California University of Pennsylvania

UNIVERSITY

1999-00 Undergraduate Catalog

OF PENNSYLVANIA

California University of Pennsylvania

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California University is a member of the Pennsylvania State System of Higher Education

California University of Pennsylvania

Is a

MEMBER

Of the

Association of State Colleges and Universities

American Association of Colleges of Teacher Education

ACCREDITED

By the

Middle States Association of Colleges and Secondary Schools

Accredited in Teacher Education

By the

National Council for Accreditation of Teacher Education

Accredited in Social Work

By the

Council on Social Work Education

Accredited in Athletic Training

By the

Commission on Accreditation of Allied Health Education Programs

Accredited in Nursing

By the

National League of Nursing

Accredited in Communication Disorders

By the

Council on Academic Accreditation of the American Speech, Language and Hearing Association

Equal Opportunity

California University of Pennsylvania acknowledges that equality of opportunity is the cornerstone of a free and democratic society. As a state-owned institution, it accepts the duty of putting the principle of equal opportunity into practice. As an institution of higher education, it accepts the responsibility of teaching that principle by its policies and actions. Consequently, California University of Pennsylvania commits itself, ethically and legally, to the equal opportunity policies of a system of fair and open recruitment and acceptance of students regardless of sex, race, color, religious creed, lifestyle, affectional or sexual preference, disability, present or previous military service, ancestry, national origin, union and political affiliation, and age. Nevertheless, mindful of the reality of past injustices and present societal needs, the university reserves the right to employ a limited use of racial, ethnic, and sexual criteria to accomplish remedial objectives when necessary.

Once students are admitted to California University of Pennsylvania, the same rights, privileges, programs and activities are made available to all without regard to arbitrary and irrelevant criteria. Financial aids, especially scholarships, guaranteed loans, grants, work study programs, assistantships, and internships, are provided on an equal opportunity basis. Likewise, advisors and counselors are available to all students. Special programs have been established to meet the needs of students and are available on a first-come, first-served basis to all students without regard to race, national origin, or religion. However, in the case of living arrangements, sex and disability distinctions are made to better serve and accommodate all students. Finally, in accordance with recent federal and state legislation, architectural and programmatic modifications have been implemented to ensure that no qualified student is prevented from succeeding at California University of Pennsylvania because of disability.

In addition, California University of Pennsylvania engages in an open and equitable system of recruitment and employment of faculty and staff candidates. It practices a non-discriminatory system of compensation, including pay, promotion, tenure, transfer, education, training and other benefits of employment.

California University of Pennsylvania prides itself on having created a workplace and learning environment free from discrimination and harassment. If situations or conditions to the contrary occur, an immediate and appropriate redress will take place. Persons aware of such situations or conditions are encouraged to contact the Social Equity Officer 724-938-4014, the Title IX Coordinator 724-938-4351, or the Section 504 ADA Coordinator 724-938-4076.

From the President

California University of Pennsylvania is in the opportunity business. Since 1852, thousands of students have seized the opportunity we offer to improve not only their lives, but the lives of people they have touched.

Our alumni are practicing professionals in education, health care, law, public service, business, environmental science, and government, and the list doesn't stop there. From coastal wetlands to outer space, California University graduates are using their education to continue the never-ending search for knowledge. In various settings all over the globe, Cal U alumni are helping to make the world a better place.

At California, we place a great emphasis on people and relationships. We have a dedicated faculty, a caring, concerned staff, excellent facilities, exemplary curriculum, and a variety of extra-curricular activities, all dedicated to helping students get the most from their college experience.

Learning is not confined to the classroom; the university experience should be a broad one. Personal growth is proportionate to the wise use of the many resources available. We encourage students to become involved in the total life of the University and its surrounding communities.

We also foster a family atmosphere. We are small enough to care about individuals, and yet large enough to be able to offer a variety of programs.

I hope that you take time to read through this catalog. It can tell you much about the University and its programs. To really get to know us, however, you should come for a personal visit, and I urge you to do that. You and your family are always welcome.

Angelo Armenti, Jr.

P.S. To get a preview of campus, visit our website at **www.cup.edu**.

Table of Contents

Mission

California University of Pennsylvania's mission is to provide quality education at a reasonable cost. To this end the university:

(1) offers undergraduate instruction in the liberal arts, education, human resources, the professions, business, science and technology;

(2) offers a graduate education to, and beyond, the master's degree, in certain areas of study;

(3) helps meet the region's economic, social, cultural, and recreational needs;

(4) fosters research and service;

(5) encourages the intellectual growth of its faculty, as well as its students.

Goals

California's special mission is to develop programs in science, technology, and applied engineering.

California University of Pennsylvania is a multipurpose, regional university firmly committed to offering students of widely varied ages, backgrounds, interests and needs, a broad range of educational opportunities and experiences. Thus, the university endeavors to provide a contemporary array of degree programs-associate, baccalaureate and masters-which will enable the student to develop as an intelligent, caring individual who will be able to function as a contributing, productive member of society.

The university recognizes the important relationship that exists between those disciplines which enhance one's ability to think critically, reason analytically, communicate effectively, maintain historical perspective and promote good citizenship, and those disciplines which provide the specialized knowledge and the critical intellectual skills to perform effectively in a wide variety of settings. To this end, it is the purpose of the university to prepare men and women to meet the challenges of the world of work in education, business, industry, government, the professions, the human services, and graduate and professional schools.

As a regional institution, the university strives to present a diversity of programs and services for those residing in its service area. A principle goal of the University Advancement, especially in its Mon Valley Renaissance program, is to provide different kinds of assistance related to economic development.

The university also offers to local residents access to many social and cultural activities.

Objectives

The faculty and students of the university are participating members of an educational institution charged with preservation, discovery, and dissemination of knowledge in the arts, sciences, technologies, vocations and professions, and with the creative application of that knowledge in their lives both as individuals and as members of society.

The objectives of the university are:

(1) to provide a liberal education which aims at developing analytical thinking and individual initiative and responsibility;

(2) to provide flexible, innovative programs and support services that are responsive to a broad range of student and regional needs;

(3) to provide a professional faculty and an effective administration;

(4) to create and maintain a learning environment in which the rights of all are respected;

(5) to provide a wide range of learning opportunities for students interested in associate, baccalaureate, graduate, and non-degree programs;

(6) to promote effective communication among faculty, students, administration, and the general public;

(7) to provide a diversity of intellectual, cultural, social and recreational activities and experiences for the university and surrounding communities;

(8) to encourage thoughtful and responsible faculty and student participation in local, state, national, and international affairs;

(9) to require high standards of teaching and scholarship and to encourage participation in professional activities;

(10) to foster academic research which contributes to human knowledge and the vitality of the institution; and

(11) to maintain an on-going system of self-evaluation whereby the goals of the institution serve as the criteria for determining the institution's effectiveness.

The College of Education and Human Services

The principle goal of the College of Education and Human Services is to maintain a diversity of contemporary curricula appropriate for the preparation of new teachers and the improvement of teachers already in the field. In addition, the College sponsors the development and delivery of a variety of special programs for the purpose of educating practitioners in a number of human service areas.

The College of Liberal Arts

Through traditional courses of study, the College of Liberal Arts attempts to teach reflective thinking that enables graduates to make responsible social decisions in a multi-cultural world. The Liberal Arts programs are designed to present students with options that call upon precise knowledge, cultural perspectives, aesthetics, and personal and professional communication skills in order to create informed, as well as technologically literate, graduates.

The Eberly College of Science and Technology

The Eberly College of Science and Technology's goal is to make available an array of scientific, technological and career-oriented programs which prepare students for the increasingly complex demands of the industrial, business and health fields as well as for further study in graduate and professional schools.

The School of Graduate Studies and Research

The goal of the Graduate School is to provide an opportunity for those who already have undergraduate training to further develop their experience at the graduate or post-graduate level.

About California University

The university is in the Borough of California, a community of approximately 6,000 residents, located on the banks of the Monongahela River, about an hour's drive south of Pittsburgh. It is accessible via Interstate 70, Exits 15 (PA 43), 16 (Speers), or 17 (PA 88, Charleroi) or via U.S. 40 (PA 43 or 88). The Mid-Mon Valley/ Fayette Expressway (PA 43) links California to the federal Interstate Highway system. The university is approximately 30 minutes from Exit 8 (New Stanton) on the Pennsylvania Turnpike, and an hour from Greater Pittsburgh International Airport.

The main campus consists of 39 buildings situated on 90 acres. An additional 104-acre recreation complex, George H. Roadman University Park, is located one mile from campus. This complex includes a football stadium, an all-weather track, tennis courts, a baseball diamond, a softball diamond, soccer and rugby fields, a cross country course, areas for intramural sports, and picnic facilities.

The geographic location of the university gives the resident student opportunities to explore and pursue a wide variety of activities. Located on the Appalachian Plateau, an area of rolling hills, the university is a short drive from camping, hiking, fishing, hunting, white water rafting, and canoeing, and skiing in the Laurel Mountains. In addition to varied cultural activities on campus, the student has easy access to the Pittsburgh metropolitan area, located only 30 miles north of the campus.

This provides an opportunity to enjoy the Pittsburgh Symphony, the Pittsburgh Ballet, the Civic Light Opera, the David L. Lawrence Convention Center, the Pittsburgh Steelers, Penguins, and Pirates, various museums and all of the excitements and attractions of a major metropolitan area.

The institution that is now California University of Pennsylvania began as an academy nearly 150 years ago. It has evolved over the years into a multi-purpose university. One of the fourteen state-owned institutions of higher education in the Pennsylvania State System of Higher Education, it has the strength and stability of a university system, but it retains its own flavor and unique history.

(Additional information may be found in the book by Regis J. Serinko, *California University of Pennsylvania: The People's College in Monongahela Valley*, published in 1992).

1852: A two-story Academy, offering education from kindergarten through college was established in the recently founded community of California. The institution was supported by local taxes and the donations of community residents.

1864: A ten-acre site for the Academy was purchased.

1865: The Academy obtained a charter as a Normal School for its district and became a teacher-preparatory institution.

1874: The institution was renamed the South-Western Normal School.

1914: The Commonwealth acquired the institution and renamed it the California State Normal School. The curriculum became exclusively a two-year preparatory course for elementary school teachers.

1928: The institution became California State Teachers College, returning to its previous status as a four-year-degree-granting institution, with increasing opportunities for liberal arts education. Under the presidency of Robert Steele (1928-1951), California began to concentrate on industrial arts and atypical education (what is now called special education) and otherwise expanded its curricula. The campus grew to 35 acres, and a number of new buildings were erected.

1959: During the presidency of Michael Duda (1956-68), liberal arts curricula were introduced, and the college became California State College. In 1962 a graduate program was introduced. The degrees of master of arts and master of science were initiated in 1968. During Dr. Duda's presidency, more than a dozen new buildings were completed, and the size of the student body and faculty increased more than four-fold.

1974: During the presidency of George H. Roadman (1969-1977), the college developed a special mission in science and technology to complement its traditional roles in liberal arts and education.

1983: On July 1, 1983, the college became a part of the State System of Higher Education and changed its name to California University of Pennsylvania. Under the leadership of President John P. Watkins (1977-1992), the College of Science and Technology became fully operational, offering programs in such varied areas as mathematics and computer science, industrial management, nursing, energy technology, robotics, and electrical engineering technology.

1992: Angelo Armenti Jr. appointed president of California University.

1996: College of Science and Technology renamed Eberly College of Science and Technology in honor of the Eberly Foundation for its philanthropic generosity.

1997: Cal U Southpointe Center in the Southpointe Technology Center in Canonsburg, PA, opened in January, offering a variety of courses and programs.

1998: The University formally adopts three core values: integrity, civility and responsibility.

1999: The new Eberly Science and Technology Center, a state-of-the-art facility for the study of science and technology, opened at the beginning of 1999-2000 academic year.

Admissions

How to Apply to California University

Address inquiries to:

Admissions Office
California University of Pennsylvania
250 University Avenue
California, PA 15419-1394

724-938-4404 (TELEPHONE)
724-938-4564 (FAX)
E-mail Address: inquiry@cup.edu

We encourage applicants to write or call for an appointment to visit the university.

General Admission Requirements

To be considered for admission as a degree-seeking student, applicants must submit the following:

1. Completed application form
2. Application fee
3. Official high school transcript which includes class rank (or GED certificate)
4. Scholastic Assessment Test (SAT) or American College Testing (ACT) scores (may be waived for applicants who have been out of high school for at least three years or have an Associate, R. N., or Baccalaureate degree)
5. Transfer students must submit all college transcripts.

Students in special categories of admission should check the section on Specific Entrance Requirements for required application materials.

Specific Admission Requirements

Freshmen

Students attending a post-secondary institution for the first time are considered new freshmen. All students in this classification must submit the materials included in items 1-4 listed under General Admisssion Requirements.

Transfers

Students seeking to transfer to California University from another post-secondary institution must submit the materials included in items 1-5 listed uder General Admission Requirements. If a degree has not been earned beyond high school, applicants must also submit high school transcripts, including the results of all standardized test scores. The awarding of an associate degree is considered to have satisfied the high school graduation requirement.

Students seeking to transfer to California University must be in good academic and social standing at the last institution attended in order to qualify for admission. In cases where students have been out of school for at least one semester, special consideration will be given.
See the Academic Passport for more information on transfer credits.

Early Admission for High-School Students

High school students may be eligible for admission to California University provided the following requirements have been met:

1. The student must submit a completed application and pay the application fee.

2. The applicant must have completed the sophomore year of high school and be enrolled in a college preparatory curriculum.

3. An early admission clearance form must be completed with all necessary signatures affixed.

4. The student's official high school transcript must be submitted and reflect a cumulative grade point average of 3.00 for the past two years. (For up-coming juniors, ninth- and tenth-grade averages will be used.)

5. The applicant must have taken the PSAT, SAT, or ACT examination and scored at least 1050 on the PSAT or SAT or 23 on the ACT.

6. The student's status will be classified as provisional for each session while still in high school.

7. The student must submit a completed early admission clearance form and a transcript for each session that enrollment at California University is desired.

8. At the completion of the student's high school program, a second application must be submitted with the final high school transcript. A second application fee is not required. At this time the student will be in a degree program.

Graduates of California University

Post-associate and post-baccalaureate students who graduated from California University and are seeking an additional degree must re-apply to the Admissions Office.

Other Post-Baccalaureate Students

Students who graduated from another institution and want to enroll in undergraduate programs at California University must submit a completed application, application fee, and official transcripts from each institution attended.

International Students

International students are required to submit an international student application form to California University. All official transcripts, TOEFL scores, a statement of financial support, and letters of recommendation must be submitted. Assuming that all records indicate that international students could be successful, final admission is contingent upon acceptable clearance from the education authorities of the home country and from the Department of Justice, Immigration and Naturalization Service, of the United States.

Applicants from foreign countries must have competency in the use of English as demonstrated through the Test of English as a Foreign Language (TOEFL) examination. The minimum TOEFL score is 450.

International students must subscribe to the insurance plan of California University. For identification purposes, international students can obtain a United States Social Security number.

Visiting Students

Students who wish to enroll at California with the expectation of transferring credits to their home institution and do not wish to receive a degree from California University are classified as visiting students.

An application with application fee must be submitted. Admission is granted for the approved semester only.

Non-Degree Students

Students may take courses at California University without being a candidate for a degree. Non-Degree students must submit a completed application, application fee, and all appropriate official transcripts. Tuition and fees are the same as for degree students. Students may complete up to 30 credits in a non-degree seeking status. After reaching 30 credits, students must either declare a major or indicate that they do not plan to pursue a degree at California University.

Veterans

Veterans of the United States Armed Forces who have not attended an institution of higher education since their honorable discharge are admitted to California University upon following the general admission procedures.

Veterans may be awarded credit for their military training and military schools. All veterans, reservists, and National Guard members who have been honorably discharged may be eligible for credits. Credits are awarded primarily in elective categories.

Each veteran or reservist seeking such an award must submit a copy of DD 214 to the Director of Veterans Affairs. Army veterans who entered the army after October 1, 1981, should submit an A.A.R.T.S. transcript; Air Force veterans who served after 1974 should submit a C.C.A.F. transcript. Evaluations based on the latest American Council of Education Guides will be forwarded to the appropriate Dean for approval.

Evaluation of Applicants

All applications are individually evaluated. As soon as applications are complete, decisions are reached and applicants notified. Every attempt is made to complete this process within two weeks.

Admission standards have been established by the university to select those students who will be most likely to succeed in the various programs of the university.

1. Academics. An applicant must be a graduate of an approved or accredited secondary school or have an equivalent preparation as determined by any state's Department of Education.

2. Assessment and Ability Standards. An ability to do work in higher education should be evident from an assessment examination such as the Scholastic Assessment Test (SAT). In certain instances, other kinds of evidence may be used to determine the ability to do such work.

3. Character and Personality. Applicants must be able to demonstrate that they possess the personality traits, interests, attitudes, and personal characteristics necessary for higher education.

4. Admission to Special Curricula. A student seeking admission to a special curriculum may be required to complete additional requirements or have earned specific credentials.

The Admissions Office considers as many variables as possible in making admission decisions: class rank, cumulative grade point average, type of curriculum completed in relation to proposed major, guidance counselor or other recommendations, on-campus interview, standardized test scores, activities, and maturity. Each of the variables contributes to the overall assessment of applicants.

Student Credentials

All credentials presented in support of an application for admission become the property of the university and cannot be returned to the student. The complete file will be retained according to the provision of university policy and the Family Rights and Privacy Act of 1974, as amended.

All information filed in support of the application must be complete and authentic. Any false information may be grounds for denial or dismissal.

Social Security Numbers

Social Security numbers must be entered on the application for admission. Students who do not have a social security number should obtain one.

Pennsylvania Residency

Residency is determined at the time of admission. Change of residency may only occur by appealing to the Residency Appeals Committee. For further information, contact the office of the Provost and Vice President for Academic Affairs after admission and prior to registration.

Advanced Placement Credit

A student who has taken Advanced Placement examinations under the auspices of the Educational Testing Service may receive credit for them at California, provided the score is 3.00 or higher.

Transfer Student Policies

Academic Passport

Academic Passport is a transfer program designed to promote and facilitate the transfer of students in community colleges to State System of Higher Education universities, and to support the transfer of undergraduate credits earned by State System students to other System universities.

1. Academic Passport Students

   A. Transferring with an Associate Degree

   - Students transferring with an AA or AS degree must have a 2.0 minimum cumulative grade point average (GPA) in all course work presented for transfer from each institution attended.
   - The AA or AS degree recognized from Academic Passport must contain, as a minimum, 30 hours of liberal arts among the following fields of study: Composition/ Communications, Humanities/Fine Art, Behavioral/Social Sciences, Biological/Physical Sciences, and Mathematics and Computer Science.
   - A maximum of 45 general education credits and liberal arts course credits earned at the two-year college may be transferred to meet lower division requirements (a course by course match shall not be required). All additional course credits will be applied first to major courses and lastly, as electives.

B. Intra-System Transfers:

- Incumbent System university students who have attained a minimum cumulative GPA of 2.0 or higher with a minimum of 12 credit hours of college level course work shall hold an Academic Passport enabling transfer to any other System university.
- Up to a maximum of 45 general education credits and/or liberal arts course credits earned at the sending university shall be used to meet lower division university general education requirements (a course by course match shall not be required).
- Capacity limits and/or higher admissions standards may apply to certain high demand academic programs.
- System students holding the Academic Passport shall be entitled to take any course offered through distance learning and listed in the catalog at any other System university and have those credits and the grade earned accepted by their home institution.

2. Students Transferring Without Academic Passport. Students who have not completed the A.S. or A.A. degree may transfer
   - with a minimum of 12 credit hours of college level course work, up to a maximum of 45 credits in courses which have been designated and credited as general education by an accredited community college shall be used to meet lower division university general education requirements (a course by course match will not be required).
   - with a minimum cumulative GPA of 2.0 or greater in all course work presented for transfer for <u>each</u> institution attended.

Transfer Credit Evaluation

1. California University will transfer no more than 75 credits per student from an accredited two-year community or junior college, 98 credits from an accredited four-year institution, or 98 credits from combined accredited two-year and four-year colleges towards a Bachelor's degree (four years).

2. No more than 15 credits towards an associate degree (two years) at California University may be transferred.

3. Developmental courses are not transferable.

4. Grades of D are not transferable unless they are counted as part of the Academic Passport or if they were completed at a college or university that has an articulation agreement with California University.

5. When credits are transferred, only the credits are counted as advanced standing; the grade point average of transfer courses is not calculated with California University earned courses.

6. Although credits will always transfer according to these provisions, regulations that govern the national professional accreditation of certain programs offered at California University of Pennsylvania may not permit some courses taken in programs not similarly accredited at other two- and four-year institutions to be transferred as the equivalents of courses that may be similarly entitled or described in this catalog.

Tuition

Pennsylvania Residents

Full-Time Undergraduate (per semester)	
for 12 to 18 Credits	$1,809.00
for each additional Credit	150.00
Part-Time Undergraduate (per semester)	
for each Credit (less than 12)	150.00

Non-Pennsylvania Residents

Full-Time Undergraduate (per semester)	
for 12 to 18 Credits	$4,523.00
for each additional Credit	377.00
Part-Time Undergraduate (per semester)	
for each Credit (less than 12)	377.00

NOTE: Summer tuition is billed at part time rates on a per credit basis.

Room and Board

Room (per semester)	
Single	$1,508.00
Double	1,123.00
Triple	902.00
Board (per semester)	
19 meals	$1,140.00
14 meals	1,088.00
7 meals	700.00
125 meal block	1,152.00

Off-Campus Dining Plans

Board (per semester)	
19 meals	$1,140.00
14 meals	1,088.00
7 meals	700.00
125 meal block	1,018.00
Dine Dollars Plan (minimum starting balance)	$50.00

Fees*

Student Association Fee	
Undergraduate	
12 or more credits	$140.00
6 to 11 credits	70.00
1 to 5 credits	35.00
Student Union Building Fee	
12 or more credits	$81.00
6 to 11 credits	41.00
1 to 5 credits	21.00
University Service Fee	
9 or more credits	$85.00
1 to 8 credits	50.00
Student Center Operations and Maintenance Fee	
12 or more credits	$75.00
6 to 11 credits	52.00
1 to 5 credits	38.00
Academic Support Fee	
Fall/Spring	
12+ credits	$180.90
11 credits	165.88
10 credits	150.80
9 credits	135.72
8 credits	120.64
7 credits	105.56
6 credits	90.48
5 credits	75.40
4 credits	60.32
3 credits	45.24
2 credits	30.16
1 credit	15.08
Summer/Special Sessions	
Per credit	$5.00

*Southpointe Students should contact the Southpointe Center office for fee information.

NOTE: All university tuition, fees and room and board rates are subject to change upon proper approval of the Council of Trustees and/or the Board of Governors.

Payment at Residual Registration
All fees will be assessed at the time of registration. Payment may be made by cash, check, money order, or certified bank draft made payable to California University of Pennsylvania, or by VISA, MasterCard, or Discover Card. If financial aid has been awarded, this amount will be deducted from the bill. Payment plans (with initial payment) may be contracted at this time.

Payment Plans
Payment plans are available each semester. Payment plans enable you to pay your costs on a monthly basis. Payment plan information and contracts will be included with each semester bill. be deducted from the bill. Payment plans (with initial payment) may be contracted at this time.

Third Party Billing
Some companies and government agencies pay tuition directly to the university. If tuition is to be paid in this manner, please supply authorizing forms or letters to the Bursar's Office.

Veterans Deferment
Military veterans receiving G. I. Bill benefits may request deferment, if needed, from the Veterans Affairs office.

University Refund Policy
This refund policy applies to any student who withdraws or changes enrollment status after their first semester of attendance at California University. Students who meet this basic criteria will have their university charges calculated according to the following schedule:

Time of withdrawal or drops:	**Refund**
First 10% (in time) of the enrollment period	90%
11% to 25% (in time) of the enrollment period	50%
26% to 50% (in time) of the enrollment period	25%
after 50% (in time) of the enrollment period	0%

Pro-Rata Refund Policy
This refund policy applies to any student who meets the following criteria: receives federal financial aid; attends the university for the first time; and withdraws or changes enrollment status on or before the 60 percent point of the enrollment period. Students who meet all three criteria will be assessed university charges (tuition and fees, room and board, etc.) equal to the portion of the enrollment period completed.

Schedule of Pro-Rata Refunds

Time of withdrawal or drop:	**Refund**
Prior to the second day of classes	100%
First 10% (in time) of the enrollment period	90%
First 20% (in time) of the enrollment period	80%
First 30% (in time) of the enrollment period	70%
First 40% (in time) of the enrollment period	60%
First 50% (in time) of the enrollment period	50%
First 60% (in time) of the enrollment period	40%
After the 60% (in time) of the enrollment period	0%

NOTE: Financial aid recipients should refer to "refund/repayment policies" located in the Financial Aid section of the catalog.

Advance Deposit
All first–year students, transfers and readmitted students are required to submit a $75 advance deposit payable to California University of Pennsylvania. It is to be paid in advance of registration and is credited to the student's account for the first semester. This is a non-refundable fee.

Room Deposit
An advance room deposit of $100, held in the student's account and applied toward the spring semester, is required in order to reserve a room for the following academic year. First–year students will receive a housing contract with their Admissions Packet. The contract and card must be signed and returned to the Bursars Office with a $100.00 deposit.

Late Registration Fee
Students who register after the first day of the semester will be charged a $25.00 late registration fee.

Late Payment Fee
A late payment fee of $25 will be assessed when a student fails to pay the required fees by the due date or when a student fails to pay according to an approved payment plan.

Return Check Charge
A $25 fee will be charged for any check which is made payable to California University of Pennsylvania and returned by the bank.

Degree Fee
A fee of $10 must be paid by each candidate for a degree from California University of Pennsylvania. A student is not permitted to complete graduation from the university until this fee has been paid.

CLEP Fee
A one–time fee of $25 is charged for the administration and recording of CLEP (College Level Equivalency Program) credits regardless of the number of credits awarded.

Financial Aid

Mission Statement

The primary mission of the Financial Aid Office at California University of Pennsylvania is to provide financial planning and assistance to students and their families in meeting the costs of education. In fulfilling this mission, each student will be given careful consideration and the university will determine financial assistance based on federal, state, and institutional guidelines. Financial aid programs have been established to provide access to higher education with guidelines to insure fairness in disbursing available funds to qualifying students. The Financial Aid Office strives to insure that courteous, timely, and accurate financial aid services are delivered to all students seeking assistance from our office.

Location & Office Hours

The Financial Aid Office is located on the first floor of the Azorsky Administration Building. The office hours are 8:00-4:00, Monday through Friday. Appointments are encouraged but a daily on-call counselor is available to assist walk-ins. Students can contact the Financial Aid Office by calling 724-938-4415 or by Fax at 724-938-4551. In addition, a 24-hour voice mail and question/answer box telephone system is available to assist students and parents with general financial aid information or to request financial aid materials.

How to Apply

About Financial Aid

A college education is one the most important investments a student and family can make. You and your family will be expected to contribute as much as you can from your own resources (income, savings, and assets) to help meet your college expenses.

The purpose of financial aid is to help students and families meet educational expenses that cannot be met through their own resources. Financial aid can be either need-based or non-need-based. The results of the Free Application for Federal Student Aid (FAFSA) along with the cost-of-education will determine whether a student has financial need.

There are several types of financial aid available. Grants and scholarships are considered "gift aid" because they generally do not have to be repaid. Loans and employment are considered "self-help aid" because loans have to be repaid and by working, you earn money for educational expenses. Loans are by far the largest source of financial aid for the majority of students and families. Most grants, some loans (Subsidized Stafford and the Perkins Loan), and Federal Work-Study is need-based financial aid programs. The Unsubsidized Stafford and the Parent Loan for Undergraduate Students (PLUS) are considered non-need-based. Scholarships can be based upon merit, financial need or both.

There are four main sources of financial aid. These include the federal government, the state government, and the institution and private entities. The federal government is by the far the largest source of financial aid. Approximately 78% of all students attending California University receive some type of financial aid from one or more sources.

Eligibility Requirements

In order to be eligible for most federal financial aid programs, you must meet the following eligibility requirements:

- have financial need, except for some loan programs.
- have a high school diploma or a General Education Development (GED) Certificate, pass a test approved by the U.S. Department of Education, or meet other standards established by your state and approved by the U.S. Department of Education.
- be enrolled or accepted for enrollment as a regular student working towards a degree or certificate in an eligible program.
- be an U.S. citizen or eligible non-citizen.
- have a valid Social Security Number.
- make satisfactory academic progress.
- sign a statement of educational purpose and a certification statement indicating that you neither are not in default on a student loan nor owe an overpayment on a grant. Both statements are found on the FAFSA.
- register with the Selective Service, if required. You can register online at the Selective Service System's WWW site. (**www.sss.gov**)

Completing the FAFSA

Each year, you must complete the Free Application for Federal Student Aid (FAFSA) or Renewal FAFSA. The 1999-2000 FAFSA or Renewal FAFSA is available now. Prior year aid recipients will receive a renewal version of the FAFSA that can be used to apply for federal financial aid for the new award year. The Renewal FAFSA will be sent to the address you used on your 1998-99 FAFSA and will have some information about you preprinted as well as items you must update. If you do not receive your Renewal FAFSA or you are a new aid applicant, you must complete a blank 1999-2000 FAFSA. You can obtain the 1999-2000 FAFSA from a high school guidance counselor, public library, or the financial aid office of a college or university, including the Financial Aid Office at California University.

It is important that you read the instructions before completing your FAFSA because the instructions should answer most of your questions. If, after reading the instructions that accompany the FAFSA, you need help completing your form, there are several places you can contact to receive assistance. You can call 1-800-4-FED-AID (1-800-433-3243), consult your high school guidance counselor, or contact the Financial Aid Office.
Please Note: California University does not have an institutional financial aid application.

FAFSA on the Web

FAFSA on the Web is an electronic version of the 1999-2000 Free Application for Federal Student Aid (FAFSA) or the Renewal FAFSA. (**www.fafsa.ed.gov**)

The *FAFSA on the Web* site uses the (domestic) version of Netscape Navigator 3.0 or higher, which keeps a student's information private and secure during transmission over the Internet. Students wanting to complete their 1999-2000 FAFSA via the web can do so after January 1, 1998. After transmitting an application over the Internet, students mail their signed signature page to the Department. The CPS will determine their

eligibility for financial aid within 72 hours after receiving the completed application. FAFSA on the Web has a customer service line at 1-800-801-0576 where users may check the status of their applications and receive assistance with hardware, software, and transmission.

The Benefits of FAFSA on the Web

- FAFSA on the Web is *free.*
- Students can save their application information to diskette so that it can be completed and transmitted later.
- FAFSA on the Web does not require software to be installed, so it takes less time before students can actually use the application.
- Students can access the FAFSA on the Web page from anywhere, including school or home, making it more convenient to complete the application.
- FAFSA on the Web automatically edits applicant answers before transmitting, resulting in better information and fewer applications rejected by the CPS.
- FAFSA on the Web uses skip logic, so it will only ask students those questions that they need to answer.
- FAFSA on the Web can support an unlimited number of users, allowing thousands of students to apply at once.

Renewal Financial Aid Applicants

As a renewal financial aid applicant, you have two choices in completing your 1999-2000 Renewal FAFSA. You can complete a paper version of the Renewal FAFSA or submit an electronic version of the form over the Internet. To use the electronic version you will need an Electronic Access Code (EAC). You can obtain your EAC by visiting the Department of Education's website at **www.fafsa.ed.gov** and follow the link to *"Requesting an EAC."* Your EAC will be mailed to you within 7 to 10 days after you have submitted the required information. Once you obtain an EAC, you can access the electronic version of your Renewal FAFSA at the website listed above. The electronic version is generally processed within 7 to 14 days.

Both versions of the Renewal FAFSA contain preprinted information that you and your family (if applicable) reported last year, making it faster and easier for you to complete. Please carefully review and update any preprinted information, which needs to be changed for the 1999-2000 school year. Special attention should be given to the "School Information" section (Step Five). You must fill in the oval "YES" box wherever California University is listed in order for our office to receive your 1999-2000 FAFSA record. You must provide new information for any questions with an arrow pointing to the 1999-2000 column.

Renewal FAFSA Filing Tips

These tips can assist you in completing either the paper or electronic 1999-2000 Renewal FAFSA. Included below are specific changes on this year's application, as well as common errors made when completing this form. Please refer to these tips to avoid delays in the processing of your aid application.

☑ Tip #1: You will need to complete your 1998 Federal tax forms and gather documentation of all untaxed income, if applicable, in order to complete your FAFSA accurately.

☑ Tip #2: Check your permanent address on your Renewal Application (questions 4-7). If accurate, then you can file the electronic Renewal FAFSA on the Web, if desired. We would recommend using this option in filing your FAFSA because it is faster, easier, and you are less likely to make errors. If your address is not accurate, then you must complete the paper Renewal FAFSA in order to file. (Make sure you correct your permanent address on the form.)

☑ Tip #3: Please refer to the Renewal Instruction Booklet (mailed with your Renewal FAFSA) it for all questions to avoid common errors such as the following:

EXAMPLE 1: Income Tax Paid
When reporting student's income tax paid for 1998, question 42 (page 5) tells you exactly which line on your tax return to use for the correct amount. Most errors are made on this question because students often report the tax withheld by their employers on their W-2 forms, instead of the amount actually owed to the federal government.

EXAMPLE 2: Separated/Divorced Parents
Separated/divorced parents often report income incorrectly. If your parents are separated or divorced at the time of filing your application, include only the income of the parent with whom you lived the most during the last 12 months. You must include stepparent income if your parent was divorced but have remarried. **Please Note:** marital status should be reported as "married" (not "divorced") in this instance. Refer to Step 4, page 9, for additional information.

EXAMPLE 3: Untaxed Income
Many errors occur in untaxed income because Worksheet A in the instruction booklet has not been utilized. This worksheet identifies all sources of untaxed income that should be included in the application. See page 6 for Worksheet A.

☑ Tip #4: When reporting financial information, do not include cents. Round to the nearest dollar.

☑ Tip #5: Education credits (Hope and Lifetime Learning Tax Credits) are to be reported on Worksheet B page 7. The total on Worksheet B is to be entered into questions 48 (student) and 71 (parents).

☑ Tip #6: Questions regarding assets have changed. This year you must indicate the "net worth" of investments, business, and farm. Net worth is the current value minus debt. See questions 50-52 (student) and 73-75 (parents).

☑ Tip #7: Students must fill in the oval "yes" to question 35 in order to be considered for either federal or non-federal work-study employment.

☑ Tip #8: In Step 5, be sure to fill in the oval "yes" to release information again to California University of PA.

Important Deadline Dates

Financial Aid Time Line Items to Complete:	January	February	March	April	May	June	July	August
Gather financial aid documentation necessary for completion of the FAFSA	X	X	X	X	X			
Obtain a Free Application for Federal Student Aid (FAFSA)	X	X	X	X	X			
Mail your FAFSA to the Federal processor. **THE EARLIER THE BETTER!** (Keep a copy for your records!)	X	X	X	X	X			
Review your Student Aid Report (SAR) for errors and make any necessary corrections.		X	X	X	X			
Provide the Financial Aid Office with all requested information.			X	X	X	X	X	X
Financial aid award letters mailed to students. Students must sign and return letter to FAO.				X	X	X	X	X
May 1- FAFSA priority deadline for consideration for Federal Campus-Based Programs (FWS, FSEOG, & Perkins)					X			
May 1- FAFSA deadline for PHEAA State Grant.					X			
File Master Promissory Note with PHEAA. (See Stafford Loan Processing Cycle for additional information.)					X	X	X	X
Receive results of PHEAA Grant eligibility.					X	X	X	X
Receive billing statement form Bursar's Office.							X	
Due date for paying Fall semester bill.								X

Federal Campus-based Aid

At California University, we want to have the results of your 1999-2000 FAFSA or Renewal FAFSA by May 1, 1999 for you to be considered first-priority for federal campus-based aid (Federal Supplemental Educational Opportunity Grant, Perkins Loan and Federal Work-Study). In order for California University to receive the results of your FAFSA by our first-priority deadline, we strongly recommend that you file your FAFSA as soon as possible but no later than April 1, 1999, even if you have to use estimated financial information. This will allow the federal government enough time to process your FAFSA and send the results to California University by May 1, 1999. If you cannot or do not file your FAFSA by our first-priority deadline, please file as soon as you can; and, you will be considered for the Pell Grant, student loans, etc.

PHEAA State Grant

In order to receive state grant assistance from PHEAA, students must file their 1999-2000 FAFSA or Renewal FAFSA by May 1, 1999. All students are urged to apply even if the deadline has passed, since late applications are considered if funds permit.

Handling Special Circumstances

Although the process of determining a student's eligibility for financial aid is the same for all students, an adjustment sometimes can be made if a student has special circumstances. Special circumstances may include a reduction in income due to loss of employment, death or disability of a wage earner, divorce or separation, loss of social security benefits, unusual medical expenses, etc. In addition, a student who does not meet the federal definition of an independent student for financial aid purposes may be able to document those exceptional circumstances in order to be considered an independent student.

The Financial Aid Office has a Change of Income Information Form (CIIF), which should be used when the special circumstances involve a loss of income/benefits or unreimbursed medical expenses which exceed 7.5% of the family's adjusted income. The Change of Income Information Form is available after September 1 by contacting the Financial Aid Office.

A student who wants to appeal his or her dependency status for financial aid purposes should file the Dependency Appeal Form for the appropriate school year. A student who does not meet the federal definition of an independent student normally must file as a dependent student and include parental information on the FAFSA. Only students with exceptional circumstances should file the Dependency Appeal Form. Unfortunately, parents' unwillingness to help pay for college, not being claimed as an exemption on parents' tax return, or living on your own does not make a student independent for financial aid purposes. The Dependency Appeal Form is available upon request from the Financial Aid Office.

If you think you have special circumstances that you want to discuss with a financial aid counselor, please feel free to contact our office.

After You Apply

FAFSA Results

The federal government will process your Free Application for Federal Student Aid (FAFSA) and electronically send the results to the Financial Aid Office provided you listed California as one of the schools to receive the results of your FAFSA. You should receive a paper Student Aid Report (SAR) in the mail approximately two weeks after the federal processor receives your FAFSA. You should review the SAR to see if any corrections are necessary. Otherwise, you can keep the SAR for your records.

When you apply for Federal student aid the information reported on the FAFSA is used in a formula approved by Congress. This Federal formula determines a student's Expected Family Contribution (EFC), the amount the family (student and parents, if applicable) is expected to contribute toward the student's education. The basic elements included in determining the EFC are:

- ☑ contribution from the parents' income and assets
- ☑ contribution from the student's income and assets
- ☑ number of members in the household
- ☑ number of family members enrolled at least half-time in college

You can obtain an estimate of your EFC yourself by using the web calculator available at **www.finaid.org/calculators/finaidestimate.phtml**. The

lower your EFC, the more financial need you will have. The lowest EFC possible is zero; the highest is 99,999 or above.

If the student's EFC is below 2925, the student may qualify for a Federal Pell Grant (only students pursuing their first baccalaureate degree are eligible). To determine eligibility for other Federal aid, a student's EFC is used in the following equation:

Cost of Attendance
less: Expected Family Contribution (EFC)
= Financial Need

Your demonstrated financial need will determine which programs you qualify. Even if you have no financial need, you will still qualify for the Unsubsidized Federal Stafford Loan and Parent Loan for Undergraduate Student (PLUS). Your parent must be willing to apply for the PLUS Loan and have a satisfactory credit history.

Verification

Some of our financial aid applicants are selected in a process called verification. During this verification process, the FAO office must verify the accuracy of FAFSA data reported by students. If your FAFSA is selected for verification by the federal government, we will notify you and tell you exactly what documents we need from you. Typically, we students selected for verification will receive an award packet, however these awards tentative (estimate only) pending the completion and outcome of verification. Federal Stafford Loans are not certified until the verification process has been completed.

Cost of Attendance

Each year the University establishes a total *"cost of attendance"* budget based on a student's housing status (commuter, dormitory, or off-campus), enrollment status (full-time or part-time), and residency status (in-state or out-of-state). The cost of attendance budget represents the total educational expenses a student may incur while attending our University, and is a critical element in determining a student's eligibility for Federal Stafford Loan Assistance. The elements of this budget are both "direct" institutional expenses (tuition/fees and/or University room/board), as well as "indirect/living costs" (off-campus housing, books/supplies, and/or personal expenses) not billed by the University.

Listed below are the total annual "direct costs" charged to full-time, living on-campus students:

Undergraduate	In-State	Out-of-State
Tuition & Fees	*$4,699*	*$10,268*
Room Fees (double room)	*$2,182*	*$2,182*
Board Fees (14 meal plan)	*$2,150*	*$2,150*
Total Estimated Direct Costs	*$9,031*	*$14,600*

Graduate	In-State	Out-of-State
Tuition & Fees	*$4,597*	*$7,475*
Room Fees (double room)	*$2,182*	*$2,182*
Board Fees (14 meal plan)	*$2,150*	*$2,150*
Total Estimated Direct Costs	*$8,929*	*$11,807*

In some cases, we can build an individual budget for a student or add additional educational expenses with appropriate documentation. Some of the more common expenses for which we can adjust a budget include the following:

- art supplies
- costs associated with studying abroad
- dependent child care

In order to discuss having your budget adjusted, you would need to obtain appropriate documentation detailing the additional expenses and contact the FAO to schedule an appointment with a counselor.

Please Note: *The indirect/living expenses a student actually incurs will vary significantly from student to student. A student's program of study, year-in-school, housing/board arrangements, student's budgeting skills, and many other variables will affect a student's total expenses within this budget element. The University determines the indirect/living costs for each student type based on data collected from students, local bookstores, and local landlords. This data is analyzed to arrive at "average" expenses incurred by most students.*

Award Letters

California University typically starts the awarding process in early April of each year. If you are an accepted freshman/new student and we have received the results of your FAFSA by the date we begin our awarding cycle, you can expect to receive your Award Letter Packet by mid-April. For students who have not been accepted and/or their FAFSA has not been received at the point the awarding process begins, our office will send award packets to these students throughout the summer as their file becomes complete (accepted to the University and receipt of FAFSA record). **Please Note:** Only accepted students receive an award packet.

Upper class or graduate student Award Letter Packets are mailed once we have received the results of your FAFSA and we have determined that you are making Satisfactory Academic Progress for financial aid purposes.

Satisfactory Academic Progress

In order to receive financial aid, you must make Satisfactory Academic Progress (SAP) for financial aid purposes as defined by the Financial Aid Office. Our definition of SAP is different from the University's definition of being in good academic standing. Satisfactory Academic Progress (SAP) standards include three elements: 1) maximum time frame within which a degree or certificate must be granted, (2) minimum credit hours earned per academic year, and (3) minimum cumulative grade point average (g.p.a.).

The review of a student's "Satisfactory Academic Progress" (SAP) standing occurs annually at the end of the spring semester. A student's SAP standing will be based on his/her academic performance during the academic year [fall and/or

spring semester(s)]. Students who are not making satisfactory academic progress are typically notified in early summer. A student who is found deficient in one or more components is put on Financial Aid Probation for the next school year. Students on financial aid probation will be eligible to receive federal Title IV financial aid assistance during this probationary period. **Please Note:** Students will not be granted financial aid probation for two consecutive academic years.

If a student is on probation for a year and is found deficient, the student is ineligible to continue to receive financial aid for the next school year. In order to be reinstated, the student must successfully achieve the required grade point average as mandated by the SAP Policy and/or successfully make up his/her credit hour(s) deficiency at his/her own expense. The student may use the summer or any semester of the academic year to resolve their deficiency.

Students who make up their deficiency must complete and return the "Satisfactory Academic Progress Form", along with all required documents, to the Financial Aid Office before clearing their deficiency status. Only successfully earned credits, not grades, are transferable to California from another approved institution.

All Title IV recipients have a right to appeal a financial aid suspension decision by submitting a "SAP Appeal Form" to the Financial Aid Office. Written explanation of the reason(s) why the student failed to meet the Satisfactory Academic Policy Standards must be attached to the appeal form. Appeal forms are available in the Financial Aid Office. The deadline date for filing an appeal is the Students will be notified of a decision within 7 to 10 days after filing the appeal form. If the appeal is denied, a student may file a final appeal to the Director of Financial Aid. This appeal must be filed within 10 working days from the date of the first denial letter.

Grants

About Grants

Grants are considered gift aid and do not have to be repaid. Most grant aid is based on some type of need-based eligibility requirement; therefore, you must complete the FAFSA to apply for most grants. Sources of grants include federal, state, private, and institutional funds. Although grants are a very desirable source of financial aid, the availability of grants is generally limited to the neediest students. For more information about grants and other types of financial aid call 1-800-4-FEDAID and ask for The Student Guide or read it on the Web at **www.ed.gov/prog_info/SFA/StudentGuide/.**

Federal Pell Grants

Federal Pell Grants are awarded based upon the analysis of the FAFSA, cost-of-attendance, and enrollment status (full time or part time). Pell Grants are awarded only to undergraduate students who have not earned a bachelor's degree or professional degree. Pell Grants often provide a foundation of financial aid to which other aid is added for the neediest students.

The United States Department of Education uses a standardized formula, established by Congress and called the Federal Needs Analysis Methodology, to evaluate the information you report on the FAFSA. The formula produces **an Expected Family Contribution (EFC) number.** The EFC number can range from zero to 99,999 or higher. Your Student Aid Report (SAR) contains this number and will tell you if you are eligible for a Pell Grant. You can get a booklet called the EFC Formula Book, which describes how a student's EFC is calculated, by writing to:

Federal Student Aid Programs
P.O. Box 84
Washington, DC 20044

The Pell Grant for 1999-2000 will range from $400 to $3125. The maximum Pell Grant award can change each year based upon Congressional funding levels. However, if you are eligible for a Pell Grant based upon your EFC number, you are guaranteed to receive it. For the 1999-2000 school year, full-time students with EFCs from zero to 2925 qualify for a Pell Grant award. Those with EFCs greater than 2925 are not eligible for a Pell Grant but could be eligible for other types of aid.

Federal Supplemental Educational Opportunity Grants

The Federal Supplemental Educational Opportunity Grant (FSEOG) is for undergraduate students with exceptional financial need, i.e., students with the lowest Expected Family Contributions (EFCs). Preference is given to Pell Grant recipients who file their FAFSA by our first priority deadline of May 1 in order to be considered for this grant; therefore, you should submit your FAFSA by April 1 of the award year. The FSEOG annual award typically ranges from $600 to $1200.

Pennsylvania State Grants

PHEAA Grants provide need-based state grant assistance of up to $3,100 per year. The grant program is funded by the Commonwealth of Pennsylvania and is administered by PHEAA Grant Division. Student receives up to eight full-time semesters of PHEAA Grant assistance or sixteen semesters of part-time assistance.

Eligibility Criteria:
The student must:

- ☑ be a Pennsylvania resident.
- ☑ complete the FAFSA by May 1 each year.
- ☑ be enrolled on a least a half-time basis in a PHEAA-approved undergraduate program of study.
- ☑ be high school graduate or the recipient of a GED.
- ☑ demonstrate academic progress for continued aid.

Athletic Grant-in-Aid

California University of PA is a Division II member of the National Collegiate Athletic Association (NCAA). There are 11 intercollegiate teams for men and women. If you are interested in participating in intercollegiate athletics and possibly obtaining an athletic scholarship, you should contact the head coach of your preferred sport.

Student Employment

About Student Employment

Part-time employment offers you the opportunity to 1) earn part of your educational expenses; 2) gain valuable work experience;

and, 3) work with staff, faculty, and/or community members. Students who work a moderate number of hours per week often are able to manage their time better than those students who do not work at all. Of course, there are many factors you will want to consider when deciding if working is appropriate for you

If you do decide to work on a part-time basis while pursuing your education, California University has two student employment programs, Federal and Institutional Work-Study. In order to establish a reasonable balance between your academic efforts and your work schedule, students typically work eight hours per week during the academic year. Students in both programs are paid the Federal minimum wage.

California University is an Equal Opportunity/Affirmative Action Employer. The Financial Aid Office reaffirms the University's commitment to the policy that there shall be no discrimination against any individual in educational or employment opportunities because of race, color, religion, national origin, sex, status as a disabled veteran or veteran of the Vietnam era, or disability. Also, there shall be no discrimination because of age except in compliance with requirements of retirement plans or state and federal laws and guidelines.

Federal & Institutional Work-Study

Federal Work-Study is a federal financial aid program which allows you to earn money to help pay educational expenses and encourages community service work and work related to your course of study to the extent possible. In order to qualify for Federal Work-Study you must demonstrate sufficient financial need as determined from the results of your FAFSA. In addition, the Financial Aid Office must receive the results of your FAFSA by our first-priority deadline of May 1. If selected to receive a Federal Work-Study award, the FAO will send you an award notice requesting your acceptance or rejection of the award. If you are not awarded Federal Work-Study and you are still interested in working, you are still eligible to apply for an Institutional Work-Study position on campus.

Our Institutional Work-Study Program, which is funded by the University, provides student employment opportunities to enrolled students regardless of financial need or the date your FAFSA is submitted to our office.

Application Procedures

In order to apply for either Federal or the Institutional Work-Study Program, you must complete the FAFSA and mark "yes" to the question on the FAFSA that asks you if you are interested in student employment. A Work-Study Eligibility Card is automatically generated for any student who meets the following criteria:

- ☑ files a FAFSA;
- ☑ is making Satisfactory Academic Progress; and
- ☑ is currently enrolled at least half time.

A "white card" is generated for those students awarded a Federal Work-Study position while a "pink" card is generated for students interested in our Institutional Work-Study Program. Either card authorizes you to interview for a position (federal or institutional) in one of our many on-campus and a number of off-campus employment locations. In addition, a work-study information packet will also be sent to you before the beginning of fall semester.

California University does not assign or place students in positions, but rather our office posts the jobs that are available (both Federal and Institutional). Because the job posting service is centralized, students are assured an equal opportunity to apply for available jobs. Job postings appear on the Job Posting Board located outside the Financial Aid Office in the Azorsky Administration Building. Students are encouraged to check the postings on a daily basis. Jobs are posted when new positions become available and when vacancies occur.

Summer Employment

During summer sessions both part-time (10 hours a week) and full-time (maximum of 300 hours during May-August) employment opportunities are available to qualified students. Students interested in summer employment must complete a FAFSA and a "Summer Work Study Application." You can obtain this application by contacting the Financial Aid Office or clicking on "Forms" at the bottom of our opening webpage.

Payroll Procedures

All students employed by California University must complete the following payroll forms:

1. A Work-Study Eligibility Card signed by the hiring Department.
2. Federal I-9 Employment Authorization Form, which requires both your driver's license and a social security card (or other acceptable documents)
3. W-4 Withholding Form to determine the number of exemptions you are claiming for federal, state, and local income tax withholding purposes
4. Exemption or Personal History Form to determine if retirement will be deducted from your earnings.
5. Payroll Authorization Card.

Most students are paid by check every two weeks for the hours worked the previous two weeks. You pick up your paycheck from the your student employment department. Your earnings are not credited to your account to apply towards your tuition, room and board, and/or other charges although you can use your earnings to make payments yourself. Direct deposit to a bank account is available by contacting the Payroll Office.

Scholarships

About Scholarships

California University of Pennsylvania offers academically talented and creatively gifted students a variety of University and Endowed Scholarship opportunities. Each scholarship has special selection and awarding criteria, which was agreed upon by the University and the scholarship donor (if applicable). In order to streamline the selection process, California University does not use a scholarship application. Rather, all accepted students and currently enrolled students are considered for all possible University scholarships. However, selected applicants for some of the scholarship awards may be required to complete additional information for final determination of the award.

The scholarships offered range from $100 to full-tuition for an academic year. Many of the scholarships are renewable awards based on the student maintaining minimum academic standards and demonstrating financial need, if applicable. The Financial Aid Office or designated selection committee will select the best applicant(s) from the "pool" of students who met the minimum qualifications for the scholarship.

Although most scholarships are awarded solely on academic merit or special talent, some scholarships also require verification of financial need. Therefore, you are strongly encouraged to complete the Free Application for Federal Student Aid (FAFSA) by our priority deadline date of May 1 if you wish to be considered for all scholarship possibilities. If you do not have a FAFSA on file at the time we make our scholarship selections, you will not be considered for any scholarship, which has a need-based requirement to the scholarship?

If you are accepting an awarded scholarship, it means that you agree to abide by any applicable university, federal, and/or state regulations. In addition, you must:

- ☑ be registered for at least 12 credit hours for each semester during the academic year for which you receive a scholarship, and
- ☑ be making Satisfactory Academic Progress (not on financial aid suspension) as defined by the Financial Aid Office.

Scholarship Directory

AAUW Scholarship: The California Branch of the American Association of University Women awards a $400 per year scholarship to a full-time, female upperclassman over 30 who wants to complete her undergraduate degree at the University. The scholarship may be renewed upon maintenance of a 3.00 grade point average. Those interested should contact the Financial Aid Office 724- 938-4415

Alumni Scholarships: Ten renewable scholarships up to $430 are given to freshmen entering with an SAT score of at least 1100, a grade point average of 3.25, and a rank in the first or second tenth of their graduating class. Inquiries should be directed to the Admissions Office 724-938-4404

Colonel Arthur L. Bakewell Veterans Scholarships: Two $ 1,000 scholarships are offered by the Veterans Club to an honorably discharged veteran undergraduate sophomore attending the University full-time with a minimum 3.00 grade point average. Eligible individuals should contact the Veteran Affairs Office 724-938-4076

Gabriel P. Betz Scholarship: This annual scholarship of $1,000 is awarded to a student or students who are juniors majoring in Geography. A departmental scholarship committee announces the award during the fall semester. Interested candidates should contact the Earth Science Department 724- 938-4180

Board of Governors' Scholarships: These scholarships, which waive tuition every semester for four years, are given to 14 entering freshmen with at least a 2.5 grade point average and a combined SAT score of 850. Interested students should contact the Admissions Office 724-938-4404

The Edward McNall Burns Scholarship: This annual $500 scholarship is apportioned to a student or students majoring in Social Science, Economics, or History and Urban Affairs who have completed between 45 and 60 credits at the University. Applicants must submit a signed and dated letter of intent, a recent transcript showing outstanding academic ability, and proof of financial need as determined by the Financial Aid Office. Interested students should contact the Social Science Department 724-938-4042

California Area Chamber of Commerce Scholars Fund: This annual non-renewable $500 scholarship is awarded to a full-time freshman who meets the following criteria: 1) graduated from California High School; 2) ranked in the top two-fifths of their class; 3) have a competitive SAT score; 4) who are active in the community; and 4) demonstrate financial need. Interested students should contact the Chair, University Scholarship Committee 724-938-5863

California PTA Scholarship: The California High School PTA awards a $500 scholarship to a freshman student who has graduated from California High School. The scholarship is based on academic performance and financial need. Applications are available in the California High School's Guidance Office after February 1 each year.

California University of Pennsylvania Faculty Scholarships: The CUP faculty awards a limited number of full-tuition (in-state) scholarships per year to a selected number of freshmen. Minimum qualifications are: 1) admission as a full-time student at California University of Pennsylvania; 2) a combined SAT score above 1200; and 3) rank in the upper 10% of their high school graduating class. Inquiries should be directed to the Chair, University Scholarship Committee 724-938-5863

Charles and Mary Coen Scholarship: This annual non-renewable $605 scholarship is awarded to a junior who resides in Washington County. Selection is based on scholastic achievement and financial need. The Financial Aid Office will select the recipient of this award.

J. Robert Craig Scholarship: A $500 first-semester scholarship is awarded to an incoming freshman or transfer student exhibiting excellence in the natural sciences. A letter of recommendation from the applicant's science teacher must verify proof of this ability. Interested freshmen should contact the Educational Studies Department 724-938-4140) or the Physical Sciences Department 724-938-4147

Pete J. Daley II Government Scholarship: This $250 scholarship is awarded each semester to a deserving student majoring in Political Science who resides in the 49th Legislative District. The scholarship is based on academic performance and financial need. Inquiries regarding this scholarship should be directed to the Financial Aid Office 724-938-4415

James T. & Martha E. Davis Scholarship: This annual non-renewable $1000 scholarship is awarded to an academically talented junior who demonstrates financial need and resides in one of the following Pennsylvania counties: Fayette, Greene, Washington, or Westmoreland. The Scholarship Committee will select the recipient of this award.

Earth Science Faculty Scholarship: This $500 scholarship is awarded to a student majoring in Earth Science, Geography, or Geology. The applicant must have a minimum 3.00 grade point average in their major. The award is made at the end of the student's junior year. Those interested should contact the Earth Sciences Department 724-938-4180

Eberly Family Scholarships: These renewable scholarships are awarded to freshmen that have demonstrated academic promise and reside in Fayette County. The scholarship value is up to full tuition for an academic year. Each recipient must maintain sufficient academic progress to continue receiving the award. Interested students should contact the Admissions Office 724-938-4404

Dr. Calvin Fleming Scholarship: A $1000 scholarship is awarded to an outstanding student in the Natural or Physical Sciences with a preferred composite SAT score of 1200. Inquiries should be directed to the Chair, University Scholarship Committee 724-938-5863

Kenny Hager Memorial Scholarship for Graphic Communications: This non-renewable scholarship is awarded to a student majoring in Graphic Communications, who has completed at least 64 credits, has a minimum grade point average of 3.00, and demonstrates financial need. Interested students should contact the Industry and Technology Department 724-938-4085

The David W. Hambacher Scholarship: A $500 scholarship is awarded to a senior who is attending graduate school, who has a 3.0 g.p.a. or greater, demonstrates community service, and financial need. Those interested should contact the Psychology Department 724-938-4100

Majorie Henshaw Holman Award: This annual non-renewable $500 scholarship is awarded to a full-time freshman who meets the following criteria: 1) majoring in elementary education; 2) have a g.p.a of 3.0 or higher; and 3) be a graduate of Uniontown High School. Interested

students should contact the Chair, University Scholarship Committee 724-938-5863

Oren Holman Scholarship: This annual scholarship is awarded to undergraduate students based on academic achievement and financial need. Inquiries regarding this scholarship should be directed to the Financial Aid Office 724-938-4415

Delila C. Jenkins Scholarships: These renewable scholarships are awarded to freshmen Education majors demonstrating financial need. The scholarship value is up to full tuition for an academic year. Each recipient must maintain satisfactory academic progress in order to continue receiving the award. Applicants must submit the "Free Application for Federal Student Aid" to be considered. Those interested should contact the Admissions Office 724- 938-4404

Rotary District #733 Charles C. Keller Endowment Fund Scholarship: This annual scholarship is awarded to a student based on academic achievement and financial need. Priority is given to a student whose parents, grandparents were Rotarians from District #733, or to the student who participated in Rotary youth-related programs such as Interact, Rotaract, or youth exchange. If no applicant meets either of the Rotarian criteria, priority consideration will then be given to non-traditional students. Inquiries regarding this scholarship should be directed to the Financial Aid Office 724-938-4415

Michael Keller Scholarship: This annual non-renewable scholarship is awarded to a non-traditional student who is at least 30 years old. This scholarship is based on academic performance (minimum 3.0 g.p.a.) and financial need. Interested students should contact the Office of Lifelong Learning 724-938-5840

Paul J. Killius Jr. Special Education Scholarship: This annual scholarship of $900 is awarded to a freshman student majoring in Special Education who resides in the local area of the University and demonstrates financial need. Interested students should contact the Foundation Office 724-938-4553

Joseph A. Main AFGE/UMWA Scholarship: This annual $550 scholarship is awarded to an academically talented and financially needy undergraduate. Preference will be given to students born and raised in the following Pennsylvania counties: Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Washington or Westmoreland. Interested candidates can request an application from the Foundation or from AFGE Local 1916, located in Bruceton, PA.

Debra Maley Scholarship: This annual renewable scholarship is awarded to a freshman from Bentworth High School. The scholarship is based on academic performance and financial need. The Financial Aid Office will select the recipient of this award.

Donald Maley Technology Education Scholarship: This annual scholarship of $1000 is awarded to an incoming freshman majoring in Technology Education. Selection is based on scholastic achievements and financial need. Interested students should contact the Chairperson of the Maley Scholarship Committee 724-938-4085) for an application and additional information.

Albina R. Malpezzi Memorial Scholarship: This non-renewable scholarship of $750 is awarded to a female student enrolled in the College of Liberal Arts, who has completed at least 64 credits but not more than 96 credits, has a minimum grade point average of 3.25, and demonstrates financial need. Interested students should contact the Chair, University Scholarship Committee 724-938-5863

Joseph Lynn Marino Memorial Award: An award of $200 to $500 is granted each semester to a full-time undergraduate with a 3.50 overall grade point average. The applicant must be enrolled in the College of Liberal Arts and must have completed six credits in Anthropology. Those interested should contact the Chair, University Scholarship Committee 724-938-5863

Minor Major Memorial Award: This annual award (currently $350) is given to a scholastically outstanding student in any of the English curricula. There is no application. Those interested should contact the English Department 724-938-4070

Minority Scholarship: This annual non-renewable scholarship is awarded to a deserving minority student. Interested students should contact the Director of the Women's Center/Disabled Student Services 724-938-5857

Mon Valley NAACP Scholarship: A $600 renewable scholarship is awarded to a freshman who graduated from one of the following school districts: Charleroi, Belle Vernon, Ringgold, Monessen, Yough, California, or Bentworth. Nominations must be made by the school district. Minimum qualifications are: 1) a combined Sat score of 750 or ACT score of 19; 2) rank in the upper 25% of the high school graduating class; 3) attained at least a 2.50 cumulative grade point average; 4) demonstrate financial need beyond other financial aid grant programs; 5) an Afro-American high school senior; and 6) admission as a full-time student at California University. Those interested should contact the Admissions Office 724-938-4404

Elmo Natali Endowment Fund: This annual scholarship is awarded to a deserving student who is a member of the California University Football Team. Interested students should contact the Athletic Department 724- 938-4019

Kurt Nordstrom Memorial Scholarship: This scholarship is awarded each semester to a student majoring in Printing Management. A departmental committee announces its decision each semester. Interested students should contact the Industry and Technology Department 724-938-4085

Mary Noss Freshmen Scholarships: A $750 non-renewable scholarship is awarded to an incoming freshman from each of Washington County's fourteen public schools. The recipients, chosen by a committee in each high school, must attend the University full-time in order to receive the award. Eligible applicants should contact their guidance counselor.

Walter Radishek Outstanding Future Teacher Award: This $750 non-renewable scholarship is awarded to a scholastically outstanding senior education major that has completed student teaching. Inquiries should be directed to the College of Education at 724-938-4125

Rudez-Pezo Scholarship Fund: This annual $550 scholarship is awarded to an academically talented and financially needy undergraduate. First preference will be given to students majoring in the College of Education and Human Services. If no appropriate candidate is selected from that College, it will be open to students enrolled in the Eberly College of Science and Technology. Interested candidates should contact the Chair, University Scholarship Committee 724-938-5863

Elsbeth E. Santee Scholarship: Awarded to an outstanding student majoring in one or more of the Foreign Languages. Minimum qualifications are a 3.00 grade point average in the Foreign Language Major(s) and at least two completed courses in the Foreign Languages. Inquiries should be directed to the Foreign Languages Department 724-938-4246

Shaltenbrand/Westerwald Pottery Scholarship: This $550 per year, non-renewable scholarship is awarded to an incoming freshman that graduated in the upper 10% of his/her class. This scholarship is awarded first to anyone from the following counties: Allegheny, Fayette, Greene, Washington, or Westmoreland; and second to a Pennsylvania resident. Interested students should contact the Financial Aid Office at 724-938-4415

Charles W. Slick Football Scholarship: This annual scholarship is awarded to a deserving student who is a member of the California University Football Team. The scholarship is awarded based on academic performance and good citizenship qualities. Interested students should contact the Athletic Department 724-938-4019

John K. Thornburgh Honors Scholarship: This annual renewable $200 scholarship is awarded to a full-time undergraduate student who meets the following criteria: 1) enrolled in the University Honors

Program; 2) achieves a 1200 SAT or higher; and 3) have at least a 3.75 g.p.a.. Interested students should contact the Chair, University Scholarship Committee 724-938-5863

Tsolepis Football Scholarship: This annual scholarship is awarded to a freshman or upper-class student from Aliquippa High School who is a member of the California University Football Team. Interested students should contact the Athletic Department 724-938-4019

Undergraduate Assistantships: Ten $1,000 renewable scholarships are awarded to outstanding first-time freshmen entering on a full-time basis. Minimum qualifications are a 3.25 grade point average and a combined SAT score of 1100. Interested students should contact the Admissions Office 724-938-4404

Welsh Scholarship: This annual $600 scholarship is awarded to an Education major who has completed at least 96 credits, has a minimum grade point average of 3.00, and demonstrates financial need. The Dean of the College of Education and Human Services chooses the recipient. Inquiries should be directed to the College of Education and Human Services 724-938-4125

Electronic Scholarship Search Engines

The Financial Aid Office staff is frequently asked the following questions:

- "Which awards made by California University might I qualify to receive?"
- "Are there other scholarships I should pursue?"
- "If so, where can I get a listing of them and then obtain an application?"

We trust that the links provided below will assist you in your search.

FastWEB www.fastweb.com
is the largest and most complete scholarship search on the Internet. It provides access to a searchable database of more than 400,000 private sector scholarships, fellowships, grants, and student loans available to students.

MACH 25 www.mach25.com
is a simple and fast scholarship resource locator. Students develop a profile of themselves to locate scholarships that best match their qualifications.

We also encourage you to visit the University's Financial Aid Office homepage at **www.cup.edu/financial_aid.**

Loans

About Loans

Student loans are a major source of financial aid for many students. All loans, including student loans, represent debts that must be repaid; however, most student loans do not go in to repayment until after you leave school or graduate. In addition to delayed repayment, most student loans have relatively low interest rates, several repayment options from which to choose, circumstances under which you can postpone repayment, and other favorable terms and conditions. Student loans can be thought of as an investment in your future as long as you are prepared to meet your repayment responsibilities. Failure to repay your student loans will have serious adverse consequences.

It is true that most students would prefer not to borrow; but student loans represent the largest source of financial aid assistance available to students today. Building a budget is one of the most important aspects of student loan borrowing. When borrowing, it is important to carefully plan your budget so that you only borrow what you need, keep track of the total amount borrowed each year, and have some idea as to how you will pay your loans back when the time comes. The Loan Estimator and Repayment Calculator are two electronic tools that can help you with this task. These are available at **www.salliemae.com.** In addition, the Career Services Office can provide you with information concerning entry level salaries in most fields.

At California University, the federal government funds nearly 95% of all loans processed. Over 50% of all financial aid awarded at California University comes from the Federal Stafford Loan Programs.

Federal Family Educational Loan Programs (FFELP)

In order to apply for any type of FFELP (subsidized, unsubsidized, and/or a PLUS loan), you must complete the Free Application for Federal Student Aid (FAFSA) or the Renewal FAFSA for the appropriate school year and meet all general student eligibility requirements necessary to receive federal financial aid.

In addition, you can receive a loan if you are a regular student (must be admitted to California University as a degree seeking student; non-degree students are not eligible), enrolled in an eligible program of study, and attending at least half-time each term. Half-time enrollment is defined as six hours for undergraduate students and five graduate hours for graduate students.

Federal Stafford Loan Program (Subsidized/Unsubsidized)

The Federal Stafford Loan that you, the student, can borrow in your own name can be either subsidized or unsubsidized or a combination of both. In order to qualify for a subsidized loan, you must have financial need. To determine if you have financial need, your Expected Family Contribution, which is determined by the results of your FAFSA, is subtracted from the cost-of-education. Also, any other aid that you are receiving or expected to receive is subtracted from the cost-of-education to determine if you have any remaining financial need in order to qualify for a Federal Subsidized Loan. If you do qualify for a subsidized loan, the federal government pays the interest on the loan, i.e., subsidizes the loan, while you are in school, during your six month grace period prior to repayment and during any authorized period of deferment.

Students without financial need are eligible for the Federal Stafford Unsubsidized Loan. This means that you will be responsible for the interest on the loan from the time you receive the funds until the loan is paid in full. You have the option of allowing the interest to accumulate, or accrue, on the loan while you are in school and during your six-month grace period before repayment. You also have the option of paying

the interest on the loan as it accumulates. If you decide to delay interest repayment, the interest that accumulates will be "capitalized", that is, will be added to your loan principal when you begin repayment. This means your total loan principal will increase. It is better to pay the interest, if you can, because you will save money in the end. However, not all students can afford to pay the interest while still in school and that is why you have the option of letting the interest accumulate.

How much you can borrow in a subsidized and/or unsubsidized loan depends upon several factors including your grade level in school and your dependency status for financial aid purposes.

Stafford Loan Borrowing Chart

Grade Level	Annual Amount *
Freshman	Up to $2,625
Sophomore	Up to $3,500
Junior/Senior	Up to $5,500
Graduate	Up to $8,500

* - combined total of Subsidized & Unsubsidized
Please Note: Independent students and dependent students, whose parents cannot obtain a PLUS Loan, may increase their "Unsubsidized" Stafford Loan limit by the following amounts:

Grade Level	Annual Amount
Freshman/ Sophomore	Up to $4,000
Junior/Senior	Up to $5,000
Graduate	Up to $10,000

The interest rate on your Federal Stafford Subsidized or Unsubsidized Loan is variable, which means that the interest rate could change each year of repayment but will never exceed the cap of 8.25 percent. The interest rate is adjusted each July 1. A two or three percent fee is deducted proportionately from each disbursement of your student loan. This fee is kept by the federal government to help reduce the cost of the loans.

Federal Plus Loan

The Federal Parent Loan for Undergraduate Student (PLUS) is a loan for the natural parent, adoptive parent, or legal guardian of a dependent undergraduate student. In certain circumstances, a stepparent may be eligible to borrow. The first step in applying is to complete the Free Application for Federal Student Aid (FAFSA) for the appropriate year. The maximum PLUS Loan a parent can borrow is the difference between the cost of education and any other financial aid.

A parent can obtain a PLUS Loan application from a lender or the Financial Aid Office. The PLUS Loan application is then submitted to the lender. The lender and/or servicer does a credit check on the parent borrower. The parent borrower must have a good credit history in order to be able to borrow a PLUS Loan. If the parent borrower does not pass the credit check, the loan may be denied outright or the parent may be offered the option of obtaining a creditworthy endorser. The endorser would have to be able to pass the credit check, agree to endorse the Promissory Note, and agree to repay the loan if your parent would fail to do so.
If your parent is denied a PLUS Loan outright or does not have someone who is willing to be the endorser if offered that option, then you are eligible to borrow an unsubsidized loan in your own name. Freshmen and sophomores (0 to 64 hours) can borrow up to $4000 and juniors and seniors (96 or more hours) can borrow up to $5000.

The PLUS Loan interest rate is variable, but it will never exceed its cap of nine percent. The interest rate is adjusted each July 1. A three or four percent loan fee will be deducted from each disbursement. The loan fee is kept by the federal government to help reduce the costs of loans.

The PLUS Loan goes in to repayment within 60 days of the final loan disbursement for the school year. Your parent can choose the Standard, Extended, or Graduated Repayment Plan. (PLUS Loans do not have a delayed repayment option as do subsidized and unsubsidized loans.) There is no grace period on a PLUS Loan so interest begins to accumulate at the time the first disbursement is made. Your parent must begin repaying both principal and interest while you are in school.

Federal Perkins Loan

The Federal Perkins Loan (formerly called the National Defense and National Direct Student Loan) is a federally funded low-interest loan. California University is the lender using funds from the federal government and/or payments collected from previous borrowers. The interest rate on the Perkins Loan is five percent, and repayment starts nine months after you leave school or graduate.

In order to apply for the Perkins Loan, you must complete the Free Application for Federal Student Aid (FAFSA) or the Renewal FAFSA for the appropriate school year. California University must receive the results of your FAFSA by our first-priority deadline of May 1. You will need to submit your FAFSA by April 1 to allow time for processing to meet this deadline. In addition, you must have financial need in order to qualify for a Perkins Loan. In general, California University makes Perkins Loans that range from $1500 to $2500 per school year to be disbursed in equal semester payments, i.e., $750 and $1250 per semester, for two semesters, respectfully.

If you are awarded and do not decline your Perkins Loan, you will be sent a Perkins Loan packet which contains a Promissory Note, Statement of Rights & Responsibilities, and Repayment Chart to complete. You must complete and return these forms to the Bursar's Office in order to finalize receipt of your Perkins Loan.

When you graduate (or leave school for other reasons), you must complete a Perkins Loan Exit Interview. This Exit Interview will give you more information about your repayment options, deferments, cancellation provisions, etc. You will be mailed a Perkins Loan Exit Interview Packet the quarter you apply for graduation. You must complete and return the forms in the packet in order to meet your Exit Interview requirement. Failure to do so will result in a "HOLD" being placed on your grades, diploma, etc. If you are leaving school for other reasons, such as transferring to a different school, you should contact the Bursar's Office at 724-938-4431 to make arrangements to complete your Perkins Loan Exit Interview.

Application Process (Master Promissory Note)

Step 1: File the electronic or paper version of the FAFSA.

Step 2: In most cases, California University will pre-certify your loan eligibility for a Federal Stafford Loan before you file an Federal Stafford Master Promissory Note (MPN). PHEAA (the state guaranty agency) will send you a pre-printed MPN indicating your maximum loan eligibility (subsidized and/or unsubsidized) as determined by our office. The Financial Aid Office will base your Stafford Loan eligibility on your grade level, financial need, and annual and aggregate loan borrowing. However, the student's loan amount cannot exceed the student's annual loan limit under the Stafford Loan Program (see "Stafford Loan Borrowing Chart" listed below).

Step 3: Complete the borrower section of the MPN. Please be sure that all questions are complete and that the student signs and dates the MPN.

Step 4: Submit the completed MPN to PHEAA Loan Division. If applying for a Stafford Loan through an non-PHEAA-approved lender, submit the MPN to the Financial Aid Office at California University.

Step 5: Once the Financial Aid Office has certified the MPN, the lender will authorize the disbursement of loan proceeds (Electronic Funds Transfer [EFT] or check) at the appropriate time. The lender will send a "Disclosure Statement" informing the student of the amount, type, and expected disbursement date of the loan proceeds. In addition, the disclosure statement will give the student the opportunity to cancel or reduce the amount of the Stafford Loan. Finally, all first-time Stafford Loan borrowers are required to complete an *"Entrance Interview"* before loan proceeds can be disbursed.

Disbursement of Financial Aid

Crediting Financial Aid to a Student's Account

In general, once a student's financial aid award(s) has been finalized (all requested forms received, verification completed, enrollment verified, and default status reviewed), the student's semester award amount(s) (except Federal Stafford Loans and Federal College Work-Study) will be credited to his/her account beginning with the second week of the semester. Federal Stafford Loans will also be credited to a student's account once loan proceeds have been received and appropriate authorization (endorsement of loan check or a signed EFT authorization form) has been secured and all other eligibility criteria have been satisfied. Federal College Work-Study funds are disbursed bi-weekly to the student in the form of a payroll check based on the number of hours worked during the pay period. **Please Note:** Federal regulations prevent the delivery of the first disbursement of Federal Stafford Loan proceeds to first-year, first-time borrowers until thirty days after the first day of classes.

How Registration Affects Financial Aid Eligibility

Federal regulations and institutional guidelines require students to be registered before any financial aid monies can be disbursed. In addition, all federal and state financial aid programs specify minimum enrollment requirements in order for a student to receive any (maximum or partial) assistance from these programs. These minimum enrollment requirements are broken into four enrollment classifications: full-time, three-quarter-time, half-time, and less-than-half-time. The chart below indicates the number of credits used to determine a student's enrollment status. Listed below is an eligibility chart that defines the credit hour requirements for each of the five federal aid and PHEAA Grant programs, as well as the percentage of the maximum award a student may qualify for under all four enrollment classifications.

Determining Award Eligibility Based On Enrollment Status

Please Note: Federal and state financial aid awards may be adjusted according to this chart for any student whose enrollment status (as defined above) changes before 60% of the enrollment period, e.g., fall or spring semester, or a special summer session, has elapsed. This would occur when a student drops a class(es) or withdrawals from the university.

Financial Aid Refunds

Financial aid which exceeds the amount the student owes to the university (direct costs) will be disbursed to the student in the form of a refund check to cover indirect educational costs such as books and supplies, off campus housing and transportation. These refunds will be available starting with the second week of the semester for Stafford Loan refunds and all other student financial aid refunds if the student has satisfied the eligibility requirements for each award. **Please Note:** Even though refund checks will be available starting the first week of the semester, a financial aid refund check could be delayed if one or more of the following statements is true:

1) Student is a first year, first time borrower (Stafford refund only);
2) Student's federal and/or state aid has not been finalized;

3) Student's loan application was filed late;

4) The loan application or the "Free Application for Federal Student Aid" (FAFSA) is delayed at the processor (federal student aid program, guarantee agency/lender) due to missing or incorrect information.

Financial Planning

Students planning to attend California University of Pennsylvania should be aware that the cash from many of the financial aid programs is not available until the second week of the semester for which the funds are intended. Students should plan to come to the university with enough personal money for early term purchases (books, materials, art supplies, etc.) without depending upon financial aid funds.

Maintaining Financial Aid Eligibility

Satisfactory Academic Progress Policy

Federal regulations require all institutions that administer Title IV student assistance programs to monitor the academic progress toward a degree or certificate of those students applying for or receiving assistance from those programs. All California University students applying for Title IV federal assistance must meet the standards stated in this policy, regardless of whether or not they previously received aid. The

financial aid programs governed by these regulations are as follows:

Federal Pell Grant
Federal Supplemental Educational Opportunity Grant (SEOG)
Federal Perkins Loan
Federal Stafford Loan (Subsidized/Unsubsidized)
Federal Plus Loan
Federal Work-Study

Satisfactory Academic Progress (SAP) standards include three elements:
1) maximum time frame within which a degree or certificate must be granted,
2) minimum credit hours earned per academic year, and
3) minimum cumulative grade point average (g.p.a.).

Review Period

The review of a student's "Satisfactory Academic Progress" (SAP) standing occurs annually at the end of the spring semester. A student's SAP standing will be based on his/her academic performance during the academic year [fall and/or spring semester(s)]. Students who are not making satisfactory academic progress are typically notified in early summer.

Maximum Time Frame

Maximum time frame is defined as the required length of time it will take a student to complete a degree program based on the appropriate enrollment status (full-time, three-quarter time, or half-time). For a student to remain eligible for federal aid, the student must conform to the following time frame for completion of a degree:

Associate Degree

Enrollment Status	Number of Eligible Semesters
Full-time (12 or more credits)	6 semesters
Three-quarter time (9 to 11 credits)	9 semesters
Half-time (6 to 8 credits)	12 semesters

Bachelor Degree

Enrollment Status	Number of Eligible Semesters
Full-time (12 or more credits)	11 semesters
Three-quarter time (9 to 11 credits)	16 semesters
Half-time (6 to 8 credits)	22 semesters

Minimum Earned Credit Hours

In order to monitor a student's progress toward completing a degree in a prescribed amount of time, a measure of annual progress has been established. The minimum earned credit hours component requires student aid applicants and recipients to successfully earn a minimum number of credit hours per year based on a student's enrollment status. A student must meet the following earned credit hour standards based on his/her enrollment status:

Enrollment Status*	Total Earned Credits per Year
Full-time (12 or more credits)	24 credits
Three-quarter time (9 to 11 credits)	18 credits
Half-time (6 to 8 credits)	12 credits

** Assumes a student's enrollment status (full-time, three-quarter time, or half-time) remained constant throughout the academic year. The minimum earned credit hours standard listed above will differ if the student's enrollment status varies throughout the academic year.*

Minimum Cumulative Grade Point Average

Each semester the university reviews the "grade point average" (g.p.a.) of each student in order to determine whether the student is maintaining "good academic standing". The university has established minimum grade point averages that students must maintain in order to achieve "good academic standing". Listed below are the minimum grade point averages for each class level:

Freshman 1.75 Junior 1.95
Sophomore 1.85* Senior 2.00

**Students pursuing an Associate Degree must have a 2.0 g.p.a. in order to graduate..*

A student who fails to meet minimum academic standards (required g.p.a), as defined by the university, will be placed on academic probation status for one semester. Students are eligible to receive financial aid during the probation semester(s). At the end of the probation semester(s), a student **must:**

(1) achieve the required minimum grade point average (student is removed from academic probation); or
(2) achieve at least a 2.0 grade point average during the probationary semester (if this requirement is met, the student will continue on academic probation).

A student who is unsuccessful in attaining either one of these levels of academic performance will be academically dismissed from the university. Students who are academically dismissed are considered ineligible for Title IV federal aid. However, a student who is academically dismissed and is approved for re-admission (through the university's PASS Program only) will be placed on "financial aid probation." During financial aid probation a student is eligible to receive Title IV federal aid (see "Financial Aid Probation" section for additional information).

Special Grades

I (Incomplete): An incomplete grade does not earn credit or influence the grade point average in the semester in which the course work was taken. If an incomplete has been resolved and the student has earned a passing grade, the credit and grade will be counted toward satisfying the minimum credit hour standards and grade point average requirements.

W (Withdrawal): All withdrawal categories do not earn credit(s) toward graduation or toward satisfying the credit requirements of the SAP Policy.

P (Pass): If this grade is awarded, the credits apply toward graduation and toward satisfying the minimum earned credit hour standards, but will not impact a student's grade point average.

Repeated Courses: For a course that has been repeated, only the last grade earned is used in calculating the grade point average and the credits are awarded only for the semester in which it was repeated. However, each time a student enrolls in a course, the course is counted as part of the maximum time frame.

Military Transfer Credits

In most cases, military training and/or service school experience credits can be counted in the total credit hours earned by a student for satisfying the minimum credit hour progression requirement. However, the military training and/or service school experience will only be used in satisfying the minimum earned credit hour requirement during the student's first year of attendance at California University.

PHEAA Grant Progress Standard

Even though the PHEAA Grant is a non-Title IV aid program, the satisfactory academic progress requirements for this program are similar to the federal policy. For students to remain eligible for a PHEAA Grant, he/she must meet the following minimum earned credit hour standard after every two semesters of state grant assistance:

Enrollment Status*	Total Earned Credits per Year
Full-time (12 or more credits)	24 credits
Part-time (6 to 11 credits)	12 credits

For PHEAA Grant purposes, the repeated course(s) can be counted only once in meeting the 12 or 24 credit hour test.
Please Note: A student can only receive a maximum of 8 full-time or 16 part-time semesters of PHEAA Grant assistance.

Financial Aid Probation

If a student fails to achieve the Satisfactory Academic Progress Standards during the review period as outlined in this policy, the student will be placed on financial aid probation. Students who fail to meet progress standards should refer to the "Financial Aid Suspension" section listed
below. Students will remain on financial aid probation for the next award year and will be eligible to receive federal Title IV financial aid assistance during this probationary period.

Please Note: Students will not be granted financial aid probation for two consecutive academic years.

Financial Aid Suspension

If a student fails to achieve the minimum earned credit hour standard and/or the minimum grade point average upon the conclusion of a student's financial aid probationary period, the student will be placed on financial aid suspension. Students placed on financial aid suspension (progress) will become ineligible for future Title IV assistance until the student's SAP deficiency is resolved.

Eligibility for Reinstatement

In order to be reinstated, the student must successfully achieve the required grade point average as mandated by the SAP Policy and/or successfully make up his/her credit hour(s) deficiency at his/her own expense. The student may use the summer or any semester of the academic year to eliminate his/her deficiency. Students may take course work at another college or university to resolve the minimum credit-hour deficiency, provided that the credits earned at that institution are transferable to California University and the student's college dean or appointed designee has authorized the transient course work. Students who make up their credit-hour deficiency at an institution other than California University must have a Financial Aid Transcript sent to the Financial Aid Office.

Students who make up their deficiency must complete and return the Satisfactory Academic Progress Form, along with all required documents, to the Financial Aid Office before their deficiency status can be cleared.

Please Note: Only successfully earned credits, not grades, are transferable back to California from another approved institution. Students can only improve their grade point average by taking and successfully completing course work at California University.

Appeal Procedures

All Title IV recipients have a right to appeal a financial aid suspension decision by submitting a "SAP Appeal Form" to the Financial Aid Office with a written explanation of the reason(s) the student failed to meet the Satisfactory Academic Policy Standards. Appeal forms are available in the Financial Aid Office. The deadline date for filing an appeal is the third week of classes in any semester that the student is applying for financial aid. Students will be officially notified within 7 to 10 days after filing the appeal form. If the appeal is denied, final appeal must be made to the Director of Financial Aid within 10 working days of the date of the denial letter.

Refund/Repayment Policies

Definition of "Refund"

The term "refund" is defined as financial aid and/or cash payments minus the amount retained by the institution for the student's actual period of enrollment. Any student who withdraws from the university may be eligible for a refund of university charges, according to the published refund policy. However, a student who receives financial aid and withdraws from the university may be required to refund all or a portion of the financial aid awards to the appropriate financial aid program(s).

University Refund Policies

Official withdrawal from the university may entitle the student to a refund of university fees. The amount of the refund of university fees will be based on one of two refund policies: Pro-Rata or Federal Policy. The student's enrollment status at the time of withdrawal from the university will determine which refund policy will be used. Listed below is the definition of each policy and appropriate schedule.

Definition of Pro-Rata Refund Policy

This refund policy applies to any student who meets the following criteria:

- receives federal financial aid;
- attends the university for the first time;

- and withdraws on or before the 60 percent point of the enrollment period.

Students who meet all three criteria will be assessed university charges (tuition and fees, room and board, etc.) equal to the portion of the enrollment period completed.

Schedule of Pro-Rata Refunds

If the student withdraws:	Refund
Prior to the second day of classes	100%
First 10% (in time) of the enrollment period	90%
First 20% (in time) of the enrollment period	80%
First 30% (in time) of the enrollment period	70%
First 40% (in time) of the enrollment period	60%
First 50% (in time) of the enrollment period	50%
First 60% (in time) of the enrollment period	40%
After the 60% (in time) of the enrollment period	0%

Definition of Federal Refund Policy (University Refund Policy)

This refund policy applies to any student who withdraws after their first semester of attendance at California University. Students who meet this basic criteria will have their university charges calculated according to the following schedule:

Schedule of Federal Refunds

If the student withdraws during:	Refund
First 10% (in time) of the enrollment period	90%
11% to 25% (in time) of the enrollment period	50%
26% to 50% (in time) of the enrollment period	25%
After 50% (in time) of the enrollment period	0%

NOTE: Federal regulations require the university to use the refund policy (Pro Rata or Federal) that provides the largest refund to the federal aid program(s). Therefore, both the formulas are applicable in determining a refund for a federal aid recipient who withdraws during his/her first semester of attendance.

Distribution Policy

If it is determined that a portion of a student's eligible refund of university charges consists of student financial aid, the Federal Government requires that aid be returned to the financial aid program(s) in the following priority order:

1) Federal Unsubsidized Stafford Loan
2) Federal Subsidized Stafford Loan
3) Federal PLUS Loan
4) Federal Perkins Loan
5) Federal Pell Grant
6) Federal SEOG
7) Other Title IV Aid Programs
8) Other Federal, State, Private, or Institutional Aid Programs
9) The Student

Repayment Policy

Definition of "Repayment"

Repayment is defined as the amount a student must repay of student financial aid that is given directly to the student as a cash disbursement to cover non-institutional costs.

Repayment Procedures

A student who withdraws and receives a cash disbursement of student financial aid for non-institutional charges may be required to pay all or a portion of the student financial aid to the appropriate financial aid program(s). The following policies are used in determining the amount to be repaid by the student, if any:

1. Non-institutional housing/board costs are pro-rated based on the remaining months in the semester.
2. One half of the academic year allowance for books, supplies and personal/miscellaneous expenses is considered to be expended when a student begins classes.
3. Transportation costs are pro-rated based on the remaining weeks in the semester.
4. Once pro-rated expenses are determined for that semester, the institution will subtract this amount from the total cash disbursed to the student for the payment period. If it is determined that a repayment is necessary, the appropriate program will be refunded and the student will be billed.

Note: If the repayment owed is $100 or less, the student will not be billed.

Distribution Policy

If it is determined that a student is required to repay all or a portion of the student financial aid disbursed to him/her, the Federal Government requires that it be returned to the appropriate program(s) in the following priority order:

1. Federal Perkins Loan
2. Federal Pell Grant
3. Federal SEOG
4. Other Title IV Aid Programs
5. Other Federal, State, Private, or Institutional Aid Programs

Financial Aid Glossary

1040 Form, 1040A Form, 1040E Form: The Federal Income Tax Return that is required to be filed by each person who received income during the previous year.

Academic Year: The period of time school is in session, consisting of 30 weeks of instruction.

Appeal: An appeal is a formal request made by the student to have a financial aid administrator review a student's unusual circumstances which may affect the student's aid eligibility (i.e., death of a parent, unemployment, etc.)

Award Letter: An official letter issued by the Financial Aid Office that lists the financial aid awarded to the student. Students are required to check the award(s) they wish to receive, sign the award letter, and return it to the Financial Aid Office.

Bursar's Office: The Bursar's Office is the university office responsible for the billing and collection of university charges, receives loan proceeds and issues refund checks.

Campus-Based Aid Programs: There are three financial aid programs funded by the Federal Government but administered by the school, using Federal Guidelines. These programs are the Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Perkins Loan Program, and the Federal Work-Study Program.

College Work-Study: College Work-Study is a part-time job for undergraduate students. This is often referred to as the Federal Work-Study Program.

Commuter Student: A student who resides at home and commutes to school daily.

Cost of Attendance: The Cost of Attendance (COA), also known as

the cost of education or "budget", is the total amount used to calculate a student's aid eligibility. This amount includes tuition and fees, room and board, allowances for books and supplies, transportation, and personal and incidental expenses.

Custodial Parent: In the event a student's parents are separated or divorced, the custodial parent is the one who is providing more than 1/2 of the student's support. If both parents provide equal support, then the Custodial Parent is designated by the one with whom the student lived the most during the past 12 months.

Dependent Student: A student who is 23 years old or younger and is supported by their parents. A parent refusing to provide support for their child's education is not sufficient for the child to be declared independent.

Disbursement: Disbursement is the release of loan proceeds to the school for delivery to the borrower.

Disclosure Statement: The disclosure statement is a statement from the lending institution that provides the borrower with information regarding the approval amount of the loan, interest rate, origination and insurance fees, and any other finance charges incurred.

Electronic Funds Transfer: Used by most lenders to wire funds for Stafford Loan proceeds directly to participating schools without requiring a check for the student to endorse.

Enrollment Status: Indication of total credits scheduled for an enrollment period. For financial aid purposes, you must be enrolled at least half-time to receive aid.

Expected Family Contribution (EFC): The Expected Family Contribution is the amount of money that the family is expected to contribute to the student's education. This is based on the Federal Methodology need analysis formula dictated by Congress.

Financial Aid Transcript: The Financial Aid Transcript is a record of any federal aid received by the student at each post-secondary school attended.

Financial Aid Package: This includes any aid such as grants, scholarships, loans, and work-study offered to the student to assist in the funding of their education.

Free Application for Federal Student Aid (FAFSA): The FAFSA is used to apply for all need-based aid. The information contained within this document is used to calculate all financial aid for the student.

Gift Aid: Gift aid is financial aid which is not repaid, such as scholarships and grants.

Grant: Type of financial aid based on financial need that a student does not repay.

Independent Student: An independent student must meet at least one of the following criterion:
- Age 24 or older.
- Veteran of the U.S. Armed Forces
- Enrolled in a graduate or professional program beyond a bachelor's degree
- Married
- Orphan or ward of the court, or a ward of the court until age 18
- Legal dependents other than spouse for which you are responsible

Loan: Loans are borrowed money that a student must repay with interest.

Need: The difference between the Cost of Attendance and the Expected Family Contribution is known as financial need.

Pell Grant: A Pell Grant is a federal need-based grant.

Scholarship: A scholarship is gift aid which is not repaid.

Stafford Loan: A Stafford Loan comes in two forms, Unsubsidized and subsidized. Students are required to pay interest on an Unsubsidized loan; whereas, the government pays the interest on a subsidized loan while the student is in school, during the six-month grace period, and during any deferment periods.

Subsidized Loan: A subsidized loan is a loan which the government pays the interest on the loan while the student is in school, during a six-month grace period, and during any deferment periods. Subsidized loans are based on need, and may not be used to finance the family contribution.

Supplemental Educational Opportunity Grant (SEOG): The SEOG is a Federal grant program.

Unmet Need: Unmet need is the difference between the student's financial need and the total need-based aid.

Unsubsidized Loan: An Unsubsidized loan is a loan which the government does not pay the interest. The borrower is responsible for the interest on an Unsubsidized loan from the date the loan is disbursed, even while the student is still in school.

Untaxed Income: Contribution to IRAs, Keoghs, tax-sheltered annuities, and 401(k) plans, as well as worker's compensation and welfare benefits.

U.S. Department of Education: The US Department of Education administers several Federal student financial aid programs, including the Federal Pell Grant, the Federal SEOG, the Federal Work-Study, the Federal Perkins Loan, the Federal Stafford Loan, and the Federal PLUS Loan.

Verification: Verification is a review process in which the Financial Aid Office determines the accuracy of the information provided by the student and parents on their FAFSA. During this process, the student will be required to submit requested documentation.

General Education

California University believes that a liberal education is essential for all students, regardless of the profession for which they may be preparing. The goals, objectives, and courses that comprise our General Education program are designed to provide students with the knowledge, understanding, and skill they will need to pursue their careers and lead productive and rewarding lives.

Goals and Objectives

Building A Sense Of Community (1 Credit)

Students will have a common core of integrated educational experiences, learning how to become excellent students, how to survive and thrive in a college environment, and how to achieve their educational, personal, and career goals. Students will develop the skills necessary to adjust to university life; they will sense that the curriculum is organically related and holistic, not a collection of courses.

Objectives

- To establish a personal mentor/mentee relationship
- To design an academic plan of study based upon skills and interests in conjunction with her/his advisor
- To critique, analyze, and utilize time management skills
- To summarize the various elements of campus life
- To use information retrieval systems in the library, the campus network and the Internet
- To locate and explain the services provided by four learning resources available on campus
- To identify the steps necessary to complete an application for financial aid
- To perform a computer based self-directed career search utilizing the facilities and resources provided by Career Services
- To identify ten health/wellness issues and campus resources for dealing with them
- To summarize the history of California University
- To attend and critique three cultural/sports activities

Required Course

UNI 100 FIRST YEAR SEMINAR

or

HON 100 HONORS AND UNIVERSITY ORIENTATION

Critical Thinking Skills (3 Credits)

Students will have the skills necessary to evaluate real life situations and to develop conclusions based on a critical analysis of information gathered through a variety of sources and methods. Critical thinking skills encompass "various forms of inquiry, abstract logical thinking, inductive reasoning, critical analysis, and ability to find and use information" using appropriate methods and techniques. (Board of Governors' Policy 1993-01; hereafter, BOG)

Objectives

- To describe and apply methods of inquiry, abstract logical thinking, inductive and deductive reasoning
- To demonstrate critical analysis
- To identify and use problem solving techniques
- To demonstrate techniques used to locate, use and evaluate information in relation to the above objectives.

Menu Courses

CHE 101 GENERAL CHEMISTRY I
CHE 102 GENERAL CHEMISTRY II
CIS 150 INTRO TO DATABASE APPLICATION SOFTWARE
CSC 105 BASIC PROGRAMMING LANGUAGE
CSC 120 PROBLEM SOLVING & PROGRAMMING CONSTRUCTS
CSC 123 INTRO TO COMPUTER SCIENCE WITH PASCAL
CSC 218 COBOL I
CSC 223 C PROGRAMMING
CSC 224 FORTRAN
CSC 377 INFORMATION STRUCTURES
ENG 308 RESEARCH FOR WRITERS
ENG 348 HISTORY OF LITERARY CRITICISM
ENG 371 CRITICAL THEORY & TEACHING OF LIT
GEO 110 MAP PRINCIPLES
IND 101 DRAWING AND DESIGN
IND 335 WOOD TECHNOLOGY
ITE 311 INDUSTRIAL ERGONOMICS AND HUMAN FACTORS
MAT 100 FUNDAMENTALS OF MATH
MAT 191 TRIGONOMETRY
MAT 215 STATISTICS
MAT 225 BUSINESS STATISTICS
MAT 272 DISCRETE MATHEMATICS
MAT 281 CALCULUS I
MAT 282 CALCULUS II
NUR 120 INFORMED CONSUMER HEALTH
PHI 100 PERSPECTIVES IN PHILOSOPHY
PHI 115 LOGIC AND LANGUAGE
PHI 220 ETHICS
PHI 231 PHILOSOPHY OF RELIGION
PHI 302 MEDICAL ETHICS
PHI 320 ETHICAL THEORY
SOC 205 CONTEMPORARY SOCIAL PROBLEMS
SOC 240 SOCIAL INSTITUTIONS
SOC 376 SOCIOLOGICAL THEORY
TED 315 CONSTRUCTION SYSTEMS
TED 325 MANUFACTURING SYSTEMS
TED 425 MANUFACTURING ENTERPRISE
THE 201 VOICE AND INTERPRETATION
THE 211 LIGHTING I
THE 350 THEATRE PRACTICUM: ACTING
THE 354 THEATRE PRACTICUM: MANAGEMENT
THE 356 THEATRE PRACTICUM: TECH PRODUCTION

Communication Skills (9 Credits)

Students will have the ability to develop and present ideas. Communication skills include "those required for effective reading, writing, speaking, and listening" and awareness of the challenges of cross-cultural communication" (BOG)

Objectives

Public Speaking

- To construct and arrange arguments, evidence, information, and appeals in speeches designed to accomplish informative and persuasive communication goals
- To demonstrate the use of language in speeches designed to accomplish informative and persuasive communication goals
- To prepare and deliver effective communication with audiences in the presentation of speeches
- To make critical and ethical evaluation of public speeches

Menu Courses

COM 101 ORAL COMMUNICATION
COM 201 FORENSIC ACTIVITIES
COM 230 ARGUMENTATION & DEBATE
COM 250 ORAL COMMUNICATION: MANAGEMENT

Composition

Knowledge and Comprehension

- To demonstrate a capacity to carry out the planning, drafting, revising, and editing stages of the writing process
- To acquire the ability to construct, explain, and illustrate interpretations of readings
- To recognize both what a text says and how it works (its rhetorical strategies)

Application and Analysis

- To analyze the elements of the writing situation (subject, purpose, audience) as a foundation for writing
- To apply rhetorical strategies in writing expository and argumentative essays
- To produce prose that is clear, coherent, convincing, and correct

Synthesis and Evaluation

- To write essays that formulate original positions on a problem or issue in the context of a synthesis of multiple published sources
- To assess the usefulness and reliability of potential print and electronic resources for a proposed research project
- To plan, develop, and write an appropriately documented and formatted research paper

Required Courses
ENG 101 ENGLISH COMPOSITION I and
ENG 102 ENGLISH COMPOSITION II
or
HON 150 HONORS COMPOSITION I and
HON 250 HONORS COMPOSITION II

Mathematics (3 Credits)

Students will have the "ability to understand numerical data and use mathematical methods for analysis and problem-solving" (BOG). Mathematics is the science of numbers and their operations, interrelations, combinations, generalizations, and abstractions, and of space configurations and their structure, measurement, transformations, and generalizations.

Objectives

- To identify the components of a mathematics system (i.e., elements, operations, relations, and rules)
- To demonstrate rigor, exactness, precision, and accuracy in mathematical problem solving
- To illustrate the use of inductive and deductive reasoning to prove basic mathematical theorems
- To demonstrate the use of theoretical mathematical concepts in solving real-world problems
- To employ mathematics as a tool to manipulate numbers and data
- To analyze the role mathematics plays in the study of nature, particularly in cooperation with science

Menu Courses
EAS 538 COMPUTER APPLICATION WATER RESOURCES
MAT 100 FUNDAMENTALS OF MATH
MAT 171 MATHEMATICS OF FINANCE I
MAT 181 COLLEGE ALGEBRA
MAT 182 TECHNICAL MATHEMATICS I
MAT 191 TRIGONOMETRY
MAT 199 PRECALCULUS
MAT 203 GEOMETRY
MAT 215 STATISTICS
MAT 225 BUSINESS STATISTICS
MAT 271 MATHEMATICS OF FINANCE II
MAT 272 DISCRETE MATHEMATICS
MAT 273 BASIC CALCULUS
MAT 281 CALCULUS I
MAT 282 CALCULUS II
PSY 225 PSYCHOLOGICAL STATISTICS

Natural Sciences (6-8 Credits)

Students will have a basic understanding of the natural sciences, which are concerned with our relationship with the physical world. The various branches of natural science seek to understand the processes and components of the natural world and encompass physics (matter and energy, and their interrelations and transformations), biology (living organisms and their essential processes), chemistry (the physical properties and composition of nature and its products), and other disciplines.

Objectives

- To identify major concepts in natural science disciplines, which provide insights into the breadth of those disciplines and their relationship to other disciplines
- To illustrate the relationship between models, experiments, theories, and laws
- To illustrate the generation and testing of data
- To apply concepts and knowledge to the solution of problems
- To analyze and evaluate the limitations of collected data and design possible alternative interpretations

Menu Courses
BIO 103 CONTEMPORARY ISSUES IN BIOLOGY
BIO 115 PRINCIPLES OF BIOLOGY
BIO 120 GENERAL ZOOLOGY
BIO 125 GENERAL BOTANY
BIO 206 CONSERVATION OF BIOLOGICAL RESOURCES
CHE 100 INTRODUCTION TO CHEMISTRY
CHE 101 GENERAL CHEMISTRY I
CHE 102 GENERAL CHEMISTRY II
CHE 135 CHEMISTRY OF MATERIALS
EAS 100 INTRO TO EARTH SCIENCE
EAS 131 INTRO TO ENVIRONMENTAL GEOLOGY
EAS 150 INTRO TO GEOLOGY
EAS 163 INTRO TO OCEANOGRAPHY
ENS 101 INTRO TO ENVIRONMENTAL SCIENCE
ITE 311 INDUSTRIAL ERGONOMICS AND HUMAN FACTORS
PHS 117 BASIC PHYSICAL SCIENCE
PHS 136 ENVIRONMENTAL CHEMISTRY
PHY 101 COLLEGE PHYSICS I
PHY 121 GENERAL PHYSICS I
PHY 122 GENERAL PHYSICS II
PHY 202 COLLEGE PHYSICS II

Social Sciences (6 Credits)

Students will have a "basic understanding of ... the social sciences and their significance in contemporary society" (BOG) and will have an "awareness of the social, economic, political, and environmental interdependence of countries and regions of the world" (BOG). The social sciences focus on human behavior, on how we interact with each other both in the past and in the present; how we interact with the environment; and how we organize, govern and trade among ourselves.

Objectives

- To identify major concepts in the social sciences, which provide insight into the breadth of these disciplines and their relationship to other disciplines.
- To understand how the various social sciences describe, analyze, explain, and understand human behavior.
- To understand about their cultural heritage, about where we have come from, where we are and where we may be going
- To describe, predict and analyze human behavior

- To identify, explain, apply and evaluate the moral and ethical codes of a social science discipline

Menu Courses
ANT 200 OLD WORLD PREHISTORY
BUS 100 INTRODUCTION TO BUSINESS
ECO 100 ELEMENTS OF ECONOMICS
ENG 347 INTRO TO LINGUISTICS
GEO 100 INTRO TO GEOGRAPHY
GEO 105 HUMAN GEOGRAPHY
GEO 150 SURVEY OF TRAVEL & TOURISM
GEO 205 WORLD CITIES/UBRAN TOURISM
GEO 220 GEOGRAPHY OF UNITED STATES AND PA
GER 247 GERMAN CULTURE UNDER THE NATIONAL SOCIALISTS
HIS 101 US HISTORY TO 1877
HIS 102 US HISTORY SINCE 1877
HIS 104 HISTORY OF WESTERN SOCIETY TO 1740
HIS 106 HISTORY OF WESTERN SOCIETY SINCE 1740
HIS 111 DEVELOPMENT OF MAJOR WORLD CIVILIZATIONS
HIS 112 MAJOR WORLD CIVILIZATIONS IN TRANSITION
MGT 311 ORGANIZATION THEORY AND DESIGN
NUR 105 PARENTING: INSIGHTS & ISSUES
POS 100 INTRODUCTION TO POLITICAL SCIENCE
POS 105 AMERICAN NATIONAL GOVERNMENT
POS 205 MUNICIPAL GOVERNMENT
POS 218 POLITICAL PARTIES, CAMPAIGNS, & ELECTIONS*
POS 220 INTRODUCTION TO PUBLIC ADMINISTRATION
POS 237 INTERNATIONAL ORGANIZATIONS
POS 300 INTRODUCTION TO PUBLIC POLICY
POS 301 METHODS OF POLITICAL ANALYSIS
POS 306 CONGRESS
POS 310 THE PRESIDENCY
POS 315 CONSTITUTIONAL LAW: CIVIL LIBERTIES
POS 322 POLITICS OF THE MIDDLE EAST
POS 326 POLITICS OF AFRICA
POS 335 ADMINISTRATIVE LAW
PSY 100 GENERAL PSYCHOLOGY
PSY 211 SOCIAL PSYCHOLOGY
PSY 345 HISTORY & SYSTEMS OF PSYCH
SOC 100 PRINCIPLES OF SOCIOLOGY
SOC 205 CONTEMPORARY SOCIAL PROBLEMS
SOC 240 SOCIAL INSTITUTIONS
SOC 376 SOCIOLOGICAL THEORY
WST 200 INTRO TO WOMEN'S STUDIES

Humanities And Fine Arts (9 Credits)

Students will have an "appreciation of and experience with literature and the arts" (BOG), as well as with other traditional areas of the humanities. The humanities deal with human values, beliefs, and emotions, and the way these are expressed through human creations. The humanities are typically subdivided into two areas, humanities and fine arts. Humanities courses present organized values, beliefs, or emotions using language and ideas as the creative vehicle, and include literature, philosophy, and foreign language study. Fine arts courses are those which present organized values, beliefs, or emotions using the senses and physical expression as the creative vehicle, and include courses in art, music, and theatre.

Objectives

- To attend and react to a performance or exhibit related to the discipline studied, in at least one course

Humanities

- To present, critique or analyze human values, beliefs and emotions as they are conceptualized, formulated, and expressed through language and ideas

Menu Courses
COM 224 ORAL INTERPRETATION
ENG 106 INTRO TO POETRY
ENG 107 INTRO TO FICTION
ENG 108 INTRO TO DRAMA
ENG 203 GREAT BOOKS
ENG 205 WORLD LITERATURE SINCE 1600
ENG 206 WORLD LITERATURE TO 1600
ENG 301 SURVEY OF ENGLISH LITERATURE I
ENG 302 SURVEY OF ENGLISH LITERATURE II
ENG 315 SURVEY OF AMERICAN WOMEN WRITERS
ENG 337 SURVEY OF AMERICAN LITERATURE I
ENG 338 SURVEY OF AMERICAN LITERATURE II
ENG 355 SURVEY OF THE BRITISH NOVEL I
ENG 356 SURVEY OF THE ENGLISH NOVEL II
ENG 357 TWENTIETH CENTURY LITERATURE TO WWII
ENG 371 CRITICAL THEORY & TEACHING OF LIT
ENG 425 SHAKESPEARE
ENG 487 SEMINAR IN AMERICAN LITERARY GENRES
FRE 101 ELEMENTARY FRENCH I
FRE 102 ELEMENTARY FRENCH II
FRE 203 INTERMEDIATE FRENCH I
FRE 204 INTERMEDIATE FRENCH II
FRE 240 MIDDLE AGES & RENAISSANCE (800-1600)
FRE 241 THE SEVENTEENTH CENTURY & CLASSICAL AGE
FRE 242 THE EIGHTEENTH CENTURY & ENLIGHTENMENT
FRE 243 THE AGE OF FRENCH ROMANTICISM
FRE 244 THE AGE OF FRENCH REALISM
FRE 245 THE BIRTH OF MODERN FRENCH CULTURE
FRE 246 CONTEMPORARY FRENCH CULTURE IN THE ARTS
FRE 311 FRENCH CONVERSATION, COMP., & PHONETICS I
FRE 312 FRENCH CONVERSATION, COMP., & PHONETICS II
FRE 401 ADVANCED COMPOSITION, GRAMMAR, & STYLE
FRE 421 SURVEY OF FRENCH LITERATURE I
FRE 422 SURVEY OF FRENCH LITERATURE II
FRE 450 FRENCH LANGUAGE COLLIOQUIUM IN FRENCH
GER 240 FROM TACITUS TO LUTHER
GER 244 RICHARD WAGNER & HIS TIMES
GER 247 GERMAN CULTURE UNDER THE NATIONAL SOCIALISTS
MUS 100 INTRO TO MUSIC
MUS 202 NORTH AMERICAN MUSIC
MUS 204 SURVEY OF THE AMERICAN MUSICAL
MUS 301 20TH CENTURY MUSIC: HISTORY, FORM, ANALYSIS
MUS 306 THE OPERA: HISTORY, FORM, ANALYSIS
MUS 308 THE SYMPHONY: HISTORY FORM, ANALYSIS
PHI 100 PERSPECTIVES IN PHILOSOPHY
PHI 200 WORLD RELIGIONS
PHI 206 16TH-18TH CENTURY PHILOSOPHY
PHI 220 ETHICS
PHI 225 SOCIAL & POLITICAL PHILOSOPHY
PHI 231 PHILOSOPHY OF RELIGION
PHI 302 MEDICAL ETHICS
PHI 320 ETHICAL THEORY
PHI 325 PHILOSOPHY OF SCIENCE
PHI 370 PHILOSOPHY OF LAW
PHI 426 PHENOMENOLOGY & EXISTENTIALISM
SPN 101 ELEMENTARY SPANISH I
SPN 102 ELEMENTARY SPANISH II
SPN 203 INTERMEDIATE SPANISH I
SPN 204 INTERMEDIATE SPANISH II
SPN 242 GOLDEN AGE AND BAROQUE
SPN 245 TWENTIETH CENTURY SPAIN 1900-1939
SPN 246 CONTEMPORARY SPAIN 1939-PRESENT
SPN 248 ROMANTICISM IN LATIN AMERICA
SPN 249 MEXICO TWENTIETH CENTURY
SPN 250 CONTEMPORARY ARGENTINA
SPN 311 SPANISH CONVERSATION, COMP., & PHONETICS I
SPN 312 SPANISH CONVERSATION, COMP., & PHONETICS II
SPN 401 ADVANCED COMPOSITION, GRAMMAR, & STYLE
SPN 421 SURVEY OF SPANISH LITERATURE
SPN 422 SURVEY OF SPANISH AMERICAN LITERATURE

Fine Arts

- To present, critique or analyze human values, beliefs, and emotions as they are conceptualized, formulated, and

expressed through verbal and physical action and artifacts and perceived through the senses

Menu Courses
FRE 245 THE BIRTH OF MODERN FRENCH CULTURE
FRE 246 CONTEMPORARY FRENCH CULTURE IN THE ARTS
GER 244 RICHARD WAGNER & HIS TIMES
MUS 100 INTRO TO MUSIC
MUS 104 VOICE CLASS I
MUS 115 FUNDAMENTALS OF MUSIC
MUS 191 UNIVERSITY CHOIR
MUS 192 CALIFORNIA SINGERS
MUS 196 JAZZ ENSEMBLE
MUS 197 CHORAL UNION (CALIFORNIA CHORALE)
MUS 198 UNIVERSITY MARCHING BAND
MUS 199 UNIVERSITY CONCERT BAND
MUS 200 SIGHT SINGING AND EAR TRAINING
MUS 202 NORTH AMERICAN MUSIC
MUS 210 VOICE CLASS II
MUS 211 KEYBOARD I
MUS 300 JAZZ: HISTORY, FORM, ANALYSIS
MUS 301 20TH CENTURY MUSIC: HISTORY, FORM, ANALYSIS
MUS 303 MUSIC MATERIALS & METHODS FOR TEACHERS
MUS 306 THE OPERA: HISTORY, FORM, ANALYSIS
MUS 308 THE SYMPHONY: HISTORY FORM, ANALYSIS
MUS 312 KEYBOARD II
THE 100 INTRODUCTION TO THEATRE
THE 132 BALLET TECHNIQUE I
THE 133 JAZZ TECHNIQUE I
THE 201 VOICE AND INTERPRETATION
THE 240 CREATIVE DRAMATICS
THE 245 CHILDRENS THEATRE
THE 350 THEATRE PRACTICUM: ACTING
THE 351 THEATRE PRACTICUM: DANCE
THE 354 THEATRE PRACTICUM: MANAGEMENT
THE 356 THEATRE PRACTICUM: TECH PRODUCTION

Multicultural Awareness (3 Credits)

Students will have an "understanding of how people's experiences and perspectives are shaped by gender, ethnicity, culture, and other factors that distinguish groups of people, coupled with recognition of common elements within human experience that transcend time, space, race and circumstances" (BOG). Multicultural awareness assists individuals, regardless of ethnicity, gender, disabilities, social class or race, to understand and appreciate events and people from various points of view. Courses could focus on one or more of the following: gender, ethnicity, racial diversity, world religious belief systems, non-western cultures.

Objectives
- To outline diversity, either historically or cross-culturally for the population(s) under study
- To explain how cultural groups define social constructs (for example- gender roles, gender attribution, gender ideology and gender identity) and how these are expressed
- To identify and explain the social behavior of the population(s) under study
- To compare and contrast different cultural groups under study
- To explain why tensions exist between cultural groups and how such tensions are expressed, such as attribution and ideology

Menu Courses
ANT 100 INTRODUCTION TO ANTHROPOLOGY
ANT 280 INDIANS OF NORTH AMERICA
ANT 300 CULTURAL VIEWS OF WOMEN
ANT 355 PREHISTORIC AMERICAN INDIANS
ENG 155 BLACK LITERATURE
ENG 371 CRITICAL THEORY & TEACHING OF LIT
FRE 101 ELEMENTARY FRENCH I
FRE 102 ELEMENTARY FRENCH II
FRE 203 INTERMEDIATE FRENCH I
FRE 204 INTERMEDIATE FRENCH II
FRE 240 MIDDLE AGES & RENAISSANCE (800-1600)
FRE 241 THE SEVENTEENTH CENTURY & CLASSICAL AGE
FRE 242 THE EIGHTEENTH CENTURY & ENLIGHTENMENT
FRE 243 THE AGE OF FRENCH ROMANTICISM
FRE 244 THE AGE OF FRENCH REALISM
FRE 245 THE BIRTH OF MODERN FRENCH CULTURE
FRE 246 CONTEMPORARY FRENCH CULTURE IN THE ARTS
FRE 450 FOREIGN LANGUAGE COLLOQUIUM IN FRENCH
GEO 105 HUMAN GEOGRAPHY
GEO 205 WORLD CITIES/UBRAN TOURISM
GER 240 FROM TACITUS TO LUTHER
GER 247 GERMAN CULTURE UNDER THE NATIONAL SOCIALISTS
LIT 127 WOMAN AS HERO
MUS 202 NORTH AMERICAN MUSIC
NUR 101 WOMEN'S HEALTH ISSUES
PHI 200 WORLD RELIGIONS
POS 322 POLITICS OF THE MIDDLE EAST
POS 326 POLITICS OF AFRICA
PSY 311 PSYCHOLOGY OF GENDER ROLES
SOC 240 SOCIAL INSTITUTIONS
SPN 101 ELEMENTARY SPANISH I
SPN 102 ELEMENTARY SPANISH II
SPN 203 INTERMEDIATE SPANISH I
SPN 204 INTERMEDIATE SPANISH II
SPN 242 GOLDEN AGE AND BAROQUE
SPN 246 CONTEMPORARY SPAIN 1939-PRESENT
SPN 248 ROMANTICISM IN LATIN AMERICA
SPN 249 MEXICO TWENTIETH CENTURY
SPN 250 CONTEMPORARY ARGENTINA
SPN 421 SURVEY OF SPANISH LITERATURE
SPN 422 SURVEY OF SPANISH AMERICAN LITERATURE
WST 200 INTRO TO WOMEN'S STUDIES

Values (3 Credits)

Students will have an "understanding of the role of values in personal, professional, and civic life; experience in recognizing and analyzing ethical issues" (BOG). The study of values includes the acts, customs, and institutions regarded in a particular, usually favorable way by a group of people. Values must be a major theme in the course, not just a topic. Course syllabi must provide the definition(s) of value that will be explored. All courses must examine values as they relate to concrete situations within the realm of experience of most students.

Objectives
- To utilize bodies of knowledge to form the basis for an analysis of values
- To explain how values are developed within diverse human frameworks
- To analyze, synthesize and evaluate how ethical concepts are formed
- To apply an analysis of values to other branches of knowledge or to issues of universal human concern
- To acquire the critical use of sources and evaluation of evidence
- To exercise judgment in the expression of ideas
- To appraise knowledge bases on the basis of informed and independent evaluations

Menu Courses
ITE 101 INDUSTRIAL SAFETY
LIT 127 WOMAN AS HERO
PHI 200 WORLD RELIGIONS
PHI 220 ETHICS
PHI 231 PHILOSOPHY OF RELIGION
PHI 302 MEDICAL ETHICS

PHI 320 ETHICAL THEORY
PHI 370 PHILOSOPHY OF LAW
POS 315 CONSTITUTIONAL LAW: CIVIL LIBERTIES
WST 200 INTRO TO WOMEN'S STUDIES

Technological Literacy (6 Credits)

Students will have a basic understanding of the current and potential significance of technology, as well as its impact on contemporary society. Technological literacy means knowing how to use tools, resources, processes, and systems to change or to control the natural and artificial environment, thus altering the human condition. (International Technology Education Association)

Objectives

- To explain major concepts to technology, providing insights into its breadth and into its relationship to other areas of study
- To use research skills to understand materials, energy, information, people, time and tools as they apply to technological systems designed to meet human needs and wants
- To critically evaluate the implications and varying interpretations of technological changes as they relate to and determine impacts on individuals, society, the environment, and the future
- To design, produce, test, and analyze possible solutions to technological problems
- To demonstrate computer literacy

Menu Courses

CIS 150 INTRO TO DATABASE APPLICATION SOFTWARE
CSC 101 MICROCOMPUTERS & APPLICATIONS SOFTWARE
CSC 105 BASIC PROGRAMMING LANGUAGE
CSC 120 PROBLEM SOLVING & PROGRAMMING CONSTRUCTS
CSC 123 INTRO TO COMPUTER PROGRAM WITH PASCAL
CSC 201 WINDOWS & INTERNET
CSC 218 COBOL I
CSC 223 C PROGRAMMING
CSC 224 FORTRAN
CSC 377 INFORMATION STRUCTURES
EAS 273 COMPUTER CARTOGRAPHY
EAS 365 REMOTE SENSING: SATELLITE & RADAR INTERP
EDF 301 COMPUTERS FOR TEACHERS
EDF 302 APPLIED INSTRUCTIONAL TECHNOLOGY
ENG 217 SCIENTIFIC & TECHNICAL WRITING
HON 187 INFORMATION LITERACY
IND 335 WOOD TECHNOLOGY
IND 345 CONSTRUCTION PROCESSES I
MMT 310 DIGITAL PORTFOLIO
TED 315 CONSTRUCTION SYSTEMS
TED 325 MANUFACTURING SYSTEMS
TED 425 MANUFACTURING ENTERPRISE

Health And Wellness (2-3 Credits)

Students will have an understanding of the various means by which they may fulfill their potential as healthy people living in healthy communities. Wellness is the result of individuals making intelligent decisions concerning the various factors that can affect their overall health. Courses must include one or more of the following emphases; eating and exercising toward a healthy lifestyle; building healthy relationships; understanding and preventing disease; explaining drug use and abuse; making healthy choices.

- **Objectives**
- To compare and contrast health and unhealthy (lifestyles, relationships, drug use, choices, etc.)
- To explain and predict factors affecting health
- To interpret and apply health principles to their life
- To analyze, design, and assess individual health plans

Menu Courses

ANT 231 MEDICAL ANTHROPOLOGY
ATE 115 FOUNDATIONS STRENGTH TRAINING
ATE 120 SUBSTANCE ABUSE EDUCATION
ATE 340 SPORTS NUTRITION
HPE 105 CURRENT HEALTH ISSUES
HPE 202 COED AEROBIC FITNESS & NUTRITION
HPE 314 FIRST AID & PERSONAL SAFETY
NUR 101 WOMEN'S HEALTH ISSUES
NUR 105 PARENTING: INSIGHTS & ISSUES
PSY 222 PSYCH OF STRESS MANAGEMENT

Notes

California University is implementing its new General Education Program, and the goal menus will be updated throughout the implementation process. Students entering the university under this catalog will be able to satisfy General Education requirements by using courses added to goal menus in subsequent years without being required to change to a new catalog.

General education courses may include any courses in a student's career, including major courses. Major courses included on a goal menu may be used to satisfy that goal.

Although a course may appear on more than one menu, a given course may be used to satisfy only one general education goal.

When external accreditation agencies require specific competencies, departments may advise students to take specific courses included on a goal menu to complete the goal. Students should contact their advisors or department chairs for information on such requirements.

Any required course within a general education goal (e.g., UNI 100, ENG 101, ENG 102) that is failed must be retaken by the student and a passing grade earned for the course. Students should retake such courses as soon as possible.

Students must complete appropriate developmental courses or satisfy other prerequisites prior to completing a course listed on a general education goal menu.

Students must complete a lab course.

Definition: a lab course uses the scientific method in observation, collection and manipulation of data, interpretation of data, and drawing conclusions.

Students must complete two upper-level "writing intensive" courses in the major.

Criteria: Major departments must affirm that the writing intensive courses they propose require writing experiences that are relevant to that major; writing component courses must offer students opportunities for significant revision of their writing, revision typically initiated by instructors' written comments on drafts; students in writing intensive courses must be assigned a minimum of 30 pages of writing, distributed throughout the semester.

Academic Policies

Student Responsibilities and Academic Advising

Students are responsible for securing current information about university policies and for meeting all relevant requirements. Students follow the requirements and provisions of the catalog that is in effect at the time of their initial enrollment. Students who have interrupted their education for more than one year are subject to the provisions of the catalog which is current at the time of their readmission to the university. The university reserves the right to change policies, curriculum requirements, and other provisions as needed.

Faculty advisors are available to assist students in planning their academic program, but students have the responsibility for meeting all requirements for their degrees. Students are urged to take advantage of the advisory and consultation services available at the university. They should feel free to consult with professors, academic advisors, department chairpersons, the deans, and the Provost. All of these university representatives maintain regular office hours for student consultations.

Attendance

Regular class attendance is a prerequisite to successful class performance. University policy permits class absence for cause but places an obligation for successful completion of course work on the student. There is no single, university-wide policy on class attendance or on cuts; but professors may establish their particular policies on absences, assess reasonable penalties if students do not observe these policies, and treat unexplained absences as unexcused absences. The student must, in all cases, arrange to make up examinations or other work missed because of absence, according to terms and a schedule agreeable to the professors.

It is the student's responsibility to inform professors of the cause of any absence, if possible, in advance. Students should notify their college Dean of lengthy absences due to illness or other causes, and appropriate documentation may be required in such cases. The Dean will in turn notify the professors concerned. Requests for absence due to official university activities, such as field trips or athletic contests, must be made to the appropriate university official.

The Health Center does not issue medical excuses. Under certain circumstances the Health Center will notify professors about students' absences (or other failure to fulfill academic obligations) due to medical conditions; on the basis of this notification, individual professors in turn will determine whether or not to excuse the absences.
The temporary grade of Incomplete is not automatically awarded even if excused or explained absences have prevented completion of required work by the end of the semester.

Semester System

California University operates on a semester system with Fall and Spring semesters of approximately 15 weeks. In addition, there is a Summer term which typically includes a 10 week session and two five week sessions which run from June to August in addition to special sessions in May and August.

Course Numbering System

Courses numbered 100 to 499 are undergraduate courses. Courses numbered 500 may be taken for undergraduate or graduate credit, and courses numbered 700 & 800 are graduate level courses. In certain circumstances, undergraduate students are allowed to take graduate level courses for either undergraduate or for graduate credit.
Courses are numbered in the following way:
100-199 Freshman level
200-299 Sophomore level
300-399 Junior level
400-499 Senior level
Generally, courses whose numbers end in 9 (such as 209 and 459) consist of independent study or internship and registering for such courses typically requires special permission.

Credits

Credit for course work is recorded in credit hours. For most courses, one credit hour represents one class meeting per week. For laboratory classes, the ratio may differ somewhat from one department to another, but usually two or three hours of laboratory work are worth one credit hour.

A full-time student is one who is taking twelve or more credits. A student taking fewer than twelve credits is considered a part-time student.

Students expecting to progress from one class to the next on an annual basis and graduate in four years should complete an average of 32 credits per year, or 16 credits per semester.

Grading System

California University uses the following grading system for all courses:

Grade	Quality Points per Credit	Interpretation
A	4	Superior Attainment
B	3	Above Average
C	2	Average
D	1	Below Average
F	0	Failure
AU	Not calculated	Audit
I	Not calculated	Incomplete
IF	0	Incomplete Failure
P	Not calculated	Passing
W	Not calculated	Official Withdrawal
WP	Not calculated	Withdraw Passing
WF	0	Withdraw Failing
WX	Not calculated	Administrative withdrawal
UW	Not calculated	Unofficial withdrawal

Quality Point or Grade Point Average

To calculate a quality point average (QPA) or grade point average (GPA) divided the total number of quality points earned in regular courses at this university by the total number of credit hours attempted. For example, if a student has attempted a total of 60 credits, with 12 credits worth of A (=48 quality points), 24 of B (=72 quality points), 15 of C (=30 quality points), 6 of D (=6 quality points), and 3 of F (=0 quality points), this student would have a total of 156 grade points, or a QPA/GPA of 2.60.

In computing QPA/GPA, the following courses transferred from other institutions, advanced placement courses, courses passed by

examination, courses in which a P grade was assigned, CLEP credits, or credits granted for military service.

If a student repeats a course, only the repeat grade is counted. Although developmental courses do not count towards graduation, the credits earned in them are used to determine a student's QPA.

Appealing a Grade or Other Academic Decisions

University decisions are based upon applicable policies, rational procedures, and sound decision-making principles. Concerning a student's grade, it must be understood that it is not the policy of the administration to change a properly assigned grade – i.e., one based upon recorded grades for quizzes, exams, assignments, projects, and other grade criteria as indicated on the course syllabus or outline.

However, when a student alleges violations of sound academic grading procedures, the University administration and faculty mutually support a student appeal procedure which gives both the student and the faculty member a fair process to substantiate and/or refute those allegations.

In appealing a grade, a student should first contact the faculty member who issued that grade to discuss the reason for the grade. If the student is not satisfied with the faculty member's explanation, the student should then contact the faculty member's department chairperson. This contact must be in writing and must be filed with the chairperson within thirty working days after the beginning of the fall or spring semester following the term in which the grade in question was given. The chairperson shall notify in writing the student and faculty member of his/her findings and decision within 15 working days of his/her receipt of the appeal from the student.

If accord is not reached through the chairperson, the student may then appeal to the college dean. Such appeal must be in writing and must be filed with the dean within 15 working days from the date of the final written determination of the chairperson. The dean shall notify in writing the student and faculty member of his/her findings and decision within 15 working days of his/her receipt of the appeal from the student. The final source of appeal is the Provost. This final step should be taken only if there is no possibility for resolution at an earlier stage, and only if the student is convinced that arbitrary and/or capricious standards were applied. The appeal to the Provost must be in writing and must be filed with the Provost within 15 working days from the date of the final written determination of the dean. The Provost shall review the matter and take action as necessary to provide equity in the situation.

In the case of other academic decisions, the student should follow the same appeal procedure insofar as possible. In matters relating to student conduct and discipline, the Vice President for Student Development has authority to review student appeals. In matters relating to financial aid, see the section on Financial Aid in this catalog; in matters relating to teacher certification, see the relevant section in this catalog.

Cheating and Plagiarism

Truth and honesty are necessary prerequisites for all education, and students who attempt to improve their grades or class standing through any form of academic dishonesty may be penalized by disciplinary action ranging from a verbal reprimand to a failing grade in the course or dismissal from the university. If the situation appears to merit a severe penalty, the professor will refer the matter to the appropriate dean or to the Provost.

Good Academic Standing

Students who achieve the minimum Quality Point Average (QPA) or Grade Point Average (GPA) for their class rank are in good academic standing.

Class Rank (Total Credits Earned)	Minimum QPA
Freshman (1-31)	1.75
Sophomore (32-63)	1.85
Junior (64-95)	1.95
Senior (96 or more)	2.00

All earned credits including transfer credits and other advanced standing credits that have been officially accepted are counted in determining a student's class rank. All attempted credits at California University are used in determining a student's GPA.

Students who do not achieve the minimum GPA for their class rank will be subject to Academic Probation or Academic Dismissal. Satisfactory Academic Progress is also required for continued eligibility for financial aid.

Academic Probation

A student whose total number of credits attempted has reached or exceeded twelve and whose overall GPA is below the specified minimum for his or her class rank will be placed on Academic Probation.

Before registering for a new term, students on Academic Probation must have their schedules approved by the Associate Provost for Student Retention and must agree to satisfy additional requirements during the probationary semester.

A student on Academic Probation who:

attains the minimum overall GPA for his or her class rank and satisfies other requirements will be removed from Academic Probation.

attains a 2.00 GPA during the probationary semester and satisfies other requirements, but fails to attain the minimum overall GPA for his or her class rank will be permitted to return to the university on Continuing Academic Probation.

does not attain the overall GPA for his or her class rank and does not achieve a 2.00 GPA for the probationary semester, or fails to satisfy other requirements will be dismissed from the university.

Academic Dismissal

The university reserves the right to refuse the privilege of further attendance to students who have failed to meet minimum academic requirements.

If a student's cumulative grade point average remains below the required minimum after a probationary semester, the term grade point average during a probationary semester is below 2.00, and the student fails to meet other requirements, he or she will be dismissed from the university.

Incomplete Grades

An Incomplete (I) is assigned when a professor is convinced the student can complete or make up work. Faculty members may submit a final grade based on work completed and not accept late

work. However, when appropriate explanation and documentation of an illness are given, professors will not penalize students if makeups are possible or if grading on work completed is reasonable.

After the required work has been completed, the professor will submit a Change of Grade form to the Academic Records Office. The student, however, is responsible for contacting the professor regarding arrangements which should be made to complete the work for the course. (Students are not required to register for the course again)

If the required work is not completed within one calendar year, the Incomplete grade will be converted to I-F. This conversion will occur even if the student has not been enrolled at the university during this calendar year. The I-F grade is considered in the computation of the student's grade point average as an F grade. Students who wish to have an extension of the time allowed to complete the work must obtain approval from the dean of their college.

Graduating seniors must resolve their Incomplete grades by the last day of classes of the term in which they intend to graduate. Otherwise, these Incompletes immediately become I-F's, and graduation may be correspondingly affected.

Grade Reports

At the end of each semester and summer session, grade reports are mailed to students at their permanent home address. For this reason, all students should be certain the Academic Records Office has their correct permanent address. In compliance with the Family Education Rights and Privacy Act of 1974, such grade reports are sent to students and not to their parents or guardian. A grade report will not be sent if a student's academic records have been sealed.

Midterm grades are also reported for some students. These reports are available from each student's academic advisor or in the Office of Student Retention.

Transcripts

Transcripts are issued by the Academic Records Office, Room 103 in the Administration Building. Each transcript costs $3.00, and payment must be received before the transcript is issued. Checks and money orders should be made payable to California University of Pennsylvania. All transcripts are issued according to the provisions of the Family Education Rights and Privacy Act of 1974 as amended: see also the section on Confidentiality of Records in this catalog.

A request for a transcript must be made in writing, to ensure that academic information is not improperly disclosed. Telephone requests for transcripts cannot be honored. The request may be made by completing a form in the Academic Records Office or by writing a letter to that office indicating (a) the number of transcripts required, (b) the type of transcripts required (i.e., undergraduate, graduate, or both), and (c) the name and address of the person or institution where the transcript should be sent. Transcripts will not be issued to a third party without the written consent of the student.

If a transcript is issued to a student, a notation to that effect appears on the transcript. Transcripts marked in this manner are sometimes not considered official when presented to a third party by the student.

Transcripts are issued as quickly as possible, but in busy periods of the academic year there may be some delay. Requests should therefore be made well before the transcript is due elsewhere.

No transcript will be issued to a student whose financial obligations to the university have not been met in full.

Registration

Eligibility to Register

All students who have been admitted to the university and who are in good academic, financial, and disciplinary standing are eligible to register. Students who are not in good standing with the university may, under special circumstances, be given clearance to register for classes.

Enrollment and Matriculation

A student seeking a degree or credit certificate from California University is considered a matriculated student and must meet the graduation or completion requirements for his or her declared major or program. An individual who enrolls for classes but is not seeking a degree or credit certificate from California University is considered a non-matriculated student. A non-matriculating student wishing to matriculate into a degree or credit certificate program must satisfy admission requirements for that program.

Registration Procedures

Registration for an upcoming semester may be completed during the registration periods identified in the Schedule of Classes published each semester. This publication contains specific information and instructions regarding these registration periods.

Registration includes academic advising, scheduling courses, and payment of tuition and fees. Prior to scheduling classes, each student should meet with his or her academic advisor to discuss his or her progress and develop a schedule for the upcoming semester. Entering a student's schedule into the university's registration system creates a financial obligation by the student to the university, and students who do not make payment arrangements by the announced due date will have their semester schedules canceled.

Credit Overload

During the Fall and Spring semesters, full-time students may register for 18 credits without special permission. Students wishing to register for 19 or more credits must obtain written permission from their advisor and the Dean of their college. Only in exceptional circumstances will a student be allowed to register for more than 21 credits. Additional tuition and fees are charged for all credits in excess of 18.

During the Summer terms, students may register for 6 credits in any one session or 18 credits for the summer without special permission. Matriculating students wishing to register for additional credits during the Summer terms must obtain written permission from the Dean of their college, and non-matriculating students wishing to register for additional credits must obtain permission from the Director of the Summer School Program. Students are charged tuition and fees on a per credit basis for all courses during the summer.

Admission to a Closed Section

A student seeking admission to a closed section should obtain a schedule adjustment form and consult with the instructor or chairperson of the department which offers the course. Admission

to a closed section requires the signature of the instructor or department chair and the dean of the college which offers the course.

Repeating a Course

A student may repeat a course previously taken at California University. In such cases, only the later grade will be counted in the student's QPA. The original grade, however, will remain on the student's transcript. Some courses may be repeated for credit and are exempt from this policy.

Auditing A Course

A student may audit a course with the understanding that he or she will receive neither a grade nor credit for the course. The course will be listed on the student's transcript without affecting the QPA. Once a course is registered for audit, it cannot be converted back to a credit course.

Students may register to audit a course according to the following schedule:
15 week session - within the first 6 weeks
5 week session - within the first 2 weeks
10 week session - within the first 4 weeks
Audit courses are billed at the same rate as courses taken for credit.
Audit forms are available in the Academic Records Office, Room 103 of the Administration Building.

Credit By Examination/Course Challenges

Students may earn credit for a course by passing an examination rather than taking the course. In order to do so, the student must obtain permission from the chairperson of the department that offers the course and the Provost. The student must register for the course and pay tuition and fees for the course. Once a student registers to challenge a course, it cannot be converted back to a regular course.

Students may register to challenge a course according to the following schedule:
15 week session - within the first 6 weeks
5 week session - within the first 2 weeks
10 week session - within the first 4 weeks
Only grades of P (Pass) or F (Fail) will be recorded, and the course will be further identified on the student's transcript by the symbol CE. A passing grade does not affect the QPA; however, a failing grade will lower the QPA. Earned credits will count towards graduation.

Course challenge forms may be obtained in the Academic Records Office, Room 103 of the Administration Building.

Schedule Adjustments (Add/Drop)

Class schedules may be changed during the add/drop period using the schedule adjustment forms. All schedule adjustments are governed by the following regulations.

1. Prior to making schedule adjustments, a student should consult with his or her academic advisor to discuss how the adjustment will affect his or her academic progress.

2. Courses may be added prior to the second class meeting during the Fall and Spring semesters and during the first day of a summer term. Adding a course may require the signature of the instructor, department chair, and/or college dean.

3. Students may drop courses without having a grade assigned during the first six weeks of a semester; before the end of the second week of a five-week summer term; or before the end of the fourth week of a ten-week summer term.

4. After the deadline for dropping a course without grade assignment, students who drop a course or courses will receive WP or WF grades. Each professor will assign the appropriate grade and the College Dean will translate A, B, and C grades to WP, and D and F grades to WF.

5. No student is permitted to drop a course: during the last three weeks of a semester; during the last two weeks of a five-week summer term; or during the last three weeks of a ten-week summer term.

6. Ceasing to attend class does not constitute official withdrawal! Students must officially drop from a course. Leaving a course without officially dropping it may result in the assignment of an F grade by the professor. If the professor does not assign a grade, the designation of UW (unauthorized withdrawal) will be assigned by the Registrar.

Withdrawal from the University

A student who decides to withdraw from the university during any academic term, regardless of the reason, must contact the Academic Records Office immediately. All withdrawals are governed by the following regulations:

1. An honorable dismissal is granted to a student who withdraws from the university in the official manner, has met all financial obligations to the university, and has been properly cleared by the Registrar.

2. If the student withdraws officially during the first six weeks of a semester, a W grade is recorded for each course scheduled. A W grade carries no academic penalty and is not counted in the student's QPA. For an official withdrawal from a five-week session, W grades will be recorded during the first two weeks only.

3. After the sixth week of the semester, a student who makes an official withdrawal receives WP or WF grades in all courses scheduled. Professors assign A, B, C, D, or F grades, and the Dean assigns WP grades to A, B, and C, and WF to D or F grades. For five-week courses the WP-WF grades are assigned after the end of the second week.

4. No student is permitted to withdraw officially from the university during the last three weeks of a semester or summer term.

5. Leaving the university without notifying the Academic Records Office and making an official withdrawal may result in automatic failure for all courses scheduled. It also makes the student ineligible for refund of tuition and fees, and may affect academic status and financial aid. Improper withdrawals will be classified as unauthorized withdrawal and the designation UW used for all registered courses if another grade has not already been assigned by the professor.

Administrative Withdrawals

The university administration has the authority to withdraw a student from the university and to revoke that student's registration at any time for the following reasons:

1. Registration in violation of university regulations (e.g., academic ineligibility to register).

2. Failure to comply with academic requirements (e.g., unsatisfactory class attendance, violation of the learning contract for students on academic probation, etc.).

3. Failure to pay university tuition and fees by the due date.

4. Disciplinary suspension or dismissal for the remainder of an academic term or longer.

5. Severe psychological or health problems such that the student cannot be permitted to continue in attendance.

6. Other reasons deemed appropriate by the proper administrative officer.

Grades of WP, WF, WX are recorded for Administrative Withdrawals. The grade of WX is not computed in the student's grade point average and therefore involves no academic penalty. The Registrar must authorize the recording of this grade.

If a student registers in violation of the academic eligibility rule, the registration is declared invalid, the tuition and fees paid by the student are refunded in full, and no grades are recorded.

In other cases of Administrative Withdrawal, the date of the withdrawal and the reason for the withdrawal are used to determine the grade to be recorded and the amount of tuition and fees to be assessed or cancelled. In most cases, the regular tuition and fee assessment and refund policies of the university prevail.

For Administrative Withdrawals during the first six weeks of a semester or two weeks in a five-week summer session, the grade of WX is recorded for all courses on a student's schedule. No other grades, such as Incomplete, are assigned. After this period, the date of the Administrative Withdrawal and the reason for the withdrawal are considered.

1. For failure to comply with academic requirements, only WP or WF grades are assigned.

2. For failure to pay tuition and fees, only WX is assigned.

3. For Disciplinary Suspension or Dismissal, only WP or WF grades are assigned.

4. For health or psychological reasons, WX or - only with the approval of the affected instructor - an Incomplete may be assigned.

5. For other reasons not covered in 1-4, grade assignments will be at the discretion of the Provost or his or her designee.

The Registrar has the authority to antedate an administrative withdrawal if circumstances warrant such action.
Disciplinary suspensions or dismissals are initiated by the appropriate authority in the Office of Student Development and written notification is sent to the Academic Records Office, who cancels the student's registration and notifies other administrative offices and faculty members as necessary.

If faculty members have reason to inquire about a specific case of Administrative Withdrawal, they should consult the Registrar or the Office of the Provost. In certain cases, the student's right to confidentiality may not permit full disclosure of the circumstances.

Readmission to the University

Students who wish to return to the university after an absence of three consecutive terms and are in good standing with the university must apply for readmission to the dean of the undergraduate college in which they will be enrolled following their readmission.

In cases of Academic Dismissal, readmission to the university is not automatic. Students who have been dismissed for unsatisfactory academic performance will be considered for readmission only if they have satisfied the conditions for readmission that were stipulated at the time of their dismissal. Students who have been academically dismissed must apply for readmission through the Office of Student Retention.

Any student who has been academically dismissed will be denied Title IV financial assistance (federal grants, loans, and student employment). Therefore, if readmitted, the student must attend without the benefit of Title IV financial aid until the required minimum GPA for his or her class rank and/or the completion of the minimum credit hour standard have been achieved. Exceptions may be considered for students on Financial Aid probation or have filed a Satisfactory Academic Progress (SAP) appeal (please refer to the Satisfactory Academic Progress policy statement issued by the Office of Financial Aid).

In the case of Disciplinary Suspensions or Dismissals, students must satisfy the conditions for readmission that were stipulated at the time of their dismissal, and receive permission from the Vice President for Student Development to return to the university.

Applications for readmission should be submitted at least one week before the registration date for the term in which the student desires to enroll.

Former students will not be readmitted to the university until all past indebtedness has been paid.

College Level Equivalency Program (CLEP)

The university offers the opportunity to earn undergraduate credit through the College Level Equivalency Program (CLEP), which has two testing categories, the General Examination and the Subject Examination.
The General Examination is a series of tests in five separate areas: English Composition, Natural Sciences, Mathematics, Humanities, and Social Science/History. A student may earn up to thirty credits by passing the appropriate tests in this area.

The Subject Examination comprehensively tests a single subject, such as General Psychology, Statistics, etc. A student who passes one of these examinations is awarded credit for a comparable course at the university.
The CLEP program is administered by the Office of Career Planning and Placement Services in the Learning Research Center and the Southpointe Center. There is a one-time fee of $25.00 for evaluation of the CLEP results and recording the results on the student's transcripts.

The university does not grant credits for Life Experience

Undergraduate Credit for Graduate Course

Undergraduate students may enroll in graduate courses for undergraduate credit if they meet the necessary requirements for those courses. Individual departments determine the prerequisites for each course. Graduate status may be a prerequisite for admission to some courses. Graduate credits used to fulfill undergraduate requirements may not also be used to fulfill requirements in a graduate program.

Graduate Credit Load for Seniors

Undergraduates who are in their last term on campus and who are completing or have completed all the requirements for their undergraduate degree may enroll in graduate classes for graduate credit. They must fulfill all requirements for entrance into Graduate School (other than the undergraduate degree or teaching certification).

Transfer Credits

Current students who wish to take courses at some other college or university to transfer back to California University, should get approval to do so from their advisor and from the dean of their college at California University before registering for and taking such courses. Students seeking to transfer credits to California University should note the following guidelines:

1. Transfer credits are usually determined by their equivalency to California University courses.

2. Only courses in which a grade of C or better is earned will transfer.

3. Credits transfer, but grades and quality points do not. Transfer credits cannot raise a student's QPA; therefore, do not take repeat courses at another institution.

4. Courses taken at a community college, the equivalents of which are designated as upper-level courses at California, may transfer only as electives rather than equivalents to courses offered at California University.

Dual Majors, Second Majors And Second Degrees

California University grants the following degrees: B.A.; B.S.; B.S. in Education; B.S.N; and A.S. (All except the last are four-year, baccalaureate degrees.) These are referred to below as degree areas.

A distinction is drawn between the following objectives and opportunities and between the means to achieve them: (1) a Dual Major; (2) a Second Major; (3) a Second Degree and (4) a Dual Degree. These opportunities, as explained below, are the only ones offered. The university will, for example, award only one degree from any degree area. None of these opportunities should be confused with any certification programs, such as those in Teacher Education.

1. More than One Major:

(a) Dual Major is the pursuit of two separate baccalaureate majors simultaneously. These majors may be in a single department or two departments, and each must be recorded in the appropriate dean's office. Courses from one major area may be used to satisfy requirements in the other major. Both majors are recorded on the transcript, but all requirements for each major must be satisfied before the degree is conferred, and only one degree is conferred.

(b) A Second Major may be pursued only (a) after the completion of a baccalaureate degree and (b) in the same degree area as a first major. It does not lead to a second degree. The prospective student must apply through the Office of Admissions, register the intention of pursuing a Second Major, and fulfill any of the requirements of that Second Major that have not yet been satisfied.

2. More than one Baccalaureate Degree

(a) A Dual Degree is the simultaneous pursuit of two degrees in different degree areas. Courses from one major area may be used to satisfy requirements in the other major; however, a minimum of 158 credits must be accumulated in order for both degrees to be awarded. All departmental, college and university requirements for the two degree areas must be satisfied. There will be one transcript with both degree areas recorded.

(b) Any student who has previously earned a degree from a regionally accredited institution (including California University of Pennsylvania) may pursue a Second Degree. This degree must be in a different degree area than the first. Transfer credits from other institutions and prior credits from California University of Pennsylvania may be used to satisfy requirements for the second degree; however, a minimum of 30 resident credits must be accumulated beyond the number of credits completed at the time the first degree was awarded. Free elective courses must be taken, if necessary, to fulfill this 30 credit requirement. All departmental, college and university requirements for this degree must be satisfied. All courses completed will be recorded on a separate transcript. Students seeking a second degree must apply for admission in the Office of Admissions.

(The university will not award an associate degree to a student who holds a baccalaureate degree in the same area.)

Graduation Requirements

Students should become acquainted with the graduation requirements for their program of study. Students are responsible for meeting all graduation requirements and for submitting the required forms on time.
Compliance with the following general policies and procedures will help students prepare for graduation:

1. The period during which application for graduation must be made is posted throughout campus and printed in the Schedule of Classes and the California Times. Students must apply for graduation in the appropriate dean's office by the deadline. All credentials for graduation, including an application for a teaching certificate where appropriate and transcripts of credits from other institutions, must be submitted on time. Graduation may be delayed if a student's record is incomplete.

2. A minimum of 128 semester credits, including the satisfactory completion of all required courses, is necessary for graduation. Developmental courses, ENG 100, DMA 092, DMA 094, and EDE 100, do not count towards graduation, though the credits earned in them are used to determine class standing and grade point average.

3. Students in all curricula must complete a minimum of thirty credits of the last sixty credits at California University of Pennsylvania.

4. An overall grade point average of 2.5 is required in the Teacher Education curricula. An overall grade point average of 2.0 is required in most programs of study. Certain other programs may require minimum grades in courses within the major.

5. In the College of Education and Human Services, candidates in teacher education programs must complete Student Teaching.

6. All financial obligations to the university must be paid in full before graduation can be approved.

Conferring of Degrees

Degrees are conferred in May (at the end of the spring semester), in August (at the end of the summer session), and in December (at the end of the fall semester); but Commencement is held only once a year, in May. Students who graduate in August or December may participate in the Commencement exercises of the following May, but their diplomas and official university transcripts record their date of graduation as of the month and year in which their degree was conferred.

Attendance at the Commencement exercises is appropriate, unless unusual circumstances warrant graduation in absentia. Permission to graduate in absentia is granted by the President of the university, or his designee. Candidates for graduation should contact the President's Office, or his designee's office, and request permission to be excused from the Commencement ceremony.

A graduate of California University of Pennsylvania is a member of the class of that calendar year in which the degree was conferred. That is, if one graduated in May, August, or December of 1999, one is a member of the class of 1999 regardless of the year one may have attended Commencement.

Honors at Graduation

Commencement Honors are awarded to students in the graduating class who have earned 64 credits at California University in a baccalaureate degree program and achieved the required QPA.

Highest Honors (Summa Cum Laude)	3.75 to 4.0
High Honors (Magna Cum Laude)	3.50 to 3.74
Honors (Cum Laude)	3.25 to 3.49

Credits, grades, and quality points earned as part of a previously completed associate or first degree are not used to calculate commencement honors designations.

Dean's List/Semester Honors

Highest Honors	3.75 to 4.0
High Honors	3.50 to 3.74
Honors	3.25 to 3.49

Honors Convocation

The university recognizes, encourages and rewards academic excellence on the part of Master's, baccalaureate, and associate degree-seeking students by naming Presidential Scholars at the annual Honors Convocation in the spring semester. This award is a unique distinction, separate and apart from Commencement Honors.

A baccalaureate degree-seeking student designated as a Presidential Scholar must have a cumulative GPA of 3.25 in a baccalaureate program and have completed 64 credits (if a junior) and 96 credits (if a senior), of which at least 30 must have been taken at this university (calculated beyond an earned associate degree or other first degree, if applicable, and in the present baccalaureate degree program).

An associate degree-seeking student designated as a Presidential Scholar must have a cumulative GPA of 3.25 at California and have completed 45 credits, all of which must have been taken at this university.

Both full-time and part-time students may, if qualified, be named Presidential Scholars.

Confidentiality Of Records

The university's policies on the confidentiality and disclosure of student records are based on the Family Education Rights and Privacy Act of 1974 (Public Law 93-380), as amended.

I. Introduction

Official student records are established and maintained in a number of administrative offices for a variety of legitimate educational purposes. In assuming responsibility for the reasonable protection of these student records, the university recognizes its obligation to comply with the Family Education Rights and Privacy Act of 1974. Important sections of this federal law are summarized below.

II. Ownership of Records

All records kept concerning students, including those records originating at other colleges or universities and required for admission, are the property of California University of Pennsylvania.

III. Definition of a Student

A student is defined as any person currently or previously matriculated on an official basis in any academic program of the University.

IV. Public Information Regarding Students

1. The following is classified as public and may be released without the prior consent of a student: a student's name, address (both local and permanent), telephone number, e-mail address, place and date of birth, academic curriculum, dates of attendance, date of graduation, degrees and awards received, most recent educational institution attended, participation in student activities (including athletics), and height and weight (for athletic teams).

2. Students may request that any or all of this information not be made public. Such requests must be submitted in writing to the Academic Records Office or (in the case of graduate students) to the Dean of the School of Graduate Studies before the beginning of any academic term.

V. Disclosure of Student Records

1. Upon proper identification, students may inspect their own official records in the presence of the administrator in charge of records.
2. After a request to inspect a record has been received, the request must be honored within a reasonable period of time: according to federal law, not to exceed 45 days.
3. Limitations on the Right of Access by Students
The following are not subject to inspection by students:
a. Confidential letters and statements of recommendation which were placed in the educational records before January 1, 1975.
b. Financial records of the parents of the student, or any information contained therein.
c. Medical, psychiatric or similar records that are used solely in connection with treatment. Such records can be reviewed by a physician or other appropriate professional of the student's choice.
4. Disclosure of Information to Third Parties
In most circumstances students have the right to withhold their records from external third parties requesting to inspect these records. Exceptions to this general principle are as follows:
a. Disclosure of student information will be made to a third party if written consent is given by the student in question.
b. Information concerning a student will be released if properly subpoenaed pursuant to a judicial proceeding.
c. All necessary academic and/or financial records of students may be disclosed to the appropriate persons or agencies without a student's prior consent in connection with a student's application for, or receipt of, financial aid.
d. Further limited disclosure of certain kinds of information may be required in special circumstances in compliance with the federal law previously cited.

VI. Student Challenge to Record Entries

1. Students have the right to submit written or typed rebuttals to negative information contained in their files. A rebuttal statement shall become part of the file, and in cases where the negative information is reviewed by or transmitted to a third party, it must be accompanied by the student's statement of rebuttal.
2. Students may challenge the accuracy and/or appropriateness of material combined in their files. Once such a challenge has been made in writing, it will be the responsibility of the university official in charge of the file to determine the validity of the challenge, if possible. The university official shall make a written response to the challenge of the student, specifying the action taken. Should a factual error be found in any materials, the university official is authorized to make the appropriate corrections.
3. If options 1 and 2 of this section are unsatisfactory, students may request a formal hearing to challenge inaccurate, misleading, or inappropriate information in their records. The University Record Hearing Committee shall conduct a hearing in accordance with the procedures outlined in Public Law 93-380, as amended.
4. The substantive judgment of a faculty member or administrator about a student's work, as expressed in grades and/or written evaluations, is not within the purview of this policy statement. Such challenges by students may be made through the regular administrative channels already in existence for such purposes.

VII. Responsibility of University Officials

1. University officials in charge of student files are responsible for the reasonable care and protection of such files in accordance with University policy. This includes the responsibility for the release of confidential information only to authorized persons.
2. A log sheet, indicating the inspection or release of a student's file, must be kept in the student's file.
3. University officials may classify student materials and records under their supervision as active or inactive as circumstances warrant. At the discretion of the official in charge, inactive records may remain in the file but need not be circulated. Inactive records may be reviewed by a student upon request.
4. A University official may take the initiative in an attempt to purge unfavorable evaluations, or opinion records of a prejudicial nature, in a student's file. This may be done by returning the material to the person who submitted it or by requesting from the author that the material be destroyed.

VIII. University Officials Responsible for Student Records

The following university officials are responsible for student records within their respective administrative areas:
1. Provost and Vice-President for Academic Affairs
2. Vice-President for Student Development and Services
3. Vice-President for Administration and Finance
4. Vice-President for University Advancement

These officers are responsible for the maintenance of all official student records under their jurisdiction in accordance with the policies of this statement and the relevant state and federal laws. If further information is required, a student should contact the appropriate university official .

Academic Organization

Under the direction of the Provost, three undergraduate colleges and the Graduate School administer the academic affairs of the university. Each of these divisions are administered by a dean who is responsible for the operation of the college or school. In addition, University College, Lifelong Learning and the Evening-Weekend College, and the Southpointe Center provide specialized programs and services to distinct student populations.

The College of Education and Human Services

The College of Education and Human Services is composed of the departments of Academic Development Services, Communication Disorders, Counselor Education & Services, Educational Studies, Elementary Education/Early Childhood, Health Science and Sport Studies, Social Work and Gerontology and Special Education.

Teacher education programs are offered through the departments of Educational Studies, Elementary Education and Early Childhood, and Special Education and through the department of Applied Engineering and Technology in the Eberly College of Science and Technology. The departments of Academic Development Services, Health Science and Sport Studies and Social Work and Gerontology form the human services component of the College. The department of Communication Disorders offers an undergraduate program, but it does not lead to teacher certification. Certification in Communication Disorders is offered at the graduate level only. Counselor Education and Services offers programs leading to graduate degrees and to elementary and secondary counselor certifications.

Teacher Education Program

California University of Pennsylvania has a long and distinguished history of preparing teachers for the schools of the Commonwealth with nearly 30,000 teacher education alumni. The College of Education and Human Services has developed and maintained a reputation of excellence in the preparation of teachers. Because of its accreditation by NCATE, and its requirement of the Praxis II teacher certification examinations, California's graduates are able to obtain a teaching certificate in every state in the U.S.

Upon completion of a Teaching Certification Program in the College of Education and Human Services, a student will receive a Bachelor of Science in Education degree and an Instructional I Certificate. All candidates for teaching degrees must also take the Praxis II examination.

The Certificate is a license to teach in the Commonwealth of Pennsylvania and is valid for up to six years.

To convert the Instructional I Certificate into a lifetime valid Instructional II Certificate, a teacher must have three years of successful teaching experience and a Master's Degree, or must complete six credits every five years. These credits may be undergraduate, graduate, or in-service credits or any combination. The only restriction is that these credits must be taken at a four-year institution.

Admission to Teacher Education

Admission to the university is not a guarantee that a student majoring in education will be admitted to Teacher Education, complete the program, which includes student teaching, and receive a teaching certificate. The College of Education and Human Services has established standards that all education majors must meet in order to complete the Teacher Education Program. Some of these standards are embodied in the Admission to Teacher Education Program, which must be initiated by the candidate during the semester following the completion of 64 credits.

To be admitted to and progress through the Teacher Education Program, a student must complete the following steps:

1. By the completion of 32 credits, the student will complete 15 hours of field experience in an approved site and file a report in the departmental office, achieve a 2.50 QPA overall, meet the entry requirements in reading, math, and writing by test or course work, pass a speech and hearing test, and complete an initial admission orientation and the sign-off sheet.
2. By the completion of 64 credits, the student will achieve a 2.50 QPA overall, and in the major, complete a cumulative total of 30 hours of field experience in approved sites and file reports in the departmental office, take and pass the General Knowledge and Communication Skills test of Praxis Series Core Battery Tests, and receive a positive recommendation from the department screening committee. (NOTE: Students who fail to meet the requirements of steps 1 and 2 may not be permitted to register for courses in their area of specialization.)
3. By the completion of 96 credits, the student must receive a second positive recommendation from the department screening committee, complete a cumulative minimum of 45 hours in approved field experiences and file reports in the departmental office, and apply for student teaching.
4. By the completion of 96 credits and before student teaching, the student will maintain a 2.50 QPA overall, in the major, complete all courses required for student teaching (see department policy statement), present a portfolio which incorporates/demonstrates essential performance competencies established by the student's major department, and submit ACT 34 and 151 clearance prior to student teaching. (NOTE: Some departments may require this clearance prior to field experiences.)
5. By the completion of a minimum of 128 credits and for graduation in a teaching education major, the student will maintain a 2.50 QPA overall, and in the major complete steps 1 through 4 of the admission and retention process, successfully complete student teaching, and complete all required forms and return them to the Dean's office by the posted deadline.
6. The requirements for receiving a recommendation for teacher certification, the candidate will complete steps 1 through 5 of the admission and retention process, take and pass the Principles of Learning and Teaching and appropriate Specialty Area sections of the Praxis Series, and complete and return the required documents to the Dean's office.

Professional Field Experiences

Educators have observed that those who enter the teaching profession with a wide variety of contacts with young children, adolescents, and adults usually become superior teachers. To provide such contacts, each department has devised a program of professional field experiences.

Field-based and clinical experiences are systematically and sequentially selected to provide opportunities for education

students to observe, plan, and practice in a variety of professional settings. Students participate in field-based and/or clinical experiences with culturally diverse and exceptional populations, and in some cases, these experiences include not only school activities but also activities in community agencies.

Student Teaching

Student teaching is conducted under the supervision of the Director of Student Teaching. Students who are candidates for certification are required to earn twelve semester hours of credit in student teaching. However, student teaching is a competency based program and may continue beyond one semester.

Candidates are certified to teach only if they demonstrate ability to teach effectively. Teaching competency is determined by the Director of Student Teaching, the university supervisor, and the cooperating teacher or teachers. The student teacher is also required to take a practicum while student teaching. Student teachers are not generally permitted to enroll in other courses during the student teaching experience.

Student teaching is normally conducted in selected public schools located in the service area of the university. Alternative programs are also available. Interested students should discuss this possibility with the Director of Student Teaching.

The institutional philosophy regarding student teaching is to prepare students adequately to assume their responsibilities in the teaching profession with the knowledge and skill essential to their areas of specialization. Student teaching is designed to provide a climate wherein the student may exhibit creativity and the ability to make critical judgments based upon knowledge and reason.

Applications for student teaching may be secured at the Dean's Office and must be submitted in February for the next academic year.

Before students may be assigned to student teaching, they must:

1. Be admitted to Teacher Education
2. Obtain departmental approval as having satisfactorily completed the required preparatory work
3. Maintain a quality point average of 2.50 in the specialization and overall QPA

Transfer students are not assigned to student teaching until they have completed at least 24 credits of work at this university. Graduates of other colleges and universities must meet the requirements of admission to Teacher Education before being assigned to student teaching.

Student Teaching for Experienced Teachers

Teachers who have had one or more years of teaching experience may be permitted to complete the student teaching requirement by special arrangement after consultation with the Director of Student Teaching.

Appeal Procedure for Certification Students

Students appealing decisions regarding teaching certification should contact the Dean of Education and Human Services to discuss their concern. If accord is not reached at this level, the student may appeal to the Vice President for Academic Affairs.

The final source of appeal is with the Certification Appeals Committee, Department of Education, Harrisburg, Pennsylvania. This step should be taken only if there is no possibility for a resolution at an earlier stage, and only if the student is convinced that arbitrary and/or capricious standards were applied.

U.S. Citizenship – A Requirement for Teacher Certification in Pennsylvania

Permanent certificate will not be granted to any person who is not a citizen of the United States, and no provisional certificate may be granted to any person who is not a citizen or who has not declared in writing to the Department of Education the intention of becoming a citizen.

Graduation in General Education

Students who have been working toward teacher certification but are unable to complete the requirements of the teacher education program or who change their career plans may, with special permission, graduate in General Education without teacher certification. This option requires that, with the approval of the Dean of the College of Education and Human Services and the Director of Student Teaching, the student may complete 12 credits in lieu of student teaching. To initiate the process, the student must make a request, in writing and in person, to the Director of Student Teaching.

The College of Liberal Arts

The Liberal Arts are concerned with human values and social issues. They depend on the ability to think analytically, to understand other cultures and their history, as well as our own, and to appreciate artistic responses to our world.

Liberal Arts disciplines enrich life by giving it greater meaning and by enabling people to adapt to changing employment, personal, and social demands. In essence, a liberal arts education stresses the transferability of knowledge and skills from one circumstance to another, ensuring that the individual can meaningfully adapt to new personal and professional situations.

The College of Liberal Arts is comprised of the departments of Art, Communication Studies, Earth Science, English, Foreign Languages and Cultures, History , Music, Philosophy, Psychology, Social Sciences, and Theatre. Those departments offer a diverse array of major and minor programs of study.

The Liberal Arts philosophy informs all programs of study within the College. A broad general education course of study encourages students to explore a variety of course offerings and to become aware of the ways many different disciplines understand and view the world.

Students should select a major by the end of the third regular semester or upon the completion of 45 credit hours. This does not prohibit students from changing their major later in their careers; however, they will have difficulty completing requirements within eight semesters if they change majors after three semesters.

Students who do not want a major limited to a single discipline have program options in Liberal Studies, Humanities, and Social Sciences. The curriculum in each is flexible and permits interdisciplinary study.

Support Services

The College supports the Writing Center and the School Psychology Clinic. The Writing Center assists any student with writing problems, while the School Psychology Clinic provides free testing in several areas. Information about what tests are offered

and when they are given can be obtained at the Psychology Department Office, Room 319, LRC.

The College Office provides a number of student services. Among them are the review of a student's progress toward graduation and graduation clearance; transfer credit evaluation; consideration of requests for required course substitution approval; permission to take courses at other institutions for transfer to California University, including courses at schools outside the United States; the review of applications for readmission; and processing changes of academic major requests. Students who have questions about College policies and procedures should contact the College Office, Noss 103.

The College office coordinates areas of interest across the College. One important concern shared by the College is the need to relate classroom instruction with experiences outside the classroom that can assist the student in determining career directions, including graduate education. Accordingly, the College supports and implements field experiences in such areas as Archaeology and the Earth Sciences. Equally important are the internship opportunities offered by several departments.

An internship is a regularly offered course, usually taken at an off-campus location and is under the dual supervision of an agency as well as a faculty supervisor. Internships are not job training programs, and students are not paid accordingly, although some internships provide compensation for expenses incurred by the student. Guidelines and applications for internships are to be secured from the office of the sponsoring department.

The Eberly College of Science and Technology

The Eberly College of Science and Technology includes the departments of Applied Engineering and Technology, Biological and Environmental Sciences, Business and Economics, Chemistry and Physics, Mathematics and Computer Science, and Nursing. The College offers Associate and Bachelor's degree programs designed to prepare students to meet present and future requirements of specific professions.

The objective of the degree programs of the Eberly College of Science and Technology is to prepare men and women for responsible positions in business, government, industry, health care, and other complex organizations. As well, several of the College programs prepare students to undertake further study in graduate and professional schools.

Each curriculum includes both general education and a technical education component. The curricula are divided this way so that students will receive a well-rounded education and so that breadth of knowledge will increase their usefulness as professional employees and as citizens in the community. Each major within the Eberly College Science and Technology includes the necessary technical, scientific, and support courses to provide the basis for advanced study in a professional area. Classroom theory is frequently supplemented by laboratory and workshop experiences where the interrelationship between general principles and application is emphasized. Advanced study in each discipline is emphasized during the junior and senior years. Additionally, several programs provide students with opportunities to participate in either an internship in business or industry or a clinical year of study in a hospital setting where the students' educational experiences are utilized in the workplace.

The School of Graduate Studies and Research

The School of Graduate Studies and Research offers programs of study leading to the Master of Arts, Master of Education, and the Master of Science degrees, as well as state-accredited supervision certificates. Students completing their graduate education at California University have enjoyed success in pursuing doctoral and professional degrees in various professions at distinguished graduate schools throughout the U.S.

The academic programs and courses offered by the School of Graduate Studies and Research are listed in the graduate catalog. Information or course schedules may be obtained by calling the Graduate School at 724-938-4187.

University College

University College is a means to aid students in achieving educational, career, and personal goals through the utilization of a full range of institutional and community resources. It helps to both stimulate and support students in their quest for an enriched quality of life. University College empowers students to identify and accomplish life goals consistent with their abilities and interests, as well as to acquire skills and attitudes which promote life-long learning pursuant to intellectual and personal growth. In summary, University College promotes California University of Pennsylvania's mission of total student development.

University College provides:

1. A guided transition from high school or the world of work into the University environment by developing personal advisor-advisee relationships (using faculty and peer/student mentors); assessing basic skills and knowledge; assessing career interests and related activities; helping to develop an academic plan based on student skills and interests.

2. An introduction to a liberal education and its importance in life-long learning by developing proficiency in basic academic skills necessary for academic success at the University (reading, writing and mathematical skills); developing proficiency in personal skills which support learning (study skills, time management and interpersonal skills); introducing students to the breadth of human knowledge, including historical consciousness, issues of cultural ethnicity and nationality, global interdependence, and values and ethics in personal, professional, and community life.

3. Opportunities to explore various areas of interest, major areas of study and career options by introducing students to the concepts, strategies and resources associated with career planning; on-the-job experiences (co-ops, internships and field experiences); the ability to evaluate career options, to set personal and realistic goals, and to measure progress toward the attainment of those goals.

Advising and Placement Testing Center

The Advising and Placement Testing Center serves to coordinate placement testing, coordinate schedule development for entering students, pre-register students in developmental courses, monitor successful completion of developmental course work, and provide retesting opportunities for students. The Center does not replace faculty advising but helps to coordinate and supplement it.

First-Year Seminar

UNI 100 First Year Seminar is designed to help students make a smooth transition into the University environment. It is a one-credit course required of most first-time students. Topics covered in the course include: Time management, campus life issues, library, writing/studying skills, math/reading skills, financial aid, academic and career planning, health issues, and individual assistance. The FYS is taught by some of our best faculty.

Probationary Assistance (PASS) Program

The PASS Program provides the additional structure and support which may be necessary for student academic success. Participation in the PASS Program is required of students who are on First Academic Probation and students who have been dismissed for academic reasons and are subsequently readmitted. Students meet weekly with faculty, staff or graduate assistants to reinforce life/academic goals, time-management, study skills, campus resources (resource/referral), academic advisee responsibilities and the appeal process. Data indicate that students who participate actively in PASS have a greater probability of succeeding academically than those who do not.

Early Warning Notices (EWN)

The Early Warning Notices are voluntary responses from faculty and staff about students who may be experiencing academic difficulty. The Office of Student Retention contacts students who have been identified in order to offer assistance.

Ombudsperson

The Office of Student Retention is contacted by students who need information, general assistance, or who encounter difficulties with processes, procedures or personalities on campus. Established means of dealing with such concerns are used (i.e. students are informed of the appropriate processes or procedures to follow and are expected to use these). The Office of Student Retention monitors the concern(s) and becomes involved directly only if established means do not resolve the issue(s).

Developmental Courses

All new freshmen (students attending a post-secondary institution for the first time) and some transfer students take placement tests before their first registration at California to determine their levels of ability in mathematics and writing. Students who do not submit SAT scores also take a placement test in reading.

Students who do not achieve predetermined scores on these tests must enroll in appropriate developmental courses. These courses, ENG 100 English Language Skills, DMA 092 Introductory Algebra, DMA 094 Intermediate Algebra, and EDE 100 Reading, Studying, and Listening Skills, are described in the course listings in this catalog. Because these developmental courses are preparatory to a university academic experience, the credits awarded in them do not count toward the fulfillment of the number of credits for graduation, nor may they be used in fulfillment of General Education requirements. However, the grades achieved in these courses are used in establishing a student's grade point average, class standing, eligibility for financial aid, and eligibility for participation in co-curricular activities.

Office of Lifelong Learning

The Office of Lifelong Learning serves learners interested in both credit and noncredit learning opportunities. Our programs of study are flexible and can be customized to meet your desire to further your education. The classes are offered in the evenings and on Saturdays at times intended to accommodate the busy schedules of most adults. Our goal is to provide "one-stop" ease in processing your information, registration and any questions you may have. We can connect you with the right people to accomplish your goals, and with our extended office hours, we are available from 8am to 7pm Monday through Thursday and 8am to 4pm Fridays and Saturdays (except during university recesses).

The Evening Weekend College is designed to provide nontraditional students with the opportunity to enter and complete a degree program, or take advantage of credit courses for personal enrichment or professional development as a non-degree seeking student. The current degree programs offered through the Office of Lifelong Learning include a Bachelor of Arts degree in Humanities, Social Sciences, Natural Sciences, or General Studies. Areas of concentration within these degrees are designed in consultation with an academic advisor and are subject to the availability of courses in any one term. Courses are offered during the Fall, Spring, and Summer sessions. In addition, students may take courses as a non-degree seeking student without declaring a major area of study.

An application for Evening Weekend College is available from the Office of Lifelong Learning. This must be completed and submitted with a nonrefundable $25 application fee. All required official transcripts need to be received prior to admission to the program. Individuals who begin as non-degree students and who later decide to complete a degree must submit all required admission data and be in good academic standing at the time of application. Individuals must hold a high school diploma or GED to apply as either a degree or non-degree student.

In addition to credit bearing programs of study the Office of Lifelong also provides numerous noncredit opportunities for learning. These include the Community Noncredit Classes Fall and Spring series for personal or professional enrichment, Elderhostel, College Opportunity Program for the Elderly (COPE), JTPA, and Customized Contract Training programs.

The University Summer College program is also operated through the Office of Lifelong Learning.

For more information on the program and services offered by the Office of Lifelong Learning please contact us at 724-938-5840. The Office is located on the second floor of the Eberly Science and Technology Center on the university's main campus.

Southpointe Center

California University offers a number of programs and courses at an off-campus center located in the Southpointe Industrial Complex in Canonsburg, PA. Programs are geared to the needs of the population and businesses in the area. Most classes are offered at night and on weekends to accommodate adult student schedules. The facility includes a computer lab, science lab, a library with electronic accessibility, and fiber optic connections for distance learning and video teleconferencing.

Students may earn degrees in several undergraduate programs. Bachelor degree programs are offered in business administration, humanities, social sciences, natural sciences, and nursing. An associate degree program in computer science is currently available, as well as certificate programs in gerontology and computer science. In addition, several graduate degree programs are offered. For additional information on programs and admissions, please contact the California University Southpointe Center at 1-888-333-CALU or 724-873-2760.

Academic Development Services

Purpose

The Department of Academic Development Services operates three grant-funded programs: ACT 101, Student Support Services and Upward Bound. These programs help students adjust to and cope effectively with academic and related non-academic challenges.

Services

Departmental faculty provide services to students in the following areas:

1. Instruction and Tutoring

   Tutoring is provided for most entry level courses. Tutors review lecture notes, textbook and other course materials; teach course related vocabulary words; prepare students for completion of course assignments; and demonstrate the use of course related technologies. A three-credit course, EDE 100 READING, STUDY AND LISTENING SKILLS, is offered to first-year program students, and a one credit course, XCP 194 CAREER PLANNING, is offered to students with 48 credits or less.

2. Academic Counseling

   Counselors provide educational and career guidance and academic advisement. New program students are interviewed and receive both an orientation and academic plan. Counselors help students schedule and register for courses; monitor each student's academic performance; and provide students with information concerning academic policy, procedures, and practices. Program students may also be eligible for a non-punitive grading option.

The Department of Academic Development Services is located in the Noss Annex. Office hours are from 8:00 a.m. to 4:00 p.m., Monday through Friday, and weekends and evenings by appointment. Anyone desiring services or information is encouraged to stop at the office or call 724-938-4230.

Applied Engineering and Technology

Purpose

Curricula in the Department of Applied Engineering and Technology integrate a comprehensive program in the management of technology with a liberal education to prepare the graduate to function in a technology-related field of industry or education. Students develop a strong background in the fundamentals of science, mathematics and technology so they may integrate and apply their knowledge and skills to management situations in industry or laboratory teaching situations in education. In addition, students become aware of the impact of technology on the global community and the quality of life, both for the individual and for society.

Programs

The Department of Applied Engineering and Technology offers technology-related degree options in bachelor's and associate degree programs. The Department has earned a national reputation of excellence for its many technology programs.

Facilities

Technology courses are taught in the new Eberly Science and Technology Center and in the Shriver L. Coover Complex. Laboratories are furnished with state-of-the-art equipment. Some of the facilities include three electronics laboratories; a computer numerical control machining laboratory; a microprocessor lab; an automation/robotics technology laboratory; two graphics laboratories; a desktop publishing laboratory,;an electronic imaging laboratory; two photographic darkrooms; a material testing laboratory; a foundry; a machine tool laboratory; and state-of-the-art computer-aided drafting/design and multimedia technology labs. In addition, laboratories for communication, manufacturing, and transportation technology are available for use in the Technology Education program.

CADD/Drafting Lab features 25 Windows NT networked PC's with 233 MHz Pentium processors. Instruction is provided in Release 14 of AutoCAD, CADKEY 97 and ANSYS finite element analysis software.

The Multimedia Technology Lab in Coover Hall 112 features Windows based Dell Pentium PC's and Apple G3 PowerPC Macintosh computers. Instruction is provided on a variety of scripting, authoring, digital editing, video and productivity software packages; including Macromedia Authoriware, Director and Freehand, QuarkXPress, Adobe Photoshop, Netscape Navigator, Internet Explorer, Strata Videoshop and Adaptec Toast Pro.

Students have 24 hour access to the CADD/Drafting and Multimedia Technology labs. The department has more than 150 computers in its laboratories. Both Windows-based and Macintosh computers are available. Windows-based machines are used mostly in CAD, robotics and machine control. The Macintosh computers are primarily used in graphics, design and desktop publishing.

Internships

Bachelor's degree students in Electrical Engineering Technology, Graphic Communications Technology and Industrial Technology have the opportunity to complete an internship as part of their degree requirements. Students work in an organization related to their employment goals where they receive practical experience in applying what they have learned at the university. The internship credits are applied to the degree as technical elective or specialization area elective credits.

Scholarships

There are several scholarship opportunities for Graphic Communications Technology, Manufacturing Technology and Technology Education students in the Department. For more information on the scholarships, contact the Department.
Graphic Communications Technology Scholarships:
Foundation of Flexographic Technical Association Scholarship
International Publishing Management Association Scholarship
Kenny Hager Memorial Scholarship
Kurt Nordstrom Memorial Scholarship
National Scholarship Trust Fund Pittsburgh Club of Printing House Craftsmen Scholarship
Industrial Technology Scholarship:
Society of Manufacturing Engineers Scholarship
Technology Education Scholarships:
Donald Maley Technology Education Scholarship
Technology Education Association of Pennsylvania Scholarship

Student Awards

Each year, the Department honors graduating seniors who have excelled academically. Selection is based upon grade point average and faculty vote.
Applied Engineering and Technology Faculty Award for the Associate of Science Degree
Applied Engineering and Technology Faculty Award for the Bachelor of Science Degree
Electrical Engineering Technology Faculty Award
Technology Education Faculty Award
The Pittsburgh Club of Printing House Craftsmen Award

Annual Spring Technology Conference

Prospective students are encouraged to attend the Department's Annual Spring Technology Conference. This conference provides an excellent opportunity to tour facilities and observe a variety of dynamic and exciting laboratory activities, as well as interact with faculty and students.
Parents, teachers, administrators, guidance counselors and friends are invited to attend this special conference. For additional information concerning the Annual Spring Technology Conference, please call 724-938-4085, e-mail the department chair at komacek@cup.edu, or check the Department home page at www.aet.cup.edu.

Department Network Server & World Wide Web Home Page

The Department maintains its own computer network, which is connected to the university campus network and the Internet. Visit the Applied Engineering and Technology home page on the World Wide Web at www.aet.cup.edu to take a virtual tour, find e-mail addresses, review home pages created by students and faculty and learn more about special events in the Department.

Student Clubs

The Department offers five student clubs. Student clubs and their members have attended conferences across the country, conducted industrial field trips, completed service projects for the university and community and offered social events for students. Students are encouraged to participate in the clubs to develop the cooperation, management and leadership skills that employers seek today for the

team approach used in industry and education. Student clubs in the Department include: Electrical Technologies Club, Institute for Electrical and Electronic, Engineers Student Branch, National Association of Industrial Technology, Screen Printing Student Association, Student Chapter of the Pittsburgh Club of Printing House Craftsmen, Technology Education Association of California.

Tech Prep Program

The Department is involved in the Cal U Tech Prep Program, which is an outreach initiative that focuses on helping high school students prepare for and achieve associate and baccalaureate degrees in fields related to technology, business and computer science. The Cal U Tech Prep Program helps local school districts develop curriculum materials, provides cross-curricular inservice for teachers and helps promote articulation agreements between high schools and the university.

General Education

Students who enter California University under this catalog (after spring 1999) will follow the new general education program. Please consult the description of the new program in this catalog for a list of general education goals and objectives and the courses included in the menus for the various goals. Please note that some courses on a menu may be required for accreditation or certification in particular degree programs. Students should consult with their advisors regarding such requirements.

Electrical Engineering Technology

Electrical Engineering Technology deals with both abstract and practical concepts from science, mathematics, engineering and technology. Emphasis is placed on applications of current technology to meet the needs of everyday problems and situations. The Electrical Engineering Technology program provides students with the knowledge required to design, develop, modify, maintain and repair sophisticated electrical and electronic systems.

Careers

Opportunities for employment in the field of Electrical Engineering Technology are diverse and plentiful. Graduates will find challenging jobs in all areas of the United States. Typical positions can be found in electronic design software development, instrumentation design electronic field representative, systems control sales representative, microprocessor/computer applications engineering administration, and many more. The program had a 100% placement rate of its graduates last year with starting salaries averaging more than $32,000.

Curriculum

The Electrical Engineering Technology program provides students with a comprehensive understanding of the current engineering technology available to solve many of the technical problems confronting business, industry and government.

The necessary background in math, physics and computer science is provided so that meaningful mathematical modeling can be introduced and applied.

Computer/microprocessor interfacing and programming are heavily used to demonstrate flexibility and simplicity in instrumentation design, communications, signal processing, and controls.

Classical linear systems are presented to provide the student with an understanding of linear active filters, transient analysis, transducer interfacing, linearization, instrumentation, communications and controls.

Finally, the student has an opportunity to develop wider intellectual horizons through the university's general education program.

Program Admission

In addition to the conventional freshman admission procedure, student admission also includes those who have successfully completed a two-year associate degree in Electrical Engineering Technology or its equivalent.

Students graduating with an Electrical Engineering Technology associate degree from Butler County Community College, Community College of Allegheny County - South Campus or Westmoreland County Community College (or from other institutions with an articulation agreement with the University) will normally enter the program with junior class standing.

Students with an educational background in a field related to Electrical Engineering Technology who apply for admission to the program will be evaluated on an individual basis.

Bachelor of Science in Electrical Engineering Technology (129 crs.)

General Education

Students who enter California University under this catalog (after spring 1999) will follow the new general education program. Please consult the description of the new program in this catalog for a list of general education goals and objectives and the courses included in the menus for the various goals. Please note that some courses on a menu may be required for accreditation or certification in particular degree programs. Students should consult with their advisors regarding such requirements.

Professional Specialty:

Electrical Engineering Technology - 45 credits
EET 110 DC Circuits
EET 160 AC Circuits
EET 170 Digital Electronics Design
EET 210 Linear Electronics I
EET 220 Introduction to Electric Power
EET 260 Linear Electronics II
EET 270 Introduction to Microprocessor Design
EET 310 Methods in Engineering Analysis
EET 320 Network Analysis
EET 330 Advanced Microprocessor Design
EET 360 Microprocessor Engineering
EET 370 Instrumentation Design I
Electrical Engineering Electives - choose 16 credits from the following:
EET 400 Senior Project Proposal
EET 410 Automatic Control Systems
EET 420 Instrumentation Design II
EET 430 RF Communications
EET 440 Computer Networking
EET 450 Senior Project
EET 460 Digital Signal Processing
EET 475 Biomedical Engineering Technology
EET 476 Biomedical Engineering Technology
Internship
Technical Electives - eight credits minimum

Graphic Communications Technology

A reliable system for the transmission of messages is necessary in our fast-paced world. Print and electronic media serve as very effective methods of transferring those messages. Graphic communications involves all of the people, processes, materials, and related fields necessary to reproduce words, pictures, ideas and symbols in printed form on physical media; such as paper, metal or cloth, in any

quantity, and electronic form for the World Wide Web and other electronic presentation media.

The Graphic Communications Technology program at California University prepares graduates to enter the field by offering a curriculum of technical studies with laboratory-based experiences in the major printing processes. The curriculum includes courses in general education, management, a core concentration, and a technical specialty area. Students have the opportunity to concentrate in one of five technical specialty areas: Electro Graphics, Flexography, Management, Offset Lithography, and Screen Printing.

The facilities used in this program include three well-equipped graphic communication laboratories with two photographic darkrooms, a photo-imaging laboratory, a desktop publishing laboratory, and a pressroom. The labs are equipped with desktop color imaging systems, cameras, film processors, printing presses and a wide variety of other specialized graphic communications equipment.

Careers

The future for people involved in graphic communications is bright. The size and tremendous diversity of the industry provides a wide variety of career opportunities for men and women of all interests, talents and educational levels. Recent estimates indicate that between 50,000 and 100,000 people will be needed in the near future to accommodate the growth of the printing and publishing industry. Typically; Graphic Communications Technology graduates expect to fill positions in printing production, printing sales, quality control, customer service, estimating, scheduling, print buying, World Wide Web publishing, product design, marketing, equipment sales and technical service. Opportunities are available with advertising agencies, publishers, commercial printers, manufacturers of equipment and graphic communications suppliers, as well as graphic communications electronic equipment and control systems.

Curriculum

The Graphic Communications Technology program provides students with an understanding of graphic communications concepts applicable to the job. In addition, it provides students with a broad understanding of business management principles, analytical/verbal skills, computer applications and a firm general education background.

A unique opportunity in this program is the Graphic Communications internship where students may spend a junior or senior semester or a summer working in an industrial or commercial setting. Students experience how various jobs are produced and how problems are solved in a work situation. In addition, the employer has an opportunity to observe students as prospective employees.

Bachelor of Science in Graphic Communications Technology

General Education

Technical Education:
Management - 27 credits
ECO 201 Intro to Microeconomics
GCT 342 Estimating and Cost Analysis I
ITE 101 Industrial Safety
ITE 375 Principles of Production
ITE 445 Quality Control
MGT 201 Principles of Management
MGT 352 Human Resource Management
MGT 362 Labor Relations
MKT 222 Principles of Selling

Core Concentration - 30 credits

GCT 100 Graphic Communication Processes I
GCT 110 Screen Printing Techniques
GCT 200 Graphic Communications Processes II
GCT 220 Black and White Photography
GCT 225 Principles of Layout and Design
GCT 240 Desktop Publishing
GCT 270 Lithographic Techniques
GCT 330 Flexo & Package Printing
GCT 365 Color Imaging
GCT 460 Substrate and Ink

Specialization Block - 19 credits

Choose one of the following areas of specialization:
Electro Graphics:
IND 130 Introductory Circuit Analysis
IND 135 Digital Electronics
IND 235 Intro to Microprocessors
GCT 485 Graphics Seminar
GCT 495 Internship
Technical Elective

Flexography:

GCT 380 Advanced Flexo Techniques
GCT 430 Flexo Print Productions
GCT 485 Graphics Seminar
GCT 495 Internship
Technical Elective

Management:

ACC 201 Accounting I
MAT 171 Math of Finance I
MKT 301 Principles of Marketing
GCT 485 Graphics Seminar
GCT 495 Internship
Technical Elective

Offset Lithography:

GCT 370 Advanced Lithographic Techniques
GCT 470 Web Offset
GCT 485 Graphics Seminar
GCT 495 Internship
Technical Elective

Screen Printing:

GCT 210 Advanced Screen Printing Techniques
GCT 310 Screen Printing Productions
GCT 485 Graphics Seminar
GCT 495 Internship
Technical Elective

Approved Replacement Courses For Internship:

Management - six credits
ACC 201 Accounting I
BUS 100 Intro to Business
BUS 242 Business Law I
MAT 171 Math of Finance I
MGT 301 Organizational Behavior
MGT 353 Compensation Management
MGT 431 International Business Management
MKT 301 Principles of Marketing

Technical - three credits
GCT 210 Advanced Screen Printing Techniques
GCT 230 Color Photography
GCT 310 Screen Printing Production
GCT 370 Advanced Lithographic Techniques
GCT 380 Advanced Flexo Techniques
GCT 470 Web Offset

Approved Technical Electives
GCT 210 Advanced Screen Printing Techniques
GCT 230 Color Photography
GCT 310 Screen Printing Production
GCT 370 Advanced Lithographic Techniques
GCT 380 Advanced Flexo Techniques
GCT 470 Web Offset
IND 110 Technical Drawing I
IND 130 Introductory Circuit Analysis
IND 135 Digital Electronics
IND 165 Machine Processing I
IND 215 Computer Aided Drafting I
IND 230 Introduction to Linear Electronics
IND 235 Introduction to Microprocessors
IND 270 Hydraulic/Pneumatic Fluid Power
IND 278 Plastics Technology
IND 335 Advanced Microprocessors
IND 355 Wood Technology
ITE 181 Materials Technology I
MTE 250 Introduction to Automation

Additional courses may be recommended at advisor's discretion.

Industrial Technology
Industrial Technology is designed to prepare technical and technical management professionals for employment in business, industry and government. To fulfill the growing need for trained technologists, students receive a broad, flexible education which enables them to enter the workforce in a variety of professional positions. Additionally, students have the opportunity to specialize in one of several areas: computer numerical control, automation, electronics, drafting and design, and industrial management.

The Industrial Technology program provides students with a broad, flexible education, enabling them to enter the manufacturing work force in a variety of professional positions. The facilities generally available to majors in the manufacturing technology program include a materials technology/materials testing laboratory, a machine laboratory with a foundry, an automation technology laboratory (robotics, hydraulics, pneumatics), computer facilities with CAD and other software to support various industrial technology and management courses, a computer numerical control laboratory, drafting laboratories, and electronics laboratories.

Careers
Opportunities for employment in the field of Industrial Technology are diverse. Graduates find challenging job placements in all geographical areas of the United States. Some careers in Industrial Technology are: Production Supervisor Sales Representative, Production Control Product Design, Prototype Development Purchasing, Industrial Teaching Industrial Research, CNC Field Representative Manufacturing Supervisor, Systems Analysis Safety Management, Quality Control Supervisor. The program has over a 90% placement rate with average starting salaries over $30,000.

Curriculum
The Industrial Technology Program provides students with experiences in industrial and manufacturing processes that will help them understand problems they may face in a industrial environment. Basic concepts are studied in technical foundations courses such as technical drawing, electronics, automation/robotics, statics and strength of materials and industrial safety.

Advanced technology in CADD, robotics, hydraulics and computer numerical control, production analysis and systems, cost estimating and quality control provide a capstone of computer-assisted techniques used by modern industry to increase quality and productivity.

This technical background, coupled with managerial subjects and the general education requirements, positions Industrial Technology students for many attractive job opportunities.

An important opportunity in this program is the internship. Students may spend a semester or a summer working in an industrial setting. An internship broadens the student's education, offering experience in day-to-day operations of a manufacturing facility. Students observe how products are produced and how problems are solved. In addition, the employer has an opportunity to observe students as prospective employees.

Bachelor of Science in Industrial Technology

General Education

Industrial Technology: 80 credits
Physical Science - 8 Credits
CHE 101 General Chemistry I
PHY 121 General Physics I

Industrial Technology - 30 Credits
IND 110 Technical Drawing I
IND 130 Introductory Circuit Analysis
IND 135 Digital Electronics or IND 230 Introduction to Linear Electronics
IND 165 Machine Process I
IND 215 CAD I
ITE 181 Material Technology I
ITE 325 Statics and Strength
ITE 480 Problems in Industrial Technology
MTE 250 Introduction to Automation
MTE 236 Numerical Control Programming I
#EET 170 Digital Electronics Design may be substituted for IND 135 Digital Electronics

Supervision - 24 Credits
ECO 201 Introductory Microeconomics
ITE 101 Industrial Safety
ITE 375 Principles of Production
ITE 385 Industrial Cost Estimating
ITE 420 Production Analysis
ITE 445 Quality Control
MGT 201 Principles of Management
MGT 362 Labor Relations
Area of Specialization - 18 crs
Student must complete all courses in a single specialization block to satisfy degree requirements.

Automation/Robotics
ITE 460 Principles of Manufacturing

MTE 268 Automated Support Systems
MTE 350 Robotic Systems
MTE 265 Programmable Control Systems
Technical Electives

Computer Numerical Control
IND 265 Machine Processes II
ITE 460 Principles of Manufacturing
MTE 336 Numerical Control Programming II
MTE 337 COMPACT II or MTE 338 APT
Technical Electives

Drafting and Design
IND 210 Technical Drawing II
IND 315 CAD II
IND 415 CAD III
IND 416 Intro Solid Modeling/Finite Elements
Technical Electives

Electronics
IND 135 Digital Electronics OR
IND 230 Introduction to Linear Electronics
IND 235 Introduction to Microprocessors OR
EET 270 Intro. to Microprocessor Design
IND 335 Advanced Microprocessors OR
EET 330 Advanced Microprocessor Design
EET 360 Microprocessor Engineering
Technical Electives

Industrial Management
ACC 201 Accounting I
ACC 202 Accounting II
ECO 202 Introductory Macroeconomics
MAT 225 Business Statistics
Technical Electives

Approved Technical Electives:
ACC 201 Accounting I
ACC 202 Accounting II
ACC 331 Cost Accounting I
ACC 332 Cost Accounting II
ECO 202 Introductory Macroeconomics
ECO 301 Intermediate Microeconomics
ECO 302 Introductory Macroeconomics
EET 160 AC Circuits
EET 170 Digital Electronics Design
EET 220 Introduction to Electric Power
EET 270 Introduction to Microprocessor Design
EET 330 Advanced Microprocessors
EET 360 Microprocessor Engineering
FIN 301 Financial Management
IND 135 Digital Electronics
IND 210 Technical Drawing II
IND 230 Introduction to Linear Electronics
IND 235 Introduction to Microprocessors
IND 265 Machine Processes II
IND 278 Plastics Technology
IND 310 Technical Drawing II
IND 315 CAD II
IND 320 Architectural Drafting & Design
IND 335 Advanced Microprocessors
IND 355 Wood Technology
IND 270 Hydraulic/Pneumatic Fluid Power
IND 415 CAD III
IND 416 Intro Solid Modeling/Finite Elements
ITE 301 Industrial Safety Evaluation & Government Agencies
ITE 311 Industrial Ergonomics
ITE 460 Principles of Manufacturing
MAT 225 Business Statistics
MAT 273 Basic Calculus
MTE 268 Automated Support Systems
MTE 265 Programmable Control Systems
MTE 336 Numerical Control Programming II
MTE 337 COMPACT II
MTE 338 APT
MTE 350 Robotic Systems
MTE 437 Advanced COMPACT II
MTE 438 Advanced APT
MTE 450 Applications of Industrial Automation
MTE 495 Internship (1-6 credits)

Technology Education

The Technology Education program prepares the prospective teacher for employment in both elementary and secondary schools. Graduates of this program are awarded a Bachelor of Science Degree in Education and are eligible for an Instructional I Certificate qualifying them to teach Technology Education in grades K-12. An ever-expanding knowledge base in a global community makes it necessary for Technology Education majors to develop strong academic backgrounds in the humanities, sciences, mathematics and personal communication skills. In addition, they must demonstrate an understanding of teaching proficiencies that are requisite within a multicultural society.

Technology Education majors are required to complete a series of laboratory classes related to the technological systems of communication, construction, manufacturing and transportation. In these laboratory courses, students develop skills in the use of tools, materials and processes as they design, produce, use and evaluate technological systems. Computer applications using current software and support devices are emphasized. Students interact extensively with the universal systems model. Once equipped with an extensive understanding of the four technological systems and the universal systems model, students have the opportunity to evaluate the social, cultural, economic and environmental impacts of technology.

Accreditation

The Technology Education program has earned full accreditation by the National Council for Accreditation of Teacher Education (NCATE), the International Technology Education Association's (ITEA), Council on Technology Teacher Education (CTTE) and the Pennsylvania Department of Education (PDE).

Internationally Recognized Program

In 1998, the Cal U Technology Education program was one of four recognized by the International Technology Education Association's (ITEA) Council on Technology Teacher Education (CTTE) as an Outstanding Technology Teacher Education Program.

Careers

Currently, there is a significant shortage of Technology Education teachers within Pennsylvania and throughout the nation. Since 1992, every Cal U Technology Education graduate who sought a teaching position was employed. Most graduates report receiving multiple job offers. The average starting salary of graduates in 1998 was over $30,000. Teacher salaries have been increasing over the past several years with some school districts raising their top salary scale to over $80,000 per year.

The practical, hands-on nature of Technology Education creates opportunities for Technology Education teachers to qualify for summer employment within business and industry. Such occasions

provide teachers an excellent opportunity for continued professional development and additional income.

The Technology Education Program at California University of Pennsylvania enjoys an international reputation of the highest order. In 1998, the program was one of four in the country to receive the Outstanding Technology Teacher Education Program Award from the International Technology Education Association. A degree in Technology Education provides students with several career options. Most graduates teach at the elementary or secondary school levels, but many choose to attend graduate school and eventually teach at the university level. Still others have distinguished themselves in a variety of positions in government, business and the corporate world.

Curriculum

Technology Education includes the study of selected technological systems that explore the solutions of technological problems and their associated impacts encountered by people as they design, produce, use and evaluate technologies. The four primary systems that make up the Technology Education Curriculum include: Communication, Construction, Manufacturing and Transportation.

Communication Systems include the study of the technical methods by which humans communicate. These systems include experiences in such areas as drafting, design, computer-aided drafting and design, digital photography, multimedia, graphic communications, electronic communications, World Wide Web publishing, Internet applications, computer networking, video production and desktop publishing.

Construction Systems include the study of combining resources into structures such as houses, factories, roads, dams and stadiums. To understand construction technology, materials, processes, engineering principles, and impacts related to construction are examined.

Manufacturing Systems include the study of methods by which people design, produce, use and assess goods and products. This system includes courses that provide an understanding of fabricating, forming, combining and testing materials such as composites, wood, metals, plastics and ceramics. Also included is the use of computer-aided manufacturing and an enterprise approach to manufacturing technology.

Transportation Systems include the study of how people, products and materials are transported from one place to another. Students study various transportation systems within the four natural environments: land, marine, air and space. They also experience activities that reflect an operational knowledge of the subsystems common to most transportation systems including structures, propulsion, guidance, control, suspension and support.

Bachelor of Science in Education: Certification in Technology Education for Grades K-12

General Education:

Professional Education: 26 credits
EDF 290 Policy Studies in American Education
EDS 465 Developmental Reading Secondary School
EDU 210 Teaching in a Multicultural Society
EDU 340 Mainstreaming Exceptional Learner
PSY 208 Educational Psychology
TED 461 Student Teaching and School Law

Professional Specialty: 9 credits
TED 100 Introduction to Technology Education/ Early Field
TED 450 Teaching Technology in the Secondary School
TED 500 Teaching Technology in the Elementary School

Technological Systems: 48 credits
Communication Technology - 12 credits
TED 111 Communication Systems
IND 110 Technical Drawing I
IND 215 Computer Aided Drafting I
MMT 310 Digital Portfolio

Construction Technology - 6 credits
TED 315 Construction Systems
Construction Elective3

Manufacturing Technology - 12 credits
TED 125 Material Processing I
TED 225 Material Processing II
TED 325 Manufacturing Systems
TED 425 Manufacturing Enterprise
MTE 250 Introduction to Automation

Transportation Technology - 12 credits
TED 335 Transportation Systems
TED 435 Transportation Research & Development
IND 130 Introductory Circuit Analysis
IND 135 Digital Electronics
Technical Electives - 6 credits

Approved Technical Electives
GCT 110 Screen Printing Techniques
GCT 220 Black & White Photography
GCT 225 Principles of Layout and Design
GCT 240 Electronic Desktop Publishing
IND 101 Drawing and Design
IND 165 Machine Process I
IND 184 Energy and Power Systems
IND 210 Technical Drawing II
IND 230 Introduction to Linear Electronics
IND 235 Introduction to Microprocessors
IND 270 Hydraulic-Pneumatic Fluid Power
IND 278 Plastics Technology
IND 282 Small Gasoline Engines
IND 315 Computer Aided Drafting II
3IND 320 Architectural Drafting and Design
3IND 345 Construction Processes I
IND 355 Wood Technology
ITE 181 Materials Technology I
MTE 236 Numerical Control Programming I
MTE 265 Programmable Control Systems
MTE 268 Automated Support Systems
MTE 350 Robotic Systems
Independent Study Courses
TED 310 Studies in Communication (1-3 Cr.)
TED 330 Studies in Transportation (1-3 Cr.)
TED 340 Studies in Construction (1-3 Cr.)
TED 350 Studies in Manufacturing (1-3 Cr.)
TED 460 Honors Study in Communication (1-3 Cr.)
TED 465 Honors Study in Construction (1-3 Cr.)
TED 475 Honors Study in Manufacturing (1-3 Cr.)
TED 480 Honors Study in Transportation (1-3 Cr.)
Pennsylvania Certification requires a satisfactory score on the Praxis II Exam.

Associate Degrees

The Department offers associate degrees, Automation Technology: Computer Numerical Control (CNC), Electrical Engineering Technology, Screen Printing and Drafting Technology. The associate degree requires the completion of 64-66 credits. Associate degree credits can be transferred toward the completion of a Bachelor of Science degree. The associate degree is designed to provide graduates with the skills essential to enter the work force as skilled technical workers.

Automation Technology: Computer Numerical Control

Computer Numerical Control (CNC) of machine tools provides manufacturing industries a means of increasing productivity and requires that industries have educated personnel who can develop complex computerized numerical control programs.
California University of Pennsylvania has an outstanding Computer Numerical Control Machining Laboratory. It is equipped with two Bridgeport CNC vertical milling machines and a CNC lathe. High speed terminals, plotters and microcomputers are available for the preparation of programs.

Career opportunities appear to be excellent. People trained in the programming of computer numerical control machines can expect to be employed as CNC Technicians. Personnel with CNC skills are needed in most geographic regions in the United States. Jobs are available to graduates who excel.

Students in the Computer Numerical Control option of the Automation Technology Program will learn to write manual programs in the format detail of the machine tool, employing linear and circular interpolation addressing three axes.

Computer programs prepared by the students are interfaced with the machine tool with post processor software. Students load programs into the memory of a CNC lathe or mill and manufacture the part. Students, therefore, are experienced CNC machine operators, as well as manual, APT, and COMPACT II programmers.

The principle objective of the Computer Numerical Control Program is to provide students with sufficient skills and expertise in programming and operating computerized numerical control equipment to secure employment in the field.

Upon completion of the program, the graduate is expected to be able to: Program, set up, and operate CNC equipment, such as lathes and mills; Program using COMPACT II and APT programming languages; Prepare supporting documentation for machine setup and operation; Program linear and circular moves; and Machine parts on a mill and a lathe using CNC programs he/she prepared.

Associate of Science in Automation Technology: Computer Numerical Control (66 crs.)

General Education
CSC 120 Problem Solving & Programming Constructs
ENG 101 English Composition I
ENG 217 Scientific & Technical Writing
MAT 182 Technical Math I
PHI 247 Science, Technology & Society
Humanities Elective (3 credits)
Social Science Elective (3 credits)
Natural Science Elective (3 credits)
Free Elective (3 credits)

Technical Studies: 39 credits
Computer Numerical Control Machining - 24 credits
IND 165 Machine Processing I
IND 265 Machine Processing II
MTE 236 Numerical Control Programming I
MTE 336 Numerical Control Programming II
MTE 337 Computer Programming Numerical Control Equipment (COMPACT II)
MTE 338 Computer Programming Numerical Control Equipment (APT)
MTE 437 Advanced Computer Programming Numerical Control Equipment (COMPACT II)
MTE 438 Advanced Computer Programming Numerical Control Equipment (APT)

Related Electives - 15 credits
IND 110 Technical Drawing I
IND 135 Digital Electronics
IND 210 Technical Drawing II
IND 235 Introduction to Microprocessors
IND 270 Hydraulic/Pneumatic Fluid Power
IND 235 Introduction to Microprocessors
IND 270 Hydraulic/Pneumatic Fluid Power

Drafting Technology

Drafting is considered the primary means of communicating technical ideas. It is the graphic language of industry and is essential to the process of design, manufacturing, and service. A modern drafting laboratory and a well equipped CAD laboratory with terminals and plotters are available to support this program. A variety of industrial CAD software is used.

As we continue to grow technologically, the need for drafting technicians will continue to increase. Since technological growth is expected to continue for many years to come, the need will, presumably, also continue to grow.

The principle objective of the drafting technology program is to provide students with sufficient skills and expertise to secure employment in drafting or a related field. In addition, credits earned in this associate degree program are applicable to four-year Bachelor of Science degree programs.

Upon completion of the program, the graduate is expected to be able to do the following: communicate technical ideas through freehand sketching; make technical drawings that fully describe a design idea; solve technical problems by using the tools and techniques of drafting; prepare pictorial presentation drawings; write technical reports that are clear, concise, and accurate; prepare drawings and solve design problems using CADD systems.

Associate of Science in Drafting Technology (66 crs.)

General Education
CSC 120 Problem Solving & Programming Constructs
ENG 101 English Composition I
ENG 217 Scientific & Technical Writing
MAT 182 Technical Math I
PHI 247 Science, Technology & Society
Humanities Elective (3 credits)
Social Science Elective (3 credits)
Natural Science Elective (3 credits)
Free Elective (3 credits)

Technical Studies: 39 credits
Technical Drawing - 30 credits
EAS 271 Cartography
IND 110 Technical Drawing I
IND 101 Drawing and Design
IND 210 Technical Drawing I
IND 215 Computer Aided Drafting I
IND 218 Descriptive Geometry and Surface Development
IND 310 Technical Drawing III
IND 315 Computer Aided Drafting II
IND 320 Architectural Drawing & Design

Related Electives, select three of the following (9 credits)
GCT 100 Graphic Communication Processes I
IND 165 Machine Processes I
ITE 101 Industrial Safety
ITE 181 Materials Technology I

Electrical Engineering Technology

This program provides students with the knowledge to install, maintain, calibrate, and repoart electrical and electronic systems. A hands-on approach is accompanied with a sound theoretical knowledge base.

Employment opportunities are diverse and plentiful. Graduates will find challenging jobs in industrial maintenance, electronic field representative, electrical/electronic installation, sales representative.

Associate of Applied Science in Electrical Engineering Technology

General Education (37 credits)
ENG 101 English Composition I
ENG 217 Scientific & Technical Writing
MAT 181 College Algebra
MAT 191 Trigonometry
MAT 281 Calculus I or MAT 273 Basic Calculus
CSC 120 Problem Solving & Programming Constructs or higher level CSC course
COM 250 Oral Communication: Management
PHY 101 College Physics I or PHY 121 General Physics I
Humanities Elective (3 credits)
Social Science Elective (3 credits)
Natural Science Elective (3 credits)
Free Elective (3 credits)

Technical Studies (29 credits)
EET 110 DC Circuits
EET 160 AC Circuits
EET 170 Digital Electronics Design
EET 210 Linear Electronics I
EET 220 Introduction to Electric Power
EET 260 Linear Electronics II
EET 270 Introduction to Microprocessor Design
EET 330 Advanced Microprocessor Design

Screen Printing Technology

Screen printing is a component of the rapidly growing graphic communications industry. Because of the increasing complexity of the communications industry, individuals trained in screen printing are in demand.

Career opportunities are good. People trained in screen printing will find employment opportunities in most segments of the communications industry; small printing companies and large corporations with communications divisions.

A principle objective of the screen printing program is to provide students with knowledge and expertise in the applications of screen printing, thus enabling them to become productive members of the graphic communications industry. This program of studies offers the flexibility of scheduling business electives for the acquisition of knowledge and skills to initiate and manage a screen printing business or company division.

After completing the program, the graduate will be able to identify materials capable of being screen printed, based on a particular application; formulate a plan for the production of a screen printed product consistent with the individual's career objective; produce quality screen printing plates for given applications; screen print a quality image on a designated material, in accordance with detailed specifications; assess the quality and value of screen printed productions; and recognize the importance of membership in professional associations that support individual career objectives and further professional growth.

Associate of Science in Screen Printing Technology (66 crs.)

General Education
CSC 120 Problem Solving & Programming Constructs
ENG 101 English Composition I
ENG 217 Scientific & Technical Writing
MAT 182 Technical Math I
PHI 247 Science, Technology & Society
Humanities Elective (3 credits)
Social Science Elective (3 credits)
Natural Science Elective (3 credits)
Free Elective (3 credits)

Technical Studies: 39 credits
Screen Printing (30 credits)
GCT 100 Graphic Communication Processes I
GCT 110 Screen Printing Techniques
GCT 210 Advanced Screen Printing Techniques
GCT 220 Black and White Photography
GCT 225 Principles of Layout & Design
GCT 240 Electronic Desktop Publishing
GCT 310 Screen Printing Productions
GCT 342 Estimating & Cost Analysis
IND 101 Drawing and Design
ITE 101 Industrial Safety
Related Area Electives select three of the following (9 credits):
GCT 200 Graphic Communication Processes II
GCT 230 Color Photography
GCT 270 Lithographic Techniques
IND 130 Introductory Circuit Analysis
IND 278 Plastics Technology
ITE 375 Principles of Production
PHY 135 Chemistry of Materials

MINORS

Automated Control - 21 Credits
Required:
IND 110 Technical Drawing I
IND 165 Machine Processes I
MTE 236 Numerical Control I

MTE 250 Introduction to Automation
Electives:
ITE 460 Principles of Manufacturing
MTE 265 Programmable Control Systems
MTE 268 Automated Support Systems
MTE 336 Numerical Control Programming II
MTE 350 Robotic Systems
MTE 495 Internship.

Computer Numerical Control - 21 Credits
Required:
IND 110 Technical Drawing I
IND 165 Machine Processes I
MTE 236 Numerical Control Programming I
MTE 250 Introduction to Automation

Electives:
IND 215 CAD I
IND 265 Machine Processes II
ITE 460 Principles of Manufacturing
MTE 336 Numerical Control Prog II
MTE 337 CNC Programming-COMPACT
MTE 338 CNC Programming-APT
MTE 437 Advanced CNC-COMPACT
MTE 438 Advanced CNC-APT
MTE 495 Internship

Electrical Engineering Technology - 21 Credits
Required:
EET 110 DC Circuits
EET 170 Digital Electronic Design
EET 270 Introduction to Microprocessors
EET 330 Advanced Microprocessors

Electives. Any two of the following:
EET 160, AC Circuits
EET 210 Linear Electronics I
EET 220 Introduction to Electric Power
EET 360 Microprocessor Engineering
EET 440 Computer Networking

Graphic Communications Technology - 21 Credits
Required:
GCT 100 Graphic Communications Processes I
GCT 200 Graphic Communications Processes II
GCT 220 Black and White Photography
GCT 225 Principles of Layout and Design
GCT 240 Desktop Publishing

Electives:
GCT 110 Screen Printing Techniques
GCT 210 Advanced Screen Printing Techniques
GCT 230 Color Photography
GCT 270 Lithographic Techniques
GCT 330 Flexography and Package Printing Processes
GCT 342 Estimating and Cost Analysis
GCT 365 Color Imaging
GCT 370 Advanced Lithographic Techniques
GCT 390 Gravure Printing
GCT 460 Substrates and Inks

Manufacturing Technology - 21 Credits
Required:
IND 110 Technical Drawing I
IND 215 Computer Aided Drafting I
ITE 181 Material Technology I
MTE 250 Introduction to Automation
ITE 101, Industrial Safety

Electives:
ITE 311 Industrial Ergonomics
ITE 375 Principles of Production
ITE 420 Production Analysis
ITE 445 Quality Control
MTE 495 Internship

Art

Purpose

The study of artistic expression is a study of the development of art forms such as sculpture and painting; the study of technique, that is the use of color, design, and perspective to achieve the artist's objectives; and a retrospective on what a culture and society has seen, valued, and understood about its place in the world order.

Art is a product of human creativity, a manifestation of the human spirit and meaning. The study of art is included in a liberal education because it informs students about the universal search for meaning and meaningful expression, about their past, and about how each person learns to move from a literal and concrete level of understanding to a more symbolic one.

Programs

The Art major can take (1) a general Art major or (2) an Art Certification program for teaching in either a primary or a secondary school. The certification program is undertaken in conjunction with area colleges and universities, which offer certification in Art. Art courses are taken at California University and Art Education and student teaching courses are taken through the cooperating college of university.

California University also has an agreement with The Art Institute of Pittsburgh that permits a graduate of the Institute's two-year program to receive sixty credit hours toward a Bachelor of Arts degree from California University. A second agreement between the schools permits California University students to take courses during their junior year in visual communication at the Institute and receive up to thirty credits in transfer if they complete one year of full-time course work there.

The junior year program with the Pittsburgh Art Institute permits students to take courses not available at California University in the areas of visual communication, illustration, interior design, photography, industrial design technology, etc. These courses of study prepare students for positions in commercial art-for example, advertising, publishing and corporate communication. Students acquire knowledge and experience in preparing art and layouts for reproduction.

The department also offers a minor in Art with several concentration opportunities. A minor in art would be helpful if you are interested in building a "specialty" in another curriculum such as a business major with an art minor who wants to work in gallery art sales or as a curator. Perhaps you just love art as a hobby, and having a minor in art would help you improve your skills. A minor in art combined with a degree in education would provide a future classroom teacher with an area of concentration that could enhance employment opportunities. Minors are available in ceramics, crafts, painting, printmaking and sculpture.

Careers

The Art program is flexible. It directs students into various areas of art, including art history, basic technique courses, and a series of studio courses in one or more of the following: drawing, painting, sculpture, crafts, ceramics, and printmaking. The program of study prepares students to enter graduate school as well as to pursue careers in professions utilizing art.

Students can become professional artists in their area of specialization, although most will need to undertake graduate education if they are to be successful professionals. Commercial art, in advertising and in broadcast media, continues to be a major employer of art students. The BA in Art Education will provide a student with K-12 certification for teaching art in the public schools in the elementary and secondary levels.

Graduates with studio art training have opportunities to work in various museum settings, in art galleries and in interior decorating establishments. They also can seek positions in design departments and as art directors in large corporations. Artists can use their talents in conjunction with other areas of specialty, such as Biology, History, and Archaeology. Artists can be illustrators in these areas.

Finally, artists may link the study of art with another discipline. Examples include medical art; the utilization of art in therapy, for persons interested in the areas of psychology and art; and the linkage of art, archaeology, and history in the recording of artifacts and in reconstructive work.

General Education

Students who enter California University under this catalog (after Spring 1999) will follow the new General Education Program. Please consult the description of the new program in this catalog for a list of General Education Goals and Objectives and the courses included on the menus for the various goals. Please note, some courses on a menu may be required for accreditation or certification in particular degree programs. Students should consult with their advisors regarding such requirements.

Bachelor of Arts in Art

Curriculum

General Education:

Area of Concentration:
Required Art Courses (36 credits)
ART 110 Drawing I
ART 119 Design 2-D
ART 120 Design 3-D
ART 113 Ceramics I
ART 116 Painting I
ART 117 Printmaking I
ART 118 Sculpture I
ART 126 Introduction to Crafts
ART 310 Advanced Drawing

Art History (9 credits)
(select three of the following courses):
ART 122 Art History: Ancient-Medieval
ART 123 Art History: Renaissance-Rococo
ART 124 Art History: Impressionism to Cubism
ART 125 Art History: Modern and Contemporary

Studio Concentration (12 credits)
Select from Ceramics, Crafts, Graphic Design, Painting, Printmaking, or Sculpture

Non-Concentration Studio Courses selected with a faculty advisor (9 credits)

Related Electives selected with faculty advisor

Bachelor of Arts in Art with K-12 Teacher Certification

Curriculum

General Education:

Area of Concentration:
Required Art Courses (36 credits)
ART 110 Drawing I
ART 119 Design 2-D
ART 120 Design 3-D
ART 113 Ceramics I
ART 116 Painting I
ART 117 Printmaking I
ART 118 Sculpture I
ART 126 Intro to Crafts
ART 310 Advanced Drawing

Art History (9 credits)
(select three of the following courses):
ART 122 Art History: Ancient-Medieval
ART 123 Art History: Renaissance-Rococo
ART 124 Art History: Impressionism to Cubism
ART 125 Art History: Modern and Contemporary

Studio Concentration (12 credits)
Select from Ceramics, Crafts, Graphic Design, Painting, Printmaking, or Sculpture

Non-Concentration Studio Courses selected with a faculty advisor (9 credits)

Related Electives selected with faculty advisor

Professional education courses at California University (18 credits) including:
EDE 205 Art for the Elementary Grades
EDF 290 Policy Studies in American Education
EDF 302 Applied Instructional Technology

Student Teaching and additional Art methods courses at the cooperating college or university.through Carlow.

Pennsylvania Certification requires satisfactory scores on all three core batteries and the specialty, Art Education, on the PRAXIS II.

Minor in Art

Art History (3 credits)
Select one of the following:
ART 106 Art Appreciation
ART 122 Art History: Ancient-Medieval
ART 123 Art History: Renaissance-Rococo
ART 124 Art History: Impressionism to Cubism
ART 125 Art History: Modern and Contemporary

Drawing (3 credits)
Select one of the following:
ART 110 Drawing I
ART 310 Advanced Drawing

Select one of the following Studio Concentrations:

Ceramics Concentration
ART 113 Ceramics I
ART 293 Ceramics Studio
ART 393 Ceramics Studio
ART 493 Ceramics Studio (repeated for six credits)

Crafts Concentration
ART 126 Intro to Crafts
ART 213 Crafts Studio
ART 313 Crafts Studio
ART 413 Crafts Studio (repeated for six credits)

Graphic Design Concentration
ART 127 Introduction to Graphic Design
ART 227 Graphic Design Studio
ART 327 Graphic Design Studio
ART 427 Graphic Design Studio
ART 428 Graphic Design Studio

Painting Concentration
ART 116 Painting I
ART 296 Painting Studio
ART 396 Painting Studio
ART 496 Painting Studio (repeated for six credits)

Printmaking Concentration
ART 117 Printmaking I
ART 297 Printmaking Studio
ART 397 Printmaking Studio
ART 497 Printmaking Studio (repeated for six credits)

Sculpture Concentration
ART 118 Sculpture I
ART 298 Sculpture Studio
ART 398 Sculpture Studio
ART 498 Sculpture Studio (repeated for six credits)

Biological & Environmental Sciences

Purpose

The Biological & Environmental Science programs are intensive scientific curricula that prepare students for graduate work in the biological and environmental sciences and career work in many related areas. The major emphasis of these programs is to provide students with a broad scientific core of courses, including studies in chemistry, physics, mathematics, and biology.

Students have the opportunity to select, in consultation with their faculty advisors, a wide range of biological and environmental science elective courses that best fulfill their needs for future work or graduate study. Practical laboratory experience emphasizes critical thinking and the use of instrumentation to study living systems. Academic credit can be obtained for practical internship experiences.

Programs

A wide variety of majors and concentrations in various degree programs are offered by the department. Students may decide to pursue the B.S. in Biology, the Pre-Professional track, or one of several concentrations in the B.S. in Environmental Studies. Those interested in teaching may choose the B.S.Ed in Biology. Cooperative programs also allow students to pursue careers in medical technology or mortuary science. The department also offers minors in Biology and in Environmental Studies.

Facilities

The Department of Biological and Environmental Sciences is housed in a modern, four-story building equipped with an array of biological and environmental science instruments. Specialized areas include both scanning and transmission electron microscope facilities, an animal room, greenhouse, herbarium, plant growth facilities, museum and photographic facilities. Teaching laboratories are equipped for the study of anatomy, botany, cytology, ecology, embryology, entomology, genetics, microbiology, parasitology, physiology, zoology, mammalogy, water pollution biology, ichthyology, behavioral ecology, biometry, physiological ecology, solid waste management, air quality monitoring, dendrology, ornithology and wildlife biology.

Academic Societies

Beta Beta Beta is the national honor society for biological sciences. The Upsilon Theta chapter was chartered in 1978. The society fosters the pursuit of knowledge, research experience, and service, in our students. Students can achieve membership if they maintain a QPA of 3.25 after completing 60 credit hours and are extended an invitation to join. Further information can be obtained at the department office.

California University's student chapter of the National Wildlife Society was chartered in 1996. Membership is open to all students interested. The student chapter won first place in the field competition and second place in the quiz bowl at the 1997 Northeastern Conclave of The Wildlife Society.

Careers

Career opportunities include preparation for graduate work in biology and related fields, for industrial research, for government research, for careers in public health, and in the many health-related fields.

A steady demand exists for environmental scientists, such as wildlife biologists, fishery biologists, water analysis technicians, air pollution control monitors, environmental health technicians, and interpretative naturalists. Many graduates are employed in these areas by private industry and by state and federal agencies. Some graduates further their education and teach and do research at a college or university.

General Education

Students who enter California University under this catalog (after Spring 1999) will follow the new General Education Program. Please consult the description of the new program in this catalog for a list of General Education Goals and Objectives and the courses included on the menus for the various goals. Please note, some courses on a menu may be required for accreditation or certification in particular degree programs. Students should consult with their advisors regarding such requirements.

Bachelor of Science in Biology

Curriculum

General Education:

Area Of Concentration:
Required Major Courses (19 credits):
BIO 115 Principles of Biology,
BIO 120 General Zoology,
BIO 125 General Botany.
BIO 318 Genetics
BIO 478 Evolution

Related Courses (27 credits):
CHE 101 General Chemistry I
CHE 102 General Chemistry II
CHE 331 Organic Chemistry I
CHE 332 Organic Chemistry II
PHY 121 General Physics I
PHY 122 General Physics II
MAT 122 Calculus I or MAT 273 Basic Calculus

Core Electives (22 credits): (At least one course must be chosen from each core and ALL courses must be 300 and 400 level.)

Quantitative and Techniques Core:
BIO 342 Scientific Photography
BIO 431 Electron Microscopy
BIO 466 Biometry
BIO 480 Cell Biology
ENS 495 Design & Analysis

Botany Core:
BIO 307 Plant Anatomy
BIO 314 Plant Ecology
BIO 332 Economic Botany
BIO 334 Soil Science
BIO 335 Plant Physiology
BIO 336 Plant Taxonomy
BIO 407 Mycology
BIO 442 Dendrology

Zoology Core:
BIO 305 Comparative Vertebrate Anatomy
BIO 306 Human Anatomy
BIO 317 Embryology

BIO 325 Animal Histology
BIO 327 Parasitology
BIO 337 Ornithology
BIO 400 Mammalogy
BIO 433 Herpetology
BIO 435 Ichthyology
BIO 445 Entomology

Physiology Core:
BIO 328 Human Physiology
BIO 335 Plant Physiology
BIO 486 Environmental Physiology

Cell and Molecular Biology Core:
BIO 326 Microbiology
BIO 318 Genetics
BIO 405 Human Genetics
BIO 426 Clinical Microbiology
BIO 432 Cellular Ultrastructure
BIO 450 Immunology
BIO 480 Cell Biology
BIO 520 Neurobiology

Ecology Core:
BIO 310 Ecology
BIO 314 Plant Ecology
BIO 334 Soil Science
BIO 337 Ornithology
BIO 400 Mammalogy
BIO 433 Herpetology
BIO 435 Ichthyology
BIO 441 Ethology
BIO 445 Entomology
BIO 488 Water Pollution Biology
ENS 420 Principles of Wildlife Management
ENS 423 Wildlife Management Techniques

Bachelor of Science in Education Certification in Biology for Secondary Schools

Curriculum

General Education:

Professional Education (41 credits):
PSY 208 Educational Psychology
EDU 210 Teaching in a Multicultural Society
EDF 290 Policy Studies in American Ed
EDS 300 Problems of Secondary Education
EDF 301 Computers for Teachers
EDF 302 Applied Instructional Technology
EDU 340 Mainstreaming the Exceptional Child
EDS 430 Educational Tests & Measurements
EDS 461 Student Teaching & School Law
EDS 465 Developmental Reading in Secondary Schools
EDS 467 Teaching of Sciences or EDS 445 Modern Methods in Secondary Schools with advisor's approval

Academic Specialization (40 credits):

Required Biology Courses - 16 credits:
BIO 115 Principles of Biology,
BIO 120 General Zoology,
BIO 125 General Botany.
BIO 318 Genetics

Biology Core Electives (16 credits)
One course must be chosen from each of the following cores:

Botany Core –
BIO 307 Plant Anatomy
BIO 314 Plant Ecology
BIO 332 Economic Botany
BIO 334 Soil Science
BIO 335 Plant Physiology
BIO 336 Plant Taxonomy
BIO 407 Mycology
BIO 442 Dendrology

Zoology Core:
BIO 305 Comparative Vertebrate Anatomy
BIO 306 Human Anatomy
BIO 317 Embryology
BIO 325 Animal Histology
BIO 327 Parasitology
BIO 337 Ornithology
BIO 400 Mammalogy
BIO 433 Herpetology
BIO 435 Ichthyology
BIO 445 Entomology

Physiology, Cell and Molecular Core:
BIO 326 Microbiology
BIO 328 Human Physiology
BIO 335 Plant Physiology
BIO 405 Human Genetics
BIO 426 Clinical Microbiology
BIO 432 Cellular Ultrastructure
BIO 450 Immunology
BIO 478 Evolution
BIO 480 Cell Biology
BIO 486 Environmental Physiology
BIO 520 Neurobiology

Ecology Core:
BIO 310 Ecology
BIO 314 Plant Ecology
BIO 334 Soil Science
BIO 337 Ornithology
BIO 400 Mammalogy
BIO 433 Herpetology
BIO 435 Ichthyology
BIO 441 Ethology
BIO 445 Entomology
BIO 488 Water Pollution Biology
ENS 420 Principles of Wildlife Management
ENS 423 Wildlife Management Techniques

Bachelor of Science in Biology Pre-Professional Biology Track

Students in the health professions commit themselves to a lifelong process of self-education; therefore, the development of scholarly motivation, independence, and creativity are vital to professional medical competence. Acquiring an understanding of people, their societies, and their history is a valuable asset in the practice of the health professions. Consequently, a liberal education in the humanities and the arts, as well as in the social and natural sciences, provides the best professional preparation. In addition, the student should demonstrate competence and concentrated study in a curriculum or field of special interest. Although students interested in the health professions do not necessarily major in

Biology, they should plan to take a significant number of biology courses.

Varied program offerings make it possible to satisfy requirements for pre-medical, pre-dental, pre-veterinary, pre-podiatry, pre-pharmacy, pre-chiropractic, and other pre-health fields.

Curriculum
General Education:

Area Of Concentration:
Required Core Courses (39 credits):
BIO 115 Principles of Biology,
BIO 120 General Zoology,
BIO 125 General Botany.
CHE 101 General Chemistry I
CHE 102 General Chemistry II
CHE 331 Organic Chemistry I
CHE 332 Organic Chemistry II
PHY 121 General Physics I
PHY 122 General Physics II
MAT 273 Basic Calculus or MAT 281 Calculus I

Area of Specialization (20 credits):
BIO 318 Genetics
BIO 306 Human Anatomy or BIO 305 Comparative Vertebrate Anatomy*
BIO 328 Human Physiology
BIO 480 Cell Biology
BIO 326 Microbiology
*Recommended for pre-veterinary

Related Electives (nine credits):
BIO 317 Embryology
BIO 325 Animal Histology
BIO 327 Parasitology
BIO 425 Clinical Microbiology
BIO 450 Immunology
CHE 411 Biochemistry I

Bachelor of Science in Environmental Studies

The concentrations in Environmental Studies provide students with the opportunity to select from a wide range of science courses and courses from related areas to fulfill their objectives for future employment or graduate school. Almost all science courses include a laboratory or field component in which students bring theory, methodology, and instrumentation to bear on specific problems. Internships with governmental and private agencies are available to qualified applicants for academic credit.

Bachelor of Science in Environmental Studies Curriculum

General Education

Students should select one of the following concentrations

Environmental Conservation Concentration

Area Of Concentration:
Required Core Area (28 credits):
BIO 115 Principles of Biology,
BIO 120 General Zoology,
BIO 125 General Botany.
EAS 150 Introduction to Geology
CHE 101 General Chemistry I
CHE 102 General Chemistry II
CHE 331 Organic Chemistry I

Area of Specialization (18 credits):
BIO 206 Conservation of Biological Resources
BIO 310 Ecology
BIO 442 Dendrology
BIO 466 Biometry
ENS 495 Design & Analysis

Related Core electives (14 credits):
BIO 314 Plant Ecology
BIO 334 Soil Science
BIO 336 Plant Taxonomy
BIO 337 Ornithology
BIO 400 Mammalogy
BIO 435 Ichthyology
BIO 441 Ethology
BIO 445 Entomology
BIO 486 Environmental Physiology
BIO 488 Water Pollution Biology
ENS 423 Wildlife Management Techniques

Ancillary Cores (20 credits): Earth Science, Parks and Recreation, Social Science, Physical Science or Business Management. All credits must be taken in a single core according to the students interests and approved by the faculty advisor, Director of Environmental Studies and Department Chairperson.

Business Core:
BUS 100 Intro to Business
BUS 242 Business Law
ECO 200 Current Economic Issues
ECO 201 Introductory Microeconomics
MGT 201 Principles of Management
Choice of BUS, ECO, or MGT courses with approval of advisor.

Parks and Recreation Core:
EAS 264 Scenic Areas of the U.S.
GEO 362 Site Planning and Design
GEO 220 Geography of U.S. and Pennsylvania
ANT 205 Cultural Res. Management
ANT 226 Historic Sites Arch.
Choice of an additional courses with advisor's approval.

Social Science Core:
ANT 250 Culture Change and Culture Shock
HIS 236 History of Urban America
POS 300 Intro to Public Policy
SOC 235 Urban Sociology
Choice of additional courses from the following:
SOC 205 Cont. Social Problems
SOC 210 Social Stratification
SOC 216 Sociology of Work
POS 205 Municipal Government
POS 235 State and Local Government

Earth Science Core:
EAS 200 Historical Geology
EAS 232 Earth Resources
EAS 241 Meteorology or EAS 242 Climatology
Choice of EAS courses 300 level or above and approval of advisor.

Physical Science Core:
CHE 332 Organic Chemistry II
CHE 261 Analytical Chemistry I

CHE 262 Analytical Chemistry II
CHE 255 Geochemistry
Choice of additional CHE courses with advisors approval.

Environmental Science Concentration

Area Of Concentration
Required Core Area (36 credits):
BIO 115 Principles of Biology,
BIO 120 General Zoology,
BIO 125 General Botany.
CHE 101 General Chemistry I
CHE 102 General Chemistry II
CHE 331 Organic Chemistry I
CHE 332 Organic Chemistry II
PHY 121 General Physics I
PHY 122 General Physics II

Area of Specialization (26 credits):
BIO 310 Ecology
BIO 318 Genetics
BIO 478 Evolution
BIO 466 Biometry
BIO 486 Environmental Physiology
ENS 459 Environmental Research Problems
ENS 495 Design and Analysis

Related Electives (18 credits): Students can elect to specialize in the animal ecology core, in the plant ecology core, or select courses from both areas.

Animal Ecology Core:
BIO 305 Comparative Vertebrate Anatomy
BIO 327 Parasitology
BIO 337 Ornithology
BIO 400 Mammalogy
BIO 433 Herpetology
BIO 435 Ichthyology
BIO 445 Entomology
BIO 441 Ethology
BIO 575 Water Pollution Biology
ENS 420 Principles of Wildlife Management

Plant Ecology Core:
BIO 314 Plant Ecology
BIO 336 Plant Taxonomy
BIO 334 Soil Science
BIO 442 Dendrology

Environmental Pollution Control Concentration

Area Of Concentration:
Required Core Area (32 credits):
BIO 115 Principles of Biology,
BIO 120 General Zoology,
BIO 125 General Botany.
CHE 101 General Chemistry I
CHE 102 General Chemistry II
CHE 331 Organic Chemistry I
CHE 332 Organic Chemistry II
CHE 261 Analytical Chemistry I

Area of Specialization (39 credits):
BIO 310 Ecology
BIO 326 Microbiology
BIO 466 Biometry
BIO 486 Environmental Physiology
BIO 575 Water Pollution Biology
ENS 341 Techniques in Water and Wastewater Analysis
ENS 430 Air Quality Monitoring
ENS 431 Solid Waste Management
ENS 432 Environmental Regulations
ENS 459 Environmental Research Problems
ENS 495 Design and Analysis

Related Electives (9 credits):
BIO 334 Soil Science
BIO 336 Plant Taxonomy
BIO 337 Ornithology
BIO 400 Mammalogy
BIO 435 Ichthyology
BIO 442 Dendrology
BIO 445 Entomology
ENS 420 Principles of Wildlife Management
ENS 423 Wildlife Management Techniques

Wildlife Biology Concentration

*To fulfill the requirements for certification as a wildlife biologist by The Wildlife Society, students must complete nine credits from the following areas: ECO, SOC, PSY, POS, HIS, ENG, LIT, FRE or SPN.

Area Of Concentration (80 credits):
Required Core Area (28 credits):
BIO 115 Principles of Biology,
BIO 120 General Zoology,
BIO 125 General Botany.
CHE 101 General Chemistry I
CHE 102 General Chemistry II
CHE 331 Organic Chemistry I
PHY 121 General Physics I

Area of Specialization (34 credits):
BIO 310 Ecology
BIO 318 Genetics
BIO 337 Ornithology
BIO 442 Dendrology or BIO 336 Plant Taxonomy
BIO 400 Mammalogy
BIO 466 Biometry or ENS 495 Design and Analysis
ENS 420 Principles of Wildlife Management
ENS 423 Wildlife Management Techniques
ENS 432 Environmental Regulations

Related Electives (18 credits)
Students must take six credits from Group I and 12 credits from Group II.

Group I (six credits):
COM 101 Oral Communication
MGT 201 Principles of Management
HIS 234 Urban Planning
GEO 317 Land Use Planning

Group II (12 credits):
BIO 326 Microbiology
BIO 327 Parasitology
BIO 334 Soil Science
BIO 433 Herpetology
BIO 435 Ichthyology
BIO 441 Ethology
BIO 445 Entomology
BIO 478 Evolution
BIO 486 Environmental Physiology
BIO 575 Water Pollution Biology

ENS 459 Environmental Research Problems

Environmental Resouce Concentration

Area Of Concentration:

Required Core Area (14 credits):
ENS 101 Introduction to Environmental Science
CHE 101 General Chemistry I
CHE 102 General Chemistry II
BIO 103 Contemporary Issues in Biology

Area of Specialization (22/23 credits):
EAS 150 Introduction to Geology
EAS 202 Hydrology
EAS 232 Earth Resources
EAS 241 Meteorology
EAS 541 Advanced Environmental Geology
BIO 334 Soil Science or a Field Course (EAS*),
Two Field Courses (EAS*).
*Courses listed with asterisk denote a field course.

Related Electives (43/44 credits): At least six credits must be taken from each of the following groups and 24 credits must be 300 level or higher.
GROUP I:
CHE 255 Geochemistry
EAS 170 Areal Geology*,
EAS 200 Historical Geology
EAS 304 Carbonate Geology
EAS 331 Mineralogy
EAS 332 Petrology
EAS 350 Micropaleontology
EAS 421 Sedimentology
EAS 425 Structural Geology
EAS 430 Optical Mineralogy
EAS 491 Field Course in Earth Science*
EAS 492 Field Course in Geology*
EAS 527 Tectonics
EAS 548 Watershed Evaluation

GROUP II:
EAS 163 Introduction to Oceanography
EAS 242 Climatology
EAS 250 Synoptic Meteorology
EAS 343 Geomorphology*
EAS 353 Statistical Atmospheric Science
EAS 352 Thermodynamic Meteorology
EAS 366 Geology of Pennsylvania*
EAS 402 Groundwater Hydrology
EAS 563 Coastal Geomorphology and Marine Resources*
GEO 200 Economic Geography
GEO 520 Physiography of the U.S

GROUP III:
EAS 271 Cartography
EAS 273 Computer Cartography
EAS 335 Remote Sensing: Map and Aerial Photo Interpretation
EAS 372 Field Mapping*
EAS 373 Statistical Cartography
EAS 436 Field Methods in Earth Science*
EAS 437 Field Methods in Geology*
EAS 538 Computer Applications in Water Resources
GEO 110 Map Principles

GROUP IV:
BIO 206 Conservation of Biological Resources
BIO 310 Ecology
BIO 314 Plant Ecology
ENS 430 Air Quality Monitoring
ENS 431 Solid Waste Management
ENS 432 Environmental Regulations

Bachelor of Science in Medical Technology

The program involves a three-year program on campus and one year (12 months) at one of the approved affiliated schools or one acceptable to California University. Upon the completion of the clinical or internship year, the student is granted a Bachelor of Science degree from California University as well as a certificate in medical technology from the hospital school.

In addition, graduates take the national test given by the Registry of Medical Technologists of the American Society of Clinical Pathologists. The students who successfully pass this examination become registered medical technologists M.T. (A.S.C.P.)

To enhance the opportunity of being accepted by one of our affiliated hospital schools of medical technology for the fourth or clinical year, it is strongly recommended that the student maintain a minimum of a 3.0 quality point average in the natural sciences (Biology, Chemistry, Physics, and Mathematics) and a minimum of a 3.0 overall quality point average.

Curriculum

General Education

Area Of Concentration:
Biological Sciences (35 credits):
BIO 115 Principles of Biology,
BIO 120 General Zoology,
BIO 306 Human Anatomy
BIO 318 Genetics
BIO 326 Microbiology
BIO 327 Parasitology
BIO 328 Human Physiology
BIO 426 Clinical Microbiology
BIO 450 Immunology

Ancillary Courses (27 credits):
CHE 101 General Chemistry I
CHE 102 General Chemistry II
CHE 261 Analytical Chemistry I
CHE 331 Organic Chemistry I
PHY 121 General Physics I
PHY 122 General Physics II
MAT 181 College Algebra

Approved School Of Medical Technology (29 credits):
The following courses are strongly recommended by the Hospital Schools of Medical Technology to be used as electives:
CHE 332 Organic Chemistry II
BIO 407 Mycology
CHE 411 Biochemistry I
MAT 215 Statistics

Bachelor of Science in Mortuary Science

The mortuary science year, through affiliation with the Pittsburgh School of Mortuary Science, is accredited through the American Board of Funeral Service Education, National Association of Colleges of Mortuary Science, National Conference of Funeral Service Examining Boards of the United States, Inc. This program

is designed for three years of approved study on campus and one year of study at the Pittsburgh Institute of Mortuary Science. Upon completion of the program, the student is granted a Bachelor of Science degree from California and a diploma from the Pittsburgh Institute. Upon completion of a one-year resident intern period, the candidate applies for the State Board Examinations and licensure as a funeral director and embalmer.

The program to prepares students with academic background for entry into school of mortuary science; to prepare the student with an academic background that can challenge the changing technology and demands of society; and to expand the opportunities for entry into a technological world.

Curriculum

The curriculum requires 128 credits: 100 credits in required and elective California University courses and 28 credits for the institute year at an approved mortuary science institute.

General Education:

Area Of Concentration:
Required:
BIO 115 Principles of Biology
BIO 120 General Zoology
BIO 125 General Botany

Biology Elective: Select one of the following with advisor's approval
BIO 306 Human Anatomy
BIO 328 Human Physiology
BIO 326 Microbiology

Ancillary Courses (15 credits):
CHE 101 General Chemistry I
CHE 102 General Chemistry II
CHE 331 Organic Chemistry I
MAT 181 College Algebra

Complementary Courses (15 credits):
ACC 201 Accounting I
PHI 220 Ethics
PSY 310 Mental Health/Psychology of Adjustment
PSY 211 Social Psychology
SOC 100 Principles of Sociology

School Of Mortuary Sciences (28 credits):

Strongly recommended electives:
POS 100 Introduction to Political Science
CSC 105 Basic Programming Language
ART 118 Sculpture I
MAT 171 Mathematics of Finance
ENG 211 Business and Professional Writing I
MGT 201 Principles of Management
SOC 220 The Family
SOW 150 Introduction to Social Work
COM 101 Oral Communication
BIO 325 Animal Histology
BIO 327 Parasitology
CHE 332 Organic Chemistry II

Minors

Biology Concentration

Required:
BIO 115 Principles of Biology,
BIO 120 General Zoology,
BIO 125 General Botany.
Electives: A minimum of nine credits from the biology core electives listed under the Bachelor of Science in Biology degree requirements. Courses must come from at least three different core areas.

Environmental Sciences Concentration

Required:
BIO 115 Principles of Biology
BIO 120 General Zoology
BIO 125 General Botany
BIO 310 Ecology

Electives: Two approved courses from the animal and plant ecology cores listed under the Environmental Sciences option of the degree program in Environmental Studies.

Business & Economics

Purpose

The Business and Economics Department offers a number of degree programs, with emphasis given to the development of fundamental skills that will be beneficial to graduates in both their professional and private lives. The department recognizes that the keys for success are flexibility and adaptability.

The department's programs are fully supported with state-of-the-art computer facilities including current software utilized in the business community, and the faculty offers a diverse background of practical business experience and scholarly achievement to equip the graduating student with the skills necessary for success in business.

Programs

To meet the demands in the labor market, the department has designed four distinct degree approaches, each serving a specific student interest and potential employment:

The Bachelor of Science in Business Administration offers several concentrations that can be tailored to the needs of each student. The various specialized concentrations permit modification of emphasis as the student's interests become defined without loss of credits earned toward graduation. Students may focus on one of the following specialized concentrations: Accounting, Business Economics, Computer Based Management, Finance, General Business Administration, Human Resource Management, Management, or Marketing.

The Bachelor of Arts in Administration and Management provides for a broad-based flexible curriculum that meets the needs of a business student with liberal arts interests. Graduation requirements make it ideal for the transfer student since it permits maximum utilization of previously completed course work. Graduates will be prepared for a variety of management positions in business, industry and government.

The Bachelor of Arts in Economics is a multipurpose program, with the objective of providing students with a liberal arts background and an understanding of the behavior of people as both producers and consumers. The program develops an understanding of the economic problems facing us today at all levels of government and business. This approach has been found to be attractive to many employers in industry, government, and business and is an excellent preparation for graduate study in economics, business administration, hospital administration, law, public administration and urban planning.

The Bachelor of Arts in International Studies: Business and Economics provides students with a liberal arts background and an understanding of the behavior of people as both producers and consumers, and experience with a foreign language. The program develops an understanding of the economic problems facing us today in government and business throughout the world.

The Associate of Science programs in Accounting, Administration & Management, Banking, and Computer Based Management provide an alternative for students not wishing to make an immediate four-year commitment to education. The accounting student may wish to pursue a two-year course of study preparatory to entering a junior-level accounting position. The two-year programs in Administration &Management or Computer Based Management provide sufficient background in basic management skills to qualify graduates for many entry-level supervisory positions. Students desiring a career in the financial service industry or for the employees of financial institutions may select the concentration in Banking. A student can transfer all of the course work completed at any time to the appropriate four-year program leading to a Bachelor's Degree.

The department offers a minor with a vareity of concentrations, and many department courses will be of value to students enrolled in other fields. The practical nature of course material will assist any student desiring to gain knowledge of business principles regardless of major. The faculty and office staff within the department will gladly assist students to determine courses meaningful to their fields.

Awards

Achievement is recognized in several ways. Membership is open to qualified successful students in Omicron Delta Epsilon, an honorary Economics Fraternity, the Accounting Club, the Economics Club, the Marketing Club, and the Society for the Advancement of Management. These organizations are involved in a variety of social and scholastic activities. In addition, the achievements of outstanding graduating seniors are recognized with the following awards:

Wall Street Journal Award for outstanding achievement in the study of Business or Economics;
Alfred Zeffiro Award for excellence in the study of Business Management;
Pennsylvania Institute of Certified Public Accountants Award for high scholastic achievement in the study of Accounting;
John Apessos Award for excellence in the study of Management.

Careers

Career opportunities are in such positions as those of accountant, banker, city manager, general manager, government agency administrator, hospital administrator, industrial relations manager, insurance agent, office manager, personnel manager, production manager, purchasing agent, retail manager, sales manager, sales representative, securities analyst, and stock broker.

General Education

Students who enter California University under this catalog (after Spring 1999) will follow the new General Education Program. Please consult the description of the new program in this catalog for a list of General Education Goals and Objectives and the courses included on the menus for the various goals. Please note, some courses on a menu may be required for accreditation or certification in particular degree programs. Students should consult with their advisors regarding such requirements.

Bachelor of Science in Business Administration

Curriculum

General Education:

Business Administration Core:
ENG 212 Business Writing II or ENG 375 Advanced Writing
COM 250 Oral Communication: Management
CSC 101 Microcomputers and Application Software
PSY 209 Industrial Psychology
ECO 201 Introductory Microeconomics
ECO 202 Introductory Macroeconomics
ECO 304 Money and Banking or ECO 302 Intermediate Macroeconomics
ECO 311 Labor Economics or ECO 301 Intermediate Microeconomics or ECO 322 Managerial Economics
BUS 100 Introduction to Business or Business elective.
ACC 201 Accounting I
ACC 202 Accounting II
ACC 331 Cost Accounting I or ACC 321 Managerial Accounting
MGT 201 Principles of Management
MKT 301 Principles of Marketing
FIN 301 Financial Management
MGT 362 Labor Relations
MGT 402 Strategic Management

Accounting Concentration
ACC 301 Intermediate Accounting I
ACC 302 Intermediate Accounting II
Upper-level Accounting (ACC) courses (9 credits, but no internship credits are allowed)
Electives in ACC, BUS, ECO, FIN, MGT or MKT courses 200 level or above (11 credits)
(Recommended: BUS 242 Business Law I and BUS 243 Business Law II).

Business Economics Concentration
ECO 301 Intermediate Microeconomics
ECO 302 Intermediate Macroeconomics
ECO 320 Mathematical Economics
Economics electives 200 level or above(11 credits)
Electives in ACC, BUS, ECO, FIN, MGT or MKT courses 200 level or above (5 credits)

Computer Based Systems Management Concentration
Computer Science courses selected with advisor's approval (15 credits)
MGT 371 Management Information Systems
MGT 373 Computer Based Management Systems
ECO 421 Applied Econometrics
Upper-level ACC, BUS, ECO, FIN, MGT or MKT course (3 credits).

Finance Concentration
FIN 201 Introduction to Finance
FIN 211 Personal Money Management
FIN 302 Advanced Financial Management
FIN 305 Investments
FIN 411 Financial Markets and Institutions
ECO 421 Applied Econometrics
Electives: Select from the following (7 credits, 3-6 of which may be 200 level or above):
ACC, BUS, ECO, FIN, MGT or MKT courses
FIN 531 Bank Management
Upper Level Finance elective
MGT 431 International Business Management
ECO 401 Industrial Organization
ECO 405 Public Finance
ECO 431 International Economics
FIN 351 Real Estate Fundamentals
FIN 352 Real Estate Practice
BUS 242 Business Law I

General Business Administration Concentration
ACC, BUS, ECO, FIN, MGT or MKT courses 200 level or above (26 credits)

Human Resource Management Concentration
BUS 242 Business Law I
MGT 352 Human Resource Management
MGT 301 Organizational Behavior
MGT 353 Compensation Management
PSY 370 Development of Interviewing Skills
Related Electives: Select from the following (11 credits may include up to three credits of Management electives):
BUS 342 Business, Society and Government .
GEO 217 Demographic Analysis
GEO 240 Human Ecology
PSY 211 Social Psychology
PSY 222 Psychology of Stress Management
PSY 305 Psychology of Personality
PSY 311 Psychology of Gender Roles
PSY 340 Psychological Testing
PSY 428 Advanced Industrial Psychology
SOC 125 Men, Women, and Work
SOC 215 Sociology of Work

Management Concentration
MGT 301 Organizational Behavior
MGT 352 Human Resource Management
BUS 242 Business Law I
Upper level Management (MGT) courses (9 credits no internship creditsare allowed)
Related Electives selected with advisor's approval (8 credits)

Marketing Concentration
MKT 222 Principles of Selling
MKT 321 Sales Management
MKT 401 Marketing Management
MKT 351 Advertising Management
MKT 431 Consumer Behavior
MKT 431 Marketing Research
MKT 452 Business Marketing

Related Electives (5 credits)
ACC, BUS, ECO, FIN, MGT or MKT courses 200 level or above
ECO 421 Applied Econometrics
MGT 431 International Business Management
FIN 351 Real Estate Fundamentals
FIN 352 Real Estate Practice
FIN 341 Insurance and Risk Management
MKT 331 Retailing
MKT 341 Marketing for Non-profit organizations
BUS 242 Business Law I

Bachelor of Arts in Administration and Management

Curriculum

General Education:

Area of Concentration:
ECO 201 Introductory Microeconomics
ECO 202 Introductory Macroeconomics
ECO 304 Money and Banking

ECO 311 Labor Economics
Upper-level Economics courses (6 credits)
ACC 201Accounting I
ACC 202 Accounting II
ACC 321 Managerial Accounting
MGT 201 Principles of Management
MKT 271 Principles of Marketing
FIN 301 Financial Management
MGT 362 Labor Relations
Upper-level courses in ACC, BUS, FIN, MGT or MKT (6 credits)

Related Courses:
MAT 182 Technical Mathematics or MAT 181 College Algebra
MAT 225 Business Statistics
CSC 101 Microcomputer and Application Software
COM 250 Oral Communication: Management
ENG 211 Business Writing I
PSY 326 Industrial Psychology

Related Electives selected with advisor's approval (5 credits)

Bachelor of Arts in Economics

Curriculum

General Education:

Area of Concentration:
Economics Core:
ECO 201 Introductory Microeconomics
ECO 202 Introductory Macroeconomics
ECO 304 Money and Banking
ECO 301 Intermediate Microeconomics
ECO 302 Intermediate Macroeconomics
Economics electives at 200 level or above (14 credits)

Communication Skills:
ENG 211 Business Writing I or ENG 375 Advanced Writing

Quantitative Skills:
MAT 182 Technical Math I or MAT 181 College Algebra
MAT 171 Mathematics of Finance
CSC 101 Microcomputer and Application Software
MAT 225 Business Statistics
ECO 320 Mathematical Economics .

Related Courses:
ACC 201 Accounting I
ACC 202 Accounting II
Five related courses approved by one's advisor.

Bachelor of Arts in International Studies: Business and Economics Option

Curriculum

General Education:

Area of Concentration:
Business & Economics:
ACC 201 Accounting
MGT 201 Principles of Management
ECO 201 Introductory Microeconomics
ECO 202 Introductory Macroeconomics
FIN 301 Financial Management
MKT 271 Principles of Marketing
MKT 431 International Business Management

Languages: Select courses from FRE or SPN:
203 Intermediate I
204 Intermediate II
311 Conversation, Composition and Phonetics I
312 Conversation, Composition and Phonetics II
Culture and Civilization Elective
Language Elective

GEO 200 Economics of Geography
Area Study Electives (6 credits).

Restricted & Related Electives (18 credits) Selected in consultation with advisor.

Associate of Science in Accounting

Curriculum

General Education:
ENG 101 English Composition I
ENG 211 Business Writing I
MAT 181 College Algebra or MAT 182 Technical Mathematics I
CSC 101 Microcomputers and Application Software
PHI 246 Science, Technology and Society
Humanities (3 credits)
Social Sciences (3 credits)
Natural Sciences (3 credits)
Free Electives (3 credits)

Area of Concentration:
BUS 100 Intro to Business
ACC 201 Accounting I
ACC 202 Accounting II
ACC 331 Cost Accounting
MGT 201 Principles of Management

Economics Electives selected from the following (6 credits):
ECO 100 Elements of Economics
ECO 200 Current Economic Issues
ECO 201 Introductory Microeconomics
ECO 202 Introductory Macroeconomics
Accounting Electives selected with advisor's approval (6credits)

Electives selected from the following with advisor's approval: (6-11 credits):
ACC, BUS, ECO, FIN, MGT or MKT courses
COM 250 Oral Communication Management .
MAT 171 Mathematics of Finance I
MAT 225 Business Statistics
PSY 209 Industrial Psychology

Associate of Science in Administration and Management

Curriculum

General Education:
ENG 101 English Composition I
ENG 211 Business Writing I
MAT 181 College Algebra or MAT 182 Technical Mathematics
CSC 101 Microcomputer and Application Software
PHI 246 Science, Technology and Society
Humanities (3 credits)
Social Sciences (3 credits)

Natural Sciences (3 credits)
Free Electives (3 credits)

Select one of the following concentrations

Administration and Management Concentration

BUS 100 Introduction to Business
ACC 201 Accounting I
ACC 202 Accounting II
MGT 201 Principles of Management
Economics Electives selected from the following (6 credits):
ECO 100 Elements of Economics
ECO 200 Current Economic Issues
ECO 201 Introductory Microeconomics
ECO 202 Introductory Macroeconomics

Business Electives
ACC, BUS, ECO, FIN, MGT or MKT courses (12-18 credits)

Related Electives selected from the following (3-9 credits):
COM 250 Oral Communication Management .
Computer Science (CSC) electives
MAT 171 Mathematics of Finance I
MAT 225 Business Statistics
PSY 209 Industrial Psychology
Psychology (PSY) elective
Sociology (SOC) elective

Banking Concentration

ACC 201 Accounting I
ACC 202 Accounting II
ACC 321 Managerial Accounting
ECO 100 Elements of Economics
ECO 201 Introductory Microeconomics
ECO 202 Introductory Macroeconomics
MGT 201 Principles of Management
FIN 301 Financial Management
ECO 304 Money and Banking
Finance elective (3 credits)
A.I.B. courses or from selected courses in BUS, MAT, and FIN (9 credits)

Computer Based Systems Management Concentration

BUS 100 Introduction to Business
ACC 201 Accounting I
ACC 202 Accounting II
MGT 201 Principles of Management
MGT 371 Management Information Systems or MGT 373 Computer Based Management Systems
Economics Electives selected from the following (9 credits):
ECO 100 Elements of Economics
ECO 200 Current Economic Issues
ECO 201 Introductory Microeconomics
ECO 202 Introductory Macroeconomics
ECO elective
Computer Science courses selected with advisor's approval (9 credits)
ACC 321 Managerial Accounting or ACC 331 Cost Accounting
ACC, BUS, ECO, FIN, MGT or MKT courses (6 credits)

Minors In Business & Economics

Accounting Concentration

BUS 100 Intro Business
ECO 100 Elements of Economics
ACC 201 Accounting I
ACC 202 Accounting II
ACC 331 Cost Accounting I
Upper Level (300 and above) ACC Electives (six credits).

Business Concentration

BUS 100 Intro Business
ECO 100 Elements of Economics
ACC 201 Accounting I
MGT 201 Principles of Management
Upper Level (300 and above) ACC, BUS, FIN, MGT or MKT Electives (9 credits).

Economics Concentration

BUS 100 Intro Business
ECO 201 Introductory Microeconomics
ECO 202 Introductory Macroeconomics
ECO Elective.
Upper Level (300 and above) ECO Electives (9 credits).

Finance Concentration

BUS 100 Intro Business
ECO 100 Elements of Economics
ACC 201 Accounting I
FIN 211 Personal Money Management
FIN 301 Financial Management
Upper Level (300 and above) FIN Elective (6 credits).

Management Concentration

BUS 100 Intro Business
ECO 100 Elements of Economics
MGT 201 Principles of Management
MGT 301 Organizational Behavior
MGT Elective
Upper Level (300 and above) MGT Electives (six credits).

Marketing Concentration

BUS 100 Intro Business
ECO 100 Elements of Economics
MKT 222 Principles of Selling
MKT 301 Principles of Marketing
MKT Elective.
Upper Level (300 and above) MKT Electives (six credits).

Chemistry & Physics

Purpose

The Department, located in the New Science building, houses both the Chemistry and Physics programs at the university. These programs provide students with a strong foundation in chemistry, physics, and related disciplines and prepares them for employment in the private and public sector as well as for advanced professional or graduate study.

Programs

The department offers the B.S. in Chemistry and the B.A. in Physics. In addition, students interested in secondary school teaching may select B.S.Ed. certification programs in chemistry, physics, or general science.

California University participates in cooperative engineering programs with both the Pennsylvania State University and the University of Pittsburgh. The student undertakes a three-year curriculum at California University of Pennsylvania concentrating on studies in liberal arts and pre-engineering courses in natural sciences. Upon successful completion of that curriculum and the recommendation of faculty, the student spends two years at the Pennsylvania State University or the University of Pittsburgh, at which time the student will complete the engineering course requirements as specified by the institution. For students who have yet to choose between engineering or another discipline as a field endeavor, the programs provide initial studies in both the arts and sciences at California University, during which time they may ascertain whether their abilities and interests lie in the field of engineering or another discipline. In addition, the program permits qualified students to receive both a liberal and technical education at relatively low cost.

The B.A. in Natural Sciences is an extremely flexible program that provides the student with an opportunity to structure a course of study that encompasses the broad areas of science and mathematics. Students enrolling in this program are expected to work carefully and regularly with their academic advisor to develop a program that meets their individual needs.

Careers

Career opportunities include positions as analytical chemist, quality control specialist, industrial management trainee, technical writer, chemical purchasing agent and sales person with the chemical industry. Some graduates have thus chosen to continue their education or to pursue careers in medicine, dentistry, pharmacy, management, and college and university teaching and research.

General Education

Students who enter California University under this catalog (after Spring 1999) will follow the new General Education Program. Please consult the description of the new program in this catalog for a list of General Education Goals and Objectives and the courses included on the menus for the various goals. Please note, some courses on a menu may be required for accreditation or certification in particular degree programs. Students should consult with their advisors regarding such requirements.

Bachelor of Science in Chemistry

Curriculum

General Education

Area of Concentration:
CHE 101 General Chemistry I
CHE 102 General Chemistry II
CHE 205 Inorganic Chemistry
CHE 261 Analytical Chemistry I
CHE 361 Instrumental Analysis
CHE 331 Organic Chemistry I
CHE 332 Organic Chemistry II
CHE 368 Individual Work
CHE 451 Physical Chemistry I
CHE 452 Physical Chemistry II
CHE 495 Chemistry Seminar

Chemistry elective (4 credits)

MAT 281 Calculus I
MAT 282 Calculus II
PHY 101College Physics I
PHY 202 College Physics II

Related electives selected with advisor's approval (16 credits)

Bachelor of Arts in Physics

Curriculum

General Education:

Area of Concentration:
PHY 101 College Physics I
PHY 202 College Physics II
PHY 203 College Physics III
PHY 221 Intermediate Mechanics
PHY 301 Intermediate Electricity and Magnetism
PHY 331 Modern Physics I
MAT 281 Calculus I
MAT 282 Calculus II
MAT 381 Calculus III
MAT 406 Differential Equations
CHE 101General Chemistry I
CHE 102 General Chemistry II
Physics Electives (six credits)
Related Electives selected with advisor's approval (19 credits)

Bachelor of Science in Education Certification in Chemistry for Secondary Schools

Curriculum

General Education:

Professional Education:
PSY 208 Educational Psychology
EDF 290 Policy Studies in American Education
EDS 300 Problems of Secondary Education
EDF 301 Computers for Teachers
EDF 302 Applied Instructional Technology
EDU 340 Mainstreaming Exceptional Learners
EDU 210 Teaching in a Multi-Cultural Society
EDS 430 Educational Tests and Measurements in Secondary Schools

EDS 465 Developmental Reading in the Secondary School
EDS 467 Teaching of Science in Secondary Schools or EDS 455 Modern Methods in Secondary Schools (with advisor's approval)
EDS 461 Student Teaching and School Law

Professional Specialization:
CHE 101General Chemistry
CHE 102 General Chemistry II
CHE 255 Geochemistry
CHE 261 Analytical Chemistry I
CHE 331 Organic Chemistry I
CHE 411 Biochemistry I
CHE 451 Physical Chemistry I
CHE 368 Individual Work I
MAT 281 Calculus I
MAT 282 Calculus II
PHY 101 College Physics I
Pennsylvania certification requires a satisfactory score on the Praxis II

Bachelor of Science in Education: Certification in Physics for Secondary Schools

Curriculum

General Education:

Professional Education:
PSY 208 Educational Psychology
EDF 290 Policy Studies in American Education
EDS 300 Problems of Secondary Education
EDF 301 Computers for Teachers
EDF 302 Applied Instructional Technology
EDU 340 Mainstreaming Exceptional Learners
EDU 210 Teaching in a Multi-Cultural Society
EDS 430 Educational Tests and Measurements in Secondary Schools
EDS 465 Developmental Reading in the Secondary School
EDS 467 Teaching of Science in Secondary Schools or EDS455 Modern Methods in Secondary Schools (with advisor's approval)
EDS 461 Student Teaching and School Law

Professional Specialization:
PHY 101 College Physics I
PHY 202 College Physics II
PHY 203 College Physics III
PHY 221 Intermediate Mechanics
PHY 301 Intermediate Electricity and Magnetism
PHY 331 Modern Physics I
PHY 341 Mathematical Methods of Physics I
PHY 495 Physics Seminar
MAT 281 Calculus I
MAT 282 Calculus II
MAT 381 Calculus III
CHE 101 General Chemistry I
Pennsylvania certification requires a satisfactory score on the Praxis II.

Bachelor of Science in Education Certification in General Science for Secondary Schools

Curriculum

General Education:

Professional Education:
PSY 208 Educational Psychology
EDF 290 Policy Studies in American Education
EDS 300 Problems of Secondary Education
EDF 301 Computers for Teachers
EDF 302 Applied Instructional Technology
EDU 340 Mainstreaming Exceptional Learners
EDU 210 Teaching in a Multi-Cultural Society
EDS 430 Educational Tests and Measurements in Secondary Schools
EDS 465 Developmental Reading in the Secondary School
EDS 467 Teaching of Science in Secondary Schools or
EDS 455 Modern Methods in Secondary Schools (may be taken with advisor's approval)
EDS 461 Student Teaching and School Law

Professional Specialization:
BIO 120 General Zoology
BIO 125 General Botany
CHE 101 General Chemistry I
CHE 102 General Chemistry II
PHY 121 General Physics I
PHY 122 General Physics II
EAS 150 Intro to Geology
EAS 163 Introduction to Oceanography
Science electives from BIO, CHE, EAS or PHY (5 credits)

Pennsylvania certification requires a satisfactory score on the Praxis II Exam.

Cooperative Engineering Program

Curriculum

General Education:

Area of Concentration:
IND 215 Computer-Aided Drafting (CAD) I
CHE 101 General Chemistry I
CHE 102 General Chemistry II
PHY 101 College Physics I
PHY 202 College Physics II
PHY 203 College Physics III
MAT 281 Calculus I
MAT 282 Calculus II
MAT 381 Calculus III
MAT 382 Calculus IV
MAT 341 Linear Algebra I
MAT 406 Differential Equations
PHY 341 Mathematical Methods of Physics I
Engineering Discipline Courses (13 credits)
Computer Science course (chosen in cooperation with advisor)

Bachelor of Arts in Natural Sciences

Information on the curricular structure of this program is available in the Chemistry and Physics Department office, the office of the Eberly College of Science and Technology, and the Office of Lifelong Learning.

Communication Disorders

Purpose

The Communication Disorders program provides students with a broad understanding of the scientific bases of normal speech and hearing processes and the diagnostic and rehabilitation procedures necessary to remediate communication disorders. The department provides clinical services for individuals who have communication disorders. Students observe and/or assist in diagnostic evaluations and therapy programs. Their involvement includes experiences with people of all ages, ranging from pre-school to adult.
The Department of Communication Disorders is accredited by the Council on Academic Accreditation (CAA) of the American Speech, Language and Hearing Association (ASLHA).

The objectives of the program are to:

Develop an understanding of the basic acoustical, anatomical and neurological development of normal speech, language and hearing

Develop knowledge of the various disorders affecting speech and language and the underlying pathologies and symptoms of the disorders

Create awareness of the instruments and procedures available to assess speech and language disorders and develop the ability to select and use such instruments correctly

Develop the clinical skills to effectively perform therapeutic procedures to correct or improve speech and language disorders

Instill the principles and practices of ethical professional behavior

Program

The B.S.Ed. in Communication Disorders (CMD) is a pre-professional degree program. Students, therefore, should be aware that they are preparing for future graduate training before employment as a speech-language pathologist (SLP). An Education Certification track is available at the graduate level only.

Students planning to complete the undergraduate program in CMD should maintain a grade point average sufficient for admission to a graduate program. Most graduate programs in CMD require a minimum GPA of 3.0. To facilitate this goal students should maintain the following minimum GPAs at the indicated points in their undergraduate program:

End of Freshman Year (32 crs.) - 2.5 Overall, 2.5 CMD
End of Sophomore Year (64 crs.) - 2.8 Overall, 2.8 CMD
End of Junior Year (96 crs.) - 3.0 Overall, 3.0 CMD
Graduation (128 crs.) - 3.0 Overall, 3.0 CMD

Students who do not achieve these minimum standards will be counseled each semester concerning their options and opportunities.

Speech and Hearing Clinic

The Speech and Hearing Clinic is primarily a training facility for the students in the Department of Communication Disorders. Speech and hearing services are available to the immediate community and surrounding counties, as well as to students and faculty of the University.

Programs offered during the regular semester include:

A pre-school program offering a developmentally appropriate curriculum for three to five year-old children within a classroom setting. Class size is limited to 20 students. Hours of operation are MWF from 9:30 a.m. to 11:30 a.m.

Diagnostic and therapeutic services are available to individuals of all ages with various speech and language disorders

Hearing screenings and comprehensive hearing evaluations are provided to the pediatric and adult population

Recommendations and assistance with hearing aid selection is also available

The Speech and Hearing Clinic is located in the Learning Research Center, Room 296, and the phone number is 724-938-4175. The Clinic is a free service to all university students.

General Education

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Bachelor of Science in Education in Communication Disorders

Curriculum

General Education:

Related Professional Courses selected with advisor's approval (33 credits) including:
PSY 207 Developmental Psychology
EDU 210 Teaching in a Multicultural Society or SOC 110 Ethnic, Racial, and Social Minorities
EDF 301 Computers for Teachers

Communication Disorders (39 credits):
ASHA Basic Science Requirements (selected from matrix):
Biological Sciences, Physical Sciences, or Mathematics (6 credits)
Behavioral or Social Sciences (6 credits)
CMD 100 Survey of Speech Pathology
CMD 105 Language and Speech Development
CMD 203 Phonetics
CMD 204 Anatomy and Physiology
CMD 213 Acoustics and Psychoacoustics
CMD 300 Speech Pathology I
CMD 301 Speech Pathology II
CMD 305 Introduction to Audiology
CMD 320 Assessment of Speech and Language (strongly recommended for all CMD students)
CMD 400 Clinical Practicum

Communication Studies

Purpose

Communication Studies is the discipline that focuses on human communicative behavior and its influence on our personal, professional, social and cultural lives. The faculty in Communication Studies believes that human communication is fundamental to an individual's capacity to function as an effective and ethical participant in an information society. To that end, students should understand communication from both broad theoretical and specifically applied perspectives. Accordingly, the department offers courses and activities designed to help students deal with the demands of varied communication situations. The curriculum provides the student with an opportunity:

to understand more fully the human communication process and how it affects the ways people interact when making decisions, developing relationships, and influencing each other, and

to develop communication skills which enhance the individual person's capacity to function in communication situations at work, home, social gatherings, and in civic organizations.

Programs

Students majoring in Communication Studies have four academic program options:

The Speech Communication Concentration focuses on developing an understanding of the uniquely human capacity for producing and using symbols. Throughout life, during nearly every conscious minute, humans are either formulating messages or passing judgment on the messages formulated by others. Students in this program develop an understanding of and skill in the human ability to share and examine facts, ideas, opinions, values, and attitudes.

The Radio/Television Concentration emphasizes the application of mass communication theory to audio and video production. The electronic communication media have had an immense impact on human communication. Understanding the dynamics of these technologies and their effects is the most important focus on this degree program. Graduates will have an understanding of the dynamics, as well as, skills necessary to function in entry level jobs in many organizations concerned with mediated messages.

The Public Relations Concentration seeks to create graduates who understand how public opinion emerges and changes. It seeks to provide the tools graduates will need for helping clients track changes in public opinion and create messages using an ever increasing variety of media. Students who complete the degree requirements may advise a wide variety of organizations regarding their publics' responses to policies, programs, campaigns, and messages.

The fourth option is for persons who want to teach in the area of Communication. The Communication Studies Department in cooperation with the College of Education and Human Services provides course work necessary for secondary school certification in communication with a speech concentration.

Assuming that it is desirable to graduate in the normal four-year period, it is expected that students will:

Register for and complete 16-18 credit-hours each semester.

Complete both ENG 101 & 102 before taking other writing courses.

Select courses to compensate for Internship ineligibility.

Complete major courses on schedule and make-up shortcomings in General Education and electives during summer terms.

In addition to the four options identified above, students majoring in any other program on campus may minor in one of three minor concentrations available in Communication Studies – Public Communication, Public Relations, and Television Production. Successful completion of any of the three minor programs requires that the student complete twenty-one (21) credits.

The academic programs are enhanced by co-curricular activities. In addition, junior and senior students who have maintained a 3.0 grade point average are encouraged to seek internship opportunities in regional radio-television studios, public relations agencies, advertising firms, municipal governments, school districts, hospitals, labor organizations, and businesses.

The on-campus television studio and radio station provides students with "hands-on" production experience in the electronic media. The television studio supports student video production. The radio station, WVCS, broadcasts regionally. It is a student-operated and student-managed station.

Honor Society

Pi Kappa Delta is the honor society for intercollegiate debaters, individual events competitors, and teachers of communication. The Penn Zeta Chapter was organized in 1963. Undergraduate students can achieve membership in this society if they meet the minimum standards of forensic participation and are extended an invitation to join. Further information can be obtained at the departmental office.

Awards

Each year the faculty in Communication Studies selects a deserving graduating senior as an Outstanding Graduate. The honoree receives a plaque, a one-year membership in the Speech Communication Association, the national organization for communication professionals, and a one year subscription to one of its five professional journals.

Careers

Aside from the obvious careers in broadcast journalism or public relations, graduates can obtain positions in management training programs, as speech writers and as salespeople. Communicating effectively and evaluating the communication efforts of others are inescapable activities associated with any job. By understanding the theory and mastering the skills associated with a Communication Studies degree program, graduates who can demonstrate their capabilities make themselves attractive to a wide variety of employers.

An undergraduate major or minor in communication studies is an asset for careers in law, religion, education, labor relations, politics, marketing and human resource development. Unless one seeks

employment in which highly technical, specialized knowledge is required (e.g. accounting, medical technology, computer programming, and others) the career opportunities with a Communication Studies degree are extensive. Those considering a degree in this department are urged to consult with the chairperson or other faculty in the department to identify additional possibilities.

General Education

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Bachelor of Arts in Communication Studies

Curriculum

General Education:

Core Courses (27 credits):
COM 100 Perspectives on Communication
COM 101 Oral Communication or COM 250 Oral Communication Management
COM 107 Fundamentals of Discussion or COM 102 Group Discussion Management
COM 105 Survey of Radio, Television, and Film
COM 165 Interpersonal Communication
COM 350 Persuasion
COM 461 Communication Criticism
COM 481 Communication Research Techniques
COM 490 Communication Theory

Students should select one of the following concentrations

Speech Communication Concentration

Required Courses (24 credits)
COM 201 Intercollegiate Forensic Activities
COM 210 Voice and Articulation
COM 224 Introduction to Oral Interpretation
COM 230 Argumentation and Debate
COM 235 Presidential Rhetoric
COM 315 Language and Behavior
COM 324 Advanced Oral Interpretation
COM 370 Public Communication Law and Policy

Related Courses selected with advisor's approval (minimum 17 credits, 9 of which must be at the 300 or 400 level)

Radio and TV Concentration

Required Courses (12 credits):
COM 141 Audio Production I
COM 142 Video Production I
COM 463 Media Criticism
COM 445. Radio & Television in a Free Society

Performance or Production (6 credits from one area)
Performance:
COM 210 Voice and Articulation
COM 224 Introduction to Oral Interpretation
COM 246 Radio & Television Announcing
COM 336 Broadcast Reporting

Production:
COM 241 Audio Production II
COM 242 Video Production II
COM 341 Audio Aesthetics & Applications
COM 342 Video Aesthetics & Applications

Writing (6 credits):
COM 331 Radio & Television Commercials
COM 332 Radio & Television News
COM 335 Radio & Television Drama

Management (3 credits):
COM 355 Broadcast Management
COM 370 Public Communication Law & Policy
COM 410 Professional Video Communications

Related Courses selected with advisor's approval. (14 credits)
At least six credits from outside Communication Studies and at least six credits at the 300 or 400 level.

Public Relations Concentration

Required Courses (18 credits)
COM 203 Introduction to Public Relations
COM 303 Public Relations Applications
COM 315 Language & Behavior
COM 370 Communication Law and Policy
COM 438 Public Relations Campaign Management
COM 484 Public Relations Cases & Problems

Restricted Electives (23 credits):
Writing Courses (6 - 9 credits):
COM 331 Radio & Television Commercials * or COM 332 Radio & Television News
ENG 167 Journalism I or ENG 169 Journalism II or ENG 312 Journalism III
ENG 375 Advanced Writing or ENG 401* Copywriting or ENG 435 Article Writing or ENG 437 Advertising
*Students are not permitted to satisfy this requirement by taking both COM 331 and ENG 401.

Business, Society & Government Courses (6 - 9 credits):
MGT 201 Principles of Management
POS 220 Introduction to Public Administration
MKT 271 Principles of Marketing
MKT 351 Advertising Management
BUS 342. Business Society & Government

Technical Skills Courses (6 - 9 credits):
GCT 240 Electronic Desktop Publishing (required)
GCT 100 Graphic Communications Process I
GCT 220 Black & White Photography
GCT 225 Principles of Layout & Design
ART 211 Communication Design
ART 361 Video Art/Design
COM 141 Audio Production I or COM 142 Video Production I
Internship (0 - 5 credits): Students majoring in Public Relations are encouraged to plan to take Communication Internship (COM 459) but must have a 3.0 GPA in the major to do so.

Bachelor of Science in Education: Certification in Communication

(Speech Concentration) for Secondary School

Curriculum
General Education:

Professional Education:
PSY 208 Educational Psychology
EDF 290 Policy Studies in American Education
EDF 301 Computers for Teachers
EDF 302 Applied Instructional Technology
EDS 300 Problems of Secondary Education
EDS 430 Educational Tests and Measurements
EDS 440 Teaching of English
EDS 465 Developmental Reading in Secondary Schools
EDU 210 Teaching in a Multicultural Society
EDU 340 Mainstreaming Exceptional Learners
EDS 461 Student Teaching & School Law.

Academic Specialization: **Speech Concentration**

ENGLISH:
ENG 345 English Grammar and Usage
ENG 375 Advanced Writing
ENG 301 English Literature I or ENG 302 English Literature II
ENG 425 Shakespeare
ENG 337 Survey of American Literature I
ENG 338 Survey of American Literature II

THEATRE: Select courses to total six credits:
THE 131 Fundamentals of Acting
THE 141 Stagecraft I
THE 320 Fundamentals of Directing
THE 350-358 Practicum

COMMUNICATION:
COM 142 Audio Production I
COM 201 Intercollegiate Forensic Activities
COM 224 Introduction to Oral Interpretation
COM 230 Argumentation and Debate
COM 350 Persuasion

Select one of the following:
COM 315 Language and Behavior
COM 461 Communication Criticism
COM 481 Communication Research Techniques

Select one of the following:
COM 242 Video Production II
COM 324 Advanced Oral Interpretation
Pennsylvania Certification requires a satisfactory score on the Praxis II.

Minors in Communication Studies

Public Communication Concentration
COM 101 Oral Communication
COM 105 Survey of Radio, TV, & Film
COM 203 Introduction to Public Relations
COM 235 Presidential Rhetoric 1960 to the Present
COM 370 Public Communication Law & Policy
COM 445 Radio & TV in a Free Society
COM 461 Communication Criticism

Public Relations Concentration
COM 203 Introduction to Public Relations
COM 303 Public Relations Applications
COM 315 Language and Behavior
COM 370 Public Communication Law & Policy
COM 438 Public Relations Campaign Management
COM 481 Communication Research Techniques
COM 484 Public Relations Cases and Problems

Television Production Concentration
COM 105 Survey of Radio, TV, and Film
COM 141 Audio Production I
COM 142 Video Production I
COM 242 Video Production II

Select six credits from the following:
COM 331 Radio & Television Commercials
COM 332 Radio & Television News
COM 335 Radio & Television Drama

Select three credits from the following:
COM 336 Broadcast Reporting
COM 360 Appreciation of Film
COM 410 Professional Video Communications

Earth Science

Purpose

The Department of Earth Science is committed to the practical advancement of knowledge; to serving the local, national, and world community; and to the education of earth scientists and geographers. To fulfill this commitment, the department offers a broad spectrum of courses, tutoring, research, and services that enable a student, with the help of an advisor, to acquire a body of knowledge and variety of skills that serve as a basis for a professional career. The department is also committed to research and to the enhancement of the human condition through cooperation with individuals, communities, departments, institutions, organizations, and government agencies.

The department provides students with opportunities to work with modern technologies, software, data bases, and field methods. In addition to the traditional courses, the department offers field courses designed to give practical experiences.

The Department of Earth Science has adopted a holistic philosophy of geography and the earth sciences that lays the foundation for interdisciplinary relationships. Traditional academic disciplines, such as physical geography, cultural geography, regional geography, and economic geography, or divisions such as meteorology, geomorphology, and hydrology, are presented in a manner that ties together information or principles from related disciplines. The goal of the department is to produce a well-rounded, well-trained individual who is ready for a professional career.

Programs

The Earth Science major has four concentrations: Meteorology, Broadcast Meteorology, Hydro-Meteorology, and Environmental Earth Science. The Geography major has three concentrations: General, Applied, and Traveland Tourism. In addition, there are three single concentration majors: Geology, International Studies: Geography, and Parks and Recreation Management. The department, in conjunction with the College of Education and Human Services, provides a teacher certification program for those interested teaching Earth Science in secondary schools.

Honors

The national Earth Science honor society, Sigma Gamma Epsilon, has a chapter (Alpha Zeta) on campus. Students recognized for their academic and professional achievements are elected to it. Honor students in Geography are eligible for induction into Gamma Theta Upsilon. Membership is also available to students of high scholastic attainment in the California University Chapter of Rho Phi Lambda Fraternity, the professional honor society for parks and recreation majors.

Careers

A student who desires a professional career in the earth sciences or in geography in most instances will need to have an advanced degree. This is the case for such professions as geologist, meteorologist, hydrologist, climatologist, environmental geologist, regional planner, and cartographer. Undergraduates seeking employment, however, will find opportunities in businesses undertaking environmental assessments.

Students with undergraduate majors in Parks and Recreation Management or Travel and Tourism can enter directly the job market, in such positions as directors or staff persons in schools, governmental agencies (municipal and military, for example), industries or resorts with recreational programs or as travel managers, sales staff or meeting planners.

General Education

Students who enter California University under this catalog (after Spring 1999) will follow the new General Education Program. Please consult the description of the new program in this catalog for a list of General Education Goals and Objectives and the courses included on the menus for the various goals. Please note, some courses on a menu may be required for accreditation or certification in particular degree programs. Students should consult with their advisors regarding such requirements.

Bachelor of Science in Earth Science

Curriculum

General Education:

Students may select one of the following concentrations

Meteorology Concentration
Required Core Courses
EAS 150 Introduction to Geology
EAS 163 Introduction to Oceanography
EAS 200 Historical Geology
EAS 202 Hydrology
EAS 241 Meteorology
GEO 110 Map Principles
CHE 101 General Chemistry I
MAT 181 College Algebra or MAT 182 Tech. Math I
PHS 145 Astronomy
PHY 121 General Physics I
EAS ___ Field Experience
Any of the following courses will count as the field experience:
EAS 166 Geology of Pennsylvania
EAS 170 Areal Geology
EAS 372 Field Mapping
EAS 436Field Methods in Earth Sciences
EAS 437 Field Methods in Geology
EAS 491 Field Course in Earth Sciences
EAS 492 Field Course in Geology
EAS 563 Coastal Geomorphology
GEO 445 Field Methods in Geography
GEO 491 Field Course in Geography

Required Meteorological Courses:
EAS 242 Climatology
EAS 340 Synoptic Meteorology
EAS 402 Groundwater Hydrology
EAS 353 Statistical Atmospheric Science
EAS 352 Thermodynamic Meteorology
EAS 465 Seminar in Atmospheric Science
EAS 542 Applied Climatology
PHY 122 General Physics II

Additional Mathematics courses (6 credits)

Broadcast Meteorology Concentration
Common Core Courses:
EAS 100 Introduction to Earth Science
EAS 150 Introduction to Geology

EAS 163 Introduction to Oceanography
EAS 202 Hydrology
EAS 241 Meteorology
EAS 242 Climatology
GEO 110 Map Principles

Related Geography Courses:
GEO 100 Introduction to Geography
GEO 220 Geography of U.S. and PA

Required Atmospheric Science Courses:
EAS 340 Synoptic Meteorology
EAS 334 Synoptic Meteorology II
EAS 352 Thermodynamic Meteorology
EAS 365 Statistical Atmospheric Science
EAS 365 Remote Sensing: Satellite and Radar Interpretation
EAS 361 Weather Analysis
EAS 371 Weather Forecasting
EAS 381 Severe Weather
EAS 465 Seminar in Atmospheric Science
EAS 542 Applied Climatology
GEO 479 Internship

Required Broadcast Meteorology courses:
EAS 431 Practicum in Broadcast Meteorology I
EAS 432 Practicum in Broadcast Meteorology II

Required Communication Studies and Theatre courses:
COM 105 Survey of Radio, TV& Film
COM 142 Video Production I
COM 210 Voice and Articulation or THE 101 Voice and Speech
COM 242 Video Production II
COM 246 Radio and TV Announcing
THE 100 Introduction to Theatre
THE 131 Fundamentals of Acting

Required Mathematics course:
MAT 181 College Algebra

Required Chemistry and Physics:
CHE 101 General Chemistry
PHY 121 General Physics I
PHY 122 General Physics II

Hydro-Meteorology Concentration
Common Core Courses:
EAS 100 Introduction to Earth Science
EAS 150 Introduction to Geology
EAS 163 Introduction to Oceanography
EAS 202 Hydrology
EAS 241 Meteorology
EAS 242 Climatology
GEO 110 Map Principles

Required Hydro-Meteorology courses:
EAS 340 Synoptic Meteorology
EAS 353 Statistical Atmospheric Science
EAS 365 Remote Sensing: Satellite and Radar Interpretation
EAS 385 Hydro-Meteorology
EAS 402 Groundwater Hydrology
EAS 465 Seminar in Atmospheric Science
EAS 538 Computer Application in Water Resources
EAS 548 Watershed Evaluation

Quantitative Electives to be chosen from the following (12 credits):
EAS 528 Quantitative Applications in Earth Science
MAT 181 College Algebra or MAT 182 Technical Mathematics I
MAT 191 College Trigonometry or MAT 192 Technical Mathematics II
MAT 199 Pre-Calculus
MAT 203 Geometry
MAT 215 Statistics
MAT 225 Business Statistics
MAT 273 Basic Calculus
MAT 281 Calculus I
MAT 282 Calculus II
MAT 381 Calculus III
MAT 382 Calculus IV
MAT 406 Differential Equations

Required Chemistry and Physics to be chosen from the following (12 Credits):
CHE 101 General Chemistry I
PHY 101 College Physics I or PHY 121 General Physics I
PHY 122General Physics II or PHY 202 College Physics II

Meteorology and Earth Science Electives (18 Credits):
EAS 345 Synoptic Meteorology II
EAS 352 Thermodynamic Meteorology
EAS 361 Weather Analysis
EAS 371 Weather Forecasting
EAS 375 Map and Aerial Photo Interpretation
EAS 381 Severe Weather
EAS 431 Practicum in Broadcast Meteorology I
EAS 432 Practicum in Broadcast Meteorology II
EAS 463 Seminar in Oceanography
EAS 465 Seminar in Atmospheric Science
EAS 542 Applied Climatology
EAS 563 Coastal Geomorphology
GEO 479 Internship

Environmental Earth Science Concentration
Common Core Courses:
EAS 100 Introduction to Earth Science
EAS 150 Introduction to Geology
EAS 163 Introduction to Oceanography
EAS 202 Hydrology
EAS 241 Meteorology
EAS 242 Climatology
GEO 110 Map Principles

Required Environmental Earth Science Courses:
EAS 131 Intro. to Environmental Geology
EAS 232 Earth Resources
EAS 541 Advanced Environmental Geology

Required Biology and Environmental Science Courses:
BIO 103 Contemporary Issues in Biology
ENS 101 Introduction to Environmental Science

Quantitative Electives to be chosen from the following (9 Credits):
EAS 528 Quantitative Applications in Earth Science
MAT 181 College Algebra or MAT 182 Technical Mathematics I
MAT 191 College Trigonometry or MAT 192 Technical. Math II
MAT 199 Pre-Calculus
MAT 203 Geometry
MAT 215 Statistics
MAT 225 Business Statistics
MAT 273 Basic Calculus
MAT 281 Calculus I
MAT 282 Calculus II
MAT 381 Calculus III
MAT 382 Calculus IV

MAT 406 Differential Equations

Earth Science Electives (35 Credits, a minimum of 6 credits to be chosen from each of the following groups):
Lithospheric:
EAS 160 Physical Geography
EAS 200 Historical Geology
EAS 264 Scenic Areas of the U. S.
EAS 304 Carbonate Geology
EAS 331 Mineralogy
EAS 332 Petrology
EAS 343 Geomorphology
EAS 421 Sedimentology
EAS 422 Stratigraphy
EAS 425 Structural Geology
EAS 527 Tectonics
EAS 546 Petroleum
EAS 563 Coastal Geomorphology
GEO 520 Physiography

Atmospheric/Hydrological:
EAS 340 Synoptic Meteorology
EAS 345 Synoptic Meteorology II
EAS 352 Thermodynamic Meteorology
EAS 361 Weather Analysis
EAS 371 Weather Forecasting
EAS 381 Severe Weather
EAS 385 Hydro-Meteorology
EAS 463 Seminar in Oceanography
EAS 465 Seminar in Atmospheric Science
EAS 542 Applied Climatology
EAS 548 Watershed Evaluation

Techniques:
EAS 271 Cartography
EAS 273 Computer Cartography
EAS 317 Land Use
EAS 335 Remote Sensing: Map/Aerial photo Interpretation
EAS 365 Remote Sensing: Satellite and Radar Interpretation
EAS 372 Field Mapping
EAS 373 Statistical Cartography
EAS 402 Groundwater Hydrology
EAS 431 Practicum in Broadcast Meteorology I
EAS 432 Practicum in Broadcast meteorology II
EAS 538 Computer Applications in Water Resources
GEO 311 Geographic Information Systems
GEO 479 Internship

Bachelor of Science in Education: Certification in Earth Science for Secondary Schools

Curriculum:

General Education:

Professional Education:
PSY 208 Educational Psychology
EDF 290 Policy Studies in American Ed.
EDF 302 Applied Instructional Technology
EDS 300 Problems of Secondary Education
EDS 430 Educational Tests and Measurements in Secondary Schools
EDS 465 Developmental Reading in Secondary Schools
EDF 301 Computers for Teachers
EDU 210 Teaching in a Multi-Cultural Society
EDU 340 Mainstreaming Exceptional Learners
EDS 467 Teaching of Science in Secondary Schools or EDS 455 Modern Methods
EDS 461 Student Teaching and School Law

Professional Specialization:
Required:
EAS 150 Introduction to Geology
EAS 163 Introduction to Oceanography
EAS 241 Meteorology
PHS 145 Astronomy
CHE 101 General Chemistry I
MAT 199 Pre-Calculus
PHY 121 General Physics I

Restricted Electives to be chosen from the following (12 credits):
EAS 131 Environmental Geology
EAS 160 Physical Geography
EAS 166 Geology of Pennsylvania
EAS 200 Historical Geology
EAS 202 Hydrology
EAS 232 Earth Resources
EAS 242 Climatology
EAS 250 Synoptic Meteorology
EAS 264 Scenic Areas of the United States
EAS 273 Computer Cartography
EAS 436 Field Methods in Earth Science
EAS 437 Field Methods in Geology
EAS 491 Field Course in Earth Science
EAS 492 Field Course in Geology
EAS 541 Advanced Environmental Geology
EAS 550 Regional Climatology
EAS 563 Coastal Geomorphology
GEO 110 Map Principles
GEO 520 Physiography of the United States
Pennsylvania Certification requires a satifactory score on the Praxis II.

Bachelor of Arts in Geography: General Concentration

Curriculum:

General Education:

Area of Concentration:
Required courses:
GEO 105 Human Geography
GEO 110 Map Principles
EAS 160 Physical Geography
GEO 200 Economic Geography
GEO 210 Urban Geography
EAS 271 Cartography or EAS 375 Map and Aerial Photo Interpretation and
GEO 493 Seminar in Geography

Restricted Electives (24 credits)
6 to be taken from the following list of Area Studies:
GEO 220 Geography of U.S. and PA
GEO 325 Geography of Europe
GEO 328 Geography of Latin America
GEO 331 Geography of Russia

9 to be taken from the following list of Cultural Geography Systematic courses:
GEO 217 Demographic Analysis
GEO 240 Human Ecology

GEO 306 Marketing Geography
GEO 311 Geographic Information Systems
GEO 340 Historical Geography
GEO 345 Political Geography
GEO 520 Physiography of the U.S.

9 to be taken from the following list of Earth Science Systematic courses:
EAS 202 Hydrology
EAS 232 Earth Resources
EAS 241 Meteorology
EAS 242 Climatology
EAS 365 Remote Sensing: Satellite and Radar Interpretation
EAS 273 Computer Cartography
EAS 343 Geomorphology

Related Electives (18-23 credits must be taken with a minimum of 3 credits from each of the following areas):

Economics:
ECO 200 Current Economic Issues
ECO 201 Introductory Microeconomics
ECO 202 Introductory Macroeconomics
ECO 304 Money and Banking
ECO 431 International Economics
ECO 433 Economics of Growth and Development

Political Science:
POS 210 Politics of Western Europe
POS 236 Introduction to International Relations
POS 237 International Organizations
POS 281 Politics of Russia
POS 325 Politics of Asia
POS 326 Politics of Africa

Computer Science:
MAT 215 Statistics
CSC 205 Pascal
CSC 218 Cobol I
CSC 300 Computer Operations
CSC 377 Info. Structures

English:
ENG 203 Great Books
ENG 211 Business Writing I
ENG 341 Romantic Literature
ENG 336 American Literature I
ENG 337 American Literature II

History:
HIS 215 Expansion of American Foreign Policy
HIS 225 History of Contemporary Europe
HIS 236 History of Urban America
HIS 416 History of Britan

Sociology:
SOC 205 Contemporary Social Problems
SOC 235 Urban Sociology
SOC 240 Social Institutions
SOC 260 Crime

Bachelor of Arts in Geography: Applied Concentration

Curriculum:

General Education:

Area of Concentration:
Required courses:
GEO 105 Human Geography
GEO 110 Map Principles
EAS 160 Physical Geography
GEO 200 Economic Geography
GEO 210 Urban Geography
EAS 365 Remote Sensing: Satellite and Radar Interpretation
EAS 271 Cartography
EAS 273 Computer Cartography
GEO 311 Geographic Information Systems
EAS 375 Statistical Cartography
EAS 375 Map and Aerial Photo Interpretation

Restricted Electives: (18 credits):
CSC 101 Microcomputer and Software Applications
MAT 215 Statistics
ENG 317 Scientific and Technical Writing
Earth Sciences and Geography Systematic courses selected from the following (9 credits):
EAS 402 Groundwater Hydrology
EAS 341 Field Work in Meteorology
EAS 372 Field Mapping
EAS 436 Field Methods in Earth Science
EAS 437 Field Methods in Geology
EAS 463 Seminar in Oceanography
EAS 464 Seminar in Meteorology
EAS 491 Field Course in Earth Science
EAS 528 Quantitative Applications in Earth Science
GEO 217 Demographic Analysis
GEO 306 Marketing Geography
GEO 317 Land Use Analysis
GEO 345 Political Geography
GEO 445 Field Methods in Geography
GEO 491 Field Course in Geography

Related Courses: (17 credits at the 200 level and above, chosen with the advisor's approval)

Bachelor of Arts in Geography: Travel and Tourism Concentration

Curriculum:

General Education:

Area of Concentration:
Required courses:
GEO 110 Map Principles
GEO 150 Survey of Travel and Tourism
GEO 205 World Cities/Geography of Urban Tourism
GEO 285 Retail Travel
GEO 350 Systems Applications for Travel Industry
GEO 358 Comprehensive Travel Planning
GEO 425 Corporate Travel Operations
BUS 100 Introduction to Business
COM 250 Oral Communication: Management
ENG 211 Business Writing I

Travel And Tourism Electives. (38 credits, a minimum of 6 credits must be taken from each of the following four groups. At least 15 of the credits must be at the 300 level or above.)

Group I:
ART 122 Art History I
ART 123 Art History II

ART 124 Art History III
ART 125 Art History IV
ART 106 Art Appreciation
MUS 100 Introduction to Music
MUS 301 Survey 20th Century Music
MUS 204 Survey American Musical

Group II:
EAS 242 Climatology
EAS 264 Scenic Areas of the U.S.
EAS 270 Scenic Areas of the World
GEO 325 Geography of Europe
GEO 331 Geography of Russia
GEO 345 Political Geography
GEO 493 Seminar in Geography
POS 281 Politics of Soviet Union

Group III:
COM 102 Group Discussion: Management
ECO 431 International Economics
FIN 201 Introduction to Finance
GEO 155 Hospitality Industry and Operations
GEO 200 Economic Geography
GEO 210 Urban Geography
GEO 306 Marketing Geography
GEO 362 Site Planning and Design
GEO 363 Meeting and Convention Planning
GEO 374 Developing and Management of Leisure Enterprise
GEO 378 Recreation Industry Management
GEO 412 Program Planning and Administration
GEO 474 Developing the Master Plan
MGT 201 Principles of Management
MKT 222 Principles of Selling
MKT 271 Principles of Marketing

Group IV:
FRE 101 French I
FRE 102 French II
FRE 203 Intermediate French I
SPN 101 Spanish I
SPN 102 Spanish II
SPN 203 Intermediate Spanish I

This program permits a student to take an internship, GEO 479, for 3-12 credits to be used as electives. Requires mentor's approval.

Bachelor of Science in Geology

Curriculum:

General Education:

Area of Concentration:
Required Courses:
EAS 150 Introduction to Geology
EAS 200 Historical Geology
EAS 202 Hydrology
EAS 331 Mineralogy
EAS 332 Petrology
EAS 343 Geomorphology
EAS 421 Sedimentology
EAS 422 Stratigraphy
EAS 425 Structural Geology
EAS 527 Tectonics

Earth /science field experience to be chosen from the following list:
EAS 402 Groundwater Hydrology
EAS 341 Field Work in Meteorology
EAS 372 Field Mapping
EAS 436 Field Methods in Earth Science
EAS 437 Field Methods in Geology
EAS 491 Field Course in Earth Science
EAS 492 Field Course in Geology

Other required Courses (16 credits):
CHE 101 General Chemistry I
CHE 102 General Chemistry II
PHY 121 General Physics I
PHY 122 General Physics II

Math/Computer Science (9 credits)
Related Electives selected with consent of advisor (8 credits).

Bachelor of Arts in International Studies: Geography

Curriculum:

General Education:

Area of Concentration:
Geography
GEO 200 Economic Geography
GEO 210 Urban Geography
GEO 217 Demographic Analysis
GEO 345 Political Geography
GEO 325 Geography of Europe
GEO 328 Geography of Latin America

One additional geography class to be chosen from the following list:
GEO 220 Geography of U.S. and PA
GEO 325 Geography of Europe
GEO 328 Geography of Latin America
GEO 331 Geography of Russia

Languages, 21 credit hours (FRE or SPN):
___ 203 Intermediate I
___ 204 Intermediate II
___ 311 Conversation, Composition and Phonetics I
___ 312 Conversation, Composition and Phonetics II
Culture and Civilization courses (9 credits)

Related Electives: (21 credits).
A minimum of three credits to be chosen from the following list of Economics/Management courses:
ECO 200 Current Economic Issues
ECO 304 Money and Banking
ECO 351 Comparative Economic Systems
ECO 431 International Economics
ECO 433 Economics of Growth & Development

A minimum of three credits to be chosen from the following list of History courses:
HIS 215 Expansion of American Foreign Policy
HIS 225 History of Contemporary Europe
HIS 230 History of Eastern Europe
HIS 240 History of the Cold War
HIS 245 History of Russia

A minimum of three credits to be chosen from the following list of English courses:
ENG 203 Great Books
ENG 205 World Lit to 1600
ENG 206 World Lit after 1600
ENG 211 Business Writing I
ENG 301 English Lit. I
ENG 302 English Lit. II
ENG 303 19th Century Amer. Literature
ENG 304 20th Century Amer. Lit

A minimum of three credits to be chosen from the following list of Political Science courses:
POS 207 American Foreign Policy
POS 210 Politics of Western Europe
POS 220 Intro to Public Administration
POS 236 Intro to International Relations
POS 237 International Organization
POS 270 Politics of the Developing Areas
POS 281 Politics of Russia
POS 310 Presidency
POS 326 Politics of Africa

A minimum of three credits to be chosen from the following list of Mathematics courses:
CSC 205 Structural Programming with PASCAL
CSC 218 COBOL I
CSC 300 Computer Operations
CSC 377 Information Structures
MAT 215 Statistics

A minimum of three credits to be chosen from the following list of Psychology courses:
PSY 211 Social Psychology
PSY 209 Industrial Psychology
PSY 305 Psychology of Personality

A minimum of three credits to be chosen from the following list of Philosophy courses:
PHI 211 Formal Logic I
PHI 220 Ethics
PHI 225 Social and Political Philosophy
PHI 247 Science, Technology and Society
PHI 270 Philosophy of Marxism
PHI 320 Ethical Theory
PHI 415 Philosophy of Mind
PHI 431 Analytical Philosophy

Five additional credits of related electives (can include an internship) to be chosen from:
Business courses:
ACC 218 Federal Income Tax I
FIN 305 Investments
FIN 341 Insurance & Risk Management
MKT 221Salesmanship
MKT 431 Marketing Research

Social Science courses:
ANT 250 Culture Change and Culture Shock
ANT 255 World Ethnology
ANT 285 Origins of Man
SOC 210 Social Stratification
SOC 235 Urban Sociology

Communication courses:
COM 350 Persuasion
COM Argumentation and Debate

Bachelor of Arts in Parks and Recreation Management

Curriculum:

General Education:

Area of Concentration:
Core Courses:
GEO 110 Map Principles
GEO 200 Economic Geography
GEO 362 Site Planning and Design
GEO 374 Developing and Managing Leisure Enterprise
GEO 378 Recreation Industry Management
GEO 412 Program Planning and Administration
GEO 474 Developing the Master Plan

Restricted Electives to be chosen from the following (12 credits):
BUS 100 Introduction to Business
COM 250 Oral Communication Management
ENG 211 Business Writing I
GEO 105 Human Geography
GEO 311 Geographic Information Systems
GEO 317 Land Use Analysis
MGT 201 Principles of Management
POS 205 Municipal Government
POS 220 Introduction to Public Administration
PSY 209 Industrial Psychology

Restricted Electives to be selected from the following groups (12 credits):
Geography:
GEO 150 Survey of Travel and Tourism
GEO 155 Hospitality Industry and Operations
GEO 205 World Cities
GEO 210 Urban Geography
GEO 217 Demographic Analysis
GEO 306 Marketing Geography
GEO 315 Urban Transport
GEO 345 Political Geography
GEO 358 Comprehensive Travel Planning
GEO 520 Physiography of the U.S.

Social Work:
SOW 150 Introduction to Social Work
SOW 208 Minority Group Relation
SOW 265 Juvenile Delinquency
SOW 303 Human Sexuality/Society
SOW 366 Policy Analysis/Service

Marketing:
MKT 271 Principles of Marketing
MKT 341 Marketing for Non-Profit Organizations

Sociology:
SOC 205 Cont. Social Problem
SOC 220 The Family
SOC 225 Sociology of Aging
SOC 235 Urban Sociology
SOC 260 Crime

Environmental Studies:
ENS 420 Principles Wildlife Management
ENS 423 Wildlife Mgmt. Technology

Biology:

BIO 104 Basic Care of Plants
BIO 206 Conservation of Bio. Res.

Psychology:
PSY 205 Child Psychology
PSY 206 Adol. Psychology
PSY 209 Ind. Psychology
PSY 211 Soc. Psychology

Gerontology:
XGE 101 Introduction to Gerontology
XGE 102 Aging in American Society
XGE 201 Aging Policy & Services
XGE 204 Biology of Aging

Theatre:
THE 101 Voice and Speech

Business:
BUS 100 Intro. to Business
BUS 242 Business Law I

Economics:
ECO 100 Elements of Economics

Accounting:
ACC 201 Accounting I
ACC 341 Non-Profit Accounting

Political Science:
POS 100 Introduction to Political Science
POS 105 American National Government
POS 220 Public Administration
POS 205 Municipal Government
POS 300 Introduction to Public Policy

Finance:
FIN 341 Insurance Risk and Management

Math/Computer Science:
CSC 105 Basic Programming Language
CSC 120 Problem Solving Program Construct
MAT 171 Math of Finance I
MAT 181 College Algebra
MAT 215 Statistics
MAT 225 Business Statistics

Communication:
COM 102 Group Discussion Management
COM 230 Argument/Debate
COM 250 Oral Communication Management
COM 350 Persuasion

Health & Physical Education:
HPE 314 First Aid/Personal Safety

Management:
MGT 201 Principles of Management
MGT 205 Small Business Funds
MGT 271 Comp. App. in Business I
MGT 301 Organization Behavior
MGT 305 Small Business Management
MGT 352 Human Resources Management
MGT 362 Labor Relations

English:
ENG 167 Journalism I
ENG 211 Business Writing I
ENG 212 Business Writing II

Earth Sciences:
EAS 150 Intro to Geology
EAS 160 Physical Geography
EAS 241 Meteorology
EAS 242 Climatology
EAS 264 Scenic Areas of the United States
EAS 270 Scenic Areas of the World
EAS 271 Cartography
EAS 371 Field Mapping

Related electives: 23 credits. Internship: 0 to 12 credits.

Minors

Earth Science Concentration

EAS 150 Introduction to Geology
EAS 200 Historical Geology
EAS 346 Field Methods in Earth Science
EAS 541 Advanced Environmental Geology
Select three of the following:
EAS 163 Introduction to Oceanography
EAS 202 Hydrology
EAS 241 Meteorology
EAS 242 Climatology

Geology Concentration

EAS 150 Introduction to Geology
EAS 200 Historical Geology
EAS 331 Mineralology or EAS 421 Sedimentology
EAS 343 Geomorphology or EAS 437 Field Methods in Geology
EAS 425 Structural Geology or EAS 527 Tectonics
EAS 437 Field Methods in Geology or EAS 492 Field Course in Geology
EAS 521 Advanced Environmental Geology

Geography Concentration

GEO 311 Geographic Information Systems or GEO 317 Land Use Analysis
GEO 325 Geography of Europe
GEO 345 Political Geography
Select four of the following
GEO 100 Introduction to Geography
GEO 105 Human Geography
GEO 200 Economic Geography
GEO 210 Urban Geography
GEO 220 Geography of the U.S. and Pennsylvania

Educational Studies

Purpose

The Educational Studies Department is responsible for the Secondary Education Program at the undergraduate level, the Principals Program and the Superintendents Program at the graduate level, and professional courses in the College of Education and Human Services and in the Graduate School.

The department is committed to educational reform and works in partnerships with a number of public schools. Through field experiences and student teaching, Secondary Education majors are expected to become involved in these teaching centers and in the activities of the department.

All programs in the department are engaged in professional development. Periodic reviews of student progress including board review are part of that professional preparation as are long-term personal/professional relationships.

Programs

Secondary certification is offered in Biology, Chemistry, Communication* (with a concentration in either Speech or Theater), Comprehensive Social Studies, Earth Science, English*, Environmental Education, General Science, Mathematics, Modern Foreign Languages (French and Spanish), and Physics. The curriculum for each certification program is listed in the description of the department which offers the academic area for that program.

*Communication and English certifications allow teaching in both areas.

Additional opportunities are available. Athletic Training may be combined with certification in an academic area. Technology Education is offered through the Department of Applied Engineering and Technology. Art certification is available for Art majors through a cooperative agreement with other area colleges. These opportunities are described more fully in the description of the department offering these majors.

Individuals with bachelor's degrees may become certified through the Certification Only Program taking those courses required for public school certification.

Secondary Education Majors are advised both in the department and in their academic area.

All Pennsylvania teachers must pass the Praxis II examinations for certification. A grade point average of 2.5 must be maintained both overall and in the academic specialization in order to be admitted to and maintain good standing in the teacher education program.

Elementary & Early Childhood Education

Purpose

The Elementary/Early Childhood Education Department seeks to have students acquire the knowledge, skills, and attitudes essential to becoming successful members of the teaching profession. All course work and experiences in the major prepares students to meet the following standards:

- Knowledge of subject matter
- Knowledge of human development and learning
- Adapting instruction for individual needs
- Multiple instructional strategies
- Classroom motivation and management skills
- Communication skills
- Instructional planning skills
- Assessment of student learning
- Professional commitment and responsibility
- Partnerships

Programs

The Elementary/Early Childhood Education Department offers four majors: Early Childhood Education, Elementary Education, Elementary/Middle School Education, and Early Childhood/Elementary Education. The department also offers an Associate Degree in Early Childhood Education.

The Elementary/Early Childhood and Special Education Departments together offer two dual majors: Elementary/Special Education and Early Childhood/Special Education. See the section on Special Education for more information on these programs.

The College of Education is recognized by the National Council for Accreditation of Teacher Education.

Honor Society

Kappa Delta Pi, an international honor society in education, has a California University chapter. Students in education who have demonstrated a high level of academic achievement are invited to apply for induction.

Careers

With the anticipated retirements of millions of public school teachers, the future looks bright for those students interested in a career in early childhood, elementary, or middle school education. Students with undergraduate degrees in these fields are prepared to pursue advanced study in a variety of disciplines. Career Services aids students seeking teaching positions locally and out-of-state.

Admission to the Program

Students in all curricula must maintain a 2.5 Quality Point Average and achieve a satisfactory score on the General Knowledge and Communication Skills tests of Praxis II: Core Battery, a National Teacher Exam.
Prerequisites for all EDE (except EDE 100) and ECE courses include completion of 48 college or university credits with a minimum 2.5 Q.P.A., and achievement of a satisfactory score on the General Knowledge and Communication Skills tests of Praxis II: Core Battery.

General Education

Students who enter California University under this catalog (after Spring 1999) will follow the new General Education Program. Please consult the description of the new program in this catalog for a list of General Education Goals and Objectives and the courses included on the menus for the various goals. Please note, some courses on a menu may be required for accreditation or certification in particular degree programs. Students should consult with their advisors regarding such requirements.

Bachelor of Science in Education: Early Childhood Education (129 credits)

Curriculum

General Education:

Professional Education (33 crs.):
EDF 290 Policy Studies for American Education
EDF 301 Computers for Teachers
EDU 210 Teaching in a Multicultural Society
PSY 208 Educational Psychology
PSY 205 Child Psychology
EDF 302 Applied Instructional Technology
EDU 340 Mainstreaming Exceptional Learners
EDE 461 Student Teaching

Professional Specialization (33 crs.):
ECE 203 Field Experience with Infants, Toddlers, and Preschoolers
EDE 211 Instructional Strategies in Elementary and Early Childhood Education
EDE 311 Children's Literature
EDE 321 Field Experiences Elementary School
ECE 315 Mathematical Content in Early Childhood
ECE 405 Early Childhood Education Seminar
ECE 302 Emerging Literacy
ECE 304 Thematic Teaching in Early Childhood
ECE 319 Parent and Community Involvement in Education
EDE 450 Assessing Children's Performance
Elective in Elementary/Early Childhood.

Area of Concentration : (12 credits in one selected area; 6 credits must be 300-400 level)
Humanities: Language, Cultures, Literature, Philosophy, Fine Arts
Natural Sciences: Mathematics, Biology, and Physical Science
Social Sciences: History, Political Science, Sociology, Anthropology, Psychology, and Economics
Technology/Computer Science: Computer Science and Technology courses
Health Education: Health, Safety, and First Aid
Community and Family: Parenting, Sociology, Anthropology, Psychology, Social Work

Bachelor of Science in Education: Elementary Education (129 credits)

Curriculum

General Education:

Professional Education (33 crs.):
EDF 290 Policy Studies for American Education
EDF 301 Computers for Teachers
EDU 210 Teaching in a Multicultural Society
PSY 208 Educational Psychology
PSY 205 Child Psychology
EDF 302 Applied Instructional Technology
EDU 340 Mainstreaming Exceptional Learners
EDE 461 Student Teaching

Professional Specialization (33 crs.):
EDE 211 Instructional Strategies in Elementary and Early Childhood Education
EDE 300 Language and Literacy in the Elementary School I
EDE 305 Mathematical Content and Method in the Elementary School
EDE 306 Teaching of Social Studies for Elementary Grades
EDE 307 Science for the Elementary School
EDE 311 Children's Literature
EDE 320 Field Experiences Middle School
EDE 321 Field Experiences Elementary School
EDE 340 Language and Literacy in the Elementary School II
EDE 450 Assessing Children's Performance
ECE 319 Parent and Community Involvement in Education

Area of Concentration: (12 credits in one selected area; 6 credits must be 300-400 level)
Humanities: Language, Cultures, Literature, Philosophy, Fine Arts
Natural Sciences: Mathematics, Biology, and Physical Science
Social Sciences: History, Political Science, Sociology, Anthropology, Psychology, and Economics
Technology/Computer Science: Computer Science and Technology courses
Health Education: Health, Safety, First Aid, and Women's Studies.

Bachelor of Science in Education: Elementary/Middle School Education (134 credits)

Curriculum

General Education:

Professional Education (33 crs.):
EDF 290 Policy Studies for American Education
EDF 301 Computers for Teachers
EDU 210 Teaching in a Multicultural Society
PSY 208 Educational Psychology
PSY 205 Child Psychology
EDF 302 Applied Instructional Technology
EDU 340 Mainstreaming Exceptional Learners
EDE 461 Student Teaching

Professional Specialization (38 crs.):
EDE 211 Instructional Strategies in Elementary and Early Childhood Education
EDE 300 Language and Literacy in the Elementary School I
EDE 305 Mathematical Content and Method in the Elementary School
EDE 306 Teaching of Social Studies for Elementary Grades
EDE 307 Science for the Elementary School
EDE 311 Children's Literature
ECE 319 Parent and Community Involvement in Education
EDE 320 Field Experiences Middle School
EDE 321 Field Experiences Elementary School
EDE 330 Teaching in the Middle School
EDE 340 Language and Literacy in the Elementary School II
EDE 450 Assessing Children's Performance
EDS 461 Reading in Secondary Schools

Area of Concentration: (12 credits in one selected area; six credits must be 300-400 level)
Humanities: Language, Cultures, Literature, Philosophy, Fine Arts
Natural Sciences: Mathematics, Biology, and Physical Science
Social Sciences: History, Political Science, Sociology, Anthropology, Psychology, and Economics
Technology/Computer Science: Computer Science and Technology courses
Health Education: Health, Safety, First Aid and Women's Studies.

Bachelor of Science in Education: Early Childhood/Elementary Education (135 credits)

Curriculum

General Education:

Professional Education (33 crs.):
EDF 290 Policy Studies for American Education
EDF 301 Computers for Teachers
EDU 210 Teaching in a Multicultural Society
PSY 208 Educational Psychology
PSY 205 Child Psychology
EDF 302 Applied Instructional Technology
EDU 340 Mainstreaming Exceptional Learners
EDE 461 Student Teaching

Professional Specialization (45 crs):
EDE 211 Instructional Strategies in Elementary and Early Childhood Education
EDE 311 Children's Literature
EDE 305 Mathematical Content and Methods in the Elementary School
EDE 306 Teaching of Social Studies for Elementary Grades
EDE 307 Science for the Elementary School
ECE 203 Field Experiences with Infants, Toddlers, and Preschoolers
ECE 302 Emerging Literacy
ECE 304 Thematic Teaching in Early Childhood
ECE 315 Mathematical Content in Early Childhood
ECE 319 Parent and Community Involvement in Education
ECE 405 Early Childhood Education Seminar
EDE 450 Assessing Children's Performance
EDE 300 Language and Literacy in the Elementary School I
EDE 340 Language and Literacy in the Elementary School II
EDE 321 Field Experiences Elementary School

Area of Concentration: (6 credits in one selected area):
Humanities: Language, Cultures, Literature, Philosophy, Fine Arts
Natural Sciences: Mathematics, Biology, and Physical Science
Social Sciences: History, Political Science, Sociology, Anthropology, Psychology, and Economics
Technology/Computer Science: Computer Science and Technology courses
Health Education: Health, Safety, and First Aid
Community and Family: Parenting, Sociology, Anthropology, Psychology, Social Work

Associate of Science in Early Childhood Education (72 credits)

Curriculum

General Education (24 crs.):
Humanities including English Composition I, Oral Communication, and Art History or Art Appreciation or Literature or Culture or Music or Philosophy (9 credits)
Natural Sciences including Mathematics and Biological Science or Physical Science (6 credits)
Social Sciences including General Psychology, and Geography or American Government or US History or Economics (6 credits)
Health and Physical Education (3 credits)

Professional Education (15 crs.):
EDF 301 Computers for Teachers
EDU 210 Teaching in a Multicultural Society
PSY 208 Educational Psychology
PSY 205 Child Psychology
EDF 302 Applied Instructional Technology

Professional Specialization (21 crs.):
EDE 211 Instructional Strategies in Elementary and Early Childhood Education
EDE 311 Children's Literature
EDE 450 Assessing Children's Performance
EDE 203 Field Experiences with Infants, Toddlers, and Preschoolers
ECE 302 Emerging Literacy
ECE 304 Thematic Teaching in Early Childhood
ECE 319 Parent and Community Involvement in Education

Area of Concentration: (12 credits in one selected area)
Humanities: Language, Cultures, Literature, Philosophy, Fine Arts
Natural Sciences: Mathematics, Biology, and Physical Science
Social Sciences: History, Political Science, Sociology, Anthropology, Psychology, and Economics
Technology/Computer Science: Computer Science and Technology courses
Health Education: Health, Safety, and First Aid
Community and Family: Parenting, Sociology, Anthropology, Psychology, Social Work

English

Purpose

English is a comprehensive discipline. Its scope encompasses a study of the evolution of the language itself, the various types of writing, the literature in English (poetry, drama, fiction, and essay regardless of national origin), and the comparative study of literature.

As a course of study, English enables people to express themselves clearly and to read their ideas and those of others in an appreciative and critical manner. The ideas expressed are boundless, the content emotive as well as rational. What is written is a personal and social record of the struggle to create meaning. Insight into the past and present creates a common core of ideas to be considered by scholars in many disciplines.

Language competency is essential to the exchange of ideas, the successful completion of course work and meaningful employment. To insure that students will develop their language skills and will have the means to meet these expectations, the university requires that all entering students take the English placement examination. Initial course placement is based on the results of that examination. Placement into either ENG 100 English Language Skills or ENG 101 Composition I depends on the results of this holistically scored writing sample. Since college performance incorporates the ability to express ideas clearly, all students are encouraged to take the two composition courses during their first semesters.

Programs

The English major has several concentrations including the general English program and three concentrations in the Professional Writing: Creative Writing, Journalism, Scientific and Technical Writing and Journalism. For persons who want to teach English or to teach in an allied area, secondary school certification in English, in Theater and in Communication are offered in cooperation with the College of Education and Human Services.

A well developed internship system supports classroom studies in the Professional Writing Program. Depending upon the Professional Writing concentration undertaken, a student may take as many as sixteen credits of internship experience. Policies and procedures regarding internships can be secured from the departmental office or faculty internship supervisor.

Honor Society

Sigma Tau Delta is the National English Honor Society. The California University chapter, Delta Theta, was chartered in 1959 and is the oldest chapter in the Pennsylvania State System of Higher Education. Membership in Sigma Tau Delta is open not only to English majors, but also to all those who have English as an interest, provided they have at least a 3.0 average in their English courses, rank in the highest 35% of their class in general scholarship, have completed at least three semesters of college, and have completed at least two courses in literature in addition to freshman English.

Awards

The English Department encourages and rewards academic achievement in several ways.

The Eleanore C. Hibbs Writing Award is given annually to one student each in Composition I and Composition II. An applicant for the award must submit an essay that was written for that class and that carries the recommendation of the student's instructor. All entries are judged by a special committee of the English Department. The two winners receive $150 prizes plus certificates of merit, both awarded at a luncheon in May.

The Minor W. Major Award is given annually to a junior who has achieved distinction in the study of English. The award is based on merit alone. A departmental committee reviews the academic records of prospective recipients, usually English majors, and singles out the student who best meets its standards. The award, named for Dr. Minor W. Major, late professor of English, includes a certificate of merit and cash.

The English Faculty Award is given annually to the student in English whose development has been most noteworthy over four years. The recipient receives a certificate of merit and an inscribed book, awarded at the senior dinner in May.

Careers

Besides preparing students for graduate work in English and American literature, English education, linguistics, library studies, law, communication, and a number of other fields, the English program offers career opportunities in such positions as secondary school teacher, newspaper reporting, magazine editing, creative writing, public information, advertising, copywriting, communications, proof reading, and radio and television editing.

General Education

Students who enter California University under this catalog (after Spring 1999) will follow the new General Education Program. Please consult the description of the new program in this catalog for a list of General Education Goals and Objectives and the courses included on the menus for the various goals. Please note, some courses on a menu may be required for accreditation or certification in particular degree programs. Students should consult with their advisors regarding such requirements.

Bachelor of Arts in English

Curriculum

General Education:

Students should select one of the following concentrations

General English Concentration

ENG 301 English Literature I
ENG 302 English Literature II
ENG 337 Survey of American Literature I
ENG 338 Survey of American Literature II
ENG 415 Chaucer or ENG 427 Milton or ENG 310 Survey of Old and Middle English Literature
ENG 425 Shakespeare
ENG 348 History of Literary Criticism or ENG 448 Practical Criticism
ENG 347 Introduction to Linguistics or ENG 346 History of the English Language

Upper-level ENG courses. (12 credits at the 300-400 level)

Related Courses: (30 credits, at least 15 of which must be in a related discipline approved by the advisor and at least 15 of which must be at the 200 level or above.)

Creative Writing Concentration

ENG 318 Poetics
ENG 376 Creative Writing: Fiction or ENG 377 Poetry
ENG 495 Creative Writing Seminar
ENG 351 Publishing the Magazine
ENG 375 Advanced Writing
ENG 435 Article Writing
ENG 352 Studies in Writing
ENG 308 Research for Writers
ENG 496 Writing for Publication

Three of the following restricted elective courses:
ENG 203 Great Books
ENG 430 Adaptation of Literary Materials
ENG 378 Creative Writing: Drama
ENG 211 Business Writing I
ENG 217 Scientific and Technical Writing
ENG 437 Advertising
ENG 167 Journalism I
ENG 377 Poetry
ENG 401 Copywriting

Related Electives selected from the following (32 credits including 12 credits from any one area):
Literature courses (300 level and beyond)
Linguistics courses
COM electives
FRE or SPN electives
THE electives
Internship (up to 16 credits)

Journalism Concentration

ENG 151 Word Processing
ENG 167 Journalism I and
ENG 169 Journalism II and
ENG 312 Journalism III
ENG 306 Press Law and Ethics
ENG 254 American Journalism
ENG 334 Newspaper Reporting I
ENG 496 Writing for Publication

Six of the following courses:
ENG 308 Research for Writers
ENG 435 Article Writing
ENG 352 Studies in Writing
ENG 335 Newspaper Reporting II
ENG 351 Publishing the Magazine
ENG 313 Sportswriting II
ENG 437 Advertising

Electives from Related Discipline (12 credits)
Related Electives or Internship (16 credits)

Scientific and Technical Writing Concentration

ENG 375 Advanced Writing
ENG 167 Journalism I
ENG 217 Scientific and Technical Writing I
ENG 218 Scientific and Technical Writing II
ENG 351 Publishing the Magazine
ENG 435 Article Writing
ENG 308 Research for Writers
ENG 352 Studies in Writing
ENG 496 Writing for Publication

Literature Core selected from the following (6 credits):
ENG 203 Great Books
ENG 207 English Literature I and
ENG 208 English Literature II
ENG 337 Survey of American Literature I
ENG 338 Survey of American Literature II

Restricted Electives selected from the following (14 credits):
ENG 345 English Grammar and Usage
ENG 169 Journalism II
ENG 437 Advertising
ENG 401 Copywriting
ENG 211 Business Writing I
ENG 478 Directed Projects in English

Literature Electives (3-8 credits)
Internship (3-11 credits)
Scientific or Technical courses (21 credits of with 15 credits in one discipline code)

Bachelor of Science in Education: Certification in English for Secondary Schools

Curriculum

General Education:

Professional Education: (41 credits).
EDF 302 Applied Instructional Technology
EDF 290 Policy Studies in American Education
PSY 208 Educational Psychology
EDS 300 Problems of Secondary Education
EDS 430 Educational Tests and Measurements in Secondary Schools
EDS 465Developmental Reading in Secondary Schools
EDU 210 Teaching in a Multicultural Society
EDU 340 Mainstreaming Exceptional Learners
EDF 301 Computers for Teachers
EDS 440 Teaching of English in Secondary Schools
EDS 461 Student Teaching and School Law

Professional Specialization: (45 credits).
ENG 372 Composition Theory and the Teaching of Writing
ENG 346 History of the English Language
ENG 345 English Grammar and Usage
ENG 371 Critical Theory and the Teaching of Literature
ENG 347 Introduction to Linguistics
COM 230 Argumentation and Debate

Advanced Requirements: (27 credits).
ENG 337 Survey of American Literature I
ENG 338 Survey of American Literature II or American Literature elective
ENG 301 English Literature I
ENG 302 English Literature II
ENG 425 Shakespeare
COM 490 Communication Theory
THE 130 Fundamentals of Acting or THE 141 Stagecraft or THE 320 Fundamentals of Directing
Students must also achieve a satisfactory score on the Praxis II examination to obtain Pennsylvania Certification.

Minors

Literature Concentration

Required Courses (12 credits): (select one from each group)
ENG 106 Intro to Poetry or ENG 107 Intro to Fiction or ENG 108 Intro to Drama
ENG 205 World Lit to 1600 or ENG 206 World Lit after 1600
ENG 301 English Lit I or ENG 302 English Lit II
ENG 337 Survey of American Literature I or ENG 338 Survey of American Literature II

English Electives (9 credits at 300-400 level)

Business & Commercial Writing Concentration

Required Courses (12 credits):
ENG 211 Business Writing I
ENG 212 Business Writing II
ENG 308 Research for Writers
ENG 167 Journalism I or ENG 217 Sci & Tech Writing or ENG 437 Advertising

Restricted Electives selected from the following (9 credits, 6 credits minimum must be ENG):
ENG 312 Journalism III
ENG 345 Grammar & Usage
ENG 375 Advanced Writing
ENG 401 Copywriting
ENG 419 Internship three-credit limit
ENG 435 Article Writing
COM 102 Group Disc Management
COM 203 Intro to Public Relations
COM 250 Oral Comm Management
ECO 100 Elements of Econ
GCT 225 Print Layout & Design
MGT 201 Principles of Management
MKT 271 Principles of Marketing

Creative Writing Concentration

Required Courses (6 credits):
ENG 495 Creative Writing Seminar
ENG 496 Writing for Publication

Creative Writing Electives (3 to 9 credits):
ENG 376 Creative Writing: Fiction
ENG 377 Creative Writing: Poetry
ENG 378 Creative Writing: Drama

English Electives selected from the following (6-12 credits):
ENG 203 Great Books
ENG 308 Research for Writers
ENG 318 Poetics
ENG 351 Publish the Magazine
ENG 352 Studies in Writing
ENG 430 Adapt Lit Materials
ENG 435 Article Writing

Journalism Concentration

Required Courses (12 credits):
ENG 167 Journalism I
ENG 169 Journalism II
ENG 306 Press Law & Ethics
ENG 312 Journalism III

Restricted Electives selected from the following (9 credits, 6 credits minimum must be ENG):
ENG 254 History of American Journalism
ENG 313 Sportswriting I
ENG 334 Newspaper Reporting I
ENG 336 Computer Assisted Reporting
ENG 351 Publish the Magazine
ENG 401 Copywriting
ENG 419 Internship-three credit limit
ENG 435 Article Writing
ENG 437 Advertising
COM 246 Radio & TV Announcing,
COM 332 Radio & TV: News
GCT 225 Print Layout & Design

Technical Writing Concentration

Required Courses (12 credits):
ENG 212 Business Writing II
ENG 217 Sci & Tech Writing I
ENG 218 Sci & Tech Writing II
ENG 308 Research.

Restricted Electives selected from the following (9 credits, 6 credits minimum must be ENG):
ENG 345 Grammar & Usage
ENG 375 Advanced Writing
ENG 419 Internship-three credit limit
ENG 435 Article Writing
GCT 225 Print Layout & Design

Foreign Lanuages & Cultures

Purpose

Rapid political and economic changes in the world require that students not only understand other cultures but that they can communicate with persons in those cultures. In this sense familiarity with speaking and reading a foreign language and being aware of how persons in other countries think about the world is pragmatic. Instruction in an unfamiliar language also helps students see the world from a different perspective. Inasmuch as that occurs, students improve self-awareness, lose a blind ethnocentrism, and gain a greater appreciation of all cultures, including their own.

Programs

The department administers three programs: a liberal arts language program in French and Spanish; a language certification program for students who plan to teach in one of the language areas; an International Studies program with options in Business and Economics, Foreign Languages, Geography, and Political Science (consult the descriptions for the Departments of Business & Economics, Earth Sciences, and Social Sciences for additional information on the International Studies programs). Students in these programs will develop listening, speaking, reading and writing skills, as well as an awareness of cultural diversity and its impact on human behavior.

Language and culture are closely aligned, and a series of culture courses, taught in English, are available. These indicate how artistic expression, geography, and economic and historical development mutually influence each other.

A minor in foreign languages is offered in French and Spanish to provide a global component and international perspective to a liberal arts education and to prepare you for a world where cross cultural communication is vital for success.

Placement

Students entering a foreign language course will be evaluated in order to determine the proper course level placement for them. Students who wish to receive credit for previously acquired language proficiency can take a CLEP examination or a challenge examination.

Awards

The Elsbeth E. Santee Scholarship Fund grants renewal awards annually for students majoring in a foreign language who maintain a 3.0 QPA in their major. Information about the award and application procedures is available in the department office.

Careers

Linguistic ability in languages other than English can promote employment opportunities in organizations working internationally, especially legal, banking and commercial corporations, national and regional governmental agencies, social service and religious organizations, educational institutions, communications, import-export and travel businesses and a variety of translation services.

General Education

Students who enter California University under this catalog (after Spring 1999) will follow the new General Education Program. Please consult the description of the new program in this catalog for a list of General Education Goals and Objectives and the courses included on the menus for the various goals. Please note, some courses on a menu may be required for accreditation or certification in particular degree programs. Students should consult with their advisors regarding such requirements.

Bachelor of Arts in French

Curriculum

General Education:

Area of Concentration:
FRE 203 Intermediate French I
FRE 204 Intermediate French II
FRE 311 French Conversation, Composition, and Phonetics
FRE 312 French Conversation, Composition, and Phonetics II
FRE 401 Advanced Composition: Grammar and Stylistics
FRE 450 French Colloquium
French Culture and Civilization courses (6 credits)
FRE 421 Survey of French Literature I
FRE 422 Survey of French Literature II
GEO 325 Geography of Europe

One other foreign language (6 credits)

Electives: History, English, Philosophy, Psychology, and Communication Studies (3 credits in each)

Related Electives selected with the adviser's approval (14 credits)

Bachelor of Arts in Spanish

Curriculum

General Education:

Area of Concentration:
SPN 203 Intermediate Spanish I
SPN 204 Intermediate Spanish II
SPN 311 Spanish Conversation, Composition and Phonetics I
SPN 312 Spanish Conversation, Composition and Phonetics II
SPN 401 Advanced Composition: Grammar and Stylistics
Hispanic Culture and Civilization courses (six credits)
SPN 421 Survey of Spanish Literature
SPN 422 Survey of Spanish-American Literature
GEO 328 Geography of Latin America
SPN 450 Spanish Colloquium

One other foreign language (6 credits)

Electives in Communication Studies, English, History, Philosophy and Psychology (3 credits in each)

Related Electives selected with advisor's approval (14 credits)

Bachelor of Arts in International Studies: Foreign Language Track

Curriculum

General Education:

Area of Concentration:
Language I
Select either FRE or SPN:
203 Intermediate I
204 Intermediate II
311 Conversation, Composition and Phonetics I
312 Conversation, Composition and Phonetics II
Culture and Civilization Elective
Language Elective

Language II
Select either FRE or SPN:
203 Intermediate I
204 Intermediate II
311 Conversation, Composition and Phonetics I
312 Conversation, Composition and Phonetics II
Culture and Civilization Elective
Language Elective

Geography Electives selected from geography area study courses. (9 credits)

Restricted Electives selected in consultation with advisor. (18 credits)

Related Electives (5 credits)

Bachelor of Science in Education: Certification in Foreign Language for Grades K-12

Curriculum

General Education:

Professional Education:
EDF 290 Policy Studies in American Education
PSY 208 Educational Psychology
EDF 302 Applied Instructional Technology
EDS 300 Problems of Secondary Education
EDS 430 Educational Tests and Measurements in Secondary Schools
EDS 465 Developmental Reading in Secondary Schools
EDU 210 Teaching in a Multicultural Society
EDU 340 Mainstreaming the Exceptional Child
EDF 301 Computers for Teachers
EDS 466 Teaching of Modern Languages K through 12 or EDS 455 Modern Methods in Secondary Schools (with advisor's permission)
EDS 461 Student Teaching and School Law

Professional Specialization: Select either FRE or SPN
203 Intermediate I
204 Intermediate II
311 Conversation, Composition and Phonetics I
312 Conversation, Composition and Phonetics II
401 Advanced Composition: Grammar and Stylistics
Culture and Civilization courses (6 credits)
421 Survey of Literature I
422 Survey of Literature II
450 Foreign Language Colloquium

Electives in major field in second foreign language (6 credits)

Students must also achieve a satisfactory score on the Praxis II examination to obtain Pennsylvania certification.

Minors

French Concentration

Required:
FRE 101 Elementary French I
FRE 102 Elementary French II
FRE 203 Intermediate French I
FRE 204 Intermediate French II
FRE 311 French Conversation, Composition, and Phonetics I
FRE 312 French Conversation, Composition, and Phonetics II

Elective: Select one course from the following:
FRE 401 Advanced Composition; Grammar & Stylistics
FRE 421 Survey of French Literature I
FRE 422 Survey of French Literature II
FRE 450 Foreign Language Colloquium in French

Spanish Concentration

Required:
SPN 101 Elementary Spanish I
SPN 102 Elementary Spanish II
SPN 203 Intermediate Spanish I
SPN 204 Intermediate Spanish II
SPN 311 Spanish Conversation, Composition, and Phonetics I
SPN 312 Spanish Conversation, Composition, and Phonetics II

Elective: Select one course from the following:
SPN 401 Advanced Composition; Grammar & Stylistics
SPN 421 Survey of Spanish Literature
SPN 422 Survey of Spanish-American Literature
SPN 450 Foreign Language Colloquium in Spanish

Health Science and Sport Studies

Purpose and Programs

The Department of Health Science & Sport Studies offers the Athletic Training Education Program (ATEP), accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the State Board of Physical Therapy. Students may major in athletic training or combine athletic training with teacher education. The basic concept of athletic training involves prevention, care, treatment, and rehabilitation of athletic injuries.

The dual major in Athletic Training/Education Certification enables interested students to pursue the education and training necessary for a dual career as effective teachers and athletic trainers. The requirements listed below are for the Athletic Training component alone. Students interested in this program should contact the Program Director of the Athletic Training Education Program for details on the dual major. This program also requires satisfactory performance on the Praxis II examination.

Physical therapists assist ill and injured persons to improve their level of functioning and thereby, their quality of life. Physical therapist assistant (PTA) is a profession that works under the supervision of a physical therapist to provide rehabilitation services for the sick and injured. This program leads to an Associate of Applied Science degree in Physical Therapist Assistant. The program is housed in modern classrooms and well equipped laboratories in the newly renovated Hamer Hall. Students gain experience at both campus and off-campus clinical sites.

The Sports Management Program provides students with a depth of knowledge on a broad range of competencies in management, marketing, and communication. The program requires that students gan experience through practica and internships in their speciality area. Students will also be able to supplement their education experience with a minor.

New, modern athletic training rooms are located in Hamer Hall and Adamson Stadium. The cadaver anatomy laboratory is also located in Hamer Hall. The California University intercollegiate athletic program, which is a strong NCAA Division II program and a member of Pennsylvania State Athletic Conference (PSAC), comprises 13 varsity sports that enable students to gain valuable experience as student athletic trainers. Students will also receive additional hours at many area high schools or local colleges as partial fulfillment of their required clinical experience.

Careers

The high incidence of injuries occurring through athletic participation has become a national concern and has created a demand for individuals who have completed athletic training courses, fulfilled clinical requirements, and earned a minimum of a bachelor's degree.

Job opportunities for certified athletic trainers have increased substantially, and the employment potential for athletic trainers should continue to increase. The ultimate goal of this program is to prepare graduates for certification by the NATABOC and for careers in athletic training.

Many high schools hire athletic trainers to help provide better health care for their interscholastic athletic programs. In addition, four–year colleges and universities as well as junior and community colleges provide significant possibilities for employment. Positions with professional teams exist; however, they are fewer in number than those associated with interscholastic athletic programs.

There is growing employment in sports medicine and rehabilitation clinics for athletic trainers.
The aging of the baby boomer generation has created many new opportunities in physical therapy. Pennsylvania has the nation's second oldest population with 15% of all Pennsylvanians over the age of 65. According to Pennsylvania's Department of Labor and Industry, the need for physical therapist assistants will increase by nearly 60% over the next few years.

Health and Wellness

The department currently offers courses reflecting the health and wellness concept. This functions primarily as a service oriented area for the university and for the general education program. Course work can be found under the HSC or HPE designation listed in the course descriptions section of this catalog.

Admission to the Athletic Training Program

Admission into the Athletic Training Education Program is competitive, and only a limited number of students are selected each year. Applications for the Athletic Training curriculum are accepted during the second semester of the freshman year and screened by the Admissions and Academic Standards Committee (AASC). During the first semester, the student submits a letter of application to the AASC, which screens, interviews, and selects the remaining students to be admitted.

Criteria for selection are a minimum of a 3.00 QPA, or a composite score of 17, minimum 100 observation hours, interview with a departmental faculty member, and completion of the freshman examination.

Admission to the Physical Therapy Assistant Program

California University of Pennsylvania requires the completion of 67 credits for graduation. Of these 39 are taken in the area of concentration and 21 are taken in general education. The remaining 7 credits are restricted electives. Admission to the University does not guarantee program admission. Students must complete program requirements during the Pre-Professional phase and then apply for admission to the Professional phase of the program. Only a limited number of students are admitted to the Professional phase of the program each year. Criteria for selection is available from the chairperson, Department of Health Science & Sport Studies or the program director, Physical Therapist Assistant Program.

The Physical Therapist Assistant Program is seeking accreditation with the Commission on Accreditation in Physical Therapy Education (CAPTE) of the American Physical Therapy Association (APTA)

Driver Education and Safety Certification Program

Individuals who complete the program are certified by the Commonwealth of Pennsylvania and are able to teach Driver Education to students. The prospective driver education teacher will be able to identify those principles and concepts necessary to the development, organization, and teaching of a planned classroom instructional program.

This program would provide the teacher certification professional a more diverse background when seeking potential employment. In addition to their primary teaching certificate, individuals will have the knowledge and skills to teach driver education and provide a safety education program for their employer.

California University of Pennsylvania and the Commonwealth of Pennsylvania requires the completion of a minimum of 12 credits to complete this program. Six of the 12 credits are required: Introduction to Safety Education and Driver Education and Traffic Safety. The remaining courses are offered at the discretion of the department. Additional information is available from the department chairperson.

General Education

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Bachelor of Science in Education: Athletic Training

Curriculum:

General Education:

Area of Concentration:
ATE 100 Practicum Athletic Training I
ATE 110 Practicum Athletic Training II
ATE 120 Substance Abuse Education
ATE 205 Human Anatomy and Physiology I
ATE 215 Human Anatomy and Physiology II with Laboratory
HPE 105 Current Health Issues
PSY 100 General Psychology
HSC 270 Physiology of Exercise
HSC 275 Functional Kinesiology
ATE 225 Evaluative Techniques I with Laboratory
HPE 500 Emergency Medical Technician
ATE 265 Evaluative Techniques II with Laboratory
HSC 290 Therapeutic Modalities with Laboratory
ATE 300 Practicum Athletic Training III
ATE 340 Sports Nutrition
ATE 330 Therapeutic Exercise with Laboratory
ATE 405 Sports Medicine Practicum
ATE 425 Administrative Strategies in Athletic Training
ATE 460 Sports Medicine Research

Clinical hours: minimum of 800 hours during junior and senior years.

Bachelor of Science in Education: Athletic Training/Education Certification (Dual Major)

Options for dual major are: Biology, Chemistry, Communication (Speech), Communication (Theatre), Early Childhood, Earth Science, English, Foreign Languages, General Science, Mathematics, Physics, Social Studies, Special Education

Curriculum:

General Education:

Area of Concentration:
ATE 100 Practicum Athletic Training I
ATE 110 Practicum Athletic Training II
ATE 120 Substance Abuse Education
ATE 205 Human Anatomy and Physiology I
ATE 215 Human Anatomy and Physiology II with Laboratory
HPE 105 Current Health Issues
PSY 100 General Psychology
HSC 270 Physiology of Exercise
HSC 275 Functional Kinesiology
ATE 225 Evaluative Techniques I with Laboratory
HPE 500 Emergency Medical Technician
ATE 265 Evaluative Techniques II with Laboratory
HSC 290 Therapeutic Modalities with Laboratory
ATE 300 Practicum Athletic Training III
ATE 340 Sports Nutrition
ATE 330 Therapeutic Exercise with Laboratory
ATE 405 Sports Medicine Practicum
ATE 425 Administrative Strategies in Athletic Training
ATE 460 Sports Medicine Research

Clinical hours: minimum of 800 hours during junior and senior years.

Professional Education Requirements: As required by the College of Education and Human Services.

Professional Specialization (Second Major): As required by the specific major.

Bachelor Of Science In Sport Management

Curriculum

General Education:

Areas of Concentration:
SPT 200 Introduction to Sport Mgt.
HIS 218 History of Sports in America
SPT 299 Practica in Sport Mgt.
SOC 309 Sociology of Sport
PE 286 Sport Communication*
SPT 301 Psychology of Sport
PE 295 Sport Manage & Ethics*
SPT 303 Sport Marketing
SPT 304 Facility & Event Mgt.
PE 578 Law in Sport & PE*
SPT 401 Org. & Admin. of Sport
SPT 402 Governance in Sport
SPT 403 Sport Finance
SPT 404 Economics of Sport
SPT 405 Sport Mgt. Senior Seminar

SPT 499 Internship in Sport Mgt.
*Courses will be provided by Slippery Rock University via distance education

Associate Of Applied Science In Physical Therapist Assistant

Curriculum

General Education
UNI 100 First Year Seminar
COM 101 Oral Communications
PSY 100 General Psychology
ENG 101 English Composition I
BIO 230 Human Anatomy & Phys I
BIO 260 Human Anatomy & Phys II
SOC 110 Principles of Sociology

Required Core
PTA 100 Introduction to PTA
PTA 101 Basic Physical Theory Procedures
PTA 200 Professional Issues in PT
PTA 205 Cardiopulmonary Rehabilitation
PTA 210 Neurological Rehabilitation
PTA 215 Pediatric Rehabilitation
PTA 220 Geriatric Rehabilitation
PTA 225 Orthopedic Rehabilitation
HSC 275 Functional Kinesiology
HSC 290 Therapeutic Modalities

Required Field Experience
PTA 150 PT Clinical Internship I
PTA 250 PT Clinical Internship II

History

Purpose

The recording and explanation of the events that constitute social, organizational, or personal existence comprise the discipline of history. History, with its special concern for what is unique in human events, is an integrative discipline. Its narratives and explanations are contextual. As such, historians take cognizance of the works of artists, philosophers, and social scientists.

For example, social historians utilize the methods of the social scientist. This integrative aspect of historical narrative and explanation continues to make it a primary part of a Liberal Arts education. In as much as it reveals every person's past, it makes possible greater personal freedom and creativity.

Programs

The department offers a B. A. and a minor in History. The History major is general in nature, providing students with the opportunity to select areas of topical interest. In relation to the major, the department, in conjunction with the College of Education and Human Services, provides requisite courses for Social Science certification for teaching in secondary schools. Students interested in teacher certification can secure further information from the College of Education and Human Services office.

The minor in History allows students in other majors to expand their educational opportunity.

Honor Society

Students who meet the academic requirements are eligible for membership in Phi Alpha Theta, the International Honor Society. Information can be obtained from faculty advisors and the department office.

Awards

The History Faculty Award for Academic Excellence is given annually to the History major who has demonstrated outstanding achievement.

The Edward McNall Burns Scholarship Award is given annually to any individual majoring in Anthropology, Sociology, Political Science, Economics, or History. See the department office for further information.

Careers

Teacher, archivist and museum curator are professions directly related to the history major. Careers in law, religion, foreign service, both corporate and government, and diplomacy have a great reliance on historical knowledge. In addition, history majors are employed in the marketing field, in the communications industry and the insurance industry. The history major prepares students to succeed in a wide range of occupations. History continues to be ranked among the top undergraduate majors of Fortune 400 CEOs.

General Education

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Bachelor of Arts in History

Curriculum

General Education:

Area of Concentration:
Required Western History (15 credits):
HIS 101 History of the United States to 1877
HIS 102 History of the United States since 1877
HIS 104 History of Western Society to 1740
HIS 106 History of Western Society since 1740
HIS 495 Seminar in U. S. History

A minimum of two courses in Non-Western History from the following (6 credits):
HIS 111 Development of Major World Civilizations
HIS 112 Major World Civilizations in Transition
HIS 147 History of the Middle East

History Electives must include at least three topical and three chronological courses selected in consultation with the student's advisor (24 credits)

Social Science Electives must consist of one course from each of three disciplines selected from ECO, SOC, GEO, ANT, POS (9 credits)

Related Electives selected in consultation with advisor. (14 credits)

Minor in History

Required:
HIS 101 History of the US to 1877
HIS 102 History of the US since 1877
HIS 104 History of Western Society to 1740
HIS 106 History of Western Society since 1740
Electives (9 credits): any three HIS courses, 300-level or above.

Honors Program

Purpose

The Honors Program at California University of Pennsylvania provides an opportunity for an enhanced educational experience to our most talented students and faculty. Honors Program students desire to pursue intellectual and creative growth beyond the usual requirements of their major field of study and intend to cultivate their individual and personal aspirations to learn. Honors Program students and faculty expect to explore and participate in scholarly, professional, and artistic exercises outside the classroom; they engage in community service activities, which complement their academic studies and nurture their personal sense of commitment and communal responsibility. Honors students anticipate exercising leadership while at California University; they prepare to become leaders while students in our program, and they expect to continue as leaders when they graduate.

Membership

Membership in the University Honors Program is by invitation only. However, the Honors Program promotes outstanding intellectual achievement throughout the university, and undergraduate students in any program or division of the university may participate in the Honors Program. Each year, the applications of all incoming first year and transfer students are reviewed, and those students with the very highest indicators of past and future academic success are invited to participate in the Honors Program.

Programs

Each summer (since 1985) two Honors Program students receive scholarships to participate in the SSHE Summer Honors Program. This program is noted for its academic quality and its opportunity, typically, to study abroad in such places as Austria (1996), Russia (1995), England (1997), Italy (1998), and Renaissance and Reformation Europe (1999). Honors Program students have the opportunity to participate in the California Academic Leadership Hall concept, which includes specialty housing in Johnson Hall as well as educational, social, and recreational programming. The Honors Program maintains a small, but high quality, computer facility in Johnson Hall reserved for the exclusive use of its students and faculty. Each spring semester, the Honors Program conducts and coordinates a special grouping of courses and faculty for its students which focuses on a particular area, rotating in a three year cycle from Social Science (1999), through Science (2000), to Arts and Humanities (2001). Honors Program students are encouraged, enabled, and have presented their work at local, regional, and national undergraduate conferences. A few students have even collaborated with Honors Program faculty at international conferences and publication of their work.

Awards

Currently, the Honors Program annually presents the following awards: Senior Thesis Project Award and the Outstanding Honors Program Graduating Senior Award. The John K. Thornburgh Honors Scholarship is awarded to an outstanding Honors Program Student each year.

Curriculum

Courses, designated as Honors Courses, are restricted to members of the Honors Program and are offered at all class levels. In such courses enrollment is kept low, to encourage and ensure close interaction between student and professor. Additionally, most regular university course offerings at all levels may have an honors component. In such courses (called addenda), honors students fulfill the same requirements as other students in the class but honors students perform certain independent work which is designed to enhance the regular departmental courses and which is agreed upon in writing by the student, the professor, and the Director of the Honors Program. In all such courses, the successful completion of the course and its honors component is indicated on the student's transcript.

Honors Program students are expected to maintain a minimum grade-point average sufficient to achieve the Dean's List and to graduate with Honors. Additionally, students must complete a minimum of 24 credits, including addenda and thesis project, within the Honors Program.

Inquiries about the Honors Program may be made of the Director, California University of Pennsylvania, California, PA 15419-1394, 724-938–4535.

Humanities

Purpose

Humanities are most often considered a curricular area or category in which a number of majors coexist interdependently. For example, Foreign Languages, Art and English are program areas under the Humanities heading. However, California University has a separate Humanities program, which works particularly well for those students who find that their goals lie somewhere between two or three different Humanities areas.

The Humanities program is designed to allow greater freedom in shaping an integrated university program responsive to the students' unique interests and permit the greatest breadth for studying the interrelationships between disciplines. This program stresses breadth of knowledge and interdisciplinary awareness. Students have the opportunity, as well as the responsibility, to develop unique, integrated and personalized programs combining courses from Humanities areas.

Additional information on the Humanities program can be obtained from the College of Liberal Arts or from the Office of Lifelong Learning for its Evening & Weekend College program.

General Education

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Bachelor of Arts in Humanities

Curriculum

General Education:

Area of Concentration.

Introductory Courses (38 credits):
Select courses from the following disciplines: ART, COM, ENG, FRE, GER, LIT, MUS, PHI, SPN, and THE. Introductory courses are usually designated as 100- or 200-level.

Advanced Courses (30 credits).
Select courses from the following disciplines: ART, COM, ENG, FRE, GER, LIT, MUS, PHI, SPN, and THE.

Elective Courses (0-15 credits):
A maximum of fifteen credits from outside the Humanities area may be taken with permission of the student's faculty advisor.

Liberal Studies

Purpose

A Liberal Studies degree is interdisciplinary/multidisciplinary in structure and is designed for students whose academic interest span traditional disciplinary boundaries within the College of Liberal Arts. This degree program provides for intellectual growth, self-improvement, general knowledge, and a search for truth and understanding and may provide for the required technical training to become successful in the world of work. In addition, this program will permit students whose circumstances have precluded the traditional degree route a flexible completion program.

Administration

The program is overseen by the Dean of Liberal Arts and an advisory committee, composed of faculty from diverse disciplines. The student in conjunction with an advisor will determine the student's "plan of study," and the advisory committee and the dean will approve the plan.

General Education

Students who enter California University under this catalog (after Spring 1999) will follow the new General Education Program. Please consult the description of the new program in this catalog for a list of General Education Goals and Objectives and the courses included on the menus for the various goals.

Bachelor of Arts in Liberal Studies

Curriculum

General Education:

Specialized Area (43-48 credits with a minimum of 18 credits at the upper division) No more than 24 credits of courses with the same course prefix should be included in the plan of study

A Minor may be selected from the list of institutionally approved minors (21-24 credits)

Internship Electives with permission of the advisor to gain job related experience (3-15 credits)

Electives 27-34 credits

Mathematics & Computer Science

Purpose and Programs

The Bachelor of Science degree in Applied Computer Science is designed to provide the student with a strong computer science background supplemented with a substantial core of courses in a related academic discipline. The degree enables a student to apply the Computer Science training to an academic area of their choice.

The Bachelor of Science degree in Mathematics and Computer Science is a careful blending of courses that offers the student both theory and applications in mathematics and computer science. It prepares students for positions in business, industry or government or to go on to graduate studies in Math or Computer Science.

The Bachelor of Science degree in Industrial Management: Management and Computer Science Option emphasizes management and business courses along with computer science courses. The program is designed to prepare the student for continued study at the graduate level or for employment in business, industry, or government.

The Bachelor of Arts degree in Mathematics is a sufficiently flexible program that permits the student to select courses that meet particular interests and needs. It allows for both depth and breadth of study in mathematics as well as study in the natural sciences. It is designed to provide the student with an excellent background for graduate studies in mathematics and for employment opportunities in business, industry, or government.

The Bachelor of Science in Education degree is a program designed for the student who wishes to pursue a career in secondary teaching of mathematics. It provides the prospective teacher the opportunity to acquire the knowledge, attitudes, skills, and understanding necessary to become an effective educator.

The Associate degree in Computer Science is a two-year program designed to provide the student with career-oriented computer science technology background. Though its emphasis is on training for job placement in the computer industry after a two-year curriculum, the program is designed to allow for transfer into a four- year Bachelor of Computer Science programs.

In addition to the degree programs, the department offers an 18-credit hour certificate program in personal computer applications. The program is designed to allow students to concentrate the courses in the area of C.I.S. and learn how to use micro-computers in their daily lives. Minors in mathematics and in computer science are also offered to students in other majors who want to enhance their knowledge and their career potential.

Internships

Provision is made in several of the programs to accommodate student internships. The availability of these internships is dependent upon the needs of various governmental agencies and private employers, and they are not a guaranteed part of the program. If selected, the student may earn a salary as well as college credit and invaluable experience.

Student work-study assignments are available for those who desire and qualify for employment. Students may assist in the Mathematics Department, the Computer Center, the Computer Laboratory, or the Mathematics Laboratory. Hence, students learn while they earn.

Awards

To encourage and recognize academic achievement, the Department of Mathematics and Computer Science makes the following awards:

Computer Science Award: The computer science award is presented annually to the graduating student of the Mathematics and Computer Science Department who has achieved a high level of academic excellence in computer science courses.

Frederick E. Atkins Memorial Award: In honor of the contributions made by Frederick E. Atkins to the Mathematics Department and to the many students he taught, an award established in his name is presented to the graduating student of the Mathematics and Computer Science Department who has achieved a high level of academic excellence in Mathematics courses, in either the Mathematics and Computer Science program or the Bachelor of Arts in Mathematics program.

General Education

Students who enter California University under this catalog (after Spring 1999) will follow the new General Education Program. Please consult the description of the new program in this catalog for a list of General Education Goals and Objectives and the courses included on the menus for the various goals. Please note, some courses on a menu may be required for accreditation or certification in particular degree programs. Students should consult with their advisors regarding such requirements.

Bachelor of Science in Applied Computer Science

Curriculum

General Education:

Area of Concentration:
MAT 215 Statistics
MAT 272 Discrete Mathematics,
MAT 273 Basic Calculus
MAT 341 Linear Algebra I
CSC 218 COBOL I or CSC 224 FORTRAN
CSC 223 C Programming
CSC 316 Logic & Switching Theory
CSC 323 Assembly Language Programming
CSC 333 Object-Oriented Programming
CSC 377 Information Structure
CSC 378 Computer Architecture
CSC 396 Software Engineering
CSC 400 Operating Systems
CSC 405 Data Communications
CSC 410 LISP Programming
CSC 455 Structures of Programming Languages

Computer Science Electives selected from the following (12 credits):
CSC 218 COBOL I or CSC 224 FORTRAN
CSC 318 COBOL II

CSC 324 Computer Graphics
CSC 357 Hypermedia and CAI
CSC 375 Systems Analysis
CSC 419 Computer Science Internship
CSC 420 Artificial Intelligence
CSC 424 Numerical Analysis
CSC 456 Data Base Management Systems
CSC 460 Language Translation
CSC 475 Theory of Languages

Related Area or Minor (20 credits of related electives must be taken in a single discipline selected by the student and approved by the faculty advisor and the department chairperson at least 14 credits must be 200 level or higher).

Bachelor of Science in Mathematics and Computer Science

Curriculum

General Education:

Area of Concentration:
MAT 281 Calculus I
MAT 282 Calculus II
MAT 341 Linear Algebra I
MAT 351 Abstract Algebra
MAT 381 Calculus III
MAT 382 Calculus IV
MAT 406 Differential Equations
MAT 461 Statistical Analysis I
Mathematics courses (6 credits)
CSC 223 C Programming
CSC 224 FORTRAN
CSC 316 Logic and Switching
CSC 323 Assembly Language
CSC 333 Object Oriented Programming
CSC 377 Information Structure
CSC 378 Computer Architecture
CSC 396 Software Engineering
CSC 400 Operating Systems
CSC 424 Numerical Analysis
CSC 455 Structures of Programming Language
CSC 475 Theory of Languages

14 credits selected either from Group I or Group II only.
Group I:
CSC 324 Computer Graphics
CSC 357 Hypermedia & CAI
CSC 405 Data Communications
CSC 410 LISP Programming
CSC 419 Internship (maximum six credits)
CSC 420 Artificial Intelligence
CSC 460 Language Translation

Group II:
CSC 218 COBOL I
CSC 318 COBOL II
CSC 324 Computer Graphics
CSC 357 Hypermedia and CAI
CSC 375 Systems Analysis
CSC 405 Data Communications
CSC 419 Internship (maximum six credits)
CSC 456 Data Base Management Systems
NOTE: Other specific requirements relative to this program are available in the department office.

Bachelor of Arts in Mathematics

Curriculum

General Education:

Area of Concentration:
MAT 281 Calculus I
MAT 282 Calculus II
MAT 381 Calculus III
MAT 382 Calculus IV
MAT 203 Geometry
MAT 351 Abstract Algebra I
MAT 341 Linear Algebra I
MAT 461 Statistical Analysis I
MAT 406 Differential Equations
MAT 481 Advanced Calculus I
MAT 482 Advanced Calculus II
MAT 490 Topology

Physics and/or Chemistry courses (12 credits)

Natural Science Electives (20 credits)
*Other specific requirements relative to this program are available in the department office.

Bachelor of Science in Education Certification in Mathematics for Secondary Education

Curriculum

General Education:

Professional Education:
EDE 290 Policy Studies in American Education
PSY 208 Educational Psychology
EDF 302 Applied Instruction Tech
EDS 300 Problems of Secondary Education
EDS 430 Educational Tests and Measurements in Secondary Schools
EDS 465 Developmental Reading in Secondary Schools
EDF 301 Computers for Teachers
EDU 210 Teaching in a Multicultural Society
EDU 340 Mainstreaming Exceptional Child
EDS 460 Teaching of Mathematics in Secondary Schools
EDS 461 Student Teaching and School Law

Professional Specialization: Required:
MAT 281 Calculus I
MAT 282 Calculus II
MAT 381 Calculus III
MAT 272 Discrete Mathematics
MAT 203 Geometry
MAT 351 Abstract Algebra I
MAT 461 Statistical Analysis I
MAT 341 Linear Algebra I
MAT 304 History of Mathematics
CSC 105 Basic Programming Language or CSC 123 Introduction to Computer Science with Pascal

Restricted Electives: Choose one from Group I and one from Group II.
Group I:
MAT 382 Calculus IV

MAT 406 Differential Equations
MAT 451 Abstract Algebra II
MAT 462 Statistical Analysis II
MAT 441 Linear Algebra II
MAT 469 Honors Course in Mathematics
MAT 305 Theory of Equations
MAT 495 Seminar in Mathematics

Group II:
CSC 105 Basic Program Language
CSC 123 Introduction to Computer Science with Pascal
CSC 223 Introduction to Computer Science with C
CSC 323 Assembler Language
CSC 377 Information Structure
CSC 375 Systems Analysis

Students must have a 2.5 QPA in the Area of Professional Specialization before being accepted to student teach.
Students must also achieve a satisfactory score on the Praxis II examination to obtain Pennsylvania certification

*Other specific requirements relative to this program are available in the department office.

Bachelor of Science in Industrial Management
Management and Computer Science Option

Curriculum

General Education:

Area of Concentration:
MAT 215 Statistics or MAT 225 Business Statistics
MAT 271 Math of Finance II
MAT 272 Discrete Mathematics
COM 205 Oral Communication Management
PSY 100 General Psychology
PSY 209 Industrial Psychology
CSC 101 Microcomputer and Application Software
CSC 120 Problem Solving and Programming Constructs
CSC 218 COBOL I
CSC 223 C Programming
CSC 309 Survey of Operations Research
CSC 318 COBOL II
CSC 345 Systems Analysis
CSC 377 Information Structure
CSC 396 Software Engineering
CSC 456 Data Base Management
Computer Science courses at the 200 level or higher (at least 5 credits)

Related Area:
ACC 201 Accounting I
ACC 202 Accounting II
ACC 321 Managerial Accounting
ECO 201 Introductory Microeconomics
ECO 202 Introductory Macroeconomics
MGT 201 Principles of Management
FIN 301 Financial Management
MGT 362 Labor Relations
MGT 371 Managerial Information Systems

Associate of Science in Computer Science Technology

All credits earned in this program are directly transferable to the four year Bachelor's degree in Industrial Management: Management and Computer Science Option.

Curriculum
General Education:
ENG 101 English Composition I
ENG 217 Science and Technical Writing
CSC 120 Problem Solving and Programming Constructs
MAT 181 College Algebra or MAT 182 Technical Mathematics I
PHI 247 Science, Technology, and Society
Humanities (3 credits)
Social Sciences (3 credits)
Natural Sciences (3 credits)
Free Electives (3 credits)

Area of Concentration:
MAT 171 Mathematics of Finance I
MAT 215 Statistics or MAT 225 Business Statistics
MAT 272 Discrete Mathematics
CSC 101 Microcomputer and Application Software
CSC 218 COBOL I
CSC 223 C Programming
CSC 300 Computer Operations
CSC 357 Hypermedia and CAI
CSC 377 Information Structures
Mathematics or Computer Science courses at the 200 level or higher (12 credits)

Certificate in Personal Computer Application

Curriculum

Computer Programming (6 credits):
CSC 120 Problem Solving and Programming Constructs
CSC 202 Visual Programming

Application Software (12 credits):
CSC 101 Microcomputer and Application Software
CIS 150 Introduction to Data Base Applications Software
CIS 215 Introduction to Telecommunications and Local Area Networks
CSC 201 DOS, Windows and the Internet

Minor in Mathematics

Required: (15 credits):
MAT 272 Discrete Mathematics
MAT 281 Calculus I
MAT 282 Calculus II
MAT 341 Linear Algebra I
MAT 381 Calculus III
Electives selected from the following (6 credits):
MAT 201 Mathematical Modeling
MAT 203 Geometry
MAT 351 Abstract Algebra I
MAT 382 Calculus IV
MAT 406 Differential Equations
MAT 441 Linear Algebra II
MAT 461 Statistical Analysis I

Minors in Computer Science

Computer Science Concentration

Required:
MAT 272 Discrete Mathematics,
CSC 120 Problem Solving and Programming Constructs
CSC 233 C Programming
CSC 316 Logic and Switching Theory
CSC 377 Information Structure

Electives: Select any two of the following courses:
CSC 202 Visual Programming
CSC 218 COBOL I
CSC 224 FORTRAN
CSC 333 Object Oriented Programming
CSC 375 COBOL II
CSC 396 Software Engineering
CSC 419 Computer Science Internship

Information Systems Concentration

Required:
CSC 101 Microcomputer and Application Software
CSC 120 Problem Solving and Programming Constructs
CSC 201 DOS Windows and Internet
CIS 150 Introduction to Data Base Applications
CIS 215 Introduction to Local Area Networks and Telecommunications

Electives: Select any one of the following:
CSC 223 C Programming
CSC 300 Computer Operations
CSC 309 Survey of Operations Research
CSC 357 Hypermedia and CAI
CSC 419 Computer Science Internship

Music

Purpose

Did you ever meet anyone who did not like some type of music? Well, neither did we. Music is an important form of expression and enjoyment. To fully appreciate music, you have to understand it. At California University we provide the opportunity to experience this art form completely as a listener, performer and student.

Program

Though the university has no major in music, we do offer a minor. The attainment of the Music Minor may be especially valuable to those who seek an Area of Concentration or an enhancement to their chosen field.

The curriculum serves the Humanities and Fine Arts goals of the General Education program. The Music Department offers courses in basic musicianship, theory, music history, education, applied electives and ensemble performance. These offerings provide students with the opportunity and flexibility to structure a course of study that fits individual needs.

Minor in Music (24 credits)

Required:
MUS 100 Introduction to Music
MUS 115 Fundamentals of Music
MUS 200 Sight Singing & Ear Training

History, Theory and Education Electives: (9 crs. min)
MUS 202 North American Music
MUS 204 History of the American Musical
MUS 300 Jazz: History, Form & Analysis
MUS 301 20th Century Music: History Form & Analysis
MUS 303 Music Materials & Methods for the Classroom Teacher, Grades K-8
MUS 306 The Opera: History, Form & Analysis
MUS 308, The Symphony: History, Form and Analysis

Applied Electives: (3 crs. min).
MUS 104 Voice Class I
MUS 210 Voice Class II
MUS 211 Keyboard I
MUS 312 Keyboard II
Private Instruction Repeatable Courses are available to Music Minors.
MUS 109-409 Private Instruction - Brass
MUS 119-419 Private Instruction - Piano
MUS 129-429 Private Instruction - Percussion
MUS 149-449 Private Instruction Woodwind
MUS 159-459 Private Instruction - Voice

Nine of the 24 credits for the Minor must be at 300 and/or 400 level. To achieve the minor in 24 credits, any student who begins private instruction at the 100 or 200 level must take their 300 level courses from the History, Theory and Education Elective List.

Performance Electives (Repeatable Courses): (3 crs. min)
MUS 191 University Choir
MUS 192 California Singers
MUS 196 Jazz Ensemble
MUS 198 University Marching Band
MUS 199 University Concert Band

NURSING BSN Program

Purpose

California University's Nursing Department offers an upper division program leading to a Bachelor of Science in Nursing for registered nurses from associate degree and diploma programs. The program is accredited by the National League for Nursing Council of Baccalaureate and Higher Degree Programs and the Commission on Collegiate Nursing Education.

The RN/BSN program is designed to provide the graduate with an educational foundation in the arts and sciences as well as nursing, to serve as a basis for graduate education and as a commitment for lifelong learning. Additionally, the program assists the RN with the synthesis of theories and research findings into the role of the professional nurse, and builds upon the RN's competencies in nursing by providing increasingly complex experiences in a variety of settings.

All of the academic requirements of the university apply to the Nursing program. In addition, a minimum grade of "C" is required in each upper-division nursing course. Admission to upper division nursing courses requires completion of an Entry Level Portfolio, including evidence of RN licensure in Pennsylvania, CPR certification, OSHA inservice on universal precautions, annual health evaluation, professional liability insurance, personal health insurance, and two professional references. Specific information and forms concerning these requirements are available in the Nursing Department.

Advanced Placement

Step 1: Eligibility for Advance Placement. Credit for basic nursing education will be awarded as follows:
If you meet one of the following criteria, you are eligible to register for the Entry Level Portfolio: (1) Graduation from an NLN accredited ADN or diploma program within the past three years; (2) Graduation from an NLN accredited ADN or diploma program more than three years ago, with 1000 hours of nursing practice within the past three years; (3) If neither of the previous conditions are met, successful completion of the NLN Mobility Profile II exams.

Step 2: Advance Placement Credit. In order to receive 30 credits advanced placement in nursing, you must successfully complete the Entry Level Portfolio. The first step in completion of the Entry Level Portfolio is attendance at a mandatory orientation session. Students are advised to attend an orientation session the semester before enrolling in upper division nursing courses.

Contact the Department of Nursing for a registration form to reserve a seat at the orientation session of your choice. Should you have any questions about this process, please don't hesitate to contact the Department of Nursing at (724) 938-5739.

Scholarship Opportunities

Scholarship opportunities for RN students entering this program are available through various local, state and national nursing organizations. Additionally, the Department of Nursing maintains a Nursing Honor Society and a Nursing Alumni Society which presents a yearly award to the outstanding graduating senior.

Bachelor of Science in Nursing

Curriculum
PreBSN (67 Credits):
General Education
Communication Skills
ENG 101 English Comp I
ENG 102 English Comp II
COM 102 Group Discussion Management
Social & Behavioral Sciences:
PSY 100 General Psychology
SOC 100 Principles of Sociology
PSY 207 Developmental Psychology
Humanities/Fine Arts
PHI 100 Perspectives in Philosophy or
PHI 220 Ethics or PHI 307 Medical Ethics
Natural Sciences (optional challenge exams):
BIO 230 Anatomy & Physiology I
BIO 260 Anatomy & Physiology II
CHE 150 Chemistry for Health Professionals
BIO 226 Microbiology

Nursing
Advanced Placement or NLN Mobility II Exams
Care of the Adult Client
Care of the Client during Childbearing/Care of Child
Care of Client with a Mental Disorder

Entry Level Portfolio
TOTAL OF A & B 30
TOTAL PreBSN 67
**All preBSN requirements must be successfully completed before being admitted to upper division nursing courses. Status change from preBSN to BSN occurs upon completion of all preBSN requirements.

BSN (61 Credits)
General Education
MAT 215 or MAT 225 Statistics
PSY 211 Social Psychology or
PSY 209 Industrial Psychology
Humanities Elective
Supportive Courses
MGT 201 Principles of Management
Computer Science Elective
Supportive Electives: XGE, CSC, ENG 211, COM, MGT, NUR 200, BIO. (Choose any two)

Nursing
NUR 330 Philosophy of Professional Nursing
NUR 350 Health Assessment
NUR 370 Methods of Nursing Research
NUR 375 Leadership & Change in Nursing
NUR 410 Research Utilization
NUR 450 Trends & Issues in Nursing

NUR 470 Family Health Nursing
NUR 475 Community Health Nursing
NUR 485 Professional Development

TOTAL PreBSN MAJOR 67
TOTAL BSN MAJOR 61
TOTAL FOR DEGREE 128
NOTE: General education courses may be accepted as transfer credits from accredited institutions.
A minimum of 42 credits, including all upper division nursing courses, must be completed at California University of Pennsylvania.
Selected courses may be challenged by examination. Specific information on challenge examinations may be obtained from the Department of Nursing.

School Nurse Certification

The School Nurse Certification program is offered jointly through the College of Education and the Department of Nursing. The registered nurse who completes the School Nurse Certification program will have the ability to apply the knowledge and skills obtained in the BSN program in meeting the health care needs of children in elementary and secondary school settings. Students who successfully complete the program are eligible to apply for the School Nurse Certificate (Education Specialist I) issued by the Pennsylvania Department of Education.

RN/BSN students may complete the 13 required credits for certification as supportive and free electives within the BSN major. Registered nurses who have previously earned a BSN must complete a minimum of the 13 required credits.

In order to participate in the school nurse practicum experience, the student must provide evidence of: current licensure as a registered nurse in Pennsylvania, current CPR certification, first aid certification (advanced certification preferred), physical exam including tuberculin testing or chest X-ray, attendance at OSHA inservice on universal precautions, professional liability insurance, and Act 34 and Act 33 Clearance Forms.

Curriculum
EDF 290 Policy Studies in American Education
PSY 208 Educational Psychology
ESP 501 Introduction to the Exceptional Child
NUR 406 School Health Nursing

Nursing Associate of Science Program

The cooperative nursing program offered by the Community College of Allegheny County and California University of PA affords students the opportunity to complete the requirements for an associate degree in nursing on the campus of California University of PA. Students may complete the non-nursing, general education requirements at California University of PA, while completing nursing courses offered by CCAC on the California campus. Upon successful completion of the program, students are awarded an associate degree in nursing from Community College of Allegheny County, and are eligible to sit for the National Council Licensure Examination (NCLEX-RN).

Students who earn an associate degree are prepared for entry-level positions in nursing, and provide direct client care in a structured health care setting. Upon successful completion of both the associate degree program and the licensure examination (NCLEX), students may matriculate into the upper division Bachelor of Science in Nursing (BSN) program offered at California University. This degree prepares the student to practice in a wide variety of health care settings, expands career advancement opportunities for the RN, and provides a foundation for graduate education.

Curriculum

General Education
ENG101 English Composition
ENG 102 English Composition II
PSY 100 Introduction to Psychology
Math Elective
Computer Science Elective
Humanities Elective

Supportive Courses
BIO 230 Anatomy & Physiology I
BIO 260 Anatomy & Physiology II
BIO 226 Microbiology
PSY 207 Developmental Psych
SOC 100 Intro to Sociology

Nursing /CCAC Courses
NSG 101 Universal Self Care Requisites CCAC
NSG 102 Basic Health Deviation CCAC
Health Care Requisites
NSG 105 Nursing Research CCAC
NSG 201 Developmental Self Care Requisites CCAC
NSG 202 Developmental Self Care CCAC
NSG 213 Complex Health Deviation CCAC
Self-Care Requisites
NSG 214 Complex Health Deviation CCAC
Self-Care Requisites

Nursing RN Program

The Washington Hospital School of Nursing (WHSN) Registered Nurse Program is a cooperative venture between California University and the WHSN. Entrance into the program requires successful performance by the prospective student on the qualifying examination given by the WHSN and subsequent acceptance for admission to both the WHSN and California University of Pennsylvania. The program of study leading to the certificate of completion given by WHSN and licensure as a registered nurse, following successful completion of the prescribed curriculum and examinations as required by law, is 27 months in duration.

The cooperative nature of this program is based upon the university providing a minimum of 40 credits in traditional science and general education courses and the WHSN providing the traditional nursing courses and clinical experiences required for certification as a registered nurse.

Because of the necessity to limit enrollment at WHSN, the availability of university classes may be limited. This is particularly critical with regard to the science classes, Anatomy and Physiology I and II, Chemistry for the Health Sciences, Basic Microbiology and Basic Principles of Nutrition where, depending upon circumstances, enrollment may be restricted to students who have been formally accepted into the WHSN Program. Individuals who wish to earn a degree from the university may continue in the Bachelor of Science Nursing Program offered by the university following completion of the WHSN Program. However, other qualifications and/or examinations may be required prior to entry into the university BSN Program.

Curriculum

General Education
ENG 101 English Composition
PSY 100 General psychology
BUS 201 Principles of Management

Supportive Courses
BIO 230 Anatomy & Physiology
BIO 260 Anatomy & Physiology
BIO 226 Microbiology
BIO 228 Basic Principles of Nutrition
CHE 150 Chemistry for Health Professions
PSY 207 Developmental Psychology
SOC 100 Principles of Sociology

Nursing/WHSN Courses

Nursing I	150 hours
Nursing II	240 hours
Nursing III	350 hours
Nursing IV	357 hours
Nursing V	240 hours
Nursing VI	350 hours

Philosophy

Purpose

The word "philosophy" comes from two Greek words that mean love (phileo) and wisdom (sophia), and throughout much of history anyone who sought knowledge was called a philosopher. Socrates, though, was esteemed to be a good philosopher because he was aware of how little he knew. In knowing this, however, he was wiser than some "authorities" and "experts" whose unreflective confidence in their beliefs was mistaken. In this tradition, philosophy became the academic discipline which critically studies the justification of beliefs and attempts to put together different kinds of beliefs to form a workable view of reality as a whole. In brief, philosophy is the critical study of theories about truth, knowledge, reality, and values. Aristotle thought the study of philosophy was intrinsically rewarding, an end in itself, because it fulfilled a distinctively human potential, namely the ability to reason and to know. But if minimizing mistaken or dogmatic beliefs has practical value, then philosophy also can serve pragmatic purposes.

Philosophy students study the historical development of theories about the nature of knowledge, reality, and values, and they learn how to assess such theories. Students develop abilities to think logically, to explore issues from different perspectives, and to present their ideas effectively in writing.

Programs

The philosophy major is a program of study covering the history of philosophy, logic, and issues in philosophy which might be grouped as ethical, epistemological, or metaphysical. In addition to the traditional philosophy major, the department also offers a Philosophy/Pre-Law option. This option is not required for those intending to go to law school, but it indicates courses which might be useful for students planning a career in law.

Activities

The Philosophy Department advises the student Philosophy Club. This club gives students informal social opportunities for discussions, debates, and lectures. The Philosophy Department also hosts topical lectures and forums.

Careers

Philosophy majors go on to a variety of careers: law, ministry, teaching, civil service, management, to name a few. Indeed, the philosophy major is well suited for any career that values critical reasoning, logical problem solving, and an ability to look at issues from many perspectives. Increasingly the business world is looking for this kind of liberally educated person. Philosophy majors work closely with their advisors to choose major and non-major courses that will help them achieve their individual educational and career goals. The philosophy program at California University is designed to be flexible so that it can be tailored to a variety needs and interests.

General Education

Students who enter California University under this catalog (after Spring 1999) will follow the new General Education Program. Please consult the description of the new program in this catalog for a list of General Education Goals and Objectives and the courses included on the menus for the various goals.

Bachelor of Arts in Philosophy

Curriculum

General Education:

Area of Concentration:
Required:
PHI 115 Logic and Language or PHI 211 Formal Logic I
PHI 201 History of Ancient Philosophy
PHI 206 16th to 18th Century Philosophy
PHI 225 Social and Political Philosophy or PHI 370 Philosophy of Law
PHI 320 Ethical Theory
PHI 325 Philosophy of Science or PHI 405 Epistemology
PHI 410 Metaphysics or PHI 415 Philosophy of Mind
PHI 459 Tutorial or PHI 490 Seminar

Philosophy Electives: two courses at the 200 level or higher and three courses at the 300 level or higher. (15 credits)

Related Electives or Minor (29 credits).

Philosophy: Pre-Law Concentration

Curriculum

General Education:

Area of Concentration
Required (18 credits):
PHI 115 Logic and Language
PHI 201 History of Ancient Philosophy
PHI 206 16th-18th Century Philosophy
PHI 225 Social and Political Philosophy
PHI 320 Ethical Theory
PHI 370 Philosophy of Law

Philosophy Electives two courses at the 200 level or higher and three courses at the 300 level or higher. (15 credits)

Related Courses (24 credits):
BUS 242 Business Law I
COM 165 Interpersonal Communication or COM 230 Argumentation and Debate or COM 350 Persuasion
ENG 345 English Grammar and Usage or ENG 375 Advanced Writing
HIS 101 History of US to 1877
HIS 102 History of US since 1877
POS 105 American Government
POS 228 Development of Political Thought: Classical and Medieval or POS 229 Development of Political Thought: Modern
POS 314 Constitutional Law: Governmental Powers or POS 315 Constitutional Law: Civil Liberties or POS 316 Judicial Process

Electives: (11 credits)

Philosophy Minor

Required:
PHI 115 Logic and Language or PHI 211 Formal Logic I
PHI 201 History of Ancient Philosophy
PHI 206 16th to 18th Century Philosophy
Philosophy Electives at the 300-400 level (12 credits)

Psychology

Purpose

Psychology is one of the social/behavioral sciences engaged in the systematic study of behavior and experience. Psychology focuses on the study and explanation of patterns of individual behavior. The latter rests not only on mental processes but also on social and physiological ones. The field of psychology seeks to understand individual behavior as an end in itself as well as use that information to assist persons to live more productive and fulfilling lives.

Programs

The department offers two majors: General Psychology and Industrial/Organizational Psychology. Within the General Psychology major there are options for students interested in counseling and mental health care careers, or educational, child, or developmental psychology. Industrial/Organizational Psychology is the research and applied specialty concerned with the impact of organizational dynamics upon individual decision-making. It is the major for students interested in human resource management careers.

The department also offers certification for Psychology Technicians. Students interested in social service employment will be prepared by the certification program to obtain entry-level positions at a variety of social service agencies and/or seek further training in graduate programs. For more information on this certification, contact the Psychology Department.

The department makes available to its majors a publication entitled "The Survival Manual," which states policies, procedures, course requirements, and other information of interest to majors.

Minors in Psychology and Industrial/Organizational Psychology are also offered to students in other programs.

Awards

The David W. Hambacher Memorial Fund Scholarship Award is given annually. Applicants must be Psychology majors with a 3.0 grade point average and have completed 96 credits. Information about the award is available in the departmental office. The award is given in the Spring semester.

An Outstanding Senior Award is given annually at the spring Psychology Club banquet.

Honor and Professional Societies

Qualified majors can join Psi Chi, the national honor society. The department also sponsors a Psychology Club which hosts guest speakers, organizes trips to conferences of professional interest, and provides career and employment information.

Careers

Traditionally, psychologists have been employed in universities, schools and clinics. Today, more than ever before, they can be found working in businesses, hospitals, private practice, courtrooms, sports competitions, police departments, government agencies, private laboratories, the military and other settings.

A student with a Bachelor of Arts in Industrial/Organizational Psychology can find employment in personnel resource management. Students will be prepared to do personnel recruitment, training, testing, and supervision. Most career opportunities in psychology, however, require an advanced degree.

General Education

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Bachelor of Arts in Psychology

Curriculum

General Education:

Area of Concentration:
PSY 100 General Psychology
PSY 225 Psychological Statistics
PSY 235 Psychology of Learning
PSY 345 History and Systems of Psychology
PSY 360 Experimental Psychology

One of the following:
PSY 205 Child Psychology
PSY 206 Adolescent Psychology
PSY 207 Developmental Psychology

Two of the following:
PSY 208 Educational Psychology
PSY 209 Industrial Psychology
PSY 211 Social Psychology
PSY 340 Psychological Testing

One of the following:
PSY 305 Psychology of Personality
PSY 400 Abnormal Psychology

Additional Psychology courses (9 to 24 credits)

Related electives including courses in at least three of the following areas: Anthropology, Biology, Chemistry, Education, Gerontology, Social Work, Political Science, Philosophy, Physics, Sociology, or Special Education. (17 to 35 credits)

Bachelor of Arts in Industrial/Organizational Psychology

Curriculum

General Education:

Area of Concentration:
PSY 100 General Psychology
PSY 209 Industrial Psychology
PSY 211 Social Psychology
PSY 225 Psychological Statistics
PSY 235 Psychology of Learning
PSY 340 Psychology of Testing
PSY 345 History and Systems of Psychology
PSY 360 Experimental Psychology
PSY 370 Interviewing Skills

PSY 428 Advanced Industrial Psychology
MGT 201 Principles of Management
MGT 301 Organizational Behavior
MGT 352 Human Resource Management
MGT 353 Compensation Management
MGT 362 Labor Relations

Psychology electives (8 credits)

Electives from Communication Studies, Business, Accounting, Economics, Industrial Technology or English (15 credits)

Minors

Psychology Concentration

Required: (12 credits):
PSY 100 General Psychology
PSY 225 Psychological Statistics
PSY 305 Psychology of Personality
PSY 360 Experimental Psychology

Electives: (6 credits):
Select one:
PSY 205 Child Psychology
PSY 206 Adolescent Psychology
PSY 207 Developmental Psychology

Select one:
PSY 208 Educational Psychology
PSY 209 Industrial Psychology
PSY 211 Social Psychology
PSY 235 Psychology of Learning

Select two 300- or 400-level Psychology Electives: (6 credits)

Industrial Organizational Psychology Concentration

Required: (21 credits)
PSY 100 General Psychology
PSY 209 Industrial Psychological
PSY 370 Interviewing Skills
PSY 428 Advanced Industrial Psychology
MGT 352 Human Resource Management
MGT 353 Compensation Management
MGT 362 Labor Relations.
Statistics course (3 credits) not limited to psychological statistics

Social Sciences

Purpose

Common to the degree programs offered by the Department of Social Sciences is the study of people interacting with one another. Their common approach is scientific, that is, they study patterns of human behavior by objective, measurable methodologies.

Anthropology is the most comprehensive since there is no aspect of human development or behavior that it does not study, although it traditionally has focused on pre-industrial societies. Anthropology includes such diverse subject areas as ethnology, medical and psychological anthropology, archaeology, and human evolution. Field experiences are available in archaeology. An archaeology field school runs during the summer school session. Students participate in the excavation of a site.

Political Science is the most prescribed of the discipline majors offered in the department. It limits its interests to the political aspects of human behavior, both national and international, including the study of power and organizations.

Sociology is the systematic study of all features of group life, beginning with the family and ending with global arrangements. Because it is a multi-paradigm science, students are educated to appreciate a wide range of theoretical perspectives and research methods. The Sociology Program offers course work in the structures and processes of social interaction. The place of sociology in interdisciplinary studies also is emphasized.

The Social Science Area major is general and interdisciplinary in nature. It presents an overview, as well as the interrelationships, of all the social science disciplines. Along with sociology, anthropology and political science, it includes psychology, history, geography and economics.

Programs

Anthropology, Social Science and Sociology are majors without optional concentrations.. Political Science offers three concentrations: General Political Science, Public Administration, and Pre-Law. The Public Administration option is an interdisciplinary field of study with courses offered through the programs in Business and Economics, as well as Political Science.

Under the International Studies Program, Political Science advises the International Studies: Political Science concentration. This course of study is interdisciplinary.

The department, in conjunction with the College of Education and Human Services, provides a teacher certification program for those interested in teaching the social sciences in secondary schools.

Criminal Justice is a cooperative program between the Community College of Beaver County and California University of Pennsylvania. Students interested in obtaining this degree must contact the Department of Social Science Office and be approved by the chairperson for admittance to the program.

Internships

An internship is a form of field experience. Anthropology students do internships at the Carnegie Museum in Pittsburgh and various historical sites, such as Bushy Run and the Fort Necessity Historical Park. Political Science students are placed in governmental agencies, law firms and offices of public administrators and elected officials where they can observe and practice what they have learned in the classroom. Sociology majors are placed in police departments, private investigation agencies, and governmental and private agencies serving the homeless and juvenile offenders.

Honor Societies

Anthropology majors are eligible for membership in the Gamma Chapter of Lambda Alpha, the national honor society. Requirements are the completion of twelve credits of Anthropology course work and a 3.0 grade point average or higher in the major, as well as an overall 2.7 grade point average.

Students in the social sciences are eligible for membership in Pi Gamma Mu, the social science honor society. Students must have completed sixty-four university credits, including a minimum of twenty credits in social science course work, and have a 3.0 or higher grade point average.

Awards

The Joseph Lynn Marino Memorial Award is presented annually. For consideration an applicant must have a minimum grade point average of 3.5, be enrolled in the College of Liberal Arts and have successfully completed two courses in Anthropology.
The Edward McNall Burns Scholarship Award is given annually to any individual majoring in anthropology, sociology, and political science.

The George S. Hart Memorial Award for Academic Excellence is given annually to the graduating senior with the highest GPA in the Social Sciences Area.

Careers

Students with an undergraduate degree can secure work in entry level social service and personnel resource areas. Career opportunities, however, increase with the attainment of graduate course work and degrees. The social sciences as a whole prepare students to enter careers in law, public administration, the ministry, personnel resource management, education, social service professions and law enforcement.

General Education

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Bachelor of Arts in Anthropology

Curriculum

General Education:

Area of Concentration:
ANT 100 Introduction to Anthropology
ANT 101 Archaeology Field School
ANT 255 World Ethnology
ANT 290 Archaeology or ANT 355 Prehistoric American Indians
ANT 390 Human Origins

ANT 421 Anthropological Thought
Anthropology Electives (15 credits)
SOC 100 Principles of Sociology
PYS 225 Psychological Statistics
SOC 308 Social Science Research Methods

Related Electives or a Minor (23 credits)

Bachelor of Arts in Political Science:

Curriculum

General Education (60 credits):

Students may select one of the following concentrations.

General Political Science Concentration
Required:
POS 100 Introduction to Political Science
POS 105 American Government
POS 450 Seminar in American Politics
One course each in American Politics, Political Theory, International Relations/Comparative Politics, and Public Administration/Public Policy
Political Science electives with at least nine credits must be at the 300 level or above (12 credits)

Related courses including the following (35 credits):
HIS 101 History of the United States to 1877
HIS 102 History of the United States since 1877
HIS 104 History Western Society to 1740
HIS 106 History Western Society since 1740
Related Electives, all of which must be at the 200 level or above, or a Minor

Public Administration Concentration
Required:
POS 100 Introduction to Political Science
POS 105 American Government
POS 220 Introduction to Public Administration
POS 300 Introduction to Public Policy
POS 301 Methods of Political Analysis
POS 450 Seminar in American Politics
Economics & Management courses (15 credits)
ECO 201 Introduction to Microeconomics
ECO 202 Introduction to Macroeconomics
FIN 301 Financial Management
MGT 201 Principles of Management
MKT 341 Marketing for Non-Profit Organizations

Related Courses (9 credits)
Computer Science Elective
COM 102 Group Discussion: Management
COM 250 Oral Communication: Management

Public Administration Electives (24 credits).
Electives (2 credits)

Pre-Law Concentration
Required:
POS 100 Introduction to Political Science
POS 105 American Government
POS 450 Seminar in American Politics
One course each in American Politics, Political Theory, International Relations/Comparative Politics, Public Administration/Public Policy and Public Law.
Political Science electives (9 credits)

At least 9 of the preceding 24 credits must be at the 300 level or above.

Related courses including the following (35 credits):
HIS 101 History of the United States to 1877
HIS 102 History of the United States since 1877
HIS 104 History of Western Society to 1740
HIS 106 History of Western Society since 1740
Related Electives, all of which must be at the 200 level, or above or a Minor (23 credits)

Bachelor of Arts in Sociology

Curriculum

General Education:

Area of Concentration:
Required courses (30 credits):
SOC 100 Principles of Sociology
SOC 110 Ethnic, Racial, and Sexual Minorities
SOC 210 Social Stratification
SOC 220 The Family
SOC 240 Social Institutions
SOC 305 Symbolic Interactionism
SOC 308 Social Science Research Methods
SOC 376 Sociological Theory
SOC 495 Seminar in Sociology
MAT 215 Statistics or PSY 225 Psychological Statistics

Sociology Electives distributed in three categories (18 credits): Institutions, Collective Behavior and Social Issues.

Social Science Electives or a Minor (21 credits)

Bachelor of Arts in Social Sciences

Curriculum

General Education:

Area of Concentration:

Required (30 credits):
Social science courses (nine credits), 100 level introductory courses 200 level courses, one each in ANT, ECO, GEO, HIS, POS, PSY, HIS and SOC (21 credits),

Area of Interest (18-23 credits): Courses are taken within a single social science discipline.

Related electives (15-20 credits):
All courses used to fulfill these electives must satisfy four conditions:

- must not be in the discipline selected as "Area of Interest"
- must have direct relevance to analyzing and understanding human behavior
- must be from three or more disciplines
- must have the advisor's approval

Bachelor of Arts in International Studies: Political Science Concentration

Curriculum

General Education:

Area of Concentration:
Political Science:
POS 210 Politics of Western Europe
POS 236 Introduction to International Relations
POS 237 International Organizations
POS 326 Politics of Africa
POS 281 Politics of Russia
POS 325 Politics of Asia

Language: Select courses from either FRE or SPN:
203 Intermediate I
204 Intermediate II
311 Conversation, Composition and Phonetics I
312 Conversation, Composition and Phonetics II
Culture & Civilization Elective
Language Elective

Geography:
GEO 345 Political Geography
Area Studies (6 credits)

Restricted Electives (18 credits)

Related Electives (5 credits)

Bachelor of Science in Education: Certification in Social Studies for Secondary Schools

Curriculum

General Education:

Professional Education:
EDF 290 Policy Studies in American Education
PSY 208 Educational Psychology
EDF 302 Applied Instructional Technology
EDS 300 Problems of Secondary Education
EDS 430 Educational Tests and Measurements in Secondary Schools
EDS 465 Developmental Reading in the Secondary School
EDF 301 Computers for Teachers
EDU 210 Teaching in a Multi-cultural Society
EDU 340 Mainstreaming Exceptional Learners
EDS 445 Teaching of Social Science in Secondary Schools or
EDS 455 Modern Methods in Secondary Schools
EDS 461 Student Teaching and School Law

Professional Specialization:
ANT 100 Introduction to Anthropology
GEO 100 Introduction to Geography
GEO 110 Map Principles
GEO 340 Historical Geography
EAS160 Physical Geography
HIS 101 History of the United States to 1877
HIS 102 History of the United States since 1877
HIS 104 History of Western Civilization to 1740
HIS 106 History of Western Civilization since 1740
Non-western History course
ECO 100 Elements of Economics
ECO 201 Introductory Microeconomics or ECO 202 Introductory Macroeconomics
POS 100 Introduction to Political Science
POS 105 American Government
SOC 100 Principles of Sociology
One additional Sociology course.
Students must also achieve a satisfactory score on the Praxis II exam.

Associate Degree in Criminal Justice

Curriculum: The associate degree from the Community College of Beaver County comprises 63 credits.
General Education (27-28 credits):
ENG 101 Composition I
ENG 102 Composition II
COM 101 Oral Communication
SOC 100 Principles of Sociology
PSY 100 General Psychology
Biology Course
POS 105 American National Government
Computer Science Elective
Humanities Elective

Area of Concentration (36 credits):
XJJ 155 Administration of Criminal Justice
XJJ 160 Criminal Law I
XJJ 261 Interview and Interrogation
XJJ 156 Narcotics and Drug Abuse
XJJ 157 Correctional Administration
XJJ 270 Criminology
XJJ 262 Police Ethics and Problems; Criminal Evidence
Criminal Justice elective

Minors

Anthropology Concentration

Required:
ANT 100 Introduction to Anthropology
Select three of the following:
ANT 231 Medical Anthropology
ANT 250 Culture Change and Culture Shock
ANT 255 World Ethnology
ANT 280 Indians of North America
ANT 290 Archaeology
Select three of the following:
ANT 300 Cultural Views of Women
ANT 355 Prehistoric American Indians
ANT 360 Historic Sites Archaeology
ANT 390 Human Origins

Political Science Concentration

Required:
POS 100 Intro to Political Science
POS 105 American Government
Electives:
Select two: 200-level Political Science (POS) course
Select three: 300-level Political Science (POS) courses

Public Administration Concentration

Required:
POS 100 Introduction to Political Science
POS 105 American Government
POS 220 Introduction to Public Administration
Electives: Select four of the following:
POS 205 Municipal Government or POS 235 State and Local Government

POS 300 Introduction to Public Policy
POS 310 The Presidency
POS 314 Constitutional Law: Government Powers
POS 315 Constitutional Law: Civil Liberties
POS 316 Judicial Process

Sociology Concentration

Required:
SOC 100 Principles of Sociology
SOC 110 Ethnic, Racial, and Sexual Minorities or SOC 210 Social Stratification
SOC 165 Modern Freedom Movements or SOC 216 Sociology of Work or SOC 225 Sociology of Aging
SOC 240 Social Institutions
SOC 308 Social Science Research Methods
Sociology Electives: Select three of the following (9 credits):
SOC 305 Symbolic Interactionism
SOC 310 Collective Behavior
SOC 330 Religion as a Social Phenomenon
SOC 376 Sociological Theory
SOC 495 Seminar in Sociology

Social Work & Gerontology

Purpose

The Social Work Program's primary objective is to provide the student with generalist skills for entry into beginning social work practice in a variety of agencies and human service settings. Its secondary objectives are to prepare students for entrance into graduate programs of social work and related professional schools, contribute to the general college education of non-social work majors by helping students understand social welfare needs, services, and issues relevant to a modern industrial democracy, and contribute to the provision of social welfare services and to the social work profession through service, research and continuing education.

The Gerontology Program is dedicated to providing the student with a broad range of academic and practical experience that will enable the graduate to function in a variety of settings, such as, administration, planning, management, and delivery of services to older persons. Working with older adults is a projected employment growth area. California University has the only Bachelor of Science in Gerontology program among the fourteen universities in the State System of Higher Education.

The objective of Gerontology program is to increase the number and competency of persons working with older adults, their families and their communities. The Center in the Woods provides supervision from Gerontology faculty and a professional staff for a variety of student experiences. It is one of the few senior centers in the nation that has a working relationship with an academic program in gerontology.

The Aging Specialist Certificate is becoming recognized as the minimum credential of qualification in the field of aging. The Certificate in Gerontology is designed primarily for either undergraduates interested in working with older adults in relation to their undergraduate major (e.g., Social Work, Psychology, Nursing, Communication Disorders) or people who are currently working with or on behalf of older adults who have had practical experience in the field of aging but who have had little formal training. The Aging Specialist Certificate is 18 hours of course work in Gerontology including a three-credit practicum experience.

Careers

Graduates of the Social Work program are eligible for membership in the National Association of Social Workers and for advanced standing in accredited graduate social work programs. The program provides career opportunities in such areas as personal services (case management, family development, counseling), protective services, mental health, public welfare, and informational/advising services (education, crisis centers, consulting and public interest advocacy).

Admission to the Social Work Program

Full admission into the Social Work program requires that the student apply to the major after completing several basic social work courses. Among other things, full admission requires a 2.0 GPA both overall and within the major. Continued good standing and graduation require achieving a 2.5 average in the major.

General Education

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on the menus for the various goals. Please note, some courses on a menu may be required for accreditation or certification in particular degree programs. Students should consult with their advisors regarding such requirements.

Bachelor of Science in Social Work

Curriculum

General Education:

Area of Concentration:
Foundation (3 credits)
SOW 150 Introduction to Social Work

Practice Interventions (12 credits)
SOW 256 Social Work Interviewing
SOW 302 Micro Practice Methods
SOW 348 Mezzo Practice Methods
SOW 349 Macro Practice Methods

Human Behavior/Social Environment (12 credits)
SOW 215 Human Growth and Behavior I
SOW 216 Human Growth and Behavior II
SOW 208 Minority Group Relations
SOW 303 Human Sexuality and Society

Social Welfare Policy and Services (9 credits)
SOW 295 History and Philosophy of Social Welfare
SOW 366 Policy Analysis/Service Delivery
SOW 370 Social Change

Research (3 credits)
SOW 405 Social Work Research Methods

Special Interests (17 credits)
SOW 265 Juvenile Delinquency
SOW 270 Child Welfare
SOW 296 Poverty & Related Social Problems
SOW 306 Social Work in Rural Environment
SOW 350 Social Work with Aging
SOW 353 Psychopathology for Social Workers
SOW 495 Seminar in Social Work
PSY 400 Abnormal Psychology

Field Work (12 credits)
SOW 419 Social Work Practicum I
SOW 420 Social Work Practicum II

Bachelor of Science in Gerontology

Curriculum

General Education:

Area of Concentration:

Foundation (6 credits)
XGE 101 Introduction to Gerontology
XGE 102 Aging in American Society

Required
XGE 201 Aging Policies and Services
XGE 204 Biology of Aging
XGE 205 Media and Library Resources in Aging
XGE 380 Adult Development and Aging
XGE 439 Seminar in Gerontology

Major Electives selected from the following (18 credits):
XGE 202 Middle Years of Life
XGE 210 Group Work with Older Adults
XGE 249 Aging and the Family
XGE 289 Minority Aging/Institutionalization
XGE 300 Health and Safety in Aging
XGE 320 Counseling the Older Adult
XGE 340 Activities in Long-Term Care
XGE 350 Exercise for the Elderly
XGE 369 Rural Aging
XGE 370 Nursing Homes
ENG 215 Literature and Aging
HIS 204 Historical Perspectives on Aging

Related Courses (16 credits)
SOW 150 Introduction to Social Work
ENG 151 Word Processing
HPE 314 First Aid and Personal Safety
SOW 350 Social Work with the Aging
One other 200, 300, or 400 level SOW course
One 200, 300, or 400 level course in MGT or MKT

Field Experience (6 credits)
XGE 449 Gerontology Practicum including both community setting (3 credits) and institutional setting (3 credits)

Related Electives (1-7 credits)

Aging Specialist Certificate

Curriculum

Six credits in Gerontology:
XGE 101 Introduction to Gerontology
XGE 201 Aging Politics and Services

Gerontology courses chosen in consultation with prorgram advisors (minimum of 9 credits)

Three-credit practicum course
XGE 449 Gerontology Practicum

Special Education

Purpose

The Department of Special Education, accredited by the American Association of Colleges of Teacher Education, NCATE, PDE, CEC, and Middle States, offers programs leading to the baccalaureate degree with a major in Special Education. Students in either Early Childhood or Elementary Education may dual major in Special Education. Graduates of these programs receive certification in both Early Childhood or Elementary Education and Mentally and/or Physically Handicapped.

Special Education programs, leading to the Pennsylvania Instructional Level I certification, entitles the graduate to teach children with the following handicaps: Mental retardation, learning disability, physical handicaps, emotional disturbance, and brain damage. The general objectives of the program are to demonstrate:

- An understanding of the nature of handicapping conditions and the impact of these conditions on normal growth and development
- An ability to effectively use alternative instructional strategies appropriate to the needs of exceptional children
- The ability to identify the educationally relevant characteristics of various exceptional children and to effectively diagnose and prescribe appropriate educational experiences
- The ability to function as a competent classroom manager in promoting learning among handicapped students
- Competency to initiate instructional programs that facilitate appropriate career and vocational goals for the mentally and/or physically handicapped.

Special Education and Early Childhood or Elementary Education dual majors must demonstrate the competencies associated with each of the individual certificate programs. In addition, they must demonstrate the ability to:

- Identify students who are in need of some special service
- Work effectively with other teachers in cooperatively planning programs for children with special needs
- Facilitate the social acceptance of children with handicaps by structuring classroom environments that reinforce positive interpersonal relationships
- Complete educational assessment of the learning needs of students
- Develop individual educational prescriptions based on assessment data
- Effectively modify instructional strategies or materials to provide for the unique needs of students manifesting learning handicaps

Careers

The field of special education, both within the state of Pennsylvania and nationally, continues to grow, providing excellent professional career opportunities. Recent federal legislation has mandated new services for handicapped youngsters and provided increased funding. The impetus should be toward an increased growth rate in special education programs, particularly for children with severe and/or profound handicaps. Graduates of the Mentally and/or Physically Handicapped program are qualified to assume several professional roles including: special education classroom teacher, resource room teacher, homebound instruction teacher, hospital teacher, and a variety of roles in sheltered workshops and community-living arrangements for handicapped adults.

The growth of mainstream/inclusion programs for mildly handicapped youngsters has been rapid. It has been recognized that children with mild forms of handicaps typically attain higher levels of achievement in the regular class environment than in the special self-contained classroom. These children do, however, need special help and remedial instruction in some areas of the curriculum. Thus, the resource room is becoming an increasingly common means of addressing the needs of children while continuing to maintain their enrollment in regular classrooms. This process of integrating/including the handicapped child should be initiated early, preferably at the preschool level, or no later than the early elementary years. Teachers trained in Early Childhood or Special Education will be able to provide excellent resource services to both children and the other staff members of an elementary school. Graduates of this program are qualified to assume several professional roles, including regular early childhood classroom teacher (nursery-third grade), special education classroom teacher; mentally retarded, emotionally disturbed, physically handicapped, learning disabled, brain-damaged (nursery-twelfth grade), and resource room teacher.

General Education

Students who enter California University under this catalog (after Spring 1999) will follow the new General Education Program. Please consult the description of the new program in this catalog for a list of General Education Goals and Objectives and the courses included on the menus for the various goals. Please note, some courses on a menu may be required for accreditation or certification in particular degree programs. Students should consult with their advisors regarding such requirements.

Bachelor of Science in Education: Mentally/Physically Handicapped Education

Curriculum

General Education:

Professional Education:
EDF 290 Policy Studies in American Education
PSY 207 Developmental Psychology
PSY 208 Educational Psychology
EDF 302 Applied Instructional Technology
EDU 210 Teaching in a Multicultural Society
EDF 301 Computers for Teachers
ESP 461 Student Teaching Practicum and School Law

Area of Concentration:
ESP 101 Exceptional Child I
ESP 200 Exceptional Child II
ESP 301 Behavior Principles I
ESP 401 Behavior Principles II
ESP 502 Education of the Severely/Profoundly Handicapped
ESP 503 Diagnostic Testing/Prescriptive Teaching
ESP 504 Curriculum Planning & Methods I
ESP 505 Curriculum Planning & Methods II
ESP 506 Habilitation Training
HPE 338 Physical Education Activities for the Exceptional Child

Bachelor of Science in Education: Early Childhood/Special Education (dual major)

Curriculum

General Education:

Professional Education:
EDF 290 Policy Studies in American Education
EDU 210 Teaching in a Multicultural Society
PSY 205 Child Psychology;
PSY 208 Educational Psychology
EDF 302 Applied Instructional Technology
EDF 301 Computers for Teachers
ESP 461 Student Teaching Practicum and School Law

Early Childhood Courses:
ECE 203 Field Experience Infant/Toddler/Day
ECE 302 Emerging Literacy
ECE 304 Thematic Teaching in Early Childhood
ECE 315 Mathematics Content in Early Childhood
ECE 319 Parent and Community Involvement
ECE 405 Early Childhood Seminar
EDE 211 Instructional Strategies
EDE 311 Children's Literature
EDE 321 Field Experience Elementary

Special Education Courses:
ESP 101 Exceptional Child I
ESP 301 Behavior Principles I
ESP 200 Exceptional Child II
ESP 401 Behavior Principles II
ESP 502 Education of the Severely/Profoundly Handicapped
ESP 503 Diagnostic Testing/Prescriptive Teaching
ESP 504 Curriculum Planning & Methods I
ESP 505 Curriculum Planning & Methods II
ESP 506 Habilitation Training

Bachelor of Science in Education: Elementary/Special Education (dual major)

Curriculum

General Education:

Professional Education:
EDF 290 Policy Studies in American Education
EDF 301 Computers for Teachers
EDF 302 Applied Instructional Technology
EDU 210 Teaching in a Multicultural Society
PSY 205 Child Psychology,
PSY 208 Educational Psychology
ESP 461 Student Teaching Practicum and School Law.

Elementary Education Courses:
EDE 211 Instructional Strategies
EDE 321 Field Experience Elementary
EDE 305 Mathematics Content and Methods in the Elementary School
EDE 306 Teaching Social Studies Elementary Grades
EDE 307 Science for Elementary/Early Childhood
EDE 311 Children's Literature
EDE 300 Language and Literacy I
EDE 340 Language and Literacy II
ECE 319 Parent and Community Involvement.

Special Education Courses:
ESP 200 Exceptional Child II
ESP 101 Exceptional Child I
ESP 301 Behavior Principles I
ESP 401 Behavior Principles II
ESP 502 Education of the Severely/Profoundly Handicapped
ESP 503 Diagnostic Testing/Prescriptive Teaching
ESP 504 Curriculum Planning & Methods I
ESP 505 Curriculum Planning & Methods II
ESP 506 Habilitation Training

Theatre

Purpose

As one of the performing arts, theatre is a means of self-expression and social communication. Whether we study pure dramatic expression or musical dramatic expression, we seek to understand how speech, movement and other non-verbal aspects of production such as lighting, scenery, and costumes, communicate ideas and emotion and how they are used for entertainment, education, reform and other social purposes.

The study of the dramatic arts serves both Theatre majors and those students in other disciplines concerned with human interaction and symbolic expression (e.g., art, education, communication, political science, sociology, English and psychology). Students who are aware of the history and technology associated with theatre enhance their appreciation of this art form.

Programs

Theatre is an undergraduate degree program in the College of Liberal Arts and is included in the undergraduate degree Secondary Education Communication Certification program in the College of Education and Human Services.

Theatre serves a dual function. It provides occupational education and training for talented students pursuing careers in theatre, and it provides both educational and performance opportunities for all students on campus. Six dance courses, ranging from basic ballet to theatre dance, give the major a competitive advantage in professional preparation.

In cooperation with the Student Association, Incorporated, the Theatre Department sponsors five play-producing groups with membership open to all students: University Players, which produces Main Street Productions; Children's Theatre, which annually performs before young audiences of more than 3,000; Stories 'n Things, which carries theatre directly to schools; Mon Valley Dance Council, producing dance productions; and Theatre Now, which presents experimental drama in innovative staging. These organizations either individually or in combination, present six on-campus play, dance, and musical productions. In addition, the department sponsors a pre-professional summer stock company which offers the opportunity for the student to work in a repertory environment.

Each student organization shares the facilities and faculty of the department. Steele Auditorium has a fully equipped 955-seat proscenium stage, and scenery, lighting, costume, property shops, storage space and classrooms. A state-of-the-art 16 channel sound mixer with multiple microphone and line inputs on-stage and in the theatre has recently been installed. A complete renovation and revision of the stage and building's lighting system is in progress.

The Theatre Department rewards creative excellence by offering opportunities for upper level students to produce shows, and to direct or design both major and minor (one-act plays) productions. Theatre majors are required to take one practicum credit during each semester they are enrolled. These credits give the students practical experience in various areas of theatrical production: technical production, dance, acting, design, management, directing, technical direction, touring theatre, and summer theatre. Students are encouraged to use the practicum experience to broaden and enlarge their experience in the field of theatre.

Honor Society

Since 1938, outstanding students have annually been elected to the University Players' Hall of Fame. Membership in Alpha Psi Omega, the national honorary Theatre fraternity, is achieved through active participation in theatre productions.

Careers

Graduates of California University work throughout the country in professional and semi-professional theatre, in film and television, in teaching, community and regional theatre, recreation, and in rehabilitation theatre, public relations, interior decoration, costuming, and arts management.

General Education

Students who enter California University under this catalog (after Spring 1999) will follow the new General Education Program. Please consult the description of the new program in this catalog for a list of General Education Goals and Objectives and the courses included on the menus for the various goals. Please note, some courses on a menu may be required for accreditation or certification in particular degree programs. Students should consult with their advisors regarding such requirements.

Bachelor of Arts in Theatre

Curriculum

General Education:

Area of Concentration
Required:
THE 100 Introduction to the Theatre
THE 132 Ballet Technique I
THE 141 Stagecraft I
THE 131 Fundamentals of Acting
THE 302 History of Theatre I
THE 312 History of Theatre II
THE 350-358 Theatre Practicum courses (8 credits)
THE 359 Theatre Practicum: Senior Thesis
Electives in disciplines closely related to Theatre or a minor (24 credits)

Bachelor of Science in Education: Certification in Communication (Theatre Concentration) for Secondary Schools

Curriculum

General Education:

Professional Education:
PSY 208 Educational Psychology
EDF 290 Policy Studies in American Education
EDF 301 Computers for Teachers
EDF 302 Applied Instructional Technology
EDS 300 Problems of Secondary Education
EDS 430 Educational Tests and Measurements
EDS 440 Teaching of English
EDS 465 Developmental Reading in Secondary Schools
EDS 461 Student Teaching & School Law
EDU 210 Teaching in a Multicultural Society

EDU 340 Mainstreaming Exceptional Learners

Academic Specialization: Theatre Concentration
English:
ENG 345 English Grammar and Usage
ENG 375 Advanced Writing
ENG 301 English Literature I
ENG 302 English Literature II
ENG 337 Survey of American Literature I
ENG 338 Survey of American Literature II

Select one of the following courses:
ENG 425 Shakespeare
THE 305 Shakespeare in the Theatre.

Theatre:
THE 131 Fundamentals of Acting
THE 141 Stagecraft I
THE 320 Fundamentals of Directing
THE history or THE literature courses (6 credits)
THE electives (3 credits)
THE 359 Theatre Practicum: Senior Thesis.

Communication:
COM 230 Communication: Argumentation and Debate
COM 490 Communication Theory

Minors in Theatre

Theatre Concentration

Required:
THE 100 Introduction to Theater
THE 131 Fundamentals of Acting
THE 132 Ballet Technique I or THE 133 Jazz Technique I
THE 141 Stagecraft I
Electives: THE 350-358 Theatre Practicum courses (9 credits)

Dance Concentration

THE 131 Fundamentals of Acting
THE 132 Ballet Technique I
THE 133 Jazz Technique I
THE 231 Jazz Technique II
THE 232 Ballet Technique II
THE 300 Theatre Dance I
THE 301 Theatre Dance II
Electives: THE 350-358 Theatre Practicum courses (6 credits)

Child Drama Concentration

THE 100 Introduction to Theatre
THE 240 Creative Dramatics
THE 245 Children's Theatre
THE 255 Puppetry
Electives: THE 350-358 Theatre Practicum courses (9 credits, 1 credits must be in THE 357 Theatre Practicum: Tour Theatre)

Theatre History/Literature Concentration
THE 100 Introduction to Theatre
THE 302 History of Theatre I
THE 312 History of Theatre II
THE 304 World Drama
THE 305 Shakespeare in the Theatre
THE 306 Modern Drama
THE 303 American Theatre History or THE 352 Theatre Practicum: Directing

Technical Theatre/Design Concentration

THE 100 Introduction to Theatre
THE 141 Stagecraft I
Three of the following courses:
THE 211 Lighting I
THE 311 Lighting II
THE 271 Scene Design I
THE 371 Scene Design II
THE 325 Costume Design
THE 225 Costume Construction
THE 341 Stagecraft I
THE 328 Scene Painting
Electives: THE 350-358 Theatre Practicum courses (6 credits)

Acting Concentration

THE 101 Voice and Interpretation
THE 131 Fundamentals of Acting
THE 231 Intermediate Acting
THE 331 Advanced Acting
THE 132 Ballet Technique I
THE 133 Jazz Technique I
One of the following:
THE 231 Jazz Technique II
THE 232 Ballet Technique II
THE 309 Reader's Theatre
THE 350 Theatre Practicum: Acting

Women's Studies

Purpose

Women's Studies is an interdisciplinary field that examines the diverse experiences, contributions and perspectives of women and considers how ideas about gender have shaped human lives. Women's Studies views the world from the perspectives of women who differ widely in race, class, age, and many other ways. Because these perspectives have often been left out of traditional studies, interdisciplinary study of women and gender can provide a new and vital framework for approaching knowledge in other disciplines, posing questions that may not have been asked before.

Women and men in Women's Studies classes encounter intriguing questions and challenging information that may touch on personal identity, relations between men and women, contributions of women to their world, and the history and future of gender. Since traditional education has paid scant attention to gender or to the half of humanity that is female, Women's Studies helps to fill a major gap and provides the opportunity for individuals to become more well rounded and more aware.

Careers

More and more women are joining the work force outside the home, as well as continuing in important roles in homemaking and child rearing. With these rapid changes, it is becoming increasingly important to understand the social forces that influence how much power people have. The Women's Studies Certificate Program helps prepare both women and men to deal more effectively with gender relations in their professional and personal life. Whether the student's major field is in education, social services, business, communications, medicine, or science, any field of study will be enhanced by the approach to knowledge offered in this program.

Special Activities

In addition to course work, Women's Studies students may wish to participate in a variety of special activities. The Program sponsors guest speakers, luncheon discussion sessions, and other special events, as well as publishing its own newsletter, *The Tide*, which encourages student involvement.

Certificate in Women's Studies

A certificate in Women's Studies is not a degree but is an undergraduate specialization. It makes an excellent complement for many majors, since virtually every field of study is affected in some way by gender. A student may pursue the certificate by one of two routes:

Curriculum

Fifteen credit option.

Required courses:
WST 200 Introduction to Women's Studies
WST 400 Feminist Scholarship and Research: A Seminar
WST 425 Practicum in Women's Studies
Electives: six credits among the electives listed below, from two different disciplines.

Eighteen credit option.

Required courses:
WST 200 Introduction to Women's Studies
WST 400 Feminist Scholarship and Research: A Seminar
Electives: 12 credits among the electives listed below, from three different disciplines

Certificate Electives:

ENG 315 Survey of American Women Writers
HIS 260 Women in United States History
HIS 262 Women in Ancient and Medieval European History
LIT 127 Woman as Hero
NUR 101 Women's Health Issues
PSY 311 Psychology of Gender Roles
SOC 110 Ethnic, Racial, and Sexual Minorities
SOC 125 Men, Women, and Work
SOC 175 Contemporary Women's Movement
ANT 300 Cultural Views of Women
SOW 303 Human Sexuality and Society
SOW 495 Seminar in Social Work: Sexual Assault Counseling
XGE 202 Middle Years of Life
WST 300 Selected Topics in Women's Studies
WST 425 Practicum in Women's Studies

Inquiries regarding the Women's Studies Program may be made of the director, California University of Pennsylvania, California, PA 15419.

Course Descriptions

Accounting – ACC

ACC 201. ACCOUNTING I. The fundamentals of debit and credit; the use of journals and ledgers; basic accounting procedures; adjusting and closing entries; completion of accounting cycle; preparation of pertinent financial statements. (3 crs.)

ACC 202. ACCOUNTING II. A continuation of basic accounting principles with an emphasis on partnership and corporate accounting. Prerequisite: ACC 201. (3 crs.)

ACC 218. FEDERAL INCOME TAX I. An introduction to individual federal income tax accounting. (3 crs.)

ACC 301. INTERMEDIATE ACCOUNTING I. In-depth treatment of basic accounting principles and concepts. A preparation for advanced courses in accounting and for the theory and practice sections of the uniform CPA examination. Prerequisite: ACC 202. (3 crs.)

ACC 302. INTERMEDIATE ACCOUNTING II. A continuation of the in-depth treatment of basic accounting principles and concepts with the emphasis on corporations. A preparation for advanced courses in accounting and for the theory and practice sections of the uniform CPA examination. Prerequisite: ACC 301. (3 crs.)

ACC 318. FEDERAL INCOME TAX II. Advanced topics in federal taxation. Partnerships, decedents, estates, trusts, corporations, pension and profit sharing plans, foreign income, securities transactions, etc. Prerequisite: ACC 218. (3 crs.)

ACC 321. MANAGERIAL ACCOUNTING. For non-accounting majors; emphasizes the use of accounting data in the decision-making process of a business enterprise. Topics covered are cost-volume relationships; manufacturing costs and analysis; relevant cost analysis; budgeting and variance analysis; responsibility accounting and cost allocation; job and process product costing. Prerequisite: ACC 202. (3 crs.)

ACC 331. COST ACCOUNTING I. An introduction to basic cost-accounting principles, cost-volume, profit analysis, standard costing, process and job order costing and departmental budgeting. Prerequisite: ACC 202. (3 crs.)

ACC 332. COST ACCOUNTING II. A survey of special topics in the field of manufacturing accounting. Prerequisites: ACC 331. (3 crs.)

ACC 341. NONPROFIT ACCOUNTING. An introduction to accounting for governmental and not-for-profit organizations, including analysis of current, plant, and other general and special funds. Emphasis will be given to planning, programming, and budgeting to achieve institutional objectives. Cost benefit analysis will also be developed within the framework of funds allocation to specific programs. (3 crs.)

ACC 401. ADVANCED FINANCIAL ACCOUNTING. Special topics in accounting. Mergers and acquisitions, consolidated financial reports, fiduciaries, etc. Prerequisite: ACC 202. (3 crs.)

ACC 418. TAX PLANNING AND CONCEPTS. This course deals with the broad recognition of the tax effect on business decisions, and a practical approach to tax planning for both the corporate and individual taxpayer. (3 crs.)

ACC 431. INTERNATIONAL ACCOUNTING. A study of the current state of International Accounting standards (IFAC's) and their relationship to the multinational corporation. Prerequisite: ACC 302. (3 crs.)

ACC 441. AUDITING. Internal control evaluation and financial compliance, professional ethics, auditing standards and procedures, statistical sampling and EDP auditing. Prerequisite: ACC 301. (3 crs.)

ACC 491. ACCOUNTING INTERNSHIP. Practicum with Public Accounting firms, government, or industry. Prerequisites: 18 credits in Accounting and permission of instructor. (Repeatable; Variable crs.; a maximum of 12 credits may be used towards a baccalaureate degree.)

ACC 495. SEMINAR IN ACCOUNTING THEORY. A review of the Accounting literature with special emphasis on those topics concerning contemporary issues in Accounting. Prerequisite: ACC 302. (3 crs.)

Anthropology - ANT

ANT 100. INTRODUCTION TO ANTHROPOLOGY. An introduction to biological anthropology (primatology, hominid evolution, variation in modern man), archaeology (methods, evidences of the evolution and diffusion of culture), anthropological linguistics, and cultural anthropology (methods of participant observation, comparative data from non-Western societies, diversity and unity of culture). (3 crs.)

ANT 101. ARCHAEOLOGY FIELD SCHOOL. An introduction to archaeological procedures by participation in the excavation of a site. Students will be involved in all phases of an archaeological excavation, from initial preparation of the site for excavation through the processing of artifacts at the campus archaeological laboratory. (3-6 crs., summer only)

ANT 200. OLD WORLD PREHISTORY. A middle-level survey of the main archaeological focal points of the Old World, requiring a basic understanding of archaeological concepts, goals and techniques. (3 crs.)

ANT 210. PRIMITIVE INSTITUTIONS. Analysis and comparison of the social, political, and religious institutions of pre-literate and pre-industrial peoples. (3 crs.)

ANT 220. AZTECS, MAYAS, AND INCAS. An introduction to and survey of the ethnology and pre-conquest archaeology of the advanced American Indian cultures of Meso-America and the Andean Culture area. Inquiry into the problems of cultural precocity. Prerequisite: ANT 100. (3 crs.)

ANT 225. EIGHTEENTH AND NINETEENTH CENTURY FOLK CRAFTS AND TRADITIONS. Placing American folk crafts and traditions in cultural perspective by learning how to identify such crafts and traditions, determining how they have evolved through time, and identifying the role such practices held in the American family. Students learn the rudiments of a number of the crafts and traditions by observing them being performed and by doing them. They learn how to gather material folk cultural data by collecting data on a craft or folk tradition in Southwestern Pennsylvania. (3 crs.)

ANT 231. MEDICAL ANTHROPOLOGY. An introductory course that emphasizes the contributions from biological anthropology, archaeology, and cultural anthropology to the study of human sickness and health. Prerequisite: ANT 100. (3 crs.)

ANT 235. ENCULTURATION. A cross-cultural examination of the universal human problem of transforming a neonate into a functioning adult in a particular culture. (3 crs.)

ANT 250. CULTURE CHANGE AND CULTURE SHOCK. Conditions and factors which stimulate or retard cultural change are considered with reference to specific historical, ethnological and sociological data and theories. Emphasizes the impact of Western technology upon non-Western cultures while also treating of the primitivization of the Western world. Prerequisite: ANT 100. (3 crs.)

ANT 255. WORLD ETHNOLOGY. An advanced course in cultural anthropology, in which comparative data from text and films about non-Western cultures are used to reveal cultural differences and similarities and the nature of the ethnographic enterprise. (3 crs.)

ANT 280. INDIANS OF NORTH AMERICA. Social anthropology and cultural ecology of American Indian cultures. (3 crs.)

ANT 281. SUB-SAHARAN AFRICA. The cultural anthropology of selected African groups, past and contemporary. (3 crs.)

ANT 290. ARCHAEOLOGY. A comprehensive survey of archaeology: history, theory and techniques. (3 crs.)

ANT 300. CULTURAL VIEWS OF WOMEN. This discussion -based course is structured around the theme of how various world societies have viewed women. The cross-cultural perspective is the means by which American students learn to appreciate other cultural points of view and become more self-aware of their own cultural views about women. (3 crs.)

ANT 325. CULTURAL RESOURCE MANAGEMENT: HISTORICAL PRESERVATION. The need for preservation of cultural resources (historic preservation), the legislation supporting such work, and the way the work is performed. Students learn what is meant by historic preservation and cultural resource study, what types of questions preservationists must seek answers to, how significant resources (historic and archaeological) are identified, how to determine whether a resource is considered significant, how to do architectural descriptions of historic structures, and how to complete the National Register of Historic Places nomination forms. Part of the course involves on-site study of resources. Prerequisite: ANT 100. (3 crs.)

ANT 329. ANTHROPOLOGY INTERNSHIP. Learning new ideas and skills, as well as applying those already learned in class, is the objective of an internship. Internships are conducted under the guidance of both an on-site and a campus supervisor. Internships are a means for exploring career opportunities. (Variable crs.)

ANT 355. PREHISTORIC AMERICAN INDIANS. The archaeology and reconstructed culture of Indians of the eastern United States. (3 crs.)

ANT 360. HISTORIC SITES ARCHAEOLOGY. Techniques, philosophy, work, and aims of that branch of history and anthropology that studies the American past from a cultural-archaeological point of view. The course includes study of military and community restorations based on historical archaeology, such as Colonial Williamsburg, Plymouth Plantation, Independence Square, Fort Michilimackinac, Fort Ligonier, and Fort Necessity. Some laboratory and field experiences included. Prerequisite: ANT 100. (3 crs.)

ANT 379. SPECIAL PROBLEMS IN ANTHROPOLOGY. (Variable crs.)

ANT 385. PRIMATE SOCIETIES AND BEHAVIOR. Advanced study of the non-human primates, including classification to the generic level. Prerequisite: ANT 285 or permission of the instructor. (3 crs.)

ANT 390. HUMAN ORIGINS. Contemporary biological anthropology, emphasizing the evolutionary theory, genetics, non-human primates, taxonomic classification, the evolution of human beings as part of the evolution of the primates, the importance of technology, and the emergence and development of culture. (3 crs.)

ANT 421. ANTHROPOLOGICAL THOUGHT. Within a seminar context, the history of anthropological thought is examined from the period of the Enlightenment until modern times. Particular emphasis is placed on the emergence of the various schools of anthropology that have developed and waned over the past 100 years. Prerequisites: Junior or Senior, Anthropology major, or permission of the instructor. (3 crs.)

ANT 495. SEMINAR IN ANTHROPOLOGY. (3 crs.)

Art - ART

ART 106. ART APPRECIATION. An introduction to the major movements in art which helped shape western civilization. This course is a survey of historical and contemporary approaches to painting, sculpture, and architecture. (3 crs.)

ART 110. DRAWING I. A beginning course in drawing skills and techniques stressing line, contour and value studies, and the study of linear perspective. This course stresses rendering techniques and the visual skills necessary for students to draw what they see. (3 crs.)

ART 113. CERAMICS I. An introductory exploration of clay through hand building techniques and the potter's wheel. Students examine the various forms and functions of the ceramic vessel. The course focuses on forming processes and the glazing and firing of pieces made in the studio. (3 crs.)

ART 116. PAINTING I. An introduction to the fundamentals of painting. Emphasis is placed on fundamental techniques of rendering, including the study of light and shadow, color, intensity control and projection and recession of objects in space. Work and exercises are done primarily in oil paints. Work in watercolor or acrylic may be done with prior approval of the instructor. (3 crs.)

ART 117. PRINTMAKING I. This course is designed to develop an interest and techniques into making woodcuts, lithographs, etchings, engravings, serigraphs, monoprints, and photo print processes. (3 crs.)

ART 118. SCULPTURE I. Introduction to the basic language, elements, media, tools, techniques and principles of the organization of sculpture. The basic techniques of manipulation, subtraction, substitution and addition involving different media and tools. (3 crs.)

ART 119. DESIGN 2-D. An examination of elements and principles used in two-dimensional visual composition. The student uses a variety of media to solve problems in the theory and practice of art fundamentals. (3 crs.)

ART 120. DESIGN 3-D. An examination of elements and principles of three-dimensional visual composition. These include all the elements and principles used in two-dimensional design, as well as the concepts of mass and volume. (3 crs.)

ART 122. ART HISTORY: ANCIENT – MEDIEVAL. Introduces students to the historical unfolding of the earliest significant ideas, images, events, artists and personalities involved with the visual arts – from cave art to the dawning of the Renaissance. The textual focus is upon these earliest visual arts from Europe, Asia, and Northern Africa. Through lectures, visual aids, and opportunities for study in the field, students with or without prior knowledge of visual art will learn how to make the art of this period accessible and useful. (3 crs.)

ART 123. ART HISTORY: RENAISSANCE – ROCCO. Introduces students to the historical unfolding of the significant ideas, images, events, artists and personalities involved with the visual arts in Europe between the 14th and 17th centuries. The textual focus is upon the visual arts from Europe, but will also include outstanding visual examples from other parts of the world. Through lectures, visual aids, and opportunities for study in the field, students with or without prior knowledge of visual art will learn how to make the art of this period accessible and useful. (3 crs.)

ART 124. ART HISTORY: IMPRESSIONSIM TO CUBISM. Introduces students to the historical unfolding of the significant ideas, images, events, artists and personalities involved with the beginnings of "modern" Western visual arts. The textual focus is upon the visual arts from Europe, but will also include outstanding visual examples from the U.S. and other parts of the world. Through lectures, visual aids, and opportunities for study in the field, students with or without prior knowledge of visual art will learn how to make the art of this period accessible and useful. (3 crs.)

ART 125. ART HISTORY: MODERN AND COMTEMPORARY. Introduces students to the historical unfolding of the significant ideas, images, events, artists and personalities involved with the visual arts at the changing of the millenium. The textual focus is upon the visual arts from Europe and North America and will include outstanding visual examples from other parts of the world. Through lectures, visual aids, and opportunities for study in the field, students with or without prior knowledge of visual art will learn how to make the art of this period accessible and useful. (3 crs.)

ART 126. INTRODUCTION TO CRAFTS. Students will explore the principles of basic studio techniques using fiber arts, stained glass and jewelry. Design issues will be addressed through a variety of studio problems using each medium. Problem solving skills and craftsmanship will be stressed, as well as understanding the role of the craftsperson in society as a producer of objects within a specialized discipline. (3 crs.)

ART 127. INTRODUCTION TO GRAPHIC DESIGN. This course provides a foundation in visual communication, provides an understanding of the major concepts of graphic design and how design relates to advertising and marketing, and introduces the computer as a production tool. (3crs.)

ART 211. COMMUNICATION DESIGN. This studio course provides hands-on experience using design tools and techniques to create pictorial symbols which communicate ideas in a universal language. The course also explores the history of pictures/symbols used as language. (3 crs.)

ART 213, 313, 413. CRAFT STUDIO. This studio concentration explores a large spectrum of contemporary textile, stained glass or jewelry techniques. Areas of investigation for the textile area, for example, include advanced loom work, textile treatment, innovative design of soft sculpture. In the jewelry concentration, the students could explore centrifugal or lost wax casting, enameling, found material. In the stained glass area, the students will experience slumping, fusing, beveling and sculptural forms. Emphasis is, at all times, on innovative design, imagination in the utilization of technique and material, as well as general craftsmanship. Prerequisite: Either Fiber Arts (ART 112), Stained Glass (ART 115), or Jewelry (ART 255). (3 crs. - Art 413 is repeatable to 18 crs.)

ART 232. MICROCOMPUTER AS A TOOL FOR THE ARTIST. An introduction for the art major to micro computers and appropriate hardware/software for art production in various media. It is a studio course in which works of art are developed with the aid of the computer. Art majors must have completed at least two studio requirements prior to taking this course. (3 crs.)

ART 227, 327, 427, 428. GRAPHIC DESIGN STUDIO. A progressive level of graphic design courses that will emphasize creative, visual problem solving, graphic design history, theory, and criticism, the creation of portfolio quality work, and client relationships and processional practices. Preprequisite: ART 127 & ART119. (3 crs.)

ART 245. TAPESTRY WEAVING. An introduction to both traditional and contemporary tapestry techniques. Emphasis is on imaginative use of traditional techniques with each student expected to design and execute creative, well-crafted woven pieces in a variety of unusual material. (3 crs.)

ART 260. WATERCOLOR I. Basic watercolor techniques. Emphasis is placed on both transparent and opaque water colors. (3 crs.)

ART 293, 393, 493. CERAMIC STUDIOS. Advanced courses in ceramic skills and techniques on the potter's wheel and in-hand forming methods. Considerable emphasis will be placed on glazing and firing a body of work completed through an in-depth study area in clay. Prerequisite: Ceramics I (ART 113). (3 crs. - ART 493 is repeatable to 18 crs.)

ART 296, 396, 496. PAINTING STUDIOS. A progressive level of painting studios developing proficiencies in painting techniques, rendering skills, and the visual analysis of forms. Students explore a variety of painting methods, subjects and themes towards the goal of having each student achieve a unique approach to form and content. Prerequisite: ART 116 Painting I. (3 crs. - ART 496 is repeatable to 18 crs.)

ART 297, 397, 497. PRINTMAKING STUDIOS. A successive-level studio course designed to enable students who wish to pursue in depth printmaking techniques and further develop their creativity in this area. Students will also be expected to demonstrate critical thinking and analysis of materials and the use of such in the various media. Prerequisite: ART 117 Printmaking I. (3 crs. - ART 497 is repeatable to 18 crs.)

ART 298, 398, 498. SCULPTURE STUDIOS. A successive-level studio course designed to enable students who are seriously interested in sculpture, the opportunity to experiment with many types of media and to investigate other seasonable materials which can be used as sculpture. They will be expected to impose on themselves problems which demonstrate critical thinking and analysis of materials. Prerequisite: ART 118 Sculpture I. (3 crs. - ART 498 is repeatable to 18 crs.)

ART 303. SECONDARY ART METHODS. A study of the development of secondary art students, as well as the study of materials and their utilization in the development of a secondary art program. (3 crs.)

ART 310. ADVANCED DRAWING. This advanced drawing course explores expressive drawing techniques and drawing media, and is a continuation of work to improve performance of academic drawing skills. Emphasis is placed on drawing from a model to develop a knowledge of human anatomy and to understand its effects on the surface information of the human form. Basic drawing skills are required. Prerequisite: ART 110 Drawing I or equivalent. (3 crs. - repeatable to 18 crs.)

ART 329. ART INTERNSHIP. Supervised experience providing the specific technical skills used in the art world outside the classroom and studio, e.g., mounting exhibits, techniques of art restoration, graphic arts production techniques, and promoting arts and cultural events. (Variable crs.)

ART 360. WATERCOLOR II. A course designed to further the study of transparency and opaque watercolor. Includes techniques in gouache, egg tempera, and fresco painting. (3 crs.)

ART 361. VIDEO ART/DESIGN. A course that teaches the information and skills necessary to produce graphics presentations on a computer and transfer those presentations onto video tape. Produce such products as video slide shows, video titling, simple character generation and animation of video screens. (3 crs.)

ART 460. SELECTED TOPICS. An exploration of material not covered in regular art studios or art history classes. It will provide faculty and students the opportunity to explore new ideas and techniques of selected topics in depth. (3 crs.)

Athletic Training - ATE

ATE 100. PRACTICUM ATHLETIC TRAINING I. The basic mechanical techniques of athletic training, such as taping, transportation, modality usage, maintenance of equipment, record keeping, etc. (1 cr.)

ATE 105. CURRENT ISSUES IN ATHLETICS. A comprehensive overview of life skills that provide educational experience and services in order to develop well balanced life styles for the student athletes and other interested students. The course examines decision making, planning and fulfillment of life goals, as well as contemporary issues, problems and controversies within the intercollegiate athletic setting. (3 crs.)

ATE 110. PRACTICUM ATHLETIC TRAINING II. The course consists of basic athletic training skills and techniques taught to the entry level athletic training student, such as preventive taping techniques and evaluation of basic injuries. Prerequisite: A grade of C or better in ATE 100. (1 cr.)

ATE 115. FOUNDATIONS OF STRENGTH TRAINING AND CONDITIONING. To facilitate an understanding of strength training and conditioning concepts, the adaptation of strength training and conditioning on the human body, and the practical application of this knowledge in designing resistance training programs. (2 crs.)

ATE 120. SUBSTANCE ABUSE EDUCATION. The knowledge of substance abuse as it relates to athletics and competition, drug testing procedures as enforced by governing associations, and the prevention and treatment of substance abuse.

ATE 205. HUMAN ANATOMY AND PHYSIOLOGY I. The organization, structures, and functions of the human body: the development of the cell, tissues, integumentary system, digestive system, respiratory system, urinary system, reproductive system, lymphatic and cardiovascular systems. (4 crs.)

ATE 215. HUMAN ANATOMY AND PHYSIOLOGY II WITH LABORATORY. The organization, structures and functions of the human body: the development and function of the skeletal system, ligament and joint structure, muscular system, and the nervous system, Prerequisite: A grade of C or better in ATE 205. (4 crs.)

ATE 225. EVALUATIVE TECHNIQUES I WITH LABORATORY. This course entails the study of evaluation techniques of injuries to the lower extremities. Review of anatomy, injury recognition, muscle testing, treatment protocols and preventative measures are also examined. Prerequisites: Must be formally enrolled ATEP or by permission of the instructor. (4 crs.)

ATE 265. EVALUATIVE TECHNIQUES II WITH LABORATORY. This course entails the study evaluation techniques of injuries to the spine and upper extremities. Review of anatomy, injury recognition, muscle testing, treatment protocols and preventative measures are also examined. Prerequisites: Must be formally enrolled ATEP or by permission of the instructor. (4 crs.)

ATE 300. PRACTICUM ATHLETIC TRAINING III. This course will provide the student with the understanding of advanced athletic training applications and techniques used in the prevention and rehabilitation of athletic injuries and other special clinical situations. (2 crs.)

ATE 330. THERAPEUTIC EXERCISE WITH LABORATORY. Lectures and laboratory exercises that explain the use and theory of therapeutic exercise and equipment used for rehabilitation in the sports medicine setting. Prerequisite: Must be formally enrolled ATEP or by permission of the instructor. (4 crs.)

ATE 340. SPORTS NUTRITION. Nutrition and its applications to health and sports: designed to provide the student with a sound nutritional background so that sound decisions may be made concerning all aspects of nutrition. Additionally, specific nutritional techniques used to improve athletic performance are addressed. (3 crs.)

ATE 400. ORTHOPEDIC EVALUATIONS IN SPORTS MEDICINE. Clinical evaluations of injured athletes by the student and the physician to be used in determining the extent of an injury. The student will register for this course again in a consecutive semester. Prerequisite: Must be formally enrolled ATEP or by permission of the instructor. (1 cr.)

ATE 405. SPORTS MEDICINE PRACTICUM. This purpose of this course is to allow the undergraduate athletic training student to gain clinical and administrative skills through experience with intercollegiate or interscholastic teams. Prerequisite: Must be formally enrolled ATEP and must be at least a junior in standing. (1 cr.)

ATE 425. ADMINISTRATIVE STRATAGIES IN ATHLETIC TRAINING. Administrative functions, litigation, staff relationships, ethics, budget and supplies, inventory, facility design, maintenance, safety assessment, student trainer organization and résumé writing. Prerequisite: Must be formally enrolled ATEP or by permission of the instructor. (2 cr.)

ATE 460. SPORTS MEDICINE RESEARCH. Different types of research, particularly descriptive and experimental are presented. Emphasis is placed on developing library research skills, critically analyzing research, and becoming a knowledgeable consumer of research in order to apply it in the clinical environment. Prerequisite: Must be formally enrolled ATEP or by permission of the instructor. (3 crs.)

ATE 500. PHARMACOLOGY FOR THE ALLIED HEALTH SCIENCES. The purpose of this course is to provide an overview of drugs commonly used to treat patients seen by persons working in the allied health professions. Medical reasons for drug treatment, specific actions of therapeutic agents, and adverse effects are presented. Prerequisite: Must have completed at least 96 credits or at the discretion of the instructor. (2 crs.)

Biology - BIO

BIO 103. CONTEMPORARY ISSUES IN BIOLOGY. Basic biological principles are applied to the understanding of current social-biological problems and how these relate to an individual's personal life. Topics included are human sexuality, nutrition, health and disease, evolution, behavior, and the diversity of life. Three lecture hours weekly. For students not majoring in Biology. (3 crs.)

BIO 104. BASIC CARE OF PLANTS. A general introduction to the basic care of plants. Students are introduced to techniques that will make the growing and caring of plants, indoors and out, less complicated and more fun. Prerequisites: None. Three lecture hours weekly. (3 crs.)

BIO 108. BIOLOGICAL CONCEPTS. A one semester preparation course in biology for students who must take BIO 115 as part of their curriculum and who require additional training in the biological sciences. Topics are selected to deal with the fundamental concepts that are requisite to entrance into BIO 115. Three lecture hours weekly. (3 crs.)

BIO 112. BIOLOGY OF SEXUALLY TRANSMITTED DISEASES. A non-major Biology course pertaining to the causes and consequences of human sexually transmitted diseases. Descriptions of the microorganisms which cause STDs and the factors which are involved in their dissemination will be studied. Special emphasis will be directed towards human behavior patterns and mores which are conducive to contracting these venereal diseases. Viral STDs (Acquired Immune Deficiency Syndrome, Human Papilloma Disease, Herpes Simplex II and Hepatitis B) will be emphasized because they can cause severe diseases or even death in humans; however, the more common venereal diseases (syphilis, gonorrhea, lymphogranuloma, venereum, chancroid and candidiasis) will also be studied. Three lecture hours weekly. (3 crs.)

BIO 115. PRINCIPLES OF BIOLOGY. Structures and functions common to all organisms; cell structure and function, the chemical aspects of biological systems, energy and materials balance in nature, developmental biology, principles of genetics, evolution, and ecology. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 120. GENERAL ZOOLOGY. A comprehensive phylogenetic survey of the animal kingdom, with emphasis on evolutionary changes and the interrelationships of animals with their environment. Laboratory studies of representative members of the major phyla. Prerequisite: BIO 115. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 125. GENERAL BOTANY. A survey of form and function of the major plant groups as well as the bacteria, algae, water molds, slime molds, and fungi within the overall framework of a modern phylogenetic system of classification. Prerequisite: BIO 115. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 206. CONSERVATION OF BIOLOGICAL RESOURCES. A study of biological aspects relating to plants and animals directly associated with water, soil, and environmental changes. Numerous field trips are taken into areas of Western Pennsylvania to observe land reclamation, conservation practices, and basic problems confronting human populations. Prerequisites: BIO 115 & 125. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 226. BASIC MICROBIOLOGY. This course will provide a survey of the prokaryotic and the medically important concepts of microbiology including microbial control, acquisition of disease, disease prevention and control. Prerequisites: This course is for students who are enrolled in a nursing program, or have obtained permission of the instructor. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 228. BASIC PRINCIPLES OF NUTRITION. This course was designed to provide nursing professionals with the basic principles of normal and therapeutic nutrition which can be used as a basis for making sound nutritional decisions for dietary planning for their clients, their families, or themselves throughout the life cycle, in health or in illness. Prerequisites: This course is for students who are enrolled in a nursing program, or have obtained permission of the instructor. Three lecture hours weekly. (3 crs.)

BIO 230. ANATOMY AND PHYSIOLOGY I. A general survey of the basic anatomical terms of position and direction, the relevant scientific units, the chemical components of living organisms, animal cytology, histology, embryology, the integumentary system, the rudiments of neurology, the skeletal system, and the cardiovascular system. Prerequisites: This course is for students who are enrolled in a nursing program, or have obtained permission of the instructor. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 260. ANATOMY AND PHYSIOLOGY II. A general survey of the basic structure of the peripheral and autonomic nervous systems, sensory receptors and special sense organs, the endocrine system, the cardiovascular system, the lymphatic system, the respiratory system, the digestive system, the urinary system, homeostasis, the reproductive system, human embryonic development, and metabolism. Prerequisite: BIO 230. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 305. COMPARATIVE VERTEBRATE ANATOMY. A comparative study of the vertebrate organs and organ systems of animals in the phylum chordata, with emphasis on evolutionary changes. Prerequisites: BIO 115 & 120. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 306. HUMAN ANATOMY. A study of the structure of the human body, including discussion of the eleven fundamental systems. Each system is described in terms of its gross anatomy, with some discussion of histology and physiology where appropriate. Prerequisites: BIO 115 & 120 or permission of the instructor. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 307. PLANT ANATOMY. A detailed study of structural differentiations, especially in the higher plants: the structure of meristems and developmental changes in their derivatives. Prerequisites: BIO 115 & 125. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 310. ECOLOGY. Ecology presents the biology or environmental science student with a holistic approach to the study of the biological

environment. Emphasis is focused on the natural environments of organisms, particularly as biotic assemblages of these organisms interact with their environments from the concrete levels of organization up to the regional and biome levels. Prerequisites: BIO 115, 120 and 125 or permission of the instructor. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 314. PLANT ECOLOGY. A consideration of the plant communities which are influenced by both biotic and physical factors. The emphasis is on the vegetation of Pennsylvania, especially in the area of the Appalachian Mountains. Laboratory work provides the student with the opportunity to become familiar with modern methods of vegetation analysis and community sampling. Prerequisites: BIO 115 and BIO 125. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 317. EMBRYOLOGY. A study of oogenesis and spermatogenesis and resultant developments following fertilization: factors involved in morphogenetic determination; organology; sequences of changes in development. Special emphasis on the chick and comparative examples of development in other animals. Prerequisites: BIO 115 and BIO 120. Three lecture and three laboratory hours weekly. (4 crs.)

BIO 318. GENETICS. An introduction to molecular genetics and to the basic principles of inheritance. Gene interactions, multiple-factor inheritance, chromosome inheritance, chromosome mapping, chromosomal and extrachromosomal inheritance. The roles of mutation, selection, migration, and genetic drift are investigated to determine the genetic composition of different populations. Prerequisites: BIO 115, 120, and 125. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 325. ANIMAL HISTOLOGY. The study of cellular differentiations in tissue, tissue identification, and special functions, especially in the mammals. Prerequisites: BIO 115 and 120. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 326. MICROBIOLOGY. A detailed study of bacteria and viruses, with less emphasis on fungi, algae, and protozoans. Special emphasis on medical aspects of bacteriology, immunology, and virology. The cytology, physiology, microbiology, and culture of microbes are pursued in the laboratory. Prerequisites: BIO 115 and BIO 125, CHE 101 and CHE 102, or permission of the instructor. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 327. PARASITOLOGY. A study of the etiology, epidemiology, and biology of some common human and animal parasites. Prerequisites: BIO 115 and BIO 120. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 328. HUMAN PHYSIOLOGY. The functions of the human body. Basic physiological phenomena are studied with considerable emphasis upon clinical and practical application. Prerequisites: BIO 115 and BIO 120 or permission of the instructor. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 332. ECONOMIC BOTANY. A study of mankind's dependence and economic interest in plants. Topics include important metabolic reactions of plants, use of plants as a food source, use of plant cell walls, exudates and extractives as economic products. Prerequisites: BIO 115 and 125. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 334. SOIL SCIENCE. An edaphological approach is taken in the study of the soil, i.e., the soil as a natural habitat for plants. The various properties of the soil are considered as they relate to plant production. Since the clay and humus fractions are of tremendous importance, the course will incorporate a colloidal-biological basis. Prerequisites: CHE 101 and CHE 102. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 335. PLANT PHYSIOLOGY. The physio-chemical foundations of plant functions are investigated, including such topics as water and salt absorption, photosynthesis, respiration, plant growth substances, photoperiodic responses, mineral metabolism, germination and the effects of air pollution on plants. Recent advances in the field of plant physiology are included. Prerequisites: BIO 115 and BIO 125, CHE 101 and CHE 102. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 336. PLANT TAXONOMY. A study of relationships among the vascular plants, their classification and methods of identification. Plant families native to Western Pennsylvania are stressed. Prerequisites: BIO 115 and BIO 125. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 337. ORNITHOLOGY. The study of bird life. Classification, anatomy, behavior, and recognition of birds, with emphasis on local species and their relationships to people and the ecological balance with other organisms. Prerequisites: BIO 115 and BIO 120. Three lecture hours and three laboratory hours or field activity weekly. (4 crs.)

BIO 342. SCIENTIFIC PHOTOGRAPHY. A basic course in the life and environmental sciences which stresses the myriad ways in which photography can be applied to enhance the effectiveness of teaching and research endeavors of biologists and environmentalists. Special attention is given to photomicroscopy, macrophotography, and field photography. Various other illustrative materials are also prepared utilizing selective photographic equipment and/or procedures. Students can take this course twice for a maximum of 4 credits. Prerequisites: three Biological or Environmental courses with a minimum of one field-oriented course. (2-4 crs.)

BIO 400. MAMMALOGY. A study of the classification, distribution, and natural history of mammals, with emphasis on eastern North American species. Field studies and preparation of study specimens. Prerequisites: Can be taken with the permission of the instructor. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 405. HUMAN GENETICS. Chromosomal abnormalities, Mendel's Laws, and the effect of change of gene action on Mendelian ratios. Other topics include; sex-related inheritance, random mating, consanguinity, allelism, mutations, and maintenance of polymorphism. Prerequisites: BIO 115, 120, 125, and 318. Three lecture hours weekly. (3 crs.)

BIO 407. MYCOLOGY. An extensive examination of the fungi, with emphasis on the filamentous forms. The cytology, physiology, and morpholgy of the fungi are studied to determine their role in the scheme of nature. Laboratory techniques in isolating, culturing, enumerating, and identifying fungi. Prerequisites: BIO 115, 125, and 326. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 418. BIOLOGICAL RESEARCH INVESTIGATIONS. A research program for advanced undergraduate students who wish to pursue careers in biological or medical areas. Emphasis is placed upon the use of various scientific instruments and biological procedures necessary for research investigations. The student works closely with one or more faculty members on a research project which is departmentally approved. Each research project is unique, and the data should ultimately be published in a prominent biological journal. The student normally participates in one aspect of an ongoing research study and may pursue work for one or more semesters. Students can take a maximum of 12 credits, 6 of which may be counted in the area of concentration. Prerequisites: BIO 115 and BIO 125 (or BIO 120), one Biology elective course, junior or senior standing, and a 3.0 QPA. (1-4 crs.)

BIO 426. CLINICAL MICROBIOLOGY. A survey of the indigenous and pathogenic microorganisms of man, general principles deduced from complexities involving biochemistry and physiology, host-parasite relationships, and laboratory procedures. Organisms studied include: bacteria, fungi, viruses, and ricksettsia. Prerequisites: BIO 115, 125 and 326; CHE 101 and 102. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 431. TECHNIQUES IN ELECTRON MICROSCOPY. Detailed training in the operation and care of the electron microscope: techniques of specimen preparation for electron microscope visualization including fixation, embedding, and ultrathin sectioning; special techniques such as replication and shadow casting. Prerequisites or concurrent courses: BIO 432, CHE 331, CHE 332, or permission of the instructor. Three lecture hours and three lab hours weekly. (4 crs.)

BIO 432. CELLULAR ULTRASTRUCTURE. A study of the generalized cell, the highly specialized cell, and tissues as seen by the electron microscope, with special emphasis on correlation of structure with function. An additional aim is to enhance the student's ability to interpret electron micrographs. Prerequisites: BIO 115, BIO 120, and BIO 125, CHE 331 and CHE 332, a molecular biology course and/or permission of instructor. Three lecture hours weekly. (3 crs.)

BIO 433. HERPETOLOGY. A consideration of the Amphibia and Reptilia from taxonomical, morphological, evolutionary, behavioral, and physiological

viewpoints with emphasis on ecological relationships. Prerequisites: BIO 115 and BIO 120. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 435. ICHTHYOLOGY. An introduction to the morphology, taxonomy, ecology, and distribution of the major groups of freshwater fishes, with emphasis on the northeastern U.S. fauna. Prerequisites: BIO 115 and BIO 120. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 441. ETHOLOGY. Four principal approaches to ethology: ecology, physiology, genetics, and development are interpreted within the framework of evolutionary biology with emphasis on the patterns of behavioral similarities and differences among different kinds of animals. Prerequisites: BIO 115, BIO 120, BIO 308, BIO 316 or ENS 300. Need permission of the instructor. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 442. DENDROLOGY. A study of the tree species of the Kingdom Metaphyta: the importance of these organisms to other biota, especially man, and their prospects of continued survival in a rapidly changing biosphere. Emphasis on the forest communities and tree species of the mixed mesophytic forest regions of southwestern Pennsylvania. Prerequisites: BIO 115 and BIO 125. Three lecture hours weekly. (3 crs.)

BIO 445. ENTOMOLOGY. A specialized study of insects: identification and classification development phases, physiological characteristics, economic importance, disease vectors. Prerequisite: BIO 115 and BIO 120. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 449. BIOLOGY FOR MEDICAL TECHNOLOGY CLINICAL PRACTICUM I. Upon acceptance to a hospital school of Medical Technology, the student undertakes the clinical training experience required by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). Programs of instruction will vary from one hospital to another but usually include hematology, microbiology, parasitology, immunology, urinalysis, and biochemistry. This course is the first of two required terms. (15 crs.)

BIO 450. IMMUNOLOGY. A detailed study of the immune system of animals covering nonspecific and specific host responses to foreign materials, the interaction between cells of the specific immune response, the nature and diversity of the immune response, the practical applications of the immune response, and disorders associated with the immune response. Prerequisites: BIO 115, BIO 120 and BIO 318 or BIO 326. Three lecture hours weekly. (3 crs.)

BIO 459. BIOLOGY FOR MEDICAL TECHNOLOGY CLINICAL PRACTICUM II. A continuation of BIO 449. The second of two terms. (14 crs.)

BIO 466 BIOMETRY. The fundamental concepts underlying the application and interpretation of statistical methods to biological and ecological research. Practical experience in the development and analysis of laboratory and field projects. Prerequisites: MAT 215 and permission of instructor. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 478. EVOLUTION. An advanced course pertaining to the mechanisms that are operative in the process of biological evolution. Life origins and development are investigated, with special emphasis placed upon the importance of genetic and metabolic systems diversity. The recurring and universal themes of mutation and natural selection are thoroughly discussed as the concept of evolution at the population level is developed. A detailed account of human origins and species diversity is also studied. Prerