transfer/challenge credit and/or advanced placement is determined on an individual basis by the Division of Nursing. Courses in natural sciences, taken within five years, that meet program requirements will be accepted. Behavioral and social science courses will be evaluated for recency on an individual basis.

Licensed Vocational Nurses who seek advanced placement in the registered nurse curriculum have two alternatives: 1. complete the degree program, or 2. complete selected courses which meet the California Board of Registered Nurses thirty (30) unit option requirements. Specific details are available in the Nursing Office. Preference will be given to those applicants who have completed applications on file in the Nursing Office two months prior to starting nursing courses.

Licensed Vocational Nurses who have completed the Imperial Valley College Nursing Program may, after one year of employment as an LVN, complete the general requirements for Registered Nurse and then enroll in the fourth semester nursing classes. Specific details

regarding transition from Vocational Nurse status to Registered Nurse status are available in the Nursing Office.

Progression Policies

1 - The required nursing and general education courses outlined on page 93 of the catalog must be taken in the sequence listed. Students may take some or all general education courses before entering the program but may not complete them later than the semester indicated on page 93 of the catalog. The Nursing Department's English and Math requirements must be met prior to graduation.

2 - A grade point average of 2.0 must be maintained in every course required by the nursing curriculum. A student who makes a grade lower than a 2.0 in any course required by the nursing program must repeat the course.

3 - Required courses in Microbiology and Anatomy/Physiology taken more than five years previous to enrollment must be repeated. Other courses are evaluated on an individual basis.

4 - Nursing courses may be repeated one time. If a student is unsuccessful a second time, he/she must contact the Director of Nursing Education and Health Technologies who will evaluate the student's academic situation and, with the student, will develop a plan of remediation.

All Nursing (NS) classes except NS 2C are nine-week classes. NS 2C is a fourteen-week class. In addition, students are expected to schedule skills laboratory practice time.

NA 1A (R) (4)

INTRODUCTION TO PATIENT CARE I

2 Hrs. Lec. 6 Hrs. Lab.

Prerequisites: HT 1, Anat 10, Psych 1A, admission to the Nursing Program. Theory and skills basic to the provision of safe nursing care are introduced in the classroom and the skills laboratory. Components of the nursing process are studied. Parameters of health are defined and the physical and psychological needs of the normal individual explored. (CSU)

NS 1A (V) (4)

INTRODUCTION TO PATIENT CARE I

2 Hrs. Lec. 6 Hrs. Lab.

Prerequisites: HT 1, Anat 6, Psych 1A, admission to the Nursing Program. Theory and skills basic to the provision of safe nursing care are introduced in the classroom and the skills laboratory. Components of the nursing process are studied. Parameters of health are defined and the physical and psychological needs of the normal individual explored. (CSU)

NS 1B (R) (4)

INTRODUCTION TO PATIENT CARE II

2 Hrs. Lec. 6 Hrs. Lab.

Prerequisite: NS 1A(R), NS 1C(R) or permission of the instructor. Communication skills are presented in this course. Basic psychological and physiological concepts related to stress that cause disruptions in the individual's ability to adapt to his/her environment are presented in the classroom. Concurrently in clinical sessions, the student relates learned skills and theory to the care of patients with well-defined commonly occurring illnesses in the hospital setting. (CSU)

NS 1B (V) (4)

INTRODUCTION TO PATIENT CARE II

2 Hrs. Lec. 6 Hrs. Lab.

Prerequisite: NS 1A(V), NS 1C(V) or permission of the instructor. Communication skills are presented in this course. Basic psychological and physiological concepts related to stress that cause disruptions in the individual's ability to adapt to his/her environment are presented in the classroom. Concurrently in clinical sessions, the student relates learned skills and theory to the care of patients with well-defined commonly occurring illnesses in the hospital setting. (CSU)

NS 1C (R) (1.5)

PHARMACOLOGY I

1.5 Hrs. Lec.

Prerequisite: Admission to the Nursing Program or permission of the instructor. An introductory course in Pharmacology designed to assist the student to acquire basic skills in drug dosage calculations and the administration of medications. A skills laboratory requirement is included. Clinical application will be integrated into Nursing 1B (R). (CSU)

NS 1C (V) (1.5)

PHARMACOLOGY I

1.5 Hrs. Lec.

Prerequisite: Admission to the Nursing Program or permission of the instructor. An introductory course in Pharmacology designed to assist the student to acquire basic skills in drug dosage calculations and the administration of medications. A skills laboratory requirement is included. Clinical application will be integrated into Nursing 1B (V). (CSU)

NS 2A (R) (5.5)

THE MATERNITY CYCLE

2.5 Hrs. Lec. 9 Hrs. Lab.

Prerequisite: NS 2B (R) or permission of the instructor. The nursing process is used to assess the needs of and devise a plan of care for the pregnant woman through the maternity cycle. Consideration is given to the physiological, psychosocial, cultural, and economic factors which have impact on the mother, infant, and the family as a whole. Concurrent classroom and clinical experience are provided. (CSU)

NS 2A (V) (5.5)

THE MATERNITY CYCLE

2.5 Hrs. Lec. 9 Hrs. Lab.

Prerequisite: NS 1B (V), NS 2B (V) or permission of the instructor. The nursing process is used to assess the needs of and devise a plan of care for the pregnant woman through the maternity cycle. Consideration is given to the physiological, psychosocial, cultural, and economic factors which have impact on the mother, infant, and the family as a whole. Concurrent classroom and clinical experience are provided. (CSU)

NS 2B (R) (5.5)

COMMON HEALTH PROBLEMS I

2.5 Hrs. Lec. 9 Hrs. Lab.

Prerequisite: NS 1B (R) or permission of the instructor. The first of three nine-week courses designed to provide a progressive and sequential study of common, well-defined health problems of the respiratory, reproductive and special senses systems are presented. Transition from wellness to illness is emphasized. Concepts acquired in previous courses are applied with increasing complexity to caring for individuals of all ages. Physiological, psychological, emotional, cultural and

social concepts are integrated into the planning and implementation of nursing care. Concurrent classroom and clinical experience are provided. (CSU)

NS 2B (V) (5.5)

COMMON HEALTH PROBLEMS I

2.5 Hrs. Lec. 9 Hrs. Lab.

Prerequisite: NS 1B (V) or permission of the instructor. The first of three nine-week courses designed to provide a progressive and sequential study of common, well-defined health problems of the respiratory, reproductive and special senses systems are presented. Transition from wellness to illness is emphasized. Concepts acquired in previous courses are applied with increasing complexity to caring for individuals of all ages. Physiological, psychological, emotional, cultural and social concepts are integrated into the planning and implementation of nursing care. Concurrent classroom and clinical experience are provided. (CSU)

NS 2C (R) (2)

PHARMACOLOGY II

2 Hrs. Lec.

Prerequisite: NS 1B (R), NS 1C (R) or permission of the instructor. This course focuses on those components of pharmacology related to safe nursing care. It includes information about the general classification of drugs and principles of therapy related to the effects, actions, and therapeutic use of each drug. The nursing actions and rationale for nursing actions are covered. Clinical application is integrated into the clinical nursing courses. (CSU)

NS 2C (V) (1.5)

PHARMACOLOGY II

1.5 Hrs. Lec.

Prerequisite: NS 1B (V), NS 1C (V) or permission of the instructor. This course focuses on those components of pharmacology related to safe nursing care. It includes information about the general classification of drugs and principles of therapy related to the effects, actions, and therapeutic use of each drug. The nursing actions and rationale for nursing actions are covered. Clinical application is integrated into the clinical nursing courses. (CSU)

NS 3A (R) (6.5)

COMMON HEALTH PROBLEMS II

2.5 Hrs. Lec. 12 Hrs. Lab.

Prerequisite: NS 2A (R), NS 2C (R), NS 2B (R), NS 3C (R), or permission of the instructor. The second of three nine-week courses designed to provide a progressive and sequential study of common, well-defined health problems is presented. Emphasis is placed on the immune, endocrine, hematological, cardiovascular, and musculoskeletal systems. Concepts acquired in previous courses are applied with increasing complexity in caring for individuals of all ages. Physiological, psychological, emotional, cultural and social aspects are integrated into the planning and implementation of nursing care. Concurrent clinical experiences are provided whenever possible. In conjunction, appropriate nursing skills are learned in the classroom. (CSU)

NS 3A (V) (6.5)

COMMON HEALTH PROBLEMS II

2.5 Hrs. Lec. 12 Hrs. Lab.

Prerequisite: NS 2A (V), NS 2C (V), NS 2B (V), NS 3C (V), or permission of the instructor. The second of three nine-week courses designed to provide a progressive and sequential study of common, well-defined health

problems is presented. Emphasis is placed on the immune, endocrine, hematological, cardiovascular, and musculoskeletal systems. Concepts acquired in previous courses are applied with increasing complexity in caring for individuals of all ages. Physiological, psychological, emotional, cultural and social aspects are integrated into the planning and implementation of nursing care. Concurrent clinical experiences are provided whenever possible. In conjunction, appropriate nursing skills are learned in the classroom. (CSU)

NS 3B (R) (6.5)

COMMON HEALTH PROBLEMS III

2.5 Hrs. Lec. 12 Hrs. Lab.

Prerequisite: NS 2A (R), NS 2C (R), NS 2B (R), NS 3C (R), NS 3A (R), or permission of the instructor. The final nine-week course designed to provide a progressive and sequential study of common, well-defined health problems is presented in Nursing 3B. The concepts from previous courses are applied with increasing complexity to the caring of individuals throughout the lifespan. The pathophysiology, treatment, and nursing management of common disorders involving the neurological, integumentary, gastrointestinal and renal systems are studied in a progressive sequence across the lifespan. Principles of growth and development are reinforced. The nursing process is utilized by the student to identify the problems and nursing interventions needed for selected patients in the clinical setting. (CSU)

NS 3B (V) (6.5)

COMMON HEALTH PROBLEMS III

2.5 Hrs. Lec. 12 Hrs. Lab.

Prerequisite: NS 2A (V), NS 2C (V), NS 2B (V), NS 3C (V), NS 3A (V), or permission of the instructor. The final nine-week course designed to provide a progressive and sequential study of common, well-defined health problems is presented in Nursing 3B. The concepts from previous courses are applied with increasing complexity to the caring of individuals throughout the lifespan. The pathophysiology, treatment, and nursing management of common disorders involving the neurological, integumentary, gastrointestinal and renal systems are studied in a progressive sequence across the lifespan. Principles of growth and development are reinforced. The nursing process is utilized by the student to identify the problems and nursing interventions needed for selected patients in the clinical setting. (CSU)

NS 3C (R) (1)

PATIENT CARE MANAGEMENT

1 Hr. Lec.

Prerequisite: NS 2B (R) or permission of the instructor. To be taken concurrent with NS 2A (R). An overview of the leadership and management process as it relates to management of patient care is presented. Clinical application is integrated into NS 3A (R), NS 3B (R) and all subsequent nursing courses. (CSU)

NS 3C (V) (.5)

PATIENT CARE MANAGEMENT

.5 Hr. Lec.

Prerequisite: NS 2B (V) or permission of the instructor. To be taken concurrent with NS 2A (V). An overview of the leadership and management process as it relates to management of patient care is presented. Clinical application is integrated into NS 3A (V), NS 3B (V) and all subsequent nursing courses. (CSU)

NS 4A (R) (4.5)**COMMON HEALTH PROBLEMS IV**

2 Hrs. Lec. 7.5 Hrs. Lab.

Prerequisite: NS 3B (R), NS 3C (R) or permission of the instructor. This course is concerned with an individual's response to stress and crisis. The promotion of mental health, intervention in maladaptive disorders, and the rehabilitation of chronic disorders is presented in concurrent classroom and clinical settings. Cultural and social attitudes toward behavior which deviates from accepted norms is discussed. (CSU)

NS 4B (R) (4.5)**ADVANCED NURSING**

2 Hrs. Lec. 7.5 Hrs. Lab.

Prerequisite: NS 4A (R) or permission of the instructor. In-depth study of patients with increasingly complex health problems is presented. The nursing process is used to plan and implement nursing care for a group of patients. Concurrent clinical experience in geriatric and advanced medical-surgical nursing is arranged. (CSU)

NS 4C (R) (1)**NURSING TRENDS**

1 Hr. Lec.

Prerequisite: NS 4A (R) or permission of the instructor. Current issues affecting nursing are discussed. Legislation, health care delivery system, and legal and ethical aspects of health care are integrated into the clinical component of NS 4B. Upon successful completion of NS 4B and NS 4C, the student is eligible to write the examination for Registered Nurse. (CSU)

NS 5 (1-3)**NURSING: TRANSITION COURSE**

1-3 Hrs. Lec.

Prerequisite: Completion of advanced placement requirements or permission of the instructor. This course is designed to prepare the advanced placement student to enter the appropriate level of the Associate Degree Nursing program. Students may take variable units from one to three, according to their placement status. Content includes the nursing process, fluids and electrolytes, pharmacology, maternity nursing and nursing interventions for selected health conditions. (CSU)

NURSING CONTINUING EDUCATION**Registered Nursing**

Prospective students are advised to check with the college previous to each semester concerning continuing education courses to be offered. New courses are offered periodically as community health agency and health personnel needs are identified. An enrollment fee will be charged. All courses have been approved by the California Board of Registered Nursing, BRN Provider No. 00294, and meet the requirements for relicensure.

RN 37 (1)**BASIC ARRHYTHMIA RECOGNITION**

1 Hr. Lec.

Prerequisite: Permission of the instructor. A basic program using a systematic approach to interpretation and recognition of cardiac arrhythmias in the monitored hospital patient and the appropriate treatment and/or nursing intervention required. Suitable for the ICU/CCU nurse or nursing assistant, beginning cardiopulmonary technician, the med/surg nurse who cares for the patient

on telemetry, or for inactive nurses who wish to update their knowledge and maintain their competency. (Same as VN/HA 37) (CSU)

RN 40 (2)**INTRAVENOUS THERAPY TECHNIQUE**

2 Hrs. Lec.

Prerequisite: Permission of the instructor. A course of instruction in intravenous therapy which includes fluid solutions of electrolytes, nutrients, vitamins, blood and blood products. (Same as VN 40) (CSU)

RN 41 (3)**PHYSICAL ASSESSMENT SKILLS**

3 Hrs. Lec.

Prerequisite: Permission of the instructor. Class is limited to fifteen (15) students. This course is designed to delineate assessment parameters and variations common to the adult patient. Students will be given the opportunity to learn how to make rapid, accurate patient assessments. They will identify and discuss common findings, observe assessment techniques and do return demonstrations. Individuals who wish to improve their physical assessment skills are the focus of this course. (CSU)

Vocational Nursing

Prospective students are advised to check with the college previous to each semester concerning continuing education courses to be offered. New courses are offered periodically as community health agency and health personnel needs are identified. An enrollment fee will be charged. All courses have been approved by the California Board of Vocational Nurse and Psychiatric Technician Examiners, BUNPT Provider No. 00294, and meet the requirements for relicensure.

VN 37 (1)**BASIC ARRHYTHMIA RECOGNITION**

1 Hr. Lec.

(Same as RN/HA 37) (CSU)

VN 40 (2)**INTRAVENOUS THERAPY TECHNIQUE**

2 Hrs. Lec.

(Same as RN 40) (CSU)

Graduates of Hospital Diploma Schools of Nursing

The A.S. Degree will be awarded to graduates of hospital diploma schools of nursing who meet all of the following criteria and complete the following program:

Criteria

1. Graduate of a state-accredited hospital school of nursing which had a curriculum covering the five basic areas of nursing (medicine, surgery, obstetrics, pediatrics, psychiatry).
2. Present California Registered Nurse Licensure.
3. Present enrollment at Imperial Valley College.

Program to be Completed

Blanket credit for previous nursing courses completed 40 Units
(Corresponds to number of RN course units in IVC Associate Degree Nursing Program.)
General Education courses to meet college requirements for graduation 20 Units

(In order to allow the graduate to articulate with baccalaureate programs in nursing, it is strongly recommended that the following courses be taken within the general education requirements: Anatomy 8, Human Physiology 1, Biology 21, Psychology 1A, Sociology 1, Psychology 35.)

Applicants for this degree must verify items 1 and 2 of the Criteria with the Nursing Director. Check with Counseling Center for procedure to follow.

NUTRITION**NU 1 (3)****SANITATION AND SAFETY CONTROL**

3 Hrs. Lec.

Prerequisite: Permission of the instructor. This course includes the basic principles of sanitation and safety and the application of these principles to a food service operation including OSHA regulations. Emphasis will be placed on the principles of food preparation and storage; safety procedures and programs and fire prevention and control. (CSU)

NU 2 (3)**FOUNDATIONS OF NUTRITION**

3 Hrs. Lec.

Prerequisite: Permission of the instructor. Scientific concept of nutrition relating to the function of nutrients in the basic life processes. Examines the major aspects of nutritional services within a health care facility, community or school food services program. The course includes child and adult nutrition application to basic food and food service programs. (CSU)

NU 3 (3)**FOOD PRODUCTION MANAGEMENT**

2 Hrs. Lec. 2 Hrs. Lab.

Prerequisite: Permission of the instructor. Organization and management of food service operations, occupational levels and responsibilities. Quantity food preparation with emphasis on food production management, effective management of time and equipment, and the responsibilities of the production supervisor. (CSU)

NU 4 (3)**SUPERVISION FOR FOOD SERVICES**

2 Hrs. Lec. 2 Hrs. Lab.

Prerequisite: Permission of the instructor. This course includes procedures and problems met by food service operations in developing labor management relationships. It includes the responsibility of selection, placement, orientation, training, counseling, rating and promotion of employees and understanding human behavior as it relates to personnel settings. (CSU)

NU 5 (3)**MODIFIED DIETS**

3 Hrs. Lec.

Prerequisite: Permission of the instructor and completion of core courses. The principles of nutrition as they relate to special and abnormal physical conditions including the effect of proper nutrition. Current knowledge and information on modified diets used in the treatment of abnormal physical conditions. Emphasis on rationale for the diet and how these modifications will improve the patient's condition. (CSU)

NU 6A (3)**FIELD EXPERIENCE-DIETARY MANAGER**

1 Hr. Lec. 4 Hrs. Lab.

Prerequisites: NU 1, 2, 3, and 4. Permission of the instructor. Supervised field experience in a dietary on-the-job setting at a health care facility. (CSU)

NU 6B (3)**FIELD EXPERIENCE-SCHOOL FOOD SERVICES MANAGER**

1 Hr. Lec. 4 Hrs. Lab.

Prerequisites: NU 1, 2, 3, and 4. Permission of the instructor. Supervised field experience in a dietary on-the-job setting at a school food facility. (CSU)

NU 7 (3)**INTRODUCTION TO HOSPITALITY INDUSTRY**

2 Hrs. Lec. 2 Hrs. Lab.

Prerequisites: Permission of the instructor and completion of core courses. Principles and practices of hospitality as it relates to food hotel services for the private and public sector. Personnel relations, public relations and community relation issues are explored. (CSU)

NU 8 (3)**MENU PLANNING AND PURCHASING**

3 Hrs. Lec.

Prerequisites: Permission of the instructor and completion of core courses. The principles of menu planning and purchasing of food services including family and child nutrition. Nutrition manager will learn to analyze information and examine issues and options so that they will be better able to plan menus that meet nutritional requirements, follow menu design principles, comply with budgetary constraints, and to plan menus that are acceptable. (CSU)

PHILOSOPHY**PHIL 1A (3)****INTRODUCTION TO PHILOSOPHY**

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. (CSU, UC)

PHIL 1B (3)**INTRODUCTION TO PHILOSOPHY**

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. (CSU, UC)

PHIL 10 (3)**LOGIC**

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. (CSU, UC)

PHIL 11 (3)**ETHICS**

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. (CSU, UC)

(CAN H EC 2)

(CAN PHIL 6)

PHIL 25 (3)
RELIGIONS OF THE MODERN WORLD
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. (CSU, UC)

PHOTOGRAPHY

PH 5 (3)
INTRODUCTION TO PHOTOGRAPHY
2 Hrs. Lec. 3 Hrs. Lab.

The basic theory, techniques, skills, and artistic expression of photography. Consideration will be given to factors such as correct use of cameras and lenses, determination of exposure, different types of film 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. The concept of photography as an art form will be introduced, and projects requiring artistic expression will be assigned. (CSU) (UC credit limited. See a counselor.)

PH 6 (3)
INTERMEDIATE PHOTOGRAPHY
2 Hrs. Lec. 3 Hrs. Lab.

Prerequisite: Ph 5 or permission of the instructor. Psych 1A is recommended. A continuation of Ph 5 with emphasis on lighting, basic poses and studio work. Posing of the subject and visualization of the finished picture will be stressed, with further practice in camera operation and film processing. (CSU) (UC credit limited. See a counselor.)

PH 7 (3)
ADVANCED PHOTOGRAPHY
2 Hrs. Lec. 3 Hrs. Lab.

Prerequisites: Ph 5 and Ph 6 or equivalent. A continuation of Ph 6 with emphasis on advanced studio and location work and on illustrative photography including magazine covers, fashion and layout. (CSU)

PH 8 (3)
MULTI-MEDIA
3 Hrs. Lec.

Prerequisites: Ph 5 and Ph 6. Ph 7 recommended. An introduction to color slides and motion picture production through the use of sequence stills, employing all techniques used in previous photographic courses. Emphasis will be given to the following areas: script writing, sound track, exposing of color film, camera techniques. (CSU) (UC credit limited. See a counselor.)

PHYSICAL EDUCATION

Unless exempt, each student is required by district policy to schedule one activity course each semester. A student may take A-B-C-D sections of the same course, but not in the same semester.

PE 1 (2)
PHYSICAL EDUCATION ACTIVITY - MILITARY SERVICE

Prerequisite: The satisfactory completion of basic or recruit training and 180 days or more active service in the military of the United States of America. The student wishing credit for military service must present his/her DD214 or equivalent supporting document to the

Veterans Assistant and register for the credit. If the student registers for the class for military credit and does not submit verification of service, he/she will be dropped as a No-Show and will not receive credit. PE 1 does not count for units toward VA, Financial Aid, or full-time student status. These are not contact hours. May receive credit only once. (CSU)

PE 3ABCD (1-1-1-1)
PHYSICAL FITNESS, WOMEN
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 college and adult life. (CSU) (UC credit limited. See a counselor.)

PE 4ABCD (1-1-1-1)
BADMINTON, COED
2 Hrs. Lab.

Etiquette, rules, background, and techniques of playing badminton. (CSU) (UC credit limited. See a counselor.)

PE 5ABCD (1-1-1-1)
SWIMMING, COED
2 Hrs. Lab.

This course is concerned with teaching the student to successfully execute the proper strokes for swimming. Skills, fundamentals, and safety knowledge are stressed from the beginner to the intermediate swimmer. (CSU) (UC credit limited. See a counselor.)

PE 6 (2)
LIFEGUARD TRAINING/ADVANCED LIFESAVING
1.5 Hrs. Lec. 1.5 Hrs. Lab.

Prerequisites: Swim 500 yards continuously using each of the following strokes for a minimum of at least 50 yards each: crawl, breast stroke, elementary back stroke, and side stroke. Surface dive to a minimum depth of 9 feet and bring a 10 lb. weight up to the surface. Surface dive to a minimum depth of 5 feet and swim a minimum of 15 yards under water. Advanced swimming and survival skills and techniques of Lifeguard Training and Advanced Lifesaving. This course meets the aquatic skills required for the American Red Cross Lifeguard Training and Advanced Lifesaving courses. (CSU)

PE 7 (2)
WATER SAFETY INSTRUCTOR TRAINING
1 Hr. Lec. 2 Hrs. Lab.

Prerequisite: Lifeguard Training Certificate and/or Advanced Lifesaving for the W.S.I. Certificate. A course designed to acquaint the student with the basic principles of being an aquatic instructor in the areas of infant and preschool children, progressive swimming courses in the following levels: A. Beginners; B. Advanced Beginners; C. Intermediate; D. Swimmers; E. Advanced Swimmers as well as the methods for teaching Basic Water Safety in addition to Emergency Water Safety. (CSU, UC)

PE 9ABCD (1-1-1-1)
ADAPTED PHYSICAL EXERCISES, COED
2 Hrs. Lab.

Open only to students who are unable to participate in the regular physical education program. The course is specifically designed to meet the individual needs of these students. (CSU) (UC credit limited. See a counselor.)

PE 10ABCD (1-1-1-1)
TEAM SPORTS
2 Hrs. Lab.

The course is designed to stimulate the development of mental and physical alertness and poise, and to encourage regular participation in a variety of sports. Includes coeducational activities. (CSU) (UC credit limited. See a counselor.)

PE 11ABCD (1-1-1-1)
VOLLEYBALL, COED
2 Hrs. Lab.

A course designed to present the basic fundamentals of volleyball such as the serve, setting, spiking, and team play. Rules and class competition are included. (CSU) (UC credit limited. See a counselor.)

PE 12ABCD (1-1-1-1)
TENNIS, COED
2 Hrs. Lab.

Tennis offers training in the basic fundamentals of the game including history, rules, and etiquette. Social etiquette of the game is stressed along with the worthy use of leisure time. Tournament competition in singles and doubles is emphasized. (CSU) (UC credit limited. See a counselor.)

PE 13 (1)
ADVANCED TENNIS, COED
2 Hrs. Lab.

Prerequisite: PE 12ABCD or approval of the 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. (CSU) (UC credit limited. See a counselor.)

PE 17ABCD (1-1-1-1)
PHYSICAL FITNESS, MEN
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 college and adult life. (CSU) (UC credit limited. See a counselor.)

PE 18ABCD (1-1-1-1)
GOLF, COED
2 Hrs. Lab.

Offers training in the fundamentals of strokes with irons, woods, and putters; includes rules and etiquette of the game. Actual participation upon a golf course and the worthy use of leisure time are emphasized. (CSU) (UC credit limited. See a counselor.)

PE 20ABCD (1-1-1-1)
SOFTBALL, COED
2 Hrs. Lab.

This course is designed to emphasize the fundamentals, knowledge of rules, coaching techniques, and basic knowledge of the game of softball. (CSU) (UC credit limited. See a counselor.)

PE 21ABCD (2-2-2-2)
ADVANCED SPORTS ACTIVITY, COED
1 Hr. Lec. 2 Hrs. Lab.

Prerequisite: Prior competitive background or permission of the instructor. This course is designed for students with previous experience in the sports of volleyball, softball, and basketball. The course will cover basic fundamentals as well as advanced team strategies found

in competitive situations. A minimum of fifteen hours per semester for each student is required in outside activities such as community sports and recreational programs. (CSU) (UC credit limited. See a counselor.)

PE 22ABCD (1-1-1-1)
RACQUETBALL AND HANDBALL, COED
2 Hrs. Lab.

Instruction and development of the handball skills. Presentation of singles and doubles play, including basic shots and strategy. (CSU) (UC credit limited. See a counselor.)

PE 23ABCD (1-1-1-1)
BASKETBALL FOR WOMEN
2 Hrs. Lab.

Designed for women students interested in basketball. To offer basic and advanced fundamentals, team play, and strategy. (CSU) (UC credit limited. See a counselor.)

PE 24ABCD (1-1-1-1)
BASKETBALL FOR MEN
2 Hrs. Lab.

An introduction to the fundamental skills and strategy of the game. Rules and class competition are included in the course. (CSU) (UC credit limited. See a counselor.)

PE 26ABCD (1-1-1-1)
MODERN DANCE, COED
2 Hrs. Lab.

Participation and instruction in rhythmic fundamentals, 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. More complex individual dance sketches and small group dance studies. (CSU) (UC credit limited. See a counselor.)

PE 28ABCD (2-2-2-2)
DANCE THEATER, COED
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. (CSU) (UC credit limited. See a counselor.)

PE 29ABCD (1-1-1-1)
JAZZ DANCE, COED
2 Hrs. Lab.

A study of syncopated movement. (CSU) (UC credit limited. See a counselor.)

PE 30ABCD (2-2-2-2)
SONG AND CHEER
4 Hrs. Lab.

Practice and performance class for songleaders and cheerleaders. Satisfies physical education activity class requirement. (CSU)

PE 32ABCD (2-2-2-2)
INTERCOLLEGIATE BASKETBALL AND P.E.
Hours to be arranged

Theory and practice of basketball. Limited to students trying out for varsity team. The student must schedule for a minimum of 10 hours per week. (CSU) (UC credit limited. See a counselor.)

PE 34AB (2-2)**INTERCOLLEGIATE BASEBALL AND P.E.**

Hours to be arranged

Theory and practice of baseball. Limited to students trying out for varsity team. The student must schedule for a minimum of 10 hours per week. (CSU) (UC credit limited. See a counselor.)

PE 38AB (2-2)**INTERCOLLEGIATE TENNIS AND P.E.**

Hours to be arranged

Eligibility will be determined by 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. (CSU) (UC credit limited. See a counselor.)

PE 40ABCD (2-2-2-2)**SYNCHRONIZED SWIMMING**

4 Hrs. Lab.

Prerequisite: Consent of the 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. (CSU) (UC credit limited. See a counselor.)

PE 41AB (2-2)**INTERCOLLEGIATE VOLLEYBALL AND P.E.**

Hours to be arranged

Prerequisites: Eligibility will be determined by Conference rules. IVC guidelines in the AS Handbook for athletics will also apply. This course is designed to give the individual a well-rounded knowledge in volleyball. The course should help develop a relationship of athletics to other matters such as exercise, recreation, sportsmanship, and competition. The student must schedule for a minimum of 10 hours per week. (CSU) (UC credit limited. See a counselor.)

PE 42AB (2-2)**INTERCOLLEGIATE SOCCER AND P.E.**

Hours to be arranged

Theory and practice of soccer. Limited to students trying out for varsity team. The student must schedule for a minimum of 10 hours per week. (CSU) (UC credit limited. See a counselor.)

PE 43AB (2-2)**INTERCOLLEGIATE SOFTBALL AND P.E.**

Hours to be arranged

Theory and practice of women's softball. Limited to students trying out for varsity team. The student must schedule for a minimum of 10 hours per week. (CSU) (UC credit limited. See a counselor.)

PE 44 (1)**SELF-DEFENSE**

2 Hrs. Lab.

A study of the art of self-defense through boxing, wrestling and elements of martial arts as it relates to self-defense. (Formerly Adm Jus 23) (CSU)

PE 45ABCD (1-1-1-1)**INDIVIDUAL SPORTS FOR THE PHYSICALLY LIMITED**

2 Hrs. Lab.

This course is designed to promote individual skill development for the physically limited student. (CSU) (UC credit limited. See a counselor.)

PE 46ABCD (1-1-1-1)**GROUP SPORTS FOR THE PHYSICALLY LIMITED**

2 Hrs. Lab.

This course is designed to broaden the physically limited student's awareness of group activities and develop a willingness to participate. (CSU) (UC credit limited. See a counselor.)

PE 50 (2)**INTRODUCTION TO PHYSICAL EDUCATION**

2 Hrs. Lec.

Principles and organization of physical education and areas of specialization within the field. (CSU) (UC credit limited. See a counselor.)

PE 51 (2)**STRUCTURING INTRAMURALS**

1 Hr. Lec. 2 Hrs. Lab.

Prerequisite: Basic knowledge and/or experience in competitive sports and recreational games. The course is designed to provide students experience in structuring various types of sports and recreation tournaments through assisting in the IVC intramural program. (CSU)

PE 52AB (2-2)**THEORY OF BASEBALL**

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. (CSU) (UC credit limited. See a counselor.)

PE 53AB (2-2)**THEORY OF BASKETBALL, COED**

2 Hrs. Lec.

This course is designed for physical education majors, recreation majors, and potential coaches. Coaching techniques and theories, history, rules, and current and possible future trends in the game will be offered. (CSU) (UC credit limited. See a counselor.)

PE 56 (2)**CARE AND PREVENTION OF ATHLETIC INJURIES**

2 Hrs. Lec.

This course is designed for the coach, coach-trainer, physical education and recreation student. Emphasizes the screening and conditioning of athletes, prevention, care and treatment of athletic injuries. Includes techniques of applying supportive materials, rehabilitation of injuries, and use of therapeutic modalities. Organization of a new athletic training program. (CSU, UC)

PE 58 (2)**PSYCHOLOGY OF COACHING**

2 Hrs. Lec.

Prerequisite: Sophomore status or permission of the instructor. A course covering all the aspects of the psychology of coaching sports. Includes certain guides to show how teaching and learning may be applied to the coaching of sports, and to bring out the relationship of meaningful learning to successful athletic coaching. (CSU) (UC credit limited. See a counselor.)

PE 59AB (3-3)**SPORTS OFFICIATING, MEN**

2 Hrs. Lec. 3 Hrs. Lab.

Theory and practice in the techniques of officiating in highly organized games and sports such as basketball, football, wrestling, baseball, track, and tennis. Students must plan for an additional three hours per

week to officiate at elementary schools. (CSU) (UC credit limited. See a counselor.)

PE 60AB (3-3)**SPORTS OFFICIATING, WOMEN**

2 Hrs. Lec. 3 Hrs. Lab.

To familiarize prospective physical education majors and minors with the rules of team and individual sports for women. (CSU) (UC credit limited. See a counselor.)

PE 61 (3)**PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL**

3 Hrs. Lec.

This course is designed to prepare the elementary school teacher to teach the whole child through physical education. (CSU)

PE 62AB (3-3)**PHYSICAL EDUCATION FOR SPECIAL OLYMPICS**

2 Hrs. Lec. 2 Hrs. Lab. plus 2 Hrs. Lab. to be arranged

A course designed to train college students to condition and prepare retarded persons for competition in Special Olympics. (CSU) (UC credit limited. See a counselor.)

PHYSICAL SCIENCE**PHYS SCI 25 (4)****INTRODUCTION TO PHYSICAL SCIENCE**

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. (CSU) (UC credit limited. See a counselor.)

PHYSICS**PHYS 4A (4)****PRINCIPLES OF PHYSICS**

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. (CSU) (UC credit limited. See a counselor.)

(CAN PHYS SEQ B)

(CAN PHYS 8)

PHYS 4B (4)**PRINCIPLES OF PHYSICS**

3 Hrs. Lec. 4 Hrs. Lab.

Prerequisites: 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. (CSU) (UC credit limited. See a counselor.)

(CAN PHYS SEQ B)

PHYS 4C (4)**PRINCIPLES OF PHYSICS**

3 Hrs. Lec. 4 Hrs. Lab.

Prerequisites: 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 area of heat, wave motion, sound, light, and modern physics. (CSU) (UC credit limited. See a counselor.)

(CAN PHYS SEQ B)

PHYSIOLOGY**PHYSIO 1 (4)****HUMAN PHYSIOLOGY**

2 Hrs. Lec. 6 Hrs. Lab.

Prerequisites: One year each of high school chemistry and biology or one semester each at the college level or a current California LVN license. The functions of the human body; emphasis on the circulatory, muscular, and nervous system. (CSU) (UC credit limited. See a counselor.)

PIPEFITTING

The following course has been developed as a part of a four-year apprenticeship program. Additional courses are in the process of being prepared. Applications should be directed to San Diego County Pipefitter Joint Apprenticeship Committee, 3901 Center Street, San Diego, CA. For additional information contact the Dean of Vocational Education.

PIPEFG 38 (2)**TIG WELDING**

1.5 Hrs. Lec. 1.5 Hrs. Lab.

This course is designed to provide the apprentice with a working knowledge of the welding process known as TIG. (Nondegree Applicable)

PLUMBING

The following courses have been developed as part of a four-year apprenticeship program. Additional courses are in the process of being prepared. Applications should be directed to San Diego County Plumbing Joint Apprenticeship Committee, 3090 Center Street, San Diego, CA. For additional information contact the Dean of Vocational Education.

PLUMB 10 (3)**PIPE TRADES ORGANIZATION**

3 Hrs. Lec.

This course will provide an introduction to industry and is designed to provide the apprentice with a working knowledge of the use and care of tools and piping materials. (Nondegree Applicable)

POLITICAL SCIENCE**POLY SCI 1 (3)****INTRODUCTION TO POLITICAL SCIENCE**

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 17A will meet graduation requirements in American Institutions. (CSU, UC)

POLY SCI 2 (3)**AMERICAN GOVERNMENT AND POLITICS**

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 17B will meet graduation requirements in American Institutions. May be taken before Poly Sci 1. (CSU, UC)

(CAN GOVT 2)

POLY SCI 3 (3)
COMPARATIVE POLITICS
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. (CSU, UC)

POLY SCI 14 (3)
INTRODUCTION TO INTERNATIONAL RELATIONS
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. (CSU, UC)

PSYCHOLOGY

PSYCH 1A (3) (CAM PSY 4)
INTRODUCTION TO PSYCHOLOGY
3 Hrs. Lec.

Prerequisite: Twelfth grade reading level ability is strongly recommended. An introduction to the study of human behavior and cognition. Includes consideration of many of the major topics in psychology including, but not limited to, the biology of behavior, learning, human development, sleep and consciousness, personality, mental disorders and therapy, and social processes. (CSU, UC)

PSYCH 1B (3)
LEARNING
3 Hrs. Lec.

Prerequisite: Psych 1A or permission of the instructor. This course will explore the role of learning in the adaptation of humans and other animals to their changing environment. Research methodology, Pavlovian and operant theories, applications and implications, and higher cognitive processes will be examined. (CSU, UC)

PSYCH 2 (3)
BIOLOGICAL PSYCHOLOGY
3 Hrs. Lec.

Prerequisite: Twelfth grade reading level highly recommended. Completion of Psych 1A preferred. An exploration of the biological basis of human behavior. The development, structure and functions of the nervous system is thoroughly examined to provide insight into its complex relationship with human behavior, thought, and feelings. The history of neuroscience and methods of scientific inquiry are reviewed. (CSU, UC)

PSYCH 3 (3)
PSYCHOLOGY OF ADJUSTMENT
3 Hrs. Lec.

Prerequisite: Twelfth grade reading level strongly recommended. A study of the development of effective behaviors. Focuses on individual behavior such as self-control, stress and emotional reactions; self-image, motivation, self-deception, lifespan development and the major psychological theories, which address these behaviors. Effective group behaviors including interpersonal relationships, marriage, sex, and society are also examined. (CSU, UC)

PSYCH 4 (3)
PSYCHOLOGY OF HUMAN SEXUALITY
3 Hrs. Lec.

A study of the psychology of Human Sexuality. Includes anatomy and physiology of sexual functions, sexual dysfunctions, sexually transmitted diseases, infertility, contemporary sexual attitudes and behaviors, sexual deviations, and controversies and implications for the individual and the society. (CSU, UC)

PSYCH 5 (3)
PSYCHOLOGY OF EFFECTIVE BEHAVIOR
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 experimental approach, including emphasis upon effective behavioral alternatives in parenting, interpersonal relations, values clarification, methods for successful study, and the art of taking responsibility for one's own life. (CSU)

PSYCH 6 (3)
CURRENT ISSUES IN PSYCHOLOGY
3 Hrs. Lec.

Prerequisite: Twelfth grade reading level strongly recommended. Psych 1A recommended. A detailed examination of recent research and publications in the areas of psychology as a science, the biological bases of behavior, psychological bases and psychological disorders and therapeutic processes. An up-to-date examination of selected topics in the field of psychology. (CSU)

PSYCH 8 (3)
PERSONAL AND CAREER DEVELOPMENT
3 Hrs. Lec.
(Same as HR 8) (CSU)

PSYCH 8A (1)
PERSONAL AND CAREER DEVELOPMENT
1 Hr. Lec.
(Same as HR 8A) (CSU)

PSYCH 8B (1)
PERSONAL AND CAREER DEVELOPMENT
1 Hr. Lec.
(Same as HR 8B) (CSU)

PSYCH 8C (1)
PERSONAL AND CAREER DEVELOPMENT
1 Hr. Lec.
(Same as HR 8C) (CSU)

PSYCH 9 (3)
INTRODUCTION TO COUNSELING
3 Hrs. Lec.
(Same as ADS 9/HR 9) (CSU)

PSYCH 10 (3)
SMALL GROUP LEADERSHIP
3 Hrs. Lec.
(Same as HR 10) (CSU)

PSYCH 11A (3)
PRACTICUM
1 Hr. Lec. 6 Hrs. Lab. field experience per week
(Same as ADS 11A/HR 11A) (CSU)

PSYCH 11B (3)
PRACTICUM
1 Hr. Lec. 6 Hrs. Lab. field experience per week
(Same as ADS 11B/HR 11B) (CSU)

PSYCH 13 (3) (CAM STAT 2)
ELEMENTARY STATISTICS
3 Hrs. Lec.
(Same as Math 12 and Bus 26) (CSU, UC)

PSYCH 14 (3)
ABNORMAL PSYCHOLOGY
3 Hrs. Lec.
Prerequisites: Twelfth grade reading level strongly recommended. Psych 1A, Psych 2 and Psych 3 recommended. Covers the major categories of mental disorders listed in the latest version of the *Diagnostic and Statistical Manual of Mental Disorders (DSM)*. Draws upon important contributions from various disciplines and theoretical stances. Case studies and research-based explanations are examined. Controversial topics related to mental disorder are explored. (CSU, UC)

PSYCH 15 (3)
SOCIAL AND PSYCHOLOGICAL DYNAMICS OF DRUG USE
3 Hrs. Lec.
Prerequisite: Completion of or concurrent enrollment in either Psych 1A, Psych 1B, Soc 1 or Soc 17 is recommended or permission of the instructor. This course views drug use behavior from a sociological and psychological perspective. It includes an analysis of factors contributing to drug use; societal influence (peer group and the family), and personal psychodynamics and development. It encompasses illegal drug use as well as legal drug use, particularly of alcohol. Potential solutions and preventive methods which could be of practical value to parents and various professional and semi-professional workers will be addressed. (Same as ADS 15/Soc 15) (CSU)

PSYCH 16 (3)
THE PSYCHOLOGY OF INTERPERSONAL RELATIONSHIPS
3 Hrs. Lec.
An investigation of the dynamics of interpersonal relationships. Starting, developing, understanding, and improving one's relationships with others will be the focus of this course. Topics will include love, jealousy, acceptance, listening skills, communication skills, perception of self and others, and self-disclosure. The course involves lecture, discussion, and experimental techniques. (Same as HR 16) (CSU)

PSYCH 17 (3)
SOCIAL PSYCHOLOGY
3 Hrs. Lec.
The study of how personality and behavior are influenced by the social context. Major concepts, problems and findings concerning the relationship of the individual and society. Includes construction of meaning, self-concept and social identity, group behavior and group membership. (Same as Sociol 17) (CSU, UC)

PSYCH 18 (1)
RESEARCH IN PSYCHOLOGY
1 Hr. Lec.
Prerequisite: Successful completion of Psych 1A or any other psychology class is recommended. An introduction to the scientific method of research used in Psychology. The class will work in groups to learn and carry out the basic steps in the research process. (CSU)

PSYCH 19 (3)
THE PSYCHOLOGY OF LOSS
3 Hrs. Lec.
The grief process will be explored as well as how one can help a person resolve a personal loss, whether it be by divorce, death, separation, the aging process, illness, retirement, changing neighborhoods, or by loss of financial security. Why some forms of grief in ourselves and others go unresolved will be explained and discussed. In addition, techniques for giving emotional support and for creating life as a challenge rather than a threat will be covered. Alternative models of caring for the terminally ill patient will be presented as well as the concept of "conscious living-conscious dying". (CSU)

PSYCH 20 (3)
DEVELOPMENTAL PSYCHOLOGY OF CHILDREN
3 Hrs. Lec.
(Same as ECE 20) (CSU) (UC credit limited. See a counselor.)

PSYCH 21 (3)
EARLY CHILDHOOD SOCIALIZATION: CHILDREN, FAMILY AND COMMUNITY
3 Hrs. Lec.
(Same as ECE 21) (CSU)

PSYCH 22 (3)
ADVANCED DEVELOPMENTAL PSYCHOLOGY AND OBSERVATION
3 Hrs. Lec.
(Same as ECE 22) (CSU)

PSYCH 26 (3)
PRINCIPLES OF PARENTING
3 Hrs. Lec.
(Same as ECE 26) (CSU)

PSYCH 27 (3)
UNDERSTANDING EXCEPTIONAL STUDENTS
2 Hrs. Lec. 2 Hrs. Lab.
(Same as ECE 27/PL 1) (CSU)

PSYCH 30 (3)
PSYCHOLOGY OF ADOLESCENCE
3 Hrs. Lec.
A study of human development from pre-adolescence through early and later adolescence to young adulthood. The course includes practical aspects of dealing with adolescent influences, settings and problem areas. (CSU) (UC credit limited. See a counselor.)

PSYCH 35 (3)
DEVELOPMENTAL PSYCHOLOGY: CONCEPTION TO DEATH
3 Hrs. Lec.
A study of human development from conception to death, including conception, prenatal development, infancy, toddlerhood, preschool years, middle childhood, adolescence, early adulthood, middle adulthood, later adulthood, and death. The course covers psychodynamic theories of development, current research, and major developmental tasks. (CSU) (UC credit limited. See a counselor.)

PSYCH 40 (3)
INTRODUCTION TO CRISIS COUNSELING
3 Hrs. Lec.
Prerequisite: Psych 1A. A course designed to familiarize the student with a basic understanding of the causes, manifestations, and treatment of emotional illness, especially relevant to crisis situations. (CSU)

PSYCH 53 (3)
GROUP LEADERSHIP AND GROUP PROCESS
3 Hrs. Lec.
(Same as ADS 53) (CSU)

PSYCH 55 (3)
CRISIS INTERVENTION AND REFERRAL TECHNIQUES
3 Hrs. Lec.
(Same as ADS 55) (CSU)

RECREATION

REC 70 (3)
INTRODUCTION TO LEISURE
3 Hrs. Lec.
Presents the basic ideas and problems in our contemporary society and projects this thinking into the future when greater amounts of leisure time will be at our disposal. The course shows the need of our citizenry to cope successfully with the pressures of our daily lives and have a balanced and meaningful use of leisure time in maintaining mental and physical health. (CSU)

REC 71 (3)
SOCIAL RECREATION
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. (CSU)

REC 72 (3)
OUTDOOR RECREATION
2 Hrs. Lec. 3 Hrs. Lab.
History, development, principles, and trends of organized camping, nature and conservation, and outdoor recreation. Laboratory and field trips, including camping and hiking activities. Practical skills in firecrafts, outdoor cooking and backpacking. Leadership training in camp counseling. Required for recreation majors. (Will not satisfy PE requirement.) (CSU)

REC 73 (4)
RECREATION FOR SPECIAL GROUPS
2 Hrs. Lec. 4 Hrs. Lab.
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. Students must plan for two additional hours by arrangement. (CSU)

SOCIAL SCIENCE

SOC SCI 52 (3)
INTRODUCTION TO AMERICAN GOVERNMENT
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 an 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.

SOCIOLOGY

SOCIOL 1 (3) (CAN SOC 2)
INTRODUCTORY SOCIOLOGY
3 Hrs. Lec.
An introductory course to the study of society. Major ideas, concepts, and methods in the study of society to include culture, social structure, social stratification, deviance and social control, social change, and marriage in the family. (CSU, UC)

SOCIOL 2 (3) (CAN SOC 4)
CONTEMPORARY SOCIAL PROBLEMS
3 Hrs. Lec.
This course deals with contemporary social problems and will cover those areas that are currently being defined by our society as problem issues. Emphasis will be given to understanding these problems on the societal level, the group level, and from the standpoint of the individual. (CSU, UC)

SOCIOL 10 (3)
SOCIOLOGY OF MINORITY GROUPS
3 Hrs. Lec.
This course includes the study of the theories of prejudice and discrimination of different groups within American society. It will cover an historical analysis of the problems of these groups and typical areas will include racism, sexism, ageism, and ethnic and religious discrimination. (Same as ADS 10) (CSU, UC)

SOCIOL 15 (3)
SOCIAL AND PSYCHOLOGICAL DYNAMICS OF DRUG USE
3 Hrs. Lec.
(Same as ADS 15/Psych 15) (CSU)

SOCIOL 17 (3)
SOCIAL PSYCHOLOGY
3 Hrs. Lec.
(Same as Psych 17) (CSU, UC)

SOCIOL 30 (3)
CRIMINOLOGY
3 Hrs. Lec.
(Same as Adm Jus 30) (CSU)

SOCIOL 33 (3) (CAN H EC 12)
MARRIAGE AND THE FAMILY
3 Hrs. Lec.
An introductory course to marriage and the family. Major ideas and concepts include: the history of love and marriage, myths and hidden realities, sex roles, singlehood and pairing, communication and conflict resolution, separation and divorce, remarriage. (CSU)

SOCIOL 49 (3)
COMPUTERS AND SOCIETY
3 Hrs. Lec.
A general course designed to acquaint students with computers and their related social issues, such as: robotics, computer crime, privacy, and computer technology as an agent of social change. This course does not include hands-on experience with computers. (CSU)

SOCIOL 50 (3)
HUMAN SERVICES IN A CHANGING SOCIETY
3 Hrs. Lec.
(Same as ADS 50) (CSU)

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 Center 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 advanced 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 (5)
ELEMENTARY SPANISH
5 Hrs. Lec.
Prerequisites: The student must be able to speak and read English. Not open to students with native ability in Spanish. (See Span 20A) For additional oral practice, concurrent enrollment in Span 5A is recommended. The beginning Spanish course is based on a contrastive analysis between Spanish and English and is designed to develop in the English-speaking student rudimentary abilities in the four basic language skills: hearing, speaking, reading, and writing. The main emphasis is on the present tense of both regular and irregular verbs. 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. (CSU, UC)

SPAN 1A (2.5)
ELEMENTARY SPANISH
2.5 Hrs. Lec.
Prerequisite: The student must be able to speak and read English. 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 5 units. (CSU) (UC credit limited. See a counselor.)

SPAN 1B (2.5)
ELEMENTARY SPANISH
2.5 Hrs. Lec.
Prerequisite: Span 1A. The student must be able to speak and read English. For additional oral practice, concurrent enrollment in Span 5A is recommended. 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 5 units. (CSU) (UC credit limited. See a counselor.)

SPAN 2 (5)
ELEMENTARY SPANISH
5 Hrs. Lec.
Prerequisites: The student must be able to speak and read English. The student can be successful in Span 2 only after having achieved all of the minimal performance objectives specified for Span 1. Either a recent

course in Span 1 or a recent 2 year high school Spanish course with good retention should enable the student to succeed in Span 2. For additional oral practice, concurrent enrollment in Span 5B is recommended. A continuation of Span 1 with the main emphasis on the imperfect, preterit, and present perfect forms for both regular and irregular verbs. (CSU, UC)

SPAN 2A (2.5)
ELEMENTARY SPANISH
2.5 Hrs. Lec.
Prerequisite: The student must be able to speak and read English. The student can be successful in Span 2A only after having achieved all the minimal performance objectives specified for Span 1A. A recent course in Span 1, 1B or a recent 2 year high school Spanish course with good retention should enable the student to succeed in Span 2A. This course is one-half the content of the regular Span 2 course. Completion of the Span 2A and 2B sequence is the equivalent of Span 2 for a total of 5 units. A continuation of Span 1 or Span 1B. (CSU) (UC credit limited. See a counselor.)

SPAN 2B (2.5)
ELEMENTARY SPANISH
2.5 Hrs. Lec.
Prerequisite: The student must be able to speak and read English. For additional oral practice, concurrent enrollment in Span 5B is recommended. The student can be successful in Span 2B only after having achieved the minimal performance objectives specified for Span 2A. This course is one-half the content of Span 2. Completion of the Span 2A and 2B sequence is the equivalent of Span 2. This course is a continuation of Span 2A. (CSU) (UC credit limited. See a counselor.)

SPAN 3 (5)
INTERMEDIATE SPANISH
5 Hrs. Lec.
Prerequisite: The student must be able to speak and read English. The student can be successful in Span 3 only after having achieved all of the minimal performance objectives specified for both Span 1 and Span 2. Either a recent course in Span 2 or a recent 3 year high school Spanish course with good retention should enable the student to succeed in Span 3. A continuation of Span 2 covering the uses of all Spanish tenses with special emphasis on the subjunctive and imperative modes. (CSU) (UC credit limited. See a counselor.)

SPAN 4 (5)
INTERMEDIATE SPANISH
5 Hrs. Lec.
Prerequisite: The student must be able to speak and read English. The student can be successful in Span 4 only after having achieved all of the minimal performance objectives specified for Span 1, 2, and 3. A recent course in Span 3 or the recent completion of 4 years of high school Spanish with good retention should enable the student to succeed in Span 4. A continuation of Span 3 but with greater emphasis on the reading and writing skills. The student will work with all tenses and modes of the Spanish language. (CSU) (UC credit limited. See a counselor.)

SPAN 5A (2.5)
BEGINNING CONVERSATIONAL SPANISH AND CULTURE
2.5 Hrs. Lec.
A course designed to give the student a basic ability in everyday Spanish. The course will emphasize vocabulary-

building, conversational skills, listening and comprehension, and culture. (CSU)

SPAN 5B (2.5)
BEGINNING CONVERSATIONAL SPANISH AND CULTURE
2.5 Hrs. Lec.

Prerequisite: Span 5A or by examination. Concurrent enrollment in Span 2 is recommended. A continuation of Span 5A. (CSU)

SPAN 20A (5)
BILINGUAL SPANISH
5 Hrs. Lec.

Prerequisite: Spanish speaking fluency, native or near-native or 3 years of high school Spanish. The course is designed to develop in the student the four basic language skills of listening, speaking, reading, and writing with a constant comparison between Spanish and English usage. Emphasis will be on the indicative tenses: present, preterit, imperfect, and future. These skills will be explored through reading in the contemporary culture of Spain, Latin America, and the Spanish speaking communities in the United States - Mexican, Cuban, Puerto Rican, and Sephardic. (CSU) (UC credit limited. See a counselor.)

SPAN 20B (5)
BILINGUAL SPANISH
5 Hrs. Lec.

Prerequisite: Span 20A or four years of high school Spanish. Continuation of Span 20A. Emphasis on the conditional and the subjunctive forms. (CSU) (UC credit limited. See a counselor.)

SPAN 23 (3)
BILINGUAL ORAL SPANISH
3 Hrs. Lec.

Prerequisite: Previous study of Spanish grammar, the equivalent of three years of high school Spanish. Native or near native fluency. 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 good grammar but need more practice in oral structures. This course will include a brief grammar review and discussion of relevant everyday topics of social concern. Concurrent enrollment in Span 20B is recommended, but not required. (CSU) (UC credit limited. See a counselor.)

SPAN 25 (3)
INTRODUCTION TO SPANISH AMERICAN LITERATURE
3 Hrs. Lec.

Prerequisite: Four years of high school Spanish or equivalent. Introductory survey of representative movements, authors, and works of Spanish American literature from the Spanish Discovery to the present. Course conducted in Spanish. (CSU, UC)

SPAN 26 (3)
INTRODUCTION TO TRANSLATION AND INTERPRETATION
2 Hrs. Lec. 2 Hrs. Lab.

Prerequisite: Near native fluency in Spanish and English. This course is designed to give students an introduction to theory and practice in translating and interpreting. There will be intensive vocabulary building and ear-training exercises; extensive and intensive reading on current events; cross-cultural training and research on career possibilities in these areas. (CSU)

SPAN 28A (3)
THE MEXICAN AMERICAN IN LITERATURE
3 Hrs. Lec.
(Same as Eng 46A) (CSU, UC)

SPAN 28B (3)
THE MEXICAN AMERICAN IN LITERATURE
3 Hrs. Lec.
(Same as Eng 46B) (CSU, UC)

SPAN 42 (3)
INTRODUCTION TO MEXICAN AMERICAN STUDIES
3 Hrs. Lec.

An interdisciplinary survey of the historical role, culture, values, and artistic contributions of the Mexican Americans to the United States. From 1836 to the present. Course conducted in English. (CSU, UC)

SPAN 60ABC (1-1-1)
LANGUAGE LABORATORY
2 Hrs. Lab.

Prerequisite: Current enrollment in Spanish. Individualized language laboratory practice with prepared taped materials and texts in the language laboratory. Practice in listening comprehension and pronunciation. Supplementary course for beginning, intermediate, and advanced levels in Spanish.

SPECIAL STUDIES

SPECIAL STUDIES 51 or 81 (1-3)
VOCATIONAL EDUCATION
Hours by arrangement

SPECIAL STUDIES 52 or 82 (1-3)
HUMANITIES
Hours by arrangement

SPECIAL STUDIES 53 or 83 (1-3)
ENGLISH
Hours by arrangement

SPECIAL STUDIES 54 or 84 (1-3)
NATURAL SCIENCE
Hours by arrangement

SPECIAL STUDIES 55 or 85 (1-3)
SOCIAL SCIENCE
Hours by arrangement

SPECIAL STUDIES 56 or 86 (1-3)
BUSINESS
Hours by arrangement

SPECIAL STUDIES 57 or 87 (1-3)
HEALTH, PHYSICAL EDUCATION AND RECREATION
Hours by arrangement

SPECIAL STUDIES 51-88
COURSE DESCRIPTION
Course content, prerequisites, and unit credit to be determined by the Division and the Office of Instruction in relation to community-student interest and available staff. Not offered every semester. Courses numbered 81-88 are nontransferable.

SPECIAL STUDIES - NONCREDIT

SPECIAL STUDIES 58
SUPERVISED TUTORING
An individualized course of study in any discipline using materials available in the Learning Center; nontransferable. (Nondegree Applicable)

SPEECH

SP 1 (3)
ORAL COMMUNICATION
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. (CSU) (UC credit limited. See a counselor.)

SP 2AB (3-3)
INTERMEDIATE PUBLIC SPEAKING
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. (CSU) (UC credit limited. See a counselor.)

SP 10 (3)
ARGUMENTATION AND DEBATE
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. (CSU, UC)

WATER TREATMENT TECHNOLOGY

WT 1 (4)
WATER TREATMENT PLANT OPERATOR I
4 Hrs. Lec.

This course will provide information needed to operate a basic fresh-water treatment plant as efficiently as possible. Course will consist of water sources and treatment, coagulation and flocculation, sedimentation, filtration, disinfection, corrosion control, taste and odor control, laboratory procedures, and plant operation and math. (CSU)

WT 2 (4)
WATER TREATMENT PLANT OPERATOR II
4 Hrs. Lec.

Prerequisite: WT 1. Study of fresh-water treatment plant safety, iron and manganese control, fluoridation, softening, demineralization, handling and disposal of process wastes, instrumentation, maintenance, administration, drinking water regulations, and treatment plant math. (CSU)

WT 3 (4)
WATER TREATMENT PLANT OPERATOR III
4 Hrs. Lec.

This course will provide the knowledge required to operate small water treatment plants. Subjects included are: water sources and treatment; wells, small water treatment plants; storage facilities; distribution systems; water quality considerations in distribution system; operation and maintenance of distribution systems; disinfection; cross connections; sampling; water borne disease and bacteriological testing. (CSU)

WT 6 (3)
COMPUTATIONAL PROCEDURES FOR TREATMENT PLANT OPERATOR I
3 Hrs. Lec.

This course is designed to give water and waste water treatment operators a general knowledge of basic mathematics as applied to treatment plant operations. The subjects covered are: calculation of treatment plant problems; fractions; decimals; percentages; ratio; proportions; averages; areas; volumes; metric system conversions; and estimation. (CSU)

WT 9 (4)
WASTE WATER TREATMENT I
4 Hrs. Lec.

Prerequisite: WT 6. This course is designed to train operators in the effective operation of waste water treatment plants. Course will consist of the fundamentals of waste water treatment, start-up operation, daily operation, interpretation of laboratory results, and process control. (CSU)

WT 10 (4)
WASTE WATER TREATMENT II
4 Hrs. Lec.

Prerequisite: WT 9. Course will consist of waste water maintenance, plant safety, sampling, laboratory procedures, hydraulics, records, process control - activated sludge, sludge digestion, solids handling, and possible approaches to solving operational problems. (CSU)

WT 11 (4)
WASTE WATER TREATMENT III
4 Hrs. Lec.

Prerequisite: WT 10. Course consists of odor control measures, operational control alternatives, in-depth study of solids handling and disposal, waste water reclamation, instrumentation, industrial waste treatment and monitoring. (CSU)

WELDING TECHNOLOGY

Enrollment in welding courses requiring a prerequisite is not allowed unless the prerequisite welding class is passed with a "C" grade or better.

WELD 31 (5)
BASIC WELDING
3 Hrs. Lec. 6 Hrs. Lab.

A complete basic study of welding technology. The student practices techniques for skill development in shielded metal arc welding, gas tungsten arc welding, and oxy-acetylene welding processes. (CSU)

WELD 31A (2)
OXY-ACETYLENE WELDING
1 Hr. Lec. 2 Hrs. Lab.

Theory, practice and application of joining metals by the oxy-acetylene process, includes metal cladding, cutting and bronze welding. This course, together with Weld 31B, is equivalent to Weld 31. Not open to students who have completed Weld 31. (CSU)

WELD 31B (3)
ARC WELDING
2 Hrs. Lec. 4 Hrs. Lab.

A beginning study of arc welding for the technology oriented student. The course consists of theory, practice and application of arc welding processes. Electrode selection and applications in different joint designs will be covered. This course, together with Weld

31A, is equivalent to Weld 31. Not open to students who have completed Weld 31. (CSU)

WELD 34 (3)
INERT GAS SHIELDED ARC WELDING
 2 Hrs. Lec. 3 Hrs. Lab.
 Theory, practice and application of Tungsten-Inert-Gas processes on aluminum, stainless steel, mild steel, and other exotic metals. (CSU)

WELD 36A (5)
ADVANCED WELDING
 3 Hrs. Lec. 6 Hrs. Lab.
 Prerequisite: Weld 31 or permission of the instructor. A concentrated course in shielded metal arc welding. The student develops his/her welding skill to a professional entry level. Includes a review of oxy-acetylene cutting and safety. (CSU)

WELD 36B (5)
ADVANCED WELDING
 3 Hrs. Lec. 6 Hrs. Lab.
 Prerequisite: Weld 36A or permission of the instructor. Emphasis is on skill development for shielded metal arc welding of pipe and heavy structural plate. Gas metal arc welding process is included to further enhance the welder's abilities. Advanced processes for shielded metal arc welding, gas metal arc welding, and oxy-acetylene welding are presented in all phases of the class. (CSU)

WELD 36C (5)
ADVANCED WELDING - WELDER CERTIFICATION AND BLUEPRINT READING
 3 Hrs. Lec. 6 Hrs. Lab.
 Prerequisite: Completion of Weld 36B or permission of the instructor. Emphasis is on welding operator qualification testing. This course is for the experienced welder and for the student completing the final phase of the Welding Technology Program. A detailed study of blueprint reading is included to further develop the welder's abilities. (CSU)

WELD 38 (2)
SHEET METAL FUNDAMENTALS
 1 Hr. Lec. 2 Hrs. Lab.
 Theory and practice in the fundamentals of planning, layout, pattern development and fabrication of flat sheet metal into useful products. (CSU)

WELD 50 (1-3)
APPLIED MATHEMATICS
 1-3 Hrs. Lec.
 (Same as Aget 50, Auto Tech 50, Math 50 and PL 50) (Nondegree Applicable)

WELD 75 (3)
BASIC SHOP SKILLS
 3 Hrs. Lec.
 (Same as Aget 75/Auto Tech 75)

COOPERATIVE WORK EXPERIENCE

Cooperative Work Experience Education is a cooperative educational program by Imperial Valley Community College and the community employers. It is an approved program of activities and objectives which is evaluated by the college. The college provides the organization, the class facilities and the personnel to coordinate the program. The employers provide places to work (work stations) and on-the-job training which has educational

value for the students. Sixteen units of work experience education may be allowed toward graduation with the Associate Degree. All students are required to be entered in a certificate or degree program. General work experience courses are not approved for veteran's benefits.

WE GEN 70 (3)
PERSONAL EFFICIENCY
 1 Hr. Lec. 10 Hrs. Lab.
 Emphasis is placed on the capacity and efficiency of accomplishing designated tasks, securing an appropriate position and increasing efficiency with work progress. Laboratory work will be arranged with the employer. The work may be in any occupation but must have educational value for the student. (CSU)

WE GEN 71 (3)
MOTIVATION
 1 Hr. Lec. 10 Hrs. Lab.
 Motivation is studied from the employee's and employer's perspective. Personal leadership development and improvement is emphasized. Laboratory work will be arranged with the employer. The work may be in any occupation but must have educational value for the student. (CSU)

WE GEN 72 (3)
LABOR AND THE ECONOMY
 1 Hr. Lec. 10 Hrs. Lab.
 Labor and management relationships are discussed. The effect of government on labor and the economy is emphasized. Employee procurement, collective bargaining and the labor movement is part of the instruction. Laboratory work will be arranged with the employer. The work may be in any occupation but must have educational value for the student. (CSU)

WE GEN 73 (3)
LAWS AFFECTING EMPLOYEES
 1 Hr. Lec. 10 Hrs. Lab.
 Labor laws that affect the welfare and security of employees are emphasized. Industrial welfare, unemployment insurance, worker's compensation, social security, and taxes are among laws discussed. Laboratory work will be arranged with the employer. The work may be in any occupation but must have educational value for the student. (CSU)

WE OCC 80 (4)
PERSONAL EFFICIENCY
 1 Hr. Lec. 15 Hrs. Lab.
 Emphasis is placed on the capacity and efficiency of accomplishing designated tasks, securing an appropriate position and increasing efficiency with work progress. Laboratory work will be arranged with the employer. The work must be in the field of the student's planned course of occupational training. (CSU)

WE OCC 81 (4)
MOTIVATION
 1 Hr. Lec. 15 Hrs. Lab.
 Motivation is studied from the employee's and employer's perspective. Personal leadership development and improvement is emphasized. Laboratory work will be arranged with the employer. The work must be in the

field of the student's planned course of occupational training. (CSU)

WE OCC 82 (4)
LABOR AND THE ECONOMY
 1 Hr. Lec. 15 Hrs. Lab.
 Labor and management relationships are discussed. The effect of government on labor and the economy is emphasized. Employee procurement, collective bargaining, and the labor movement are part of the instruction. Laboratory work will be arranged with the employer. The work must be in the field of the student's planned course of occupational training. (CSU)

WE OCC 83 (4)
LAWS AFFECTING EMPLOYEES
 1 Hr. Lec. 15 Hrs. Lab.
 Labor laws that affect the welfare and security of employees are emphasized. Industrial welfare, unemployment insurance, worker's compensation, social security, and taxes are among laws discussed. Laboratory work will be arranged with the employer. The work must be in the field of the student's planned course of occupational training. (CSU)

ZOOLOGY

ZOOL 1A (4)
GENERAL ZOOLOGY
 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 with special emphasis on the invertebrates. (CSU, UC)

ZOOL 1B (4)
GENERAL ZOOLOGY
 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. (CSU, UC)

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 major's 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/her own program.

Students may satisfy the major requirements in the following fields of study:

ADMINISTRATION OF JUSTICE

Twenty-one units required for the major

- I. Required courses for the major

| | | |
|------------|---|---|
| Adm Jus 21 | Intro to the Admin of Justice | 3 |
| Adm Jus 33 | Concepts of Criminal Law | 3 |
| Adm Jus 35 | Legal Aspects of Evidence | 3 |
| Adm Jus 36 | Principles & Procedures of the Justice System | 3 |
| Adm Jus 38 | Police Community Relations | 3 |

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

- | | | |
|--------------------|--|---|
| Adm Jus 22 | Police Field Operations | 3 |
| Adm Jus 24 | Traffic Control & Vehicle Code | 3 |
| Adm Jus 26 | Traffic Accident Investigation & Reporting | 3 |
| Adm Jus 29 | Report Writing for Administration of Justice | 3 |
| Adm Jus/ Sociol 30 | Criminology | 3 |
| Adm Jus 31 | Concepts of Probation & Parole | 3 |
| Adm Jus 34 | Criminal Investigation | 3 |
| Adm Jus 37 | Juvenile Control | 3 |
| Adm Jus 39 | Arrest & Firearms | 3 |

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

- | | | |
|------------|---------------------------------|-------|
| Adm Jus 40 | Advanced Officers Course | 1/2-3 |
| Adm Jus 43 | Reserve Officers Class Level II | 5 |
| Adm Jus 44 | Reserve Officers Class Level I | 4 |

AGRICULTURAL BUSINESS MANAGEMENT/TRANSFER

The Agricultural Business Management major is the application of business concepts to the agricultural industry and emphasizes training in management for careers in agriculture. These careers may include the management and operation of farms as well as in the management of firms that supply the service to farms and by those engaged in processing, marketing, distribution, and sales of farm products.

Twenty-four units required for the major

- I. Required courses for the major

| | | |
|-------|--|---|
| Ag 22 | Intro to Agricultural Economics | 3 |
| Ag 25 | Agricultural Bus Mgmt | 3 |
| Ag 26 | Agricultural Bus Organization & Management | 3 |
| Ag 27 | Agri Sales & Svc Mgmt | 3 |

| | |
|--------|-------------------------------------|
| Ag 29 | Computer Appl in Ag 3 |
| Econ 1 | Principles of Economics 3 |

II. Acceptable courses for the major (select a minimum of 6 units)

| | |
|---------|--|
| Ag 15 | Pesticide Safety 1 |
| Ag 20 | Animal Science 3 |
| Ag 30 | Food & Fiber in a Changing World 3 |
| Ag 40 | Soils 3 |
| Bus 1A | Principles of Accounting 4 |
| Bus 1B | Principles of Accounting 4 |
| Bus 5A | Business Law 3 |
| Chem 2A | Introduction to Chemistry 4 |

AGRICULTURAL ENGINEERING TECHNOLOGY

Provides the student with technical knowledge of mechanization and the basic skills needed to succeed in production agriculture or one of the hundreds of agriculture support services in the Imperial Valley.

Twenty-one units required for the major

I. Required courses for the major

| | |
|---------|--|
| Aget 28 | Power Equip Oper & Maint 4 |
| Aget 34 | Power Transmission Systems 4 |
| Aget 35 | Fluid Power 3 |
| Aget 37 | Small Gasoline Engines 3 |
| Aget 39 | Fundamentals of Diesel Power 4 |

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

| | |
|--------------|---|
| Ag 25 | Agricultural Bus Mgmt 3 |
| Ag 32 | Irrigation & Drainage 3 |
| Aget 50 | Applied Math (if required) 1-3 |
| Auto Tech 60 | Elec, Start, Chrg, Ignit & Related Elec Systems 5 |
| Weld 31 | Basic Welding 5 |

AGRICULTURAL SCIENCE/TRANSFER

The Agricultural Science major deals with the application of the various principles of the biological and physical sciences to agriculture. The course offerings are fundamental and broad in scope so that students can prepare for transfer or one of the hundreds of opportunities in the Animal Sciences or Soil Sciences.

Twenty-six units required for the major

I. Required courses for the major

| | |
|---------|--|
| Ag 20 | Animal Science 3 |
| Ag 29 | Computer Applications in Ag 3 |
| Ag 40* | Soils 3 |
| Ag 42 | Introduction to Crop Science 4 |
| Aget 28 | Power Equip Oper & Maint 4 |

II. Acceptable courses for the major (select a minimum of 9 units)

| | |
|--------|--|
| Ag 14 | Entomology 3 |
| Ag 21* | Feeds & Feeding 3 |
| Ag 30 | Food & Fiber in a Changing World 3 |
| Ag 32* | Irrigation & Drainage 3 |
| Ag 41* | Fertilizers 3 |

| | |
|---------|---------------------------------------|
| Ag 43 | Field & Cereal Crops 4 |
| Ag 45* | Vegetable Production 3 |
| Chem 2A | Introduction to Chemistry 4 |

- *Ag 21 Feeds & Feeding, Prerequisite: Ag 20; choose this class if Animal Science emphasis
- *Ag 32 Irrigation & Drainage, Prerequisite: Ag 40
- *Ag 40 Soils, Prerequisite: Math X (Beginning Algebra) and Chem 2A (Introduction to Chemistry)
- *Ag 41 Fertilizers, Prerequisite: Ag 40
- *Ag 45 Vegetable Production, Prerequisite: Ag 40

ALCOHOL AND DRUG STUDIES

Twenty-seven units required for the major

I. Required courses for the major

| | |
|----------------------|--|
| ADS/Psych/HR 9 | Introduction to Counseling 3 |
| ADS/Psych/HR 11A & B | Practicum 3 |
| ADS/Sociol/Psych 15 | Social & Psychological Dynamics of Drug Use 3 |
| ADS/Sociol 50 | Human Services in a Changing Society 3 |
| ADS 51 | Alcoholism: Intervention, Treatment & Recovery 3 |
| ADS 52 | Physiological Effects of Alcohol & Drug Use 3 |

Minimum of 6 units from any two of the following courses

| | |
|--------------|--|
| ADS/Psych 53 | Group Leadership & Group Process 3 |
| ADS 54 | Family Counseling Approach to Alcohol & Drug Abuse 3 |
| ADS/Psych 55 | Crisis Intervention & Referral Techniques 3 |
| ADS 56 | Program Management Techniques 3 |

Minimum of 3 units from any of the following

| | |
|---------------|--|
| ADS/Sociol 10 | Sociology of Minority Groups 3 |
| ADS 57ABCD | Current Issues in Substance Abuse 1-3, 1-3, 1-3, 1-3 |

II. Recommended courses (do not fulfill major requirements)

| | |
|-------------|---|
| Psych 3 | Psychology of Adjustment 3 |
| Psych 4 | Psychology of Human Sexuality 3 |
| Psych/HR 16 | The Psychology of Interpersonal Relationships 3 |
| Psych 30 | Psychology of Adolescence 3 |
| Psych 35 | Developmental Psychology: Conception to Death 3 |
| Sociol 33 | Marriage and the Family 3 |

ANTHROPOLOGY

Twenty-seven units required for the major

I. Required courses for the major

| | |
|-----------|--|
| Anthro 1 | Physical Anthropology 3 |
| Anthro 2 | Cultural Anthropology 3 |
| Anthro 3A | Intro to Arch Site Surveying 3 |
| Anthro 3B | Intro to Arch Excavations 3 |

| | |
|----------|--------------------------------|
| Anthro 4 | California Indians 3 |
| Geog 1 | Physical Geography 3 |

II. Acceptable courses for the major (minimum of 9 units required from the following courses)

| | |
|------------|--|
| Anthro 3C | Advanced Arch. Survey 3 |
| Anthro 3D | Advanced Arch. Excavations 3 |
| Anthro 6 | Indians of North America 3 |
| Anthro 8 | Indians of the Southwest 3 |
| Anthro 16A | Prehistoric Ceramics 3 |
| Anthro 16B | Adv Prehistoric Ceramics 3 |

ART

Twenty-four units required for the major

I. Required courses for the major

| | |
|----------|---------------------|
| Art 20A* | Drawing 3 |
| Art 20B | Drawing 3 |
| Art 22A | Design 3 |

(Minimum of 6 units from the following courses)

| | |
|--------|--|
| Art 3A | History & Appreciation of Art 3 |
| Art 3B | History & Appreciation of Art 3 |
| Art 4 | History & Appreciation of Modern Art 3 |

II. Acceptable courses for the major (select a minimum of 9 units)

| | |
|---------|---------------------------------|
| Art 5 | Women Artists 3 |
| Art 18A | Watercolor Painting 3 |
| Art 18B | Watercolor Painting 3 |
| Art 21A | Painting 3 |
| Art 21B | Painting 3 |
| Art 22B | Design 3 |
| Art 23A | Ceramics 3 |
| Art 23B | Ceramics 3 |
| Art 23C | Ceramics 3 |
| Art 25A | Life Drawing 3 |
| Art 25B | Life Drawing 3 |
| Art 28 | Technical Ceramics 3 |

*Should be taken first semester, if possible, to allow for sequence of Art 20B, Art 21AB, and Art 25AB.

AUTOMOTIVE BODY REPAIR AND PAINTING

Twenty-six to 28 units required for the major

I. Required courses for the major

| | |
|--------------|--|
| Auto Body 70 | Auto Body Repairing & Painting 5 |
| Auto Body 71 | Adv Auto Body Repairing & Painting 5 |
| Auto Body 72 | Auto & Light Truck Major Collision Repairing 5 |
| Auto Tech 50 | Applied Math (if required) 1-3 |
| Auto Tech 53 | Brakes & Suspension 5 |
| Weld 31 OR | Basic Welding 5 |
| Weld 31A & | Oxy-Acetylene Welding 2 & 3 |
| Weld 31B | Arc Welding 2 & 3 |

II. Acceptable courses for the major (5 units from the following list may be accepted as major credit if

the equivalent of Auto Body 70 has been completed in high school [two years of high school auto body])

| | |
|--------------|---|
| Auto Body 51 | Engine Tech, or equivalent 5 |
| Auto Tech 54 | Carburetors, Fuel Injection & Exhaust Systems 3 |
| Auto Tech 58 | Automotive Air-Conditioning 3 |
| WE | Cooperative Work Experience 4 |

AUTOMOTIVE TECHNOLOGY

Thirty-two units required for the major

I. Required courses for the major

| | |
|---------------|--|
| Auto Tech 51 | Engine Technology 5 |
| Auto Tech 52 | Manual Transmissions & Power Trains 3 |
| Auto Tech 53 | Brakes & Suspension 5 |
| Auto Tech 54 | Carburetors, Fuel Injection & Exhaust Systems 3 |
| Auto Tech 56 | Diagnostics 3 |
| Auto Tech 58 | Automotive Air-Conditioning 3 |
| Auto Tech 60 | Elec, Start, Chrg, Ignit, & Related Elec Systems 5 |
| Auto Tech 61A | Automatic Transmissions 5 |

II. Recommended courses for the major (not required for the major)

| | |
|--------------|--|
| Auto Tech 55 | Adv Gasoline Engines & Light Duty Diesel Engine Rebuilding 5 |
| Auto Tech 57 | Fluid Power 3 |
| Auto Tech 59 | Small Gasoline Engines 3 |
| Auto Tech 65 | Basic Machine Shop Technology 3 |
| Auto Tech 66 | Adv Machine Shop Technology 3 |
| Auto Tech 75 | Basic Shop Skills 3 |
| Weld 31 | Basic Welding 5 |

BANKING - ADMINISTRATIVE SERVICES

Twenty-three units required for the major

I. Required courses for the major

| | |
|----------|--|
| Bus 1A | Principles of Accounting 4 |
| Bus 1B | Principles of Accounting 4 |
| Bus 6 | Mgmt Concepts of Supervision 3 |
| Bus/HR 7 | Human Relations in Mgmt 3 |

II. Acceptable courses for the major (select a minimum of 9 units)

| | |
|--------|--------------------------------------|
| Bus 5A | Business Law 3 |
| Bus 42 | Business Communications 3 |
| Econ 1 | Principles of Accounting 3 |
| Sp 1 | Oral Communication 3 |

BANKING - CREDIT ADMINISTRATION

Twenty-three units for the major

I. Required courses for the major

| | |
|----------|--------------------------------------|
| Bus 1A | Principles of Accounting 4 |
| Bus 1B | Principles of Accounting 4 |
| Bus 5A | Business Law 3 |
| Bus/HR 7 | Human Relations in Mgmt 3 |
| Bus 42 | Business Communications 3 |

| | |
|--------|-------------------------------------|
| Econ 1 | Principles of Economics 3 |
| Sp 1 | Oral Communication 3 |

BANKING - GENERAL OPERATIONS

Twenty-seven units required for the major

I. Required courses for the major

| | |
|-----------|--|
| Bus 5A | Business Law 3 |
| Bus 10A | Practical Bookkeeping** 3 |
| Bus 21ABC | Prof-Exit Typewriting* 3-3-3 |
| Bus 23 | Office Machines 3 |
| Bus 40 | Grammar & Usage 3 |

II. Acceptable courses for the major (select any 2 courses)

| | |
|----------|--|
| Sp 1 | Oral Communication 3 |
| Bus/HR 7 | Human Relations in Mgmt 3 |
| Bus 39 | Office Procedure 3 |
| Bus 41 | Essen of Bus Corresp 3 |
| CIS 1 | Intro to Information Systems 3 |

*Minimum skill level 40 words per minute required to qualify for major. If skill level attained in Bus 21A, student is excused from Bus 21B and Bus 21C.

**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.

BANKING - SECRETARIAL

Twenty-seven units required for the major

I. Required courses for the major

| | |
|-----------|--|
| Bus 5A | Business Law 3 |
| Bus 21ABC | Prof-Exit Typewriting* 3-3-3 |
| Bus 32AB | Dictation & Transcrip Lab** 3-3 |
| Bus 40 OR | Grammar & Usage 3 |
| Bus 41 OR | Essen of Bus Corresp 3 |
| Bus 42 | Business Communications 3 |

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

| | |
|----------|--|
| Sp 1 | Oral Communicaton 3 |
| Bus/HR 7 | Human Relations in Mgmt 3 |
| Bus 23 | Office Machines 3 |
| Bus 39 | Office Procedures 3 |
| CIS 1 | Intro to Information Systems 3 |

*Minimum skill level of 60 net words per minute required to qualify for major. If skill level attained in Bus 21A, student is excused from Bus 21B and Bus 21C.

**Minimum skill level of 90 words per minute required to qualify for major. If attained in Bus 32A, student is excused from Bus 32B.

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 |

Psychology

| | |
|------------------------|--|
| Psych 1A | Intro to Psychology 3 |
| Psych 1B | Learning 3 |
| Psych 2 | Biological Psychology 3 |
| Psych 3 | Psychology of Adjustment 3 |
| Psych 4 | Pysch of Human Sexuality 3 |
| Psych/HR/ADS 9 | Intro to Counseling 3 |
| Psych/HR/ADS 11A & 11B | Practicum 3-3 |
| Psych 13/Bus 26/ | |
| Math 12 | Elementary Statistics 3 |
| Psych 14 | Abnormal Psychology 3 |
| Psych 16/ | The Psych of Interpersonal Relationships 3 |
| Psych/Sociol 17 | Social Psychology 3 |
| Psych/ECE 20 | Develop Psych of Children 3 |
| Psych/ECE 22 | Adv Develop Psych & Observ 3 |
| Psych/ECE 27/ | |
| PL 1 | Understanding Excep Stu 3 |
| Psych 30 | Psych of Adolescence 3 |
| Psych 35 | Develop Psych: Conception to Death 3 |

Sociology

| | |
|-----------------|-------------------------------------|
| Sociol 1 | Introductory Sociology 3 |
| Sociol 2 | Contemp Social Problems 3 |
| Sociol/Psych 17 | Social Psychology 3 |
| Sociol/ | |
| Adm Jus 30 | Criminology 3 |
| Sociol 33 | Marriage & the Family 3 |

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

| | |
|--------------|--|
| Bio 3 | Prin of Biological Science 4 |
| Psych 6 | Current Issues in Psych 3 |
| Psych/ADS/ | Social & Psychological Dynamics of Drug Use 3 |
| Sociol 15 | |
| Psych 18 | Research in Psychology 1 |
| Psych/ECE 21 | Early Child Social: Children, Family & Community 3 |
| Psych/ECE 26 | Principles of Parenting 3 |
| Psych 40 | Psych of Crisis Counseling 3 |
| Sociol 49 | Computers & Society 3 |
| Zool 1B | General Zoology 4 |

Transfer students planning to major in these areas should take the IVC General Major and complete requirements listed in the catalog of the school to which they anticipate transferring.

BILINGUAL-BICULTURAL STUDIES

Twenty-two to 24 units required for the major

I. Required courses for the major

| | |
|--------------|--|
| Eng 46A-46B/ | The Mexican American in Literature 3-3 |
| Span 28A-28B | |
| Span 42 | Into to Mexican American Studies 3 |

Required for bilingual students only

| | |
|----------|------------------------------------|
| Span 20A | Bilingual Spanish 5 |
| Span 20B | Bilingual Spanish 5 |
| Span 23 | Bilingual Oral Spanish 3 |

Required for monolingual students only

| | |
|--------|----------------------------------|
| Span 1 | Elementary Spanish 5 |
| Span 2 | Elementary Spanish 5 |
| Span 3 | Intermediate Spanish 5 |

BUSINESS OFFICE TECHNOLOGIES: ACCOUNTING TECHNICIAN

Twenty-one to 30 units and skill level required for the major

I. Required courses for the major

| | |
|-----------|--|
| Bus 10A | Practical Bookkeeping 3 |
| Bus 10B | Practical Bookkeeping 3 |
| Bus 21ABC | Prof-Exit Typewriting 3-3-3 |
| Bus 23 | Office Machines 3 |
| Bus 24 | Records Management 3 |
| CIS 1 | Intro to Information Systems 3 |
| CIS 22 | Microcomputer Operations: Bookkeeping & Accounting 3 |

II. Acceptable courses for the major (select one course)

| | |
|--------|--------------------------------------|
| Ag 25 | Agricul Bus Mgmt 3 |
| Ag 26 | Agricul Bus Organ & Mgmt 3 |
| Bus 2 | Intro to Business 3 |
| Bus 3 | Business Management 3 |
| Bus 4 | Principles of Marketing 3 |
| Bus 13 | Applied Business Law 3 |
| Bus 39 | Office Procedures 3 |

III. Required skill level for the major

Typing Skill Level 40 wpm

(Bus 25, Keyboarding Speed & Accuracy, or a repeat of Bus 21ABC may be helpful in obtaining this speed level.)

BUSINESS OFFICE TECHNOLOGIES: ADMINISTRATIVE SECRETARY

Twenty-seven to 36 units and skill levels required for the major

I. Required courses for the major

| | |
|-----------|---------------------------------------|
| Bus 21ABC | Prof-Exit Typewriting 3-3-3 |
| Bus 22A | Word Processing 3 |
| Bus 23 | Office Machines 3 |
| Bus 24 | Records Management 3 |
| Bus 31AB | Shorthand Theory & Speedldg 3-3 |
| Bus 39 | Office Procedures 3 |
| Bus 40 | Grammar & Usage 3 |
| Bus 41 OR | Essen of Bus Corresp 3 |
| Bus 42 | Business Communications 3 |

II. Acceptable courses for the major (select 3 units)

| | |
|---------|--|
| Bus 22B | Word Processing 3 |
| CIS 1 | Intro to Information Systems 3 |

| | |
|---------|---|
| CIS 23 | Microcomputer Operations: Hardware & Software 1 |
| CIS 25 | Microcomputer Operating Systems: DOS 1 |
| CIS 35A | Spreadsheet: Lotus 123 1 |
| CIS 40A | Data Base: dBase 1 |

III. Required skill levels for the major

Shorthand Skill Level 80 wpm (A repeat of Bus 31AB may be helpful in obtaining this speed level.)

Typing Skill Level 60 wpm (Bus 25, Keyboarding Speed & Accuracy, or a repeat of Bus 21ABC may be helpful in obtaining this speed level.)

BUSINESS OFFICE TECHNOLOGIES: OFFICE TECHNICIAN

Twenty-six to 32 units and skill level required for the major

I. Required courses for the major

| | |
|-----------|---|
| Bus 21ABC | Prof-Exit Typewriting 3-3-3 |
| Bus 22A | Word Processing 3 |
| Bus 23 | Office Machines 3 |
| Bus 24 | Records Management 3 |
| Bus 39 | Office Procedures 3 |
| Bus 41 OR | Essen of Bus Corresp 3 |
| Bus 42 | Business Communications 3 |
| CIS 23 | Microcomputer Operations: Hardware & Software 1 |
| CIS 35A | Spreadsheet: Lotus 123 1 |

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

| | |
|---------|---|
| Bus 10A | Practical Bookkeeping 3 |
| Bus 25 | Keyboarding: Speed & Accuracy 3 |
| Bus 40 | Grammar & Usage 3 |
| Bus 43 | Bus Corresp in Spanish 3 |
| CIS 1 | Intro to Information Systems 3 |

III. Required skill level for the major

Typing Skill Level 50 wpm

(Bus 25 or a repeat of Bus 21ABC may be helpful in obtaining this speed level.)

BUSINESS OFFICE TECHNOLOGIES: WORD PROCESSING TECHNICIAN

Twenty-four to 30 units and skill level required for the major

I. Required courses for the major

| | |
|-----------|---------------------------------------|
| Bus 21ABC | Prof-Exit Typewriting 3-3-3 |
| Bus 22A | Word Processing 3 |
| Bus 22B | Word Processing 3 |
| Bus 23 | Office Machines 3 |
| Bus 39 | Office Procedures 3 |
| Bus 40 | Grammar & Usage 3 |
| Bus 41 OR | Essen of Bus Corresp 3 |
| Bus 42 | Business Communications 3 |

II. Acceptable courses for the major (select 3 units)

| | |
|-------|--|
| CIS 1 | Intro to Information Systems 3 |
|-------|--|

| | |
|---------|--|
| CIS 23 | Microcomputer Operations: Hardware & Software 1 |
| CIS 25 | Microcomputer Operating Systems: DOS 1 |
| CIS 35A | Spreadsheet: Lotus 123 1 |
| CIS 40A | Data Base: dBase 1 |

III. Required skill level for the major

Typing Skill Level 55 wpm

(Bus 25, Keyboarding Speed & Accuracy, or a repeat of Bus 21ABC may be helpful in obtaining this speed level.)

BUSINESS SUPERVISION

Twenty-one units required for the major

I. Required courses for the major

| | |
|----------|-----------------------------------|
| Bus 2 | Intro to Business 3 |
| Bus 3 | Business Management 3 |
| Bus 6 | Mgmt Concepts of Supervision . 3 |
| Bus/HR 7 | Human Relations in Mgmt 3 |
| Bus 10A | Practical Bookkeeping 3 |
| Bus 13 | Applied Business Law 3 |
| CIS 1 | Intro to Information Systems . 3 |

II. Recommended electives (do not fulfill requirements for the major). These courses will assist students in gaining additional experience for the major.

| | |
|-------------------------|-----------------------------------|
| WE Gen 70/ WE Occ 80 | Personal Efficiency 3/4 |
| WE Gen 71/ WE Occ 81 | Motivation 3/4 |
| WE Gen 72/ WE Occ 82 | Labor & the Economy 3/4 |
| WE Gen 73/ WE Occ 83 | Laws Affecting Employees . . 3/4 |

BUSINESS TRANSFER

Twenty units required for the major

I. Required courses for the major

| | |
|--------|------------------------------------|
| Bus 1A | Principles of Accounting 4 |
| Bus 1B | Principles of Accounting 4 |
| Bus 5A | Business Law 3 |
| Econ 1 | Principles of Economics 3 |
| Econ 2 | Principles of Economics 3 |

II. Acceptable courses for the major (select a minimum of 3 units)

| | |
|-----------------------------|---|
| Bus 2 | Intro to Business 3 |
| Bus 5B | Business Law 3 |
| Bus/Math 15 | Introductory Calculus with Applications 4 |
| Bus 23 | Office Machines 3 |
| Bus 26/Math 12/ Psych 13 | Elementary Statistics 3 |
| Bus 42 | Business Communications 3 |
| CIS 1 | Intro to Information Systems . 3 |
| CIS 22 | Microcomputer Operations: Bookkeeping & Accounting . . . 3 |

COMPUTER INFORMATION SYSTEMS

Twenty-six units required for the major

I. Required courses for the major

| | |
|----------------|---|
| Bus 1A | Prin of Accounting 4 |
| Bus 1B | Prin of Accounting 4 |
| CIS 1 | Intro to Information Systems . 3 |
| CIS 10 | Programming in Cobol I 3 |
| CIS 12/Math 57 | Programming in Basic 3 |
| CIS 21ABC | Computer Applications Lab 1-1-1 |
| CIS 25 | Microcomputer Operating Systems: DOS 1 |
| CIS 35A | Spreadsheet: Lotus 123 1 |
| CIS 40A | Data Base: dBase 1 |

II. Acceptable courses for the major

| | |
|---------|--|
| CIS 11 | Programming in Cobol II 3 |
| CIS 22 | Microcomputer Operations: Bookkeeping & Acctg 3 |
| CIS 23 | Microcomputer Operations: Hardware & Software 1 |
| CIS 30 | Word Processing: WordPerfect . 1 |
| CIS 35B | Spreadsheet: Lotus 123 1 |

EARLY CHILDHOOD EDUCATION

Twenty-seven units required for the major

I. Required courses for the major

| | |
|---------------------|--|
| ECE/Psych 20 | Develop Psych of Child 3 |
| ECE/Psych 21 | Early Child Social: Children, Family & Community 3 |
| ECE/Psych 22 | Adv Develop Psych & Observ . . 3 |
| ECE 23 | Early Childhood Curric I 3 |
| ECE 24 | Early Childhood Curric II 3 |
| ECE 25 | Field Experience 3 |
| ECE/Psych 26 | Prin of Parenting 3 |
| ECE 28 | Admin & Supervision in ECE . . 3 |
| ECE 34 OR ECE 46 | Infant/Toddler Develop Multilingual & Multicultural Curric for Young Child 3 |

II. Additional courses from the following list are recommended:

| | |
|-----------------------|---|
| Psych 1A | Intro to Psychology 3 |
| Psych 1B | Learning 3 |
| Psych 3 | Psych of Adjustment 3 |
| Psych 16/ HR 16 | The Psych of Interpersonal Relationships 3 |
| Psych/Sociol 17 | Social Psychology 3 |
| Psych/ECE 27/ PL 1 | Understanding Excep Stu 3 |
| Psych 30 | Psych of Adolescence 3 |

Early Childhood Education majors are eligible for a Children's Center Permit as described in the degree program which includes 27 units in ECE, 16 units in General Education and completion of graduation requirements for the associate degree. Application for the Children's Center Permit can be made through the credentialing office at Imperial County Office of Education through California Teacher Preparation and Licensing, State Department of Education.

ENGINEERING

Forty-four units required for the major

I. Required courses for the major

| | |
|---------|-----------------------------------|
| Chem 1A | Gen Inorganic Chemistry 5 |
| Math 3A | Analytic Geometry & Calculus . 5 |
| Math 3B | Analytic Geometry & Calculus . 5 |
| Math 4 | Calc & Differ Equations 5 |
| Phys 4A | Principles of Physics 4 |
| Phys 4B | Principles of Physics 4 |
| Phys 4C | Principles of Physics 4 |

II. *Acceptable courses for the major (select a minimum of 12 units)

| | |
|-----------------------------|------------------------------------|
| Chem 1B | General Inorganic Chem 5 |
| Chem 5 | Quantitative Analysis 4 |
| Chem 12 | Organic Chemistry 5 |
| Engr 5 | Strength of Materials 3 |
| Engr 11 | Electrical Network Analysis . 3 |
| Engr 15 | Statics 3 |
| Engr 16 | Dynamics 3 |
| Engr 19** | Statics & Dynamics 6 |
| Math 12/Bus 26/ Psych 13 | Elementary Statistics 3 |
| Math 47/CIS 14 | Programming in Fortran 3 |
| Math 58 | Computer Program in Pascal . . 3 |

*Prior to enrollment in any of these courses, engineering students should consult the catalog of the institution to which they plan to transfer and determine which courses on this list are applicable to their particular major. They should then enroll for as many of these applicable courses as possible.

**Engr 19 is equivalent to Engr 15 and Engr 16.

It is essential that engineering students enroll in mathematics during the first semester.

Students majoring in engineering and planning to attend only two years at IVC are advised to give priority to lower division requirements for the major as they are prerequisites for most upper division engineering courses. If the student also wishes to complete his/her general education requirements, it will necessitate at least one additional year at IVC.

Some of the courses in categories I and II will be offered only once every two years. See a counselor for specifics on course offerings or any questions regarding the engineering program.

ENGLISH

Eighteen units required for the major

I. Required courses for the major (12 units)

| | |
|----------------------------------|--|
| Eng 1A | Reading & Composition 3 |
| Eng 1B | Intro to Literature 3 |
| Eng 42A-42B OR Eng 43A-43B | Survey of World Literature Survey of English Literature 3-3 |

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

| | |
|--------|----------------------------------|
| Eng 52 | Intro to Linguistics 3 |
|--------|----------------------------------|

| | |
|----------|---|
| Eng 54 | Intro to Film Hist & Criticism 3 |
| Eng 50 | Advanced Composition 3 |
| Eng 53AB | Creative Writing 3-3 |
| Eng 41 | Survey of American Lit 3 |
| Eng 46A | The Mexican American in Lit . 3 |
| Eng 46B | The Mexican American in Lit . 3 |

FIRE SCIENCE

Eighteen to 21 units required for the major

I. Required courses for the major

| | |
|-------------|--|
| Fire Sci 60 | Intro to Fire Tech 3 |
| Fire Sci 61 | Fundamentals of Fire Preven . 3 |
| Fire Sci 62 | Fire Protec Equip & Systems . 3 |
| Fire Sci 63 | Fundamentals of Fire Behavior & Control 3 |
| Fire Sci 64 | Fundamentals of Fire Protec . 3 |
| Fire Sci 65 | Fundamentals of Personal Fire Safety & Emerg Action 3 |
| Math 51 | Basic Math, or equivalent . . 3 |

FOREIGN LANGUAGE

Twenty units required for the major

I. Required courses for the major (minimum of 20 units from any of the following sequences with a minimum concentration of 14 units in one language). Additional units to complete the major can be selected from a second language area and/or the acceptable courses listed below:

French

| | |
|------|---------------------------------|
| Fr 1 | Elementary French* 5 |
| Fr 2 | Elementary French** 5 |
| Fr 3 | Intermediate French 4 |
| Fr 4 | Intermediate French 4 |

II. Acceptable courses for the major (will fulfill major requirements if 14 units minimum in one language have been completed in one of the areas listed below)

| | |
|-------|----------------------------------|
| Fr 5 | Inter French Read & Writ . . . 3 |
| Fr 10 | Inter Conversational French . 3 |
| Fr 11 | Inter Conversational French . 3 |

Spanish

| | |
|--------|-----------------------------------|
| Span 1 | Elementary Spanish*** 5 |
| Span 2 | Elementary Spanish**** 5 |
| Span 3 | Intermediate Spanish 5 |
| Span 4 | Intermediate Spanish 5 |

Spanish (Bilingual)

| | |
|----------|------------------------------------|
| Span 20A | Bilingual Spanish 5 |
| Span 20B | Bilingual Spanish 5 |
| Span 23 | Bilingual Oral Spanish 3 |
| Span 25 | Intro to Spanish American Lit 3 |

III. Acceptable courses for the major (will fulfill major requirements if 14 units minimum in one language have been completed in one of the areas listed above)

| | |
|---------|----------------------------------|
| Span 5A | Beg Conver Span & Cult . . . 2.5 |
|---------|----------------------------------|

| | | |
|----------|--|-----|
| Span 5B | Beg Conver Span & Cult | 2.5 |
| Span 26 | Intro to Translation & Interpretations | 3 |
| Span 28A | The Mexican American in Lit | 3 |
| Span 28B | The Mexican American in Lit | 3 |
| Span 42 | Intro to Mexican American Studies | 3 |
| Ger 1 | Elementary German | 4 |
| Ger 2 | Elementary German | 4 |

Some courses may be waived through testing or advanced placement.

Students with one year high school foreign language skills in listening, speaking, reading and writing, meeting course 1 objectives, may enter course 2 (Fr 2, Span 2, Ger 2); two years, course 3 (Fr 3, Span 3); three years, course 3 or 4; four years, course 5. Intermediate level conversational courses should be taken concurrently: Fr 10 and Fr 3; Fr 4 and Fr 11; Span 10 and Span 3; Span 11 and Span 4. Students should first contact the language instructors and counselors in order to determine whether they have met the performance guidelines as defined in the description of competence by levels. This description is available in the Counseling Center and the Language Department.

*Completion of Fr 1A and 1B sequence is equivalent to Fr 1.

**Completion of Fr 2A and 2B sequence is equivalent to Fr 2.

***Completion of Span 1A and 1B sequence is equivalent to Span 1.

****Completion of Span 2A and 2B sequence is equivalent to Span 2.

GENERAL BUSINESS

Twenty units required for the major

I. Required courses for the major

| | | |
|---------|--|---|
| Bus 2 | Intro to Business | 3 |
| Bus 3 | Business Management | 3 |
| Bus 4 | Principles of Marketing | 3 |
| Bus 10A | Practical Bookkeeping | 3 |
| CIS 1 | Intro to Information Systems | 3 |

II. Acceptable courses for the major

| | | |
|-----------|----------------------------------|-------|
| Bus 13 | Applied Business Law | 3 |
| Bus 14 | Practical Salesmanship | 3 |
| Bus 21ABC | Prof-Exit Typewriting | 3-3-3 |
| Bus 23 | Office Machines | 3 |
| Bus 24 | Records Management | 3 |
| Bus 41 | Essen of Bus Corresp | 3 |
| Bus 43 | Bus Corresp in Spanish | 3 |

III. Recommended electives (do not fulfill requirements for the major). These courses will assist students in gaining additional experience for the major.

| | | |
|------------|------------------------------------|-----|
| WE Gen 70/ | | |
| WE Occ 80 | Personal Efficiency | 3/4 |
| WE Gen 71/ | | |
| WE Occ 81 | Motivation | 3/4 |
| WE Gen 72/ | | |
| WE Occ 82 | Labor & the Economy | 3/4 |
| WE Gen 73/ | | |
| WE Occ 83 | Laws Affecting Employees | 3/4 |

GENERAL MAJOR

Completion of a minimum of 18 units of lower division courses that are required or recommended subjects as specified for upper division standing in a designated major by a college to which the student plans to transfer.

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 |
| 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 |
| 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-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 & Physiology | 5 |
| Bio 3 | Prin of Biological Science | 4 |
| Bio 21 | General Microbiology | 5 |
| Env Sci/Ag 5 | Man & 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 | Prin of Astronomy | 3 |
| Chem 1A | Gen Inorganic Chemistry | 5 |
| Chem 1B | Gen Inorganic Chemistry | 5 |
| Chem 5 | Quantitative Analysis | 4 |
| Chem 12 | Organic Chemistry | 5 |
| Geog 1 | Physical Geography | 3 |
| Geol 1A | Physical Geology | 4 |
| Math 2 | Adv Algebra & Trigonometry | 5 |
| Math 3A | Analytic Geometry & Calculus | 5 |
| Math 3B | Analytic Geometry & Calculus | 5 |
| Math 4 | Calculus & Differential Equations | 5 |
| Phys Sci 25 | Intro to Physical Science | 4 |
| Phys 4A | Principles of Physics | 4 |
| Phys 4B | Principles of Physics | 4 |
| Phys 4C | Principles of Physics | 4 |

GRAPHIC ARTS

Twenty-two units required for the major

I. Required courses for the major

| | | |
|-------|--|---|
| GA 10 | Graphic Communication I | 2 |
| GA 11 | Graphic Communication II | 3 |
| GA 12 | Composition, Layout & Paste-Up | 3 |
| GA 20 | Offset Printing I | 3 |
| GA 21 | Offset Printing II | 3 |
| GA 22 | Photography & Platemaking | 3 |
| GA 23 | Bindery, Cutting & Distrib | 2 |
| GA 30 | Graphics Plant Operation & Mgmt Fundamentals | 3 |

HUMAN RELATIONS

Areas of emphasis: Community Mental Health Worker, Counseling, School, Social Services, Personnel, Employment Counseling, and Supervision

Twenty-four units required for the major

I. Required courses for the major

| | | |
|------------------------|----------------------------------|-----|
| Psych 1A | Intro to Psychology | 3 |
| Psych 3 | Psych of Adjustment | 3 |
| HR/ADS/Psych 9 | Intro to Counseling | 3 |
| HR/Psych/ADS 11A & 11B | Practicum | 3-3 |
| Sociol 1 | Introductory Sociology | 3 |

II. With the approval of his/her counselor and the Division Chairperson, the student will select a minimum of 9 units (depending on areas of emphasis) from the following courses. It is considered advisable for students in certain areas of emphasis to take more than 9 units from the list below.

| | | |
|----------|--|---|
| Anthro 2 | Cultural Anthropology | 3 |
| Bus 6 | Mgmt Concepts of Supervision | 3 |

| | | |
|------------------|---|---|
| Bus/HR 7 | Human Relations in Mgmt | 3 |
| CIS 1 | Intro to Information Systems | 3 |
| HR/Psych 8 | Personal & Career Develop | 3 |
| HR/Psych 10 | Small Group Leadership | 3 |
| Psych 18 | Learning | 3 |
| Psych 2 | Biological Psychology | 3 |
| Psych 5 | Psych of Effective Behavior | 3 |
| Psych 13/Bus 26/ | Elementary Statistics | 3 |
| Math 12 | Abnormal Psychology | 3 |
| Psych 14 | Social & Psychological Dynamics of Drug Use | 3 |
| Psych/ADS/ | The Psych of Interpersonal Relationships | 3 |
| Sociol 15 | Social Psychology | 3 |
| Psych/HR 16 | Develop Psych of Children | 3 |
| Psych/Sociol 17 | Prin of Parenting | 3 |
| Psych/ECE 20 | Psychology of Adolescence | 3 |
| Psych/ECE 26 | Developmental Psychology: Conception to Death | 3 |
| Psych 30 | Intro to Crisis Counseling | 3 |
| Psych 35 | Contemp Social Problems | 3 |
| Psych 40 | Sociology of Minority Groups | 3 |
| Sociol 2 | Marriage & the Family | 3 |
| Sociol 10 | | |
| Sociol 33 | | |

Strongly recommended that students who do not speak Spanish take a series of courses in Conversational Spanish.

HUMANITIES

Twenty-seven units required for the major

I. Six units required from the following:

| | | |
|--------|---------------------------------------|---|
| Hum 1A | The Humanities in West Cult | 3 |
| Hum 1B | The Humanities in Culture | 3 |
| Hum 25 | Intro to the Humanities | 3 |
| Hum 26 | The Humanities | 3 |

II. Must select 9 units required from the following:

THE ARTS

Three units must be from:

| | | |
|--------|--------------------------------------|---|
| Art 3A | Hist & Appreciation of Art | 3 |
| Art 3B | Hist & Appreciation of Art | 3 |
| Art 5 | Women Artists | 3 |

Three units must be from:

| | | |
|---------|-------------------------------|---|
| Mus 20A | Hist & Lit of Music | 3 |
| Mus 20B | Hist & Lit of Music | 3 |

Remaining 3 units can be chosen from:

| | | |
|------------|--------------------------------------|---------|
| Art 3A | Hist & Appreciation of Art | 3 |
| Art 3B | Hist & Appreciation of Art | 3 |
| Art 4 | Hist & Apprec of Mod Art | 3 |
| Art 5 | Women Artists | 3 |
| Art 20A | Drawing | 3 |
| Art 22A | Design | 3 |
| Art 23A | Ceramics | 3 |
| Art 25A | Life Drawing | 3 |
| Art 33 | Gallery Display | 2 |
| Art 40 | Exploration of Paint Tech | 2 |
| Mus 7 | Intro to Music Foundations | 3 |
| Mus 8A | Beg Musicianship | 2 |
| Mus 9A | Inter Musicianship | 2 |
| Mus 17ABCD | Chamber Singers | 1-1-1-1 |

| | | |
|------------|--|---------|
| Mus 18ABCD | Chamber Orchestra | 1-1-1-1 |
| Mus 19ABCD | Instrumental Ensemble | 1-1-1-1 |
| Mus 20A | Hist & Lit of Music | 3 |
| Mus 20B | Hist & Lit of Music | 3 |
| Mus 27ABCD | Concert Band | 1-1-1-1 |
| Mus 28ABCD | College-Community Chorus | 1-1-1-1 |
| Mus 30 | Intro to Music Literature & Listening | 3 |
| Mus 31 | Intro to 20th Cent Music | 3 |

III. Must select 6 units from each of the two specialized areas:

Three units required from the following:

| | | |
|---------|-------------------------------------|---|
| Hist 4A | Hist of West Civilization | 3 |
| Hist 4B | Hist of West Civilization | 3 |

Three units required from the following:

| | | |
|---------|--|---|
| Phil 1A | Intro to Philosophy | 3 |
| Phil 1B | Intro to Philosophy | 3 |
| Phil 25 | Religions of the Modern World | 3 |

LANGUAGE ARTS

Three units required from the following:

| | | |
|------------|---------------------------------------|---|
| Drm Art 5A | Hist of World Drama | 3 |
| Drm Art 5B | Hist of World Drama | 3 |
| Eng 1B | Intro to Literature | 3 |
| Eng 41 | Survey of Amer Lit | 3 |
| Eng 42A | Survey of World Lit | 3 |
| Eng 43A | Survey of English Lit | 3 |
| Eng 43B | Survey of English Lit | 3 |
| Eng 46A | The Mexican American in Lit | 3 |
| Eng 46B | The Mexican American in Lit | 3 |
| Eng 47 | Intro to the Bible as Lit | 3 |

The remaining 3 units can be chosen from:

| | | |
|----------------|-----------------------------------|---------|
| Drm Art 20A | Fundamentals of Acting | 3 |
| Drm Art 22ABCD | Rehearsal & Performance | 1-1-1-1 |
| Eng 53AB | Creative Writing | 3-3 |
| Sp 1 | Oral Communication | 3 |
| Sp 2AB | Inter Public Speaking | 3-3 |
| Sp 10 | Argumentation & Debate | 3 |
| Fr 1 | Elementary French | 5 |
| Fr 2 | Elementary French | 5 |
| Span 1 | Elementary Spanish | 5 |
| Span 2 | Elementary Spanish | 5 |
| Ger 1 | Elementary German | 4 |
| Ger 2 | Elementary German | 4 |

INDIVIDUAL INTERDISCIPLINARY MAJOR

This major for an Associate Degree provides occupational-oriented students with an area of concentration within two divisions to meet a specific job need.

The requirements for the major will be met by satisfactory completion of 9 (or more) units in each division.

The courses required will be approved by division chairpersons, 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.

JOURNALISM

Twenty-four units required for the major

I. Required courses for the major

| | | |
|----------|--------------------------------|-------|
| Jrn 1 | Intro to Journalism | 3 |
| Jrn 2ABC | Newspaper Production | 4-4-4 |
| Ph 5 | Intro to Photography | 3 |

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

| | | |
|-------------|--------------------------------------|-----|
| Econ 1 | Prin of Economics | 3 |
| Econ 2 | Prin of Economics | 3 |
| Eng 1B | Intro to Literature | 3 |
| Sociol 1 | Introductory Sociology | 3 |
| Sociol 2 | Contemp Social Problems | 3 |
| Poly Sci 1 | Intro to Political Science | 3 |
| Poly Sci 2* | Amer Government & Politics | 3 |
| Bus 20 | Elementary Typewriting | 3 |
| Sp 1 | Oral Communication | 3 |
| Eng 53AB | Creative Writing | 3-3 |
| Ph 8 | Multi-Media | 3 |
| Eng 54 | Intro to Film Hist & Crit | 3 |

*If not used to satisfy the American Institutions requirement for graduation.

LEGAL ASSISTANT

Twenty-one units required for the major

I. Required courses for the major

| | | |
|--------|---|---|
| Bus 5A | Business Law | 3 |
| LA 21 | Research & Criminal Law | 3 |
| LA 22 | Civil Procd & Family Law | 3 |
| LA 23 | Civil Discovery & Torts | 3 |
| LA 24 | Corporations & Bankruptcy | 3 |
| LA 25 | Real Estate Law for Legal Assistants | 3 |
| LA 26 | Wills-Trusts-Probate | 3 |

LIBERAL STUDIES

(See Teacher Preparation)

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 & Physiology | 5 |
| Bio 3 | Prin of Biological Science | 4 |
| Bio 21 | General Microbiology | 5 |
| Physio 1 | Human Physiology | 4 |
| Zool 1A | General Zoology | 4 |
| Zool 1B | General Zoology | 4 |
| Env Sci/Ag 5 | Man & His Environment | 3 |
| Anthro 1 | Physical Anthropology | 3 |

(maximum of 6 units from the following courses)

| | | |
|---------|-----------------------------------|---|
| Chem 1A | Gen Inorganic Chemistry | 5 |
| Chem 1B | Gen Inorganic Chemistry | 5 |
| Chem 5 | Quantitative Analysis | 4 |
| Chem 12 | Organic Chemistry | 5 |
| Chem 2A | Intro to Chemistry | 4 |

MARKETING - SALES TECHNOLOGY

Eighteen units required for the major

I. Required courses for the major

| | | |
|--------|----------------------------------|---|
| Bus 2 | Intro to Business | 3 |
| Bus 4 | Prin of Marketing | 3 |
| Bus 13 | Applied Business Law | 3 |
| Bus 14 | Practical Salesmanship | 3 |

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

| | | |
|-----------|--------------------------------------|-------|
| Bus 1A | Prin of Accounting | 4 |
| Bus 10A | Practical Bookkeeping | 3 |
| Bus 21ABC | Prof-Exit Typewriting | 3-3-3 |
| Bus 23 | Office Machines | 3 |
| Bus 66 | Effective Customer Service | 5 |
| Econ 1 | Prin of Economics | 3 |
| Span 1 | Elementary Spanish | 5 |

MATHEMATICS

Eighteen units required for the major

I. Required courses for the major

| | | |
|---------|------------------------------------|---|
| Math 3A | Analytic Geom & Calculus | 5 |
| Math 3B | Analytic Geom & Calculus | 5 |

II. Acceptable courses for the major

| | | |
|-----------------|--|---|
| Math 2 | Adv Algebra & Trigonometry | 5 |
| Math 4 | Calculus & Differential Equations | 5 |
| Math 12/Bus 26/ | Elementary Statistics | 3 |
| Psych 13 | Elementary Statistics | 3 |
| Math 47/CIS 14 | Programming in Fortran | 3 |
| Math 57/CIS 12 | Programming in Basic | 3 |
| Math 58 | Computer Programming in Pascal | 3 |

MUSIC

Twenty-nine units required for the major

I. Required courses for the major (minimum of 25 units from the following courses)

a. Academic courses (minimum of 20 units from the following courses)

| | | |
|--------|------------------------------|---|
| Mus 8A | Beg Musicianship | 2 |
| Mus 8B | Beg Musicianship | 2 |
| Mus 8C | Inter Musicianship | 2 |
| Mus 8D | Inter Musicianship | 2 |
| Mus 9A | Beg Harmony | 3 |
| Mus 9B | Beg Harmony | 3 |
| Mus 9C | Inter Harmony | 3 |
| Mus 9D | Inter Harmony | 3 |

Note: Music 8A and 9A must be taken concurrently and the sequence followed through 8D and 9D.

b. Applied Music (minimum of 5 units from the following courses) (Requirement may be waived through proficiency examination.)

| | | |
|------------|-----------------------------------|---------|
| Mus 10A | Beginning Group Piano I | 1 |
| Mus 32ABCD | Applied Music | 1-1-1-1 |

c. Performance Ensembles (minimum of 4 units from the following courses)

| | | |
|------------|------------------------------|---------|
| Mus 17ABCD | Chamber Singers | 1-1-1-1 |
| Mus 18ABCD | Chamber Orchestra | 1-1-1-1 |
| Mus 27ABCD | Concert Band | 1-1-1-1 |
| Mus 28ABCD | College-Com Chorus | 1-1-1-1 |
| Mus 33ABCD | Symphony Orch | 1-1-1-1 |
| Mus 34ABCD | Pep Ban | 1-1-1-1 |

Note: All music majors are required to perform in at least one of the above college music organizations every semester enrolled.

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

| | | |
|------------|---|---------|
| Mus 10B | Beg Group Piano II | 1 |
| Mus 11A | Inter Group Piano I | 1 |
| Mus 11B | Inter Group Piano II | 1 |
| Mus 12 | Beg Class Guitar | 1 |
| Mus 13 | Inter Class Guitar | 1 |
| Mus 15A | Beg Class Voice | 1 |
| Mus 15B | Beg Class Voice | 1 |
| Mus 16 | Inter Class Voice | 1 |
| Mus 19ABCD | Instrumental Ensemble | 1-1-1-1 |
| Mus 20A | Hist & Lit of Music | 3 |
| Mus 20B | Hist & Lit of Music | 3 |
| Mus 21ABCD | Brass, Woodwind & Percussion Methods | 1-1-1-1 |
| Mus 25ABCD | Stage Band | 1-1-1-1 |
| Mus 26ABCD | Rehearsal & Performance | 1-1-1-1 |
| Mus 29ABCD | Estudiantina | 1-1-1-1 |
| Mus 31 | Intro to 20th Cen Music | 3 |
| Mus 64ABCD | College-Community Band | 1-1-1-1 |

NURSING

Associate Degree Nursing

Forty-six and one-half units of nursing required for the major. Thirty-three support course units required to complete the nursing program.

Pre-Application Requirements

| | | |
|---------|--|---|
| Eng 1A* | Reading & Composition | 3 |
| Eng 11 | Reading IV: Analytical & Critical Reading | 3 |
| Math X | Beginning Algebra | 3 |

TOTAL 9

Pre-Clinical Nursing

| | | |
|----------|-----------------------------------|---|
| HT 1 | Intro to Health Science | 2 |
| Psych 1A | Intro to Psychology | 3 |
| Anat 10 | Human Anat & Phys | 5 |

TOTAL 10

First Semester

| | | |
|-----------|---|-----|
| Psych 35 | Develop Psych: Conception to Death | 3 |
| Bio 21 | General Microbiology | 5 |
| NS 1A (R) | Intro to Patient Care I | 4 |
| NS 1B (R) | Intro to Patient Care II | 4 |
| NS 1C (R) | Pharmacology I | 1.5 |

TOTAL 17.5

Second Semester

| | |
|-------------|--|
| Psych/HR 16 | The Psych of Interpersonal Relationships 3 |
| NS 2A (R) | Maternity Cycle 5.5 |
| NS 2B (R) | Common Health Prob I 5.5 |
| NS 2C (R) | Pharmacology II 2 |
| TOTAL 16 | |

Third Semester

| | |
|---------------------------------|--------------------------------------|
| Humanities Elective 3 | |
| NS 3A (R) | Common Health Prob II 6.5 |
| NS 3B (R) | Common Health Prob III 6.5 |
| NS 3C (R) | Patient Care Mgmt 1 |
| TOTAL 17 | |

Fourth Semester

| | |
|---|-------------------------------------|
| Communication & Analytic Reasoning Course 3 | |
| American Institutions Course 3 | |
| NS 4A (R) | Common Health Prob IV 4.5 |
| NS 4B (R) | Advanced Nursing 4.5 |
| NS 4C (R) | Nursing Trends 1 |
| TOTAL 16 | |

*Eng 1A is required to meet the Board of Registered Nurse approved 79.5 units.

Vocational Nursing

Thirty-five and one-half units required for the major. Fourteen support course units required to complete the vocational nursing program.

Pre-Application Requirements

| | |
|---------|---|
| Eng 1A | Reading & Composition 3 |
| Eng 11 | Reading IV: Analytical & Critical Reading 3 |
| Math X | Beginning Algebra 3 |
| TOTAL 9 | |

Pre-Clinical Nursing

| | |
|----------|--|
| HT 1 | Intro to Health Science 2 |
| Psych 1A | Intro to Psychology 3 |
| Anat 6 | Anat & Phys for Health Occupations 3 |
| TOTAL 8 | |

First Semester

| | |
|------------|--|
| Psych 35 | Develop Psych: Conception to Death 3 |
| NS 1A (V) | Intro to Patient Care I 4 |
| NS 1B (V) | Intro to Patient Care II 4 |
| NS 1C (V) | Pharmacology I 1.5 |
| TOTAL 12.5 | |

Second Semester

| | |
|-------------|--|
| Psych/HR 16 | The Psych of Interpersonal Relationships 3 |
|-------------|--|

| | |
|------------|------------------------------------|
| NS 2A (V) | Maternity Cycle 5.5 |
| NS 2B (V) | Common Health Prob I 5.5 |
| NS 2C (V) | Pharmacology II 1.5 |
| TOTAL 15.5 | |

Third Semester

| | |
|------------|--------------------------------------|
| NS 3A (V) | Common Health Prob II 6.5 |
| NS 3B (V) | Common Health Prob III 6.5 |
| NS 3C (V) | Patient Care Mgmt5 |
| TOTAL 13.5 | |

**Part-Time Program Sequence
Associate Degree Nursing**

***Pre-Admission Requirements**

| | |
|----------|---|
| Eng 1A* | Reading & Composition 3 |
| Eng 11 | Reading IV: Analytical & Critical Reading 3 |
| Math X | Beginning Algebra 3 |
| TOTAL 9* | |

***Pre-Nursing Requirements**

| | |
|-------------|--|
| Anat 10 | Human Anat & Phys 5 |
| Bio 21 | General Microbiology 5 |
| HT 1 | Intro to Health Science 2 |
| Psych 1A | Intro to Psychology 3 |
| Psych 35 | Develop Psych: Conception to Death 3 |
| Psych/HR 16 | The Psych of Interpersonal Relationships 3 |
| | Humanities Elective 3 |
| | Oral Communication 3 |
| | American Institutions 3 |
| NS 1C (R) | Pharmacology I 1.5 |
| NS 2C (R) | Pharmacology II 2 |
| NS 3C (R) | Patient Care Mgmt I 1 |
| TOTAL 34.5* | |

***Nursing Requirements**

| | |
|-----------|--------------------------------------|
| NS 1A (R) | Intro to Patient Care I 4 |
| NS 1B (R) | Intro to Patient Care II 4 |
| NS 2A (R) | The Maternity Cycle 5.5 |
| NS 2B (R) | Common Health Prob I 5.5 |
| NS 3A (R) | Common Health Prob II 6.5 |
| NS 3B (R) | Common Health Prob III 6.5 |
| NS 4A (R) | Common Health Prob IV 4.5 |
| NS 4B (R) | Advanced Nursing 4.5 |
| NS 4C (R) | Nursing Trends 1 |
| TOTAL 42* | |

***Required units for Associate Degree Nurse**

**Part-Time Program Sequence
Vocational Nursing**

***Pre-Admission Requirements**

| | |
|----------|---|
| Eng 1A | Reading & Composition 3 |
| Eng 11 | Reading IV: Analytical & Critical Reading 3 |
| Math X | Beginning Algebra 3 |
| TOTAL 9* | |

***Pre-Nursing Requirements**

| | |
|-------------|--|
| Anat 6 | Anat & Phys for Health Occupations 5 |
| HT 1 | Intro to Health Science 2 |
| NS 1C (V) | Pharmacology I 1.5 |
| Psych 1A | Intro to Psychology 3 |
| Psych/HR 16 | The Psych of Interpersonal Relationships 3 |
| Psych 35 | Develop Psych: Conception to Death 3 |
| TOTAL 15.5* | |

***Nursing Requirements**

| | |
|-----------|--------------------------------------|
| NS 1A (V) | Intro to Patient Care I 4 |
| NS 1B (V) | Intro to Patient Care II 4 |
| NS 2A (V) | The Maternity Cycle 5.5 |
| NS 2B (V) | Common Health Prob I 5.5 |
| NS 2C (V) | Pharmacology II 1.5 |
| NS 3A (V) | Common Health Prob II 6.5 |
| NS 3B (V) | Common Health Prob III 6.5 |
| NS 3C (V) | Patient Care Mgmt5 |
| TOTAL 34* | |

***Theory/Clinical 1,548 req hours for Vocational Nurse**

PATIENT SERVICES ADMINISTRATION

Twenty-six to 32 units required for the major

I. Required courses for the major

| | |
|--------------|---|
| Anat 6 | Anat & Phys for Health Occupations 3 |
| Bus 21ABC | Prof-Exit Typewriting 3-3-3 (50 wpm skill level req) |
| HT 3/Bus 80 | Medical Terminology 3 |
| HT 4/Bus 81 | Medical Transcription 3 |
| HT 5/Bus 82 | Patient Information Systems 3 |
| HT 6/Bus 83 | Medical Insurance 3 |
| HT 7/Bus 84 | Patient Admin Services 3 |
| HT 8/Bus 85 | Mgmt of Patient Services 2 |
| HT 11/Bus 86 | Adv Medical Transcription 3 |

II. Recommended courses for the major (not required for the major)

| | |
|-------------|--|
| Bus 6 | Mgmt Concepts of Supervision 3 |
| Bus 7/HR 7 | Human Relations in Mgmt 3 |
| Bus 10A | Practical Bookkeeping 3 |
| Bus 10B | Practical Bookkeeping 3 |
| Bus 22A | Word Processing 3 |
| Bus 39 | Office Procedures 3 |
| Bus 40 | Grammar & Usage 3 |
| Psych/HR 16 | The Psych of Interpersonal Relationships 3 |

PHYSICAL EDUCATION

Nineteen units required for the major

I. Required courses for the major

| | |
|------|------------------------------|
| HE 1 | Health Education 3 |
|------|------------------------------|

| | |
|-------|--|
| HE 2 | First Aid 3 |
| PE 6 | Lifeguard Training/Advanced Lifesaving 2 |
| PE 50 | Intro to Physical Education 2 |
| PE 61 | PE in the Elementary School 3 |

II. Select six (6) units from the following courses:

| | |
|-----------|--|
| PE 3ABCD | Physical Fitness, Women 1-1-1-1 |
| PE 4ABCD | Badminton, Coed 1-1-1-1 |
| PE 5ABCD | Swimming, Coed 1-1-1-1 |
| PE 7 | Water Safety Instructor Training 2 |
| PE 9ABCD | Adapted Physical Exercises, Coed 1-1-1-1 |
| PE 10ABCD | Team Sports 1-1-1-1 |
| PE 11ABCD | Volleyball, Coed 1-1-1-1 |
| PE 12ABCD | Tennis, Coed 1-1-1-1 |
| PE 13 | Advanced Tennis, Coed 1 |
| PE 17ABCD | Physical Fitness, Men 1-1-1-1 |
| PE 18ABCD | Golf, Coed 1-1-1-1 |
| PE 20ABCD | Softball, Coed 1-1-1-1 |
| PE 22ABCD | Racquetball & Handball, Coed 1-1-1-1 |
| PE 23ABCD | Basketball for Women 1-1-1-1 |
| PE 24ABCD | Basketball for Men 1-1-1-1 |
| PE 26ABCD | Modern Dance, Coed 1-1-1-1 |
| PE 28ABCD | Dance Theater, Coed 2-2-2-2 |
| PE 29ABCD | Jazz Dance, Coed 1-1-1-1 |
| PE 30ABCD | Song & Cheer 2-2-2-2 |
| PE 32ABCD | Intercollegiate Basketball & PE 2-2-2-2 |
| PE 34AB | Intercollegiate Baseball & PE 2-2 |
| PE 38AB | Intercollegiate Tennis & PE 2-2 |
| PE 40ABCD | Synchronized Swimming 2-2-2-2 |
| PE 41AB | Intercollegiate Volleyball & PE 2-2 |
| PE 42AB | Intercollegiate Soccer & PE 2-2 |
| PE 43AB | Intercollegiate Softball & PE 2-2 |
| PE 44 | Self-defense 1 |
| PE 51 | Structuring Intramurals 2 |
| PE 52AB | Theory of Baseball 2-2 |
| PE 53AB | Theory of Basketball, Coed 2-2 |
| PE 56 | Care & Prevention of Athletic Injuries 2 |
| PE 58 | Psych of Coaching 2 |
| PE 59AB | Sports Officiating, Men 3-3 |
| PE 60AB | Sports Officiating, Women 3-3 |
| PE 62AB | PE for Special Olympics 3-3 |
| Anat 8 | Human Anatomy 4 |
| Anat 10 | Human Anat & Physiology 5 |

PHYSICAL SCIENCE

Eighteen units required for the major

I. Required courses for the major (minimum of 18 units from the following courses)

| | |
|--------------|---------------------------------------|
| Astron 21 | Prin of Astronomy 3 |
| Chem 1A-1B | Gen Inorganic Chemistry 5-5 |
| Chem 5 | Quantitative Analysis 4 |
| Chem 12 | Organic Chemistry 5 |
| Env Sci/Ag 5 | Man & His Environment 3 |
| Geog 1 | Physical Geography 3 |
| Geol 1A | Physical Geology 4 |

Phys Sci 25 Intro to Physical Science . . . 4
 Phys 4A-4B-4C Principles of Physics . . . 4-4-4

II. Acceptable courses for the major (maximum of 5 units from the following courses)

Math 2 Adv Algebra & Trigonometry . . . 5
 Math 3A-3B Analytic Geom & Calculus . . . 5-5
 Math 4 Calc & Differ Equations 5

PSYCHOLOGY

Twenty-one units required for the major

I. Required courses for the major

Psych 1A Intro to Psychology 3
 Psych 1B Learning 3
 Psych 2 Biological Psychology 3

Minimum of 12 units from any of the following courses:

Psych 3 Psych of Adjustment 3
 Psych 4 Psych of Human Sexuality . . . 3
 Psych 6 Current Issues in Psych . . . 3
 Psych/HR/ADS 9 Intro to Counseling 3
 Psych/HR/ADS 11A & 11B Practicum 3-3
 Psych 13/Bus 26/ Math 12 Elementary Statistics 3
 Psych 14 Abnormal Psychology 3
 Psych/ADS/ Sociol 15 Social & Psychological Dynamics of Drug Use 3
 Psych/HR 16 The Psych of Interpersonal Relationships 3
 Psych/Sociol 17 Social Psychology 3
 Psych 30 Psych of Adolescence 3
 Psych 35 Develop Psychology: Conception to Death 3

REAL ESTATE

Eighteen 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 93 Real Estate Finance 3
 Bus 94A Real Estate Appraisal 3
 Bus 95 Real Estate Economics 3

RECREATION

Eighteen units required for the major

I. Required courses for the major

Rec 70 Intro to Leisure 3
 Rec 71 Social Recreation 3
 Rec 72 Outdoor Recreation 3
 Rec 73 Recreation for Special Groups . . 4

(Two or 3 units to be selected from the following courses)

Art 22A Design 3
 PE 6 Lifeguard Training/Advanced Lifesaving 2

PE 59AB Sports Officiating, Men . . . 3-3
 PE 60AB Sports Officiating, Women . . 3-3
 PE 61 PE in the Elem School 3
 PE 62AB PE for Special Olympics . . . 3-3

II. Acceptable courses for the major (2 or 3 units to be selected from the following courses)

PE 3ABCD Physical Fitness, Women 1-1-1-1
 PE 4ABCD Badminton, Coed 1-1-1-1
 PE 5ABCD Swimming, Coed 1-1-1-1
 PE 10ABCD Team Sports 1-1-1-1
 PE 11ABCD Volleyball, Coed 1-1-1-1
 PE 12ABCD Tennis, Coed 1-1-1-1
 PE 14ABCD Recreational Games, Coed 1-1-1-1
 PE 17ABCD Physical Fitness, Men 1-1-1-1
 PE 20ABCD Softball, Coed 1-1-1-1
 PE 23ABCD Basketball for Women 1-1-1-1
 PE 24ABCD Basketball for Men 1-1-1-1
 PE 29ABCD Jazz Dance, Coed 1-1-1-1

REHABILITATION TECHNICIAN FOR THE PHYSICALLY LIMITED

Eighteen units required for the major

I. Required courses for the major

PL 1/Psych 27/ ECE 27 Understanding Excep Stu 3
 PL 2AB Practicum Exper to Work with the PL Person 2-2
 Psych 1A OR Intro to Psych
 Psych 5 Psych of Effec Behavior 3

II. A minimum of 6 units must be taken from Section II

HA 15 Health Assistant 6
 PL 10 Beg Communication with the Deaf 4
 PL 11 Inter Communication with the Deaf 4
 PL 33 Intro to Audiology 3
 PL 34 Audiometry & Hearing Conversation 3

III. Additional units to complete the major may be utilized from the courses under Section III

PE 62AB PE for Special Olympics . . . 3-3
 PL 12 Adv Communication with the Deaf 3
 PL 13ABCD Communication with the Deaf in the College Classroom 1-1-1-1
 Psych 3 Psych of Adjustment 3
 Psych/HR/ADS 9 Intro to Counseling 3
 Psych/Sociol 17 Social Psychology 3
 Psych/ECE 20 Develop Psych of Children . . . 3
 Rec 73 Recreation for Special Groups . . 4
 Sociol 1 Introductory Sociology 3
 Sociol 2 Contemp Social Problems 3
 Sp 1 Oral Communication 3

SOCIAL SCIENCE

I. Required courses for the major

The requirements for a major in Social Science may be satisfied by taking 18 units from the following

list to include at least one course from three of the seven fields:

Anthropology

Anthro 1 Physical Anthropology 3
 Anthro 2 Cultural Anthropology 3
 Anthro 3A Intro to Arch Site Surveying . . . 3
 Anthro 3B Intro to Arch Excavations . . . 3
 Anthro 4 California Indians 3
 Anthro 6 Indians of North America . . . 3

Economics

Econ 1 Prin of Economics 3
 Econ 2 Prin of Economics 3

Geography

Geog 1 Physical Geography 3
 Geog 2 Cultural Geography 3

History

Hist 4A Hist of West Civilization . . . 3
 Hist 4B Hist of West Civilization . . . 3
 Hist 17A United States History 3
 Hist 17B United States History 3
 Hist 30 Mexico & the Amer Southwest . . 3

Political Science

Poly Sci 1 Intro to Political Science . . 3
 Poly Sci 2 American Govt & Politics . . . 3
 Poly Sci 3 Comparative Politics 3
 Poly Sci 14 Intro to International Relations 3

Social Science

Soc Sci 52 Intro to American Govt 3

Sociology

Sociol 1 Introductory Sociology 3
 Sociol 2 Contemp Social Problems 3
 Sociol 10 Sociology of Minority Groups . . 3
 Sociol 33 Marriage & the Family 3

TEACHER PREPARATION

The Teacher Preparation and Licensing Law of 1970 (Ryan Act) provides for two types of teaching credentials, each permitting instruction in grades K-12. One is the MULTIPLE SUBJECT CREDENTIAL for teachers in a self-contained classroom as commonly practiced in California elementary schools. The other is the SINGLE SUBJECT CREDENTIAL for teachers responsible for only one subject as practiced in junior and senior high schools.

To satisfy the requirements for the MULTIPLE SUBJECT CREDENTIAL, the student must either pass an examination (National Teachers Examination - Commons Section) or complete an approved major. This major must cover 84 semester units with 21 units in each of the following areas: 1. English and Communications, 2. Mathematics and Science, 3. Social Science, 4. Humanities and Fine Arts, including Foreign Language. Most universities have developed LIBERAL STUDIES majors which have been approved for this credential. The National Teachers Examination may be taken at any time that the student

feels capable of passing it. Only passing scores are to be submitted. For those passing the examination, any degree major may be completed. In addition to the major, professional education courses including student teaching are required. A full credential requires 30 semester units after the B.A. degree.

To satisfy the requirements for the SINGLE SUBJECT CREDENTIAL, the individual must pass an examination or have a degree major in one of the areas listed below:

| | | |
|----------------|-----------------|--------------------|
| Agriculture | History | Music |
| Art | Home Economics | Physical Education |
| Business | Industrial Arts | Physical Science |
| English | Languages | Social Science |
| Government | Life Sciences | |
| Health Science | Mathematics | |

Other degree majors may be subsumed under these categories: e.g., Speech, Drama, Journalism under English. Check the university catalog for special listings. A person would increase the possibilities for employment by passing several examinations in addition to his/her major. It is no longer possible to teach a "minor" subject. Professional education courses and student teaching are required and a full credential is earned by completion of a year past the B.A. degree.

SPECIALIST CREDENTIALS

These credentials require advanced preparation after the individual has earned a valid teaching credential.

| | |
|----------------------------|------------------------|
| Agriculture | Physically Handicapped |
| Bilingual - Cross Cultural | Learning Handicapped |
| Early Childhood Education | Severely Handicapped |
| Mathematics | Gifted |
| Reading | Visually Handicapped |
| Communication Handicapped | |

SERVICES CREDENTIALS

These also require advanced preparation after a valid teaching credential is earned.

| | |
|-------------------------|----------------|
| Pupil Personnel | Librarianship |
| Health | Administrative |
| Clinical Rehabilitative | |

LIBERAL STUDIES

The major in Liberal Studies offers a diversified curriculum for those who are attracted to a nontraditional interdisciplinary program of study. The purposes of Liberal Studies are twofold: (1) to prepare students for graduate work in such fields as law and ministry; or work in business, human services, government, and public relations; or to pursue intellectual fulfillment for its

own sake; and, (2) to qualify students to teach in public schools of California.

Three options are available. The first is a flexible program of study which assures a breadth of education and provides opportunity for either concentration in an area of one's choice or further exploration of breadth courses. Students wishing to pursue Option I should see a counselor or consult a catalog to assure proper elective course work. Option II is the required lower division curriculum for the multiple subject teaching credential. Option III is the lower division curriculum for a multiple subject credential with a bilingual emphasis (Spanish/English).

Completion of the required core plus either Option II, Elementary Teacher Education, or Option III, Elementary Teacher Education with a bilingual emphasis (Spanish/English) will satisfy the major requirements for an Associate Degree from Imperial Valley College. It will also prepare the student for upper division course work in the Liberal Studies major that is required for the elementary school credential.

Fifty-one to 66 units required for the major

I. Required Core

- A. Eng 1A Reading & Composition 3
 - B. Eng 50 Advanced Composition 3
 - C. Sp 1 Oral Communication 3
 - D. Eng 1B OR Intro to Literature
Eng 42A OR Survey of World Lit
Eng 42B Survey of World Lit 3
 - E. Math 10A Math for Elem School Teach . . 3
Math 10B Math for Elem School Teach . . 3
 - F. Bio 3 OR Prin of Biological Sci
Zool 1A OR General Zoology
Zool 1B OR General Zoology
Bio 21 General Microbiology . . 4 or 5
 - G. Astron 21 OR Prin of Astronomy
Phys Sci 25 Intro to Phys Science . . 3 or 4
 - H. Art 20A OR Drawing
Art 22A OR Design
Mus 7 Intro to Music Foundations . . 3
 - I. Psych 1A Intro to Psychology 3
 - J. Phil 1A OR Intro to Philosophy
Phil 1B OR Intro to Philosophy
Phil 25 Religions of the Modern
World 3
 - K. HE 1 Health Education 3
 - L. PE 61 PE in the Elem School 3
- TOTAL 40-46
- Recommended Core:
- Eng 52 Intro to Linguistics 3

In addition to completion of the core and option requirements, other requirements must be met for graduation from Imperial Valley College. These include American Institutions requirements (transferable sequence), demonstration of reading competency, math competency, successful completion of PE activity courses (if applicable), the required number of units for graduation, and a minimum grade point average (2.00). See your counselor for clarification of the graduation requirements.

To enter San Diego State University's upper division Liberal Studies major (Option II or Option III) with no lower division deficiencies, the following must be completed:

II. Option II - Regular Elementary Teacher Emphasis (15-20 units required)

A. Choose one course from the list below or one course from items F and G from Part I of the Required Core courses that has not been previously taken. (3 units required)

- Anthro 1 Physical Anthropology 3
- Chem 2A Intro to Chemistry 4
- Geog 1 Physical Geography 3
- Math 2 Adv Algebra & Trigonometry . 5

B. (3 units required)

- Anthro 2 OR Cultural Anthropology 3
- Geog 2 Cultural Geography 3

C. (3 units required)

- Art 3A Hist & Apprec of Art 3
- Art 3B Hist & Apprec of Art 3
- Hist 4A Hist of West Civilization . . 3
- Hist 4B Hist of West Civilization . . 3

D. (3 units required)

- Mus 7 OR Intro to Music Foundations
(req if not selected in core)
- Art 20A OR Drawing
- Art 22A Design 3

E. Choose one course from the list below OR one course not selected in Part I, Required Core courses, items H and J; OR Part II, Option II, item C. (3 units required)

- Anthro 4 California Indians 3
- Drm Arts 20A Fundamentals of Acting 3
- Hum 25 Intro to the Humanities 3
- Mus 30 Intro to Lit & Listening 3
- Span 1 Elementary Spanish 5
- Span 2 Elementary Spanish 5
- Span 3 Intermediate Spanish 5
- Span 4 Intermediate Spanish 5
- Span 20A Bilingual Spanish 5
- Span 20B Bilingual Spanish 5
- Span 21 Inter Bilingual Spanish 5
- Span 22 Adv Bilingual Spanish 5
- Span 23 Bilingual Oral Spanish 3
- Fr 1 Elementary French 5
- Fr 2 Elementary French 5
- Fr 3 Intermediate French 4
- Fr 4 Intermediate French 4

III. Option III - Bilingual Emphasis (Spanish/English)

A. (3 units required)

- Anthro 2 OR Cultural Anthropology
- Geog 2 Cultural Geography 3

B. (3 units required)

- Art 3A Hist & Apprec of Art 3
- Art 3B Hist & Apprec of Art 3
- Drm Arts 5A History of World Drama 3
- Drm Arts 5B History of World Drama 3
- Hist 4A Hist of West Civilization . . 3
- Hist 4B Hist of West Civilization . . 3

C. (5 units required)

- Span 20B OR Bilingual Spanish
- Span 4 Intermediate Spanish 5

NOTES:

The California Basic Educational Skills Test (C-Best) must be passed before a student is admitted to any teacher education program in the state of California. It is highly recommended that this test be taken following the successful completion of Eng 1A and Math 10A.

WATER TREATMENT TECHNOLOGY

Twenty-seven units required for the major

I. Required courses for the major

- WT 1 Water Treatment Plant
Operator I 4
- WT 2 Water Treatment Plant
Operator II 4
- WT 3 Water Treatment Plant
Operator III 4
- WT 6 Computational Procead for Treat-
ment Plant Operator I 3
- WT 9 Waste Water Treatment I 4
- WT 10 Waste Water Treatment II 4
- WT 11 Waste Water Treatment III . . . 4

II. Recommended courses for the major

- Bus 3 Business Management 3
- Bus 6 Mgmt Concepts of Supervision . 3
- Bus/HR 7 Human Relations in Mgmt 3
- Chem 1A Gen Inorganic Chemistry 5
- Chem 2A Intro to Chemistry 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 units required for the major

I. Required courses for the major

- Weld 31 OR Basic Welding 5
- Weld 31A & Oxy-Acetylene Welding 5
- Weld 31B Arc Welding 2 & 3
- Weld 36A Advanced Welding 5
- Weld 36B Advanced Welding 5
- Weld 36C Adv Weld - Welder Certification
& Blueprint Reading 5

CERTIFICATE PROGRAMS

ADMINISTRATION OF JUSTICE

Twenty-one to 24 units required for the certificate

- Adm Jus 21 Intro to Admin of Justice . . . 3
- Adm Jus 33 Concepts of Criminal Law . . . 3
- Adm Jus 35 Legal Aspects of Evidence . . . 3
- Adm Jus 36 Prin & Procead of the
Justice System 3
- Adm Jus 37 Juvenile Control 3
- Adm Jus 38 Police Community Relations . . 3
- Eng 2B Basic English Composition . . 3
- Eng 12B Reading III: Inter Develop . . 3
(if required)

AGRICULTURAL ENGINEERING TECHNOLOGY

Provides the student with technical knowledge of mechanization and the basic skills needed to succeed in production agriculture or one of the hundreds of agriculture support services in the Imperial Valley.

Twenty-seven to 29 units required for the certificate

I. Required courses for the certificate

- Aget 28 Power Equip Oper & Maint . . . 4
- Aget 34 Power Transmission Systems . . 4
- Aget 35 Fluid Power 3
- Aget 37 Small Gasoline Engines 3
- Aget 39 Fundamentals of Diesel Power . . 4
- Aget 50 Applied Math (if required) 1-3
- Weld 31 Basic Welding 5

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

- Auto Tech 54 Carburetors, Fuel Injection
& Exhaust Systems 3
- Auto Tech 58 Automotive Air-Conditioning . . 3
- Auto Tech 60 Elec, Start, Charg, Ignit, &
Related Elec Systems 5
- Auto Tech 65 Basic Machine Shop Tech 3

AGRICULTURE BUSINESS MANAGEMENT

Twenty-five units required for the certificate

I. Required courses for the certificate

| | | |
|-------|--|---|
| Ag 15 | Pesticide Safety | 1 |
| Ag 22 | Intro to Agricultural Economics | 3 |
| Ag 25 | Agricultural Bus Mgmt | 3 |
| Ag 26 | Agricultural Bus Organ & Mgmt | 3 |
| Ag 27 | Agricultural Sales & Svc Mgmt | 3 |
| Ag 29 | Computer Applications in Ag | 3 |
| Ag 30 | Food & Fiber in a Changing World | 3 |
| Ag 40 | Soils | 3 |

Select one course from the following:

| | | |
|---------|---------------------------------|-----|
| Aget 50 | Applied Math | 1-3 |
| Ag 14 | Entomology | 3 |
| Bus 4 | Prin of Marketing | 3 |
| Bus 5A | Business Law | 3 |
| Bus 5B | Business Law | 3 |
| Bus 10A | Practical Bookkeeping | 3 |

ALCOHOL AND DRUG STUDIES

Twenty-seven units required for the certificate

I. Required courses for the certificate

| | | |
|------------------------|--|-----|
| ADS/Psych/HR 9 | Intro to Counseling | 3 |
| ADS/Psych/HR 11A & 11B | Practicum | 3-3 |
| ADS/Sociol/Psych 15 | Social & Psychological Dynamics of Drug Use | 3 |
| ADS/Sociol 50 | Human Services in a Changing Society | 3 |
| ADS 51 | Alcoholism: Intervention, Treatment & Recovery | 3 |
| ADS 52 | Physiological Effects of Alcohol & Drugs | 3 |

Minimum of 6 units from any two of the following courses

| | | |
|--------------|--|---|
| ADS/Psych 53 | Group Leadership & Group Process | 3 |
| ADS 54 | Family Counseling Approaches to Alcohol & Drug Abuse | 3 |
| ADS/Psych 55 | Crisis Interven & Refer Tech | 3 |
| ADS 56 | Program Mgmt Techniques | 3 |

Minimum of 3 units from any of the following

| | | |
|---------------|--|--------------------|
| ADS/Sociol 10 | Sociology of Minority Groups | 3 |
| ADS 57ABCD | Current Issues in Drug Abuse | 1-3, 1-3, 1-3, 1-3 |

II. Recommended courses (do not fulfill certificate requirements)

| | | |
|-------------|---|---|
| Psych 3 | Psych of Adjustment | 3 |
| Psych 4 | Psych of Human Sexuality | 3 |
| Psych/HR 16 | The Psych of Interpersonal Relationships | 3 |
| Psych 30 | Psych of Adolescence | 3 |
| Psych 35 | Developmental Psychology: Conception to Death | 3 |
| Sociol 33 | Marriage & the Family | 3 |

FIELD ARCHAEOLOGY

Twenty-four units and 100 hours of field work required for the certificate

I. Required courses for the certificate

| | | |
|-----------|-------------------------------------|---|
| Anthro 1 | Physical Anthropology | 3 |
| Anthro 2 | Cultural Anthropology | 3 |
| Anthro 3A | Intro to Arch Site Survey | 3 |
| Anthro 3B | Intro to Arch Excavations | 3 |
| Anthro 3C | Adv Archaeological Survey | 3 |
| Anthro 3D | Adv Arch Excavations | 3 |
| Anthro 4 | California Indians | 3 |

Three units to be selected from the following courses

| | | |
|---------|--------------------------------------|---|
| Bio 3 | Prin of Biological Science | 4 |
| Geog 1 | Physical Geograpy | 3 |
| Geol 1A | Physical Geology | 4 |
| Geol 13 | Geology of California | 3 |
| Zool 1A | General Zoology | 4 |
| Zool 1B | General Zoology | 4 |

AUTO BODY REPAIR AND PAINTING

Twenty-four to 27 units required for the certificate

| | | |
|---------------------|--|-------|
| Auto Tech 50 | Applied Math, if required | 1-3 |
| Auto Body 70 | Auto Body Repair & Paint | 5 |
| Auto Body 71 | Adv Auto Body Repair & Paint | 5 |
| Auto Body 72 | Auto & Light Truck Major Collision Repairing | 5 |
| Auto Tech 53 | Brakes & Suspension | 5 |
| Weld 31 OR | Basic Welding | 5 |
| Weld 31A & Weld 31B | Oxy-Acetylene Welding Arc Welding | 2 & 3 |

The following courses may be substituted for any of the above required courses except Auto Body 70 and Auto Body 71:

| | | |
|--------------|---|---|
| Auto Tech 54 | Carburetors, Fuel Injection & Exhaust Systems | 3 |
| Auto Tech 58 | Automotive Air-Conditioning | 3 |

AUTOMOTIVE TECHNOLOGY

Thirty-two units required for the certificate

Each course must be completed with a minimum grade of "C" for each course in the certificate program.

I. Required courses for the certificate*

| | | |
|---------------|---|---|
| Auto Tech 51 | Engine Technology | 5 |
| Auto Tech 52 | Manual Transmissions & Power Trains | 3 |
| Auto Tech 53 | Brakes & Suspension | 5 |
| Auto Tech 54 | Carburetors, Fuel Injection & Exhaust Systems | 3 |
| Auto Tech 56 | Diagnostics | 3 |
| Auto Tech 58 | Automotive Air-Conditioning | 3 |
| Auto Tech 60 | Elec, Start, Chrg, Ignit & Related Elec Systems | 5 |
| Auto Tech 61A | Automatic Transmissions | 5 |

II. Recommended courses for the certificate (do not fulfill requirements for the certificate)

| | | |
|--------------|---|---|
| Auto Tech 55 | Adv Gasoline Engines & Light Duty Diesel Engine Rebuild | 5 |
| Auto Tech 57 | Fluid Power | 3 |
| Auto Tech 59 | Small Gasoline Engines | 3 |
| Auto Tech 65 | Basic Machine Shop Tech | 3 |
| Auto Tech 66 | Adv Machine Shop Tech | 3 |
| Auto Tech 75 | Basic Shop Skills | 3 |
| Weld 31 | Basic Welding | 5 |

*Student must satisfy the Imperial Valley College Mathematics competency requirements for the certificate.

BANKING

Administrative Certificate in Bank Operations

Twenty units required for the certificate

| | | |
|----------|--|---|
| Bus 1A | Prin of Accounting | 4 |
| Bus 1B | Prin of Accounting | 4 |
| Bus 6 | Mgmt Concepts of Supervision | 3 |
| Bus/HR 7 | Human Relations in Mgmt | 3 |

Select any two of the following electives

| | | |
|--------|-----------------------------------|---|
| Bus 5A | Business Law | 3 |
| Bus 42 | Business Communications | 3 |
| Econ 1 | Prin of Economics | 3 |
| Sp 1 | Oral Communication | 3 |

Credit Administration Certificate in Banking

Twenty-three units required for the certificate

| | | |
|----------|-----------------------------------|---|
| Bus 1A | Prin of Accounting | 4 |
| Bus 1B | Prin of Accounting | 4 |
| Bus 5A | Business Law | 3 |
| Bus/HR 7 | Human Relations in Mgmt | 3 |
| Bus 42 | Business Communications | 3 |
| Econ 1 | Prin of Economics | 3 |
| Sp 1 | Oral Communication | 3 |

General Certificate in Bank Services***

Twenty-seven units required for the certificate

| | | |
|-----------|-----------------------------------|-------|
| Bus 5A | Business Law | 3 |
| Bus 10A | Practical Bookkeeping** | 3 |
| Bus 21ABC | Prof-Exit Typewriting* | 3-3-3 |
| Bus 23 | Office Machines | 3 |
| Bus 40 | Grammar & Usage | 3 |

Select any two of the following electives

| | | |
|----------|--|---|
| Bus/HR 7 | Human Relations in Mgmt | 3 |
| Bus 39 | Office Procedures | 3 |
| Bus 41 | Essen of Bus Corresp | 3 |
| CIS 1 | Intro to Information Systems | 3 |
| Sp 1 | Oral Communication | 3 |

*Minimum skill level 40 net words per minute required to qualify for certificate. If skill level attained in Bus 21A, student is excused from Bus 21B and Bus 21C.

**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.

Secretary Certificate in Bank Service

Thirty units required for the certificate

| | | |
|-----------|---------------------------------------|-------|
| Bus 5A | Business Law | 3 |
| Bus 21ABC | Prof-Exit Typewriting* | 3-3-3 |
| Bus 32AB | Dictation & Transcrip Lab** | 3-3 |
| Bus 40 | Grammar & Usage | 3 |
| Bus 41 OR | Essen of Bus Corresp | 3 |
| Bus 42 | Business Communications | 3 |

Select any two of the following electives

| | | |
|----------|--|---|
| Bus/HR 7 | Human Relations in Mgmt | 3 |
| Bus 23 | Office Machines | 3 |
| Bus 39 | Office Procedures | 3 |
| CIS 1 | Intro to Information Systems | 3 |
| Sp 1 | Oral Communication | 3 |

*Minimum skill level of 60 net words per minute required to qualify for certificate. If skill level attained in Bus 21A, student is excused from 21B & 21C.

**Minimum skill level of 90 words per minute required to qualify for certificate. If attained in Bus 32A, student is excused from Bus 32B.

BUSINESS OFFICE TECHNOLOGIES

It is highly recommended that WE Gen 70/WE Occ 80, WE Gen 71/WE Occ 81, WE Gen 72/WE Occ 82, and WE Gen 73/WE Occ 83 be completed at Imperial Valley College to provide expanded experience for the following certificate programs.

Accounting Technician

Twenty-four units and skill level required for the certificate

I. Required courses for the certificate

| | | |
|-----------|---|-------|
| Bus 10A | Practical Bookkeeping | 3 |
| Bus 10A | Practical Bookkeeping | 3 |
| Bus 21ABC | Prof-Exit Typewriting | 3-3-3 |
| Bus 23 | Office Machines | 3 |
| Bus 24 | Records Management | 3 |
| Bus 39 | Office Procedures | 3 |
| CIS 1 | Intro to Information Systems | 3 |
| CIS 22 | Microcomputer Operations: Bookkeeping & Acctg | 3 |

II. Required skill level for the certificate

Typing Skill Level 40 wpm (Bus 25, Keyboarding Speed & Accuracy, or a repeat of Bus 21ABC may be helpful in obtaining this speed level.)

Administrative Secretary

Twenty-six units and skill levels required for the certificate

I. Required courses for the certificate

| | | |
|-----------|---------------------------------|-------|
| Bus 21ABC | Prof-Exit Typewriting | 3-3-3 |
| Bus 22A | Word Processing | 3 |

| | | |
|-----------|---|-----|
| Bus 23 | Office Machines | 3 |
| Bus 24 | Records Management | 3 |
| Bus 31AB | Shorthand Theory & Speedbuilding | 3-3 |
| Bus 39 | Office Procedures | 3 |
| Bus 40 | Grammar & Usage | 3 |
| Bus 41 OR | Essen of Bus Corresp | 3 |
| Bus 42 | Business Communications | 3 |
| CIS 23 | Microcomputer Operations: Hardware & Software | 1 |
| CIS 35A | Spreadsheet: Lotus 123 | 1 |

II. Required skill levels for the certificate

Shorthand Skill Level 70 wpm (A repeat of Bus 31AB may be helpful in obtaining this speed level.)

Typing Skill Level 50 wpm (Bus 25, Keyboarding Speed & Accuracy, or a repeat of Bus 21ABC may be helpful in obtaining this speed level.)

Office Technician

Twenty-six units and skill level required for the certificate

I. Required courses for the certificate

| | | |
|-----------|---|-------|
| Bus 10A | Practical Bookkeeping | 3 |
| Bus 21ABC | Prof-Exit Typewriting | 3-3-3 |
| Bus 22A | Word Processing | 3 |
| Bus 23 | Office Machiens | 3 |
| Bus 24 | Records Management | 3 |
| Bus 39 | Office Procedures | 3 |
| Bus 40 | Grammar & Usage | 3 |
| Bus 41 OR | Essen of Bus Corresp | 3 |
| Bus 42 | Business Communications | 3 |
| CIS 23 | Microcomputer Operations: Hardware & Software | 1 |
| CIS 35A | Spreadsheet: Lotus 123 | 1 |

II. Required skill level for the certificate

Typing Skill Level 40 wpm (Bus 25, Keyboarding Speed & Accuracy, or a repeat of Bus 21ABC may be helpful in obtaining this speed level.)

Word Processing Technician

Twenty-six units and skill level required for the certificate

I. Required courses for the certificate

| | | |
|-----------|-----------------------------------|-------|
| Bus 21ABC | Prof-Exit Typewriting | 3-3-3 |
| Bus 22A | Word Processing | 3 |
| Bus 22B | Word Processing | 3 |
| Bus 23 | Office Machines | 3 |
| Bus 39 | Office Procedures | 3 |
| Bus 40 | Grammar & Usage | 3 |
| Bus 41 OR | Essen of Bus Corresp | 3 |
| Bus 42 | Business Communications | 3 |

II. Acceptable courses for the certificate (select 3 units)

| | | |
|--------|---|---|
| CIS 1 | Intro to Information Systems | 3 |
| CIS 23 | Microcomputer Operations: Hardware & Software | 1 |
| CIS 25 | Microcomputer Operating Systems: DOS | 1 |

| | | |
|---------|----------------------------------|---|
| CIS 35A | Spreadsheet: Lotus 123 | 1 |
| CIS 40A | Data Base: dBase | 1 |

III. Required skill level for the certificate

Typing Skill Level 50 wpm (Bus 25, Keyboarding Speed & Accuracy, or a repeat of Bus 21ABC may be helpful in obtaining this speed level.)

BUSINESS SUPERVISION

Twenty-one to 27 units required for the certificate

| | | |
|-----------|---|---------------|
| Bus 2 | Intro to Business | 3 |
| Bus 3 | Business Management | 3 |
| Bus 5A | Business Law | 3 |
| Bus 6 | Mgmt Concepts of Supervision | 3 |
| Bus/HR 7 | Human Relations in Mgmt | 3 |
| Bus 27ABC | Business Microcomputer Software | 1-3, 1-3, 1-3 |
| Bus 42 | Business Communications | 3 |

COMPUTER INFORMATION SYSTEMS

Twenty-three units required for the certificate

I. Required courses for the certificate

| | | |
|----------------|---|-------|
| Bus 10A | Practical Bookkeeping | 3 |
| Bus 10B | Practical Bookkeeping | 3 |
| CIS 1 | Intro to Information Systems | 3 |
| CIS 12/Math 57 | Programming in Basic | 3 |
| CIS 21ABC | Computer Applications | 1-1-1 |
| CIS 22 | Microcomputer Operations: Bookkeeping & Acctg | 3 |
| CIS 25 | Microcomputer Operating Systems: DOS | 1 |
| CIS 35A | Spreadsheet: Lotus 123 | 1 |
| CIS 40A | Data Base: dBase | 1 |

II. Acceptable courses for the certificate

| | | |
|---------|---|---|
| CIS 10 | Programming in Cobol I | 3 |
| CIS 11 | Programming in Cobol II | 3 |
| CIS 23 | Microcomputer Operations: Hardware & Software | 1 |
| CIS 30 | Word Processing: WordPerfect | 1 |
| CIS 35B | Spreadsheet: Lotus 123 | 1 |

CROP SCIENCE

Twenty-seven units required for the certificate

I. Required courses for the certificate

| | | |
|-------|---------------------------------|---|
| Ag 14 | Entomology | 3 |
| Ag 15 | Pesticide Safety | 1 |
| Ag 40 | Soils | 3 |
| Ag 41 | Fertilizers | 3 |
| Ag 42 | Intro to Crop Science | 4 |
| Ag 43 | Field & Cereal Crops | 4 |
| Ag 45 | Vegetable Production | 3 |
| Ag 49 | Weeds & Weed Control | 3 |

Select one course from the following:

| | | |
|---------|--|-----|
| Aget 28 | Power Equip Oper & Maint | 5 |
| Aget 50 | Applied Mathematics | 1-3 |
| Ag 30 | Food & Fiber in a Changing World | 3 |
| Ag 32 | Irrigation & Drainage | 3 |

EARLY CHILDHOOD EDUCATION

Fifteen units required for the certificate

| | | |
|--------------|--|---|
| ECE/Psych 20 | Develop Psych of Children | 3 |
| ECE/Psych 21 | Early Child Social: Children, Family & Community | 3 |
| ECE/Psych 22 | Adv Develop Psych & Observ | 3 |
| ECE 23 | Early Childhood Curriculum I | 3 |
| ECE 25 | Field Experience | 3 |

Early Childhood Education certificate students can apply for the Emergency Children's Center Permit upon completion of the certificate. This requires an employer statement that no Regular Children's Center Permit applicant is available. The application for the Emergency Children's Center Permit can be made through the credentialing office at Imperial County Office of Education through California Teacher Preparation and Licensing, State Department of Education.

ELECTRONICS

Fourteen units required for the certificate

I. Required courses for the certificate

| | | |
|------------|-------------------------------------|---|
| Electro 1A | Basic Elect & Electronics | 4 |
| Electro 1B | Electronics | 4 |
| Electro 2A | Adv Electronics | 3 |
| Electro 2B | Adv Electronics | 3 |

EMERGENCY MEDICAL TECHNICIAN I

Five and one-half units required for the certificate

| | | |
|------------|---|-----|
| EMT 1/A/AD | Emergency Medical Technician 1/ Ambulance | 5.5 |
|------------|---|-----|

EMERGENCY MEDICAL TECHNICIAN II

Twelve units required for the certificate

| | | |
|--------|-------------------------------------|---|
| EMT 2A | Emergency Medical Tech 2A | 7 |
| EMT 2B | Emergency Medical Tech 2B | 5 |

FIRE SCIENCE

Eighteen to 21 units required for the certificate

| | | |
|-------------|--|---|
| Fire Sci 60 | Intro to Fire Technology | 3 |
| Fire Sci 61 | Fundamen of Fire Prevention | 3 |
| Fire Sci 62 | Fire Protec Equip & Systems | 3 |
| Fire Sci 63 | Fundamen of Fire Behavior & Control | 3 |
| Fire Sci 64 | Fundamen of Fire Protection | 3 |
| Fire Sci 65 | Fundamen of Personal Fire Safety & Emer Action | 3 |
| Math 51 | Basic Math, or equivalent | 3 |

GRAPHIC ARTS - MULTI-MEDIA

Eleven units required for the certificate

| | | |
|----------|--|---|
| GA 10 | Graphic Communications I | 2 |
| GA 11 | Graphic Communications II | 3 |
| GA 12 | Composition, Layout & Paste-up | 3 |
| GA 20 OR | Offset Printing I | 3 |
| GA 22 | Photography & Platemaking | 3 |

GRAPHIC ARTS - PRINTING

Eleven units required for the certificate

| | | |
|-------|---|---|
| GA 20 | Offset Printing I | 3 |
| GA 21 | Offset Printing II | 3 |
| GA 22 | Photography & Platemaking | 3 |
| GA 23 | Bindery, Cutting & Distribution | 2 |

HEALTH ASSISTANT

Six units required for the certificate

| | | |
|-------|----------------------------|---|
| HA 15 | Health Assistant | 6 |
|-------|----------------------------|---|

HOME HEALTH AIDE

Six units required for the certificate

| | | |
|-------|----------------------------|---|
| HA 16 | Home Health Aide | 6 |
|-------|----------------------------|---|

HUMAN RELATIONS

Areas of emphasis: Community Mental Health Worker, Counseling, School, Social Services, Personnel, Employment Counseling and Supervision

Twenty-four units required for the certificate

I. Required courses for the certificate

| | | |
|------------------------|----------------------------------|-----|
| Psych 1A | Intro to Psych | 3 |
| Psych 3 | Psych of Adjustment | 3 |
| Psych/HR/ADS 9 | Intro to Counseling | 3 |
| Psych/HR/ADS 11A & 11B | Practicum | 3-3 |
| Sociol 1 | Introductory Sociology | 3 |

II. With the approval of his/her counselor and the Division Chairperson, the student will select a minimum of 9 units (depending on areas of emphasis) from the following courses. It is considered advisable for students in certain areas of emphasis to take more than 9 units from the list below.

| | | | |
|------------------|---|---|---|
| Anthro 2 | Cultural Anthropolgoy | 3 | |
| Bus 6 | Mgmt Concepts of Supervision | 3 | |
| Bus/HR 7 | Human Relations in Mgmt | 3 | |
| CIS 1 | Intro to Information Systems | 3 | |
| HR/Psych 8 | Personal & Career Develop | 3 | |
| HR/Psych 10 | Small Group Leadership | 3 | |
| Psych 1B | Learning | 3 | |
| Psych 2 | Biological Psychology | 3 | |
| Psych 5 | Psych of Effec Behavior | 3 | |
| Psych 13/Bus 26/ | Math 12 | Elementary Statistics | 3 |
| Psych/Sociol/ | ADS 15 | Social & Psychological Dynamics of Drug Use | 3 |
| Psych/HR 16 | The Psych of Interpersonal Relationships | 3 | |
| Psych/Sociol 17 | Social Psychology | 3 | |
| Psych/ECE 20 | Develop Psych of Children | 3 | |
| Psych/ECE 26 | Prin of Parenting | 3 | |
| Psych 30 | Psych of Adolescence | 3 | |
| Psych 35 | Developmental Psychology: Conception to Death | 3 | |
| Psych 40 | Intro to Crisis Counseling | 3 | |
| Sociol 2 | Contemp Social Problems | 3 | |

LEGAL ASSISTANT

Twenty-one units required for the certificate

| | | |
|--------|--|---|
| Bus 5A | Business Law | 3 |
| LA 21 | Research & Criminal Law . . . | 3 |
| LA 22 | Civil Procd & Family Law . . . | 3 |
| LA 23 | Civil Discovery & Torts | 3 |
| LA 24 | Corporations & Bankruptcy . . . | 3 |
| LA 25 | Real Estate Law for Legal Assistants | 3 |
| LA 26 | Wills-Trusts-Probate | 3 |

BASIC LIBRARY TECHNICIAN

Fifteen units required for the certificate

| | | |
|-------|-----------------------------------|---|
| LT 51 | Intro to Library Services . . . | 3 |
| LT 52 | Support for Tech Services . . . | 3 |
| LT 53 | Support for Public Services . . . | 3 |
| LT 54 | Intro to Audiovisual Services . . | 3 |
| LT 55 | Cataloging & Classifying | 3 |

MARKETING - SALES TECHNOLOGY

Eighteen units required for the certificate

| | | |
|--------|----------------------------------|---|
| Bus 2 | Intro to Business | 3 |
| Bus 4 | Prin of Business | 3 |
| Bus 13 | Applied Business Law | 3 |
| Bus 14 | Practical Salesmanship | 3 |

Six units to be selected from the following courses

| | | |
|-----------|----------------------------------|---|
| Bus 1A | Prin of Accounting | 4 |
| Bus 10A | Practical Bookkeeping | 3 |
| Bus 21ABC | Prof-Exit Typewriting . . . 3-3 | 3 |
| Bus 23 | Office Machines | 3 |
| Bus 66 | Effective Customer Service . . . | 5 |
| Econ 1 | Prin of Economics | 3 |

NUTRITION MANAGEMENT - DIETARY MANAGER

Courses required for a Certificate of Achievement by the State of California, Department of Health Services, Licensing and Certification Division. Students must achieve a minimum grade of "C" in each of the required courses.

I. Required core courses for the certificate

| | | |
|------|--|---|
| NU 1 | Sanitation & Safety Control | 3 |
| NU 2 | Foundations of Nutrition | 3 |
| NU 3 | Food Production Mgmt | 3 |
| NU 4 | Supervision for Food Svcs | 3 |
| NU 7 | Intro to Hospitality & Food Services | 3 |
| NU 8 | Menu Planning & Purchasing . . . | 3 |

Plus the following:

| | | |
|-------|----------------------------|---|
| NU 5 | Modified Diets | 3 |
| NU 6A | Field Experience | 3 |

NUTRITION MANAGEMENT - SCHOOL FOOD SERVICES MANAGER

Courses required for a Certificate of Achievement by the State of California, Department of Health Services, Licensing and Certification Division. Students must

achieve a minimum grade of "C" in each of the required courses.

I. Required core courses for the certificate

| | | |
|------|--|---|
| NU 1 | Sanitation & Safety Control | 3 |
| NU 2 | Foundations of Nutrition | 3 |
| NU 3 | Food Production Mgmt | 3 |
| NU 4 | Supervision for Food Svcs | 3 |
| NU 7 | Intro to Hospitality & Food Services | 3 |
| NU 8 | Menu Planning & Purchasing . . . | 3 |

Plus the following:

| | | |
|-------|----------------------------|---|
| NU 6B | Field Experience | 3 |
|-------|----------------------------|---|

PATIENT SERVICES ADMINISTRATION SPECIALIST

Seventeen units required for the certificate

| | | |
|-----------|------------------------------------|---|
| HT/Bus 80 | Medical Terminology | 3 |
| HT/Bus 81 | Medical Transcription | 3 |
| HT/Bus 82 | Patient Information Systems . . . | 3 |
| HT/Bus 83 | Medical Insurance | 3 |
| HT/Bus 84 | Patient Admin Services | 3 |
| HT/Bus 85 | Mgmt of Patient Services | 3 |

PHARMACY TECHNICIAN

Twenty-one units required for the certificate

| | | |
|-------------|--|---|
| Math X | Beginning Algebra | 3 |
| HT 3/Bus 80 | Medical Terminology | 3 |
| Anat 6 | Anat & Physiology for Health Occupations | 3 |
| HT 12 | Pharmacy Technician I | 6 |
| HT 13 | Pharmacy Technician II | 6 |

REAL ESTATE

Upon 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.

Eighteen units required for the certificate

| | | |
|---------|------------------------------------|---|
| Bus 90 | Real Estate Principles | 3 |
| Bus 91 | Real Estate Practices | 3 |
| Bus 92A | Legal Aspects of Real Estate . . . | 3 |
| Bus 93 | Real Estate Finance | 3 |
| Bus 94A | Real Estate Appraisal | 3 |
| Bus 95 | Real Estate Economics | 3 |

RECREATION

Eighteen units required for the certificate

I. Required courses for the certificate

| | | |
|--------|-----------------------------------|---|
| Rec 70 | Intro to Leisure | 3 |
| Rec 71 | Social Recreation | 3 |
| Rec 72 | Outdoor Recreation | 3 |
| Rec 73 | Recreation for Special Groups . . | 4 |

(Two or 3 units to be selected from the following courses)

| | | |
|---------|--|-----|
| Art 22A | Design | 3 |
| PE 6 | Lifeguard Training/Advanced Lifesaving | 2 |
| PE 59AB | Sports Officiating, Men | 3-3 |
| PE 60AB | Sports Officiating, Women | 3-3 |
| PE 61 | PE in the Elem Schools | 3 |
| PE 62AB | PE for Special Olympics | 3-3 |

II. Acceptable courses for the certificate (2 or 3 units to be selected from the following courses)

| | | |
|-----------|------------------------------------|---------|
| PE 3ABCD | Physical Fitness, Women | 1-1-1-1 |
| PE 4ABCD | Badminton, Coed | 1-1-1-1 |
| PE 5ABCD | Swimming, Coed | 1-1-1-1 |
| PE 10ABCD | Team Sports | 1-1-1-1 |
| PE 11ABCD | Volleyball, Coed | 1-1-1-1 |
| PE 12ABCD | Tennis, Coed | 1-1-1-1 |
| PE 14ABCD | Recreational Games, Coed | 1-1-1-1 |
| PE 17ABCD | Physical Fitness, Men | 1-1-1-1 |
| PE 20ABCD | Softball, Coed | 1-1-1-1 |
| PE 23ABCD | Basketball for Women | 1-1-1-1 |
| PE 24ABCD | Basketball for Men | 1-1-1-1 |
| PE 29ABCD | Jazz Dance, Coed | 1-1-1-1 |

REHABILITATION TECHNICIAN FOR THE PHYSICALLY LIMITED

Eighteen units required for the certificate

I. Required courses for the certificate

| | | |
|----------------|--|-----|
| PL 1/Psych 27/ | Understanding Excep Stu | 3 |
| ECE 27 | Practicum Exper to Work with the PL Person | 2-2 |
| PL 2AB | Intro to Psychology | |
| Psych 1A OR | Psych of Effective Behavior | 3 |
| Psych 5 | | |

II. A minimum of 6 units must be taken from Section II

| | | |
|-------|---|---|
| PL 10 | Beg Communication with the Deaf | 4 |
| PL 11 | Inter Communication with the Deaf | 4 |
| PL 33 | Intro to Audiology | 3 |
| PL 34 | Audiometry & Hearing Conversation | 3 |
| HA 15 | Health Assistant | 6 |

III. Additional units to complete the certificate may be utilized from the courses under Section III

| | | |
|-----------------|--|---------|
| PE 62AB | PE for Special Olympics | 3-3 |
| PL 12 | Adv Communication with the Deaf | 3 |
| PL 13ABCD | Communication with the Deaf in the College Classroom | 1-1-1-1 |
| Psych 3 | Psych of Adjustment | 3 |
| Psych/HR/ADS 9 | Intro to Counseling | 3 |
| Psych/Sociol 17 | Social Psychology | 3 |
| Psych/ECE 20 | Develop Psych of Children | 3 |
| Rec 73 | Recreation for Special Groups . . . | 4 |
| Sociol 1 | Introductory Sociology | 3 |
| Sociol 2 | Contemp Social Problems | 3 |
| Sp 1 | Oral Communication | 3 |

VOCATIONAL NURSING

Forty-nine and one-half units required for the certificate

| | | |
|-------------|---|-----|
| HT 1 | Intro to Health Science | 2 |
| Anat 6 | Anat & Physiology for Health Occupations | 3 |
| Psych 1A | Intro to Psychology | 3 |
| Psych/HR 16 | The Psych of Interpersonal Relationships | 3 |
| Psych 35 | Developmental Psychology: Conception to Death | 3 |
| NS 1A (V) | Intro to Patient Care I | 4 |
| NS 1B (V) | Intro to Patient Care II | 4 |
| NS 1C (V) | Pharmacology I | 1.5 |
| NS 2A (V) | Maternity Cycle | 5.5 |
| NS 2B (V) | Common Health Prob I | 5.5 |
| NS 2C (V) | Pharmacology II | 1.5 |
| NS 3A (V) | Common Health Prob II | 6.5 |
| NS 3B (V) | Common Health Prob III | 6.5 |
| NS 3C (V) | Patient Care Mgmt | 5 |

Part-Time Program Sequence

*Pre-Admission Requirements

| | | |
|--------|---|---|
| Eng 1A | Reading & Composition | 3 |
| Eng 11 | Reading IV: Analytical & Critical Reading | 3 |
| Math X | Beginning Algebra | 3 |

TOTAL 9*

*Pre-Nursing Requirements

| | | |
|-------------|---|-----|
| Anat 6 | Anat & Physiology for Health Occupations | 5 |
| HT 1 | Intro to Health Science | 2 |
| NS 1C (V) | Pharmacology I | 1.5 |
| Psych 1A | Intro to Psychology | 3 |
| Psych 35 | Developmental Psychology: Conception to Death | 3 |
| Psych/HR 16 | The Psych of Interpersonal Relationships | 3 |

TOTAL 15.5*

*Nursing Requirements

| | | |
|-----------|------------------------------------|-----|
| NS 1A (V) | Intro to Patient Care I | 4 |
| NS 1B (V) | Intro to Patient Care II | 4 |
| NS 2A (V) | The Maternity Cycle | 5.5 |
| NS 2B (V) | Common Health Prob I | 5.5 |
| NS 3A (V) | Common Health Prob II | 6.5 |
| NS 3B (V) | Common Health Prob III | 6.5 |
| NS 3C (V) | Patient Care Mgmt | 5 |

TOTAL 34*

*Theory/Clinical 1,548 req hours for Vocational Nurse

WASTE WATER TECHNOLOGY

Fifteen units required for the certificate

| | | |
|-------|--|---|
| WT 6 | Computational Procd for Treatment Plant Operator I | 3 |
| WT 9 | Waste Water Treatment I | 4 |
| WT 10 | Waste Water Treatment II | 4 |
| WT 11 | Waste Water Treatment III | 4 |

WATER TREATMENT TECHNOLOGY

Fifteen units required for the certificate

| | | |
|------|--|---|
| WT 1 | Water Treatment Plant Operator I | 4 |
| WT 2 | Water Treatment Plant Operator II | 4 |
| WT 3 | Water Treatment Plant Operator III | 4 |
| WT 6 | Computational Procd for Treatment Plant Operator I | 3 |

WELDING

One of the following four patterns of study will fulfill requirements for a certificate in Welding Technology.

Pattern One
(Recommended for Agriculture and Agricultural Services)

Twenty units required for the Pattern One certificate

| | | |
|---|------------------------------------|-------|
| Weld 31 OR | Basic Welding | 5 |
| Weld 31A & | Oxy-Acetylene Welding | 2 & 3 |
| Weld 31B | Arc Welding | 5 |
| Weld 36A | Advanced Welding | 2 |
| Weld 38 | Sheet Metal Fundamentals | 8 |
| Eight units selected from agriculture courses | | |

Pattern Two
(Recommended for air-conditioning mechanics and construction personnel)

Eighteen units required for the Pattern Two certificate

| | | |
|----------|-------------------------------------|---|
| Weld 36A | Advanced Welding | 5 |
| Weld 36B | Advanced Welding | 5 |
| Weld 38 | Sheet Metal Fundamentals | 2 |
| Ag 36 | Agricultural Construction | 3 |
| Ag 38 | Power Electricity | 3 |

Pattern Three
(Recommended for welders with a future in general service industries)

Twenty-one units required for the Pattern Three certificate

| | | |
|--|-----------------------------------|-------|
| Weld 31 OR | Basic Welding | 5 |
| Weld 31A & | Oxy-Acetylene Welding | 2 & 3 |
| Weld 31B | Arc Welding | 5 |
| Weld 36A | Advanced Welding | 3 |
| Auto Tech 65 | Basic Machine Shop Tech | 8 |
| Eight units selected from agriculture and/or automotive technology courses | | |

Pattern Four
(Recommended for the experienced welder who wishes to advance his/her general capabilities in welding and fabrication processes)

Sixteen to 18 units required for the Pattern Four certificate

| | | |
|----------|---|-----|
| Weld 36B | Advanced Welding | 5 |
| Weld 36C | Adv Weld - Welder Certification & Blueprint Reading | 5 |
| Weld 38 | Sheet Metal Fundamentals | 2 |
| Engr 21 | Technical Drawing | 3 |
| Weld 50 | Applied Mathematics | 1-3 |

OCCUPATIONAL WORK EXPERIENCE

Twenty-eight units required for the certificate

| | | |
|-----------|------------------------------------|---|
| WE Occ 80 | Personal Efficiency | 4 |
| WE Occ 81 | Motivation | 4 |
| WE Occ 82 | Labor & the Economy | 4 |
| WE Occ 83 | Laws Affecting Employees | 4 |

Twelve units from the student's planned course of occupational training as approved by the Dean of Vocational-Technical Education.

A

| | |
|--|--------|
| Absence | 23 |
| Academic Dismissal | 23 |
| Academic Probation | 22 |
| Academic Renewal | 22 |
| Accreditation | 18 |
| Activities, Student | 18 |
| Additional Degrees | 24 |
| Administration | 6 |
| Administration of Justice | 29 |
| Admission | 18 |
| College Transfers | 19 |
| Foreign Students | 19 |
| High School Graduates | 18 |
| Non-Graduates of High School | 18 |
| Out-of-State Students | 19 |
| Special High School Students | 18 |
| Advanced Placement, Nursing | 22, 67 |
| Affiliations, Institutional | 17 |
| Affirmative Action Policy | 19 |
| Agricultural Engineering Technology | 31 |
| Agriculture | 31 |
| Alcohol and Drug Studies | 33 |
| Alpha Gamma Sigma | 17 |
| Anatomy | 34 |
| Anthropology | 34 |
| Art | 35 |
| Assistance, Financial | 17 |
| Associate Degree Nursing | 67 |
| Associate in Arts Degree | 16, 24 |
| Associate in Science Degree | 16, 24 |
| Associated Students | 18 |
| Astronomy | 36 |
| Athletics | 18 |
| Courses | 72 |
| Intercollegiate | 18 |
| Attendance and Automatic Withdrawals | 23 |
| Automotive Body and Paint | 36 |
| Automotive Technology | 37 |
| Awards, Scholarship | 17 |

B

| | |
|-----------------------------|----|
| Biology | 38 |
| Board of Trustees | 6 |
| Bookstore | 18 |
| Business | 38 |

C

| | |
|--|------------|
| Calendar | 4 |
| California Articulation Number (CAN) | 29 |
| California State Colleges | 27 |
| Certificate Programs | 28, 99-106 |
| Chairpersons, Division | 7 |
| Changes in the Catalog | 24 |
| Charges | 17 |
| Chemistry | 42 |
| Class Schedules, Change in | 21 |
| College Center | 18 |
| Competency, State Requirement | 25 |
| Computer Information Systems | 42 |
| Cooperative Work Experience | 16, 82 |
| Correspondence & Extension Courses, Credit for | 27 |
| Counseling and Guidance Services | 18 |
| Courses of Instruction | 29-83 |
| Courses, Types | 15 |
| Credentials, Teaching | 97 |
| Credit by Examination | 22 |

| | |
|---|----|
| Credit for Upper Division Course Work | 22 |
| Credit Classes | 21 |
| Curricula, Occupational | 28 |

D

| | |
|--|----|
| Deadline Dates | 5 |
| Degrees | 16 |
| Dismissal Policies | 23 |
| Director | 7 |
| Disabled Student Programs and Services | 43 |
| Division Chairpersons | 7 |
| Dramatic Art | 45 |

E

| | |
|---|----|
| Early Childhood Education | 45 |
| Economics | 46 |
| Education (Not a major) | 46 |
| Education, Teacher Preparation | 97 |
| Electricity | 46 |
| Electronics | 47 |
| Eligibility & Certification of Veteran Enrollment | 24 |
| Emergency Medical Technician | 47 |
| Emeritus Faculty | 12 |
| Engineering | 48 |
| English | 48 |
| Enrollment, Concurrent High School & College | 16 |
| Entrance Examinations | 18 |
| Environmental Science | 53 |
| Evening College | 15 |
| Expenses | 17 |
| Extension Courses, Credit for | 27 |
| External Campus | 15 |

F

| | |
|---|----|
| Facilities | 13 |
| Faculty | 8 |
| Faculty, Emeritus | 12 |
| Family Educational Rights & Privacy Act of 1974 | 19 |
| Fees | 17 |
| Financial Assistance | 17 |
| Fire Science | 53 |
| Foreign Students | 19 |
| French | 55 |

G

| | |
|--|--------|
| General Education | 15, 25 |
| Requirements at IVC | 24 |
| Requirements for California State Colleges | 28 |
| Requirements for University of California | 28 |
| Geography | 56 |
| Geology | 56 |
| German | 57 |
| Grade Points | 22 |
| Grade Reports, Semester | 22 |
| Grades | 21 |
| Grading System | 21 |
| Graduation Honors | 17 |
| Graduation Petition | 23 |
| Graduation Requirements | 24 |
| Grants | 17 |
| Graphic Arts | 57 |
| Grievance Procedure | 23 |
| Guidance Services | 18 |

| | |
|--|------------|
| H | |
| Health Assistant | 58 |
| Health Education | 58 |
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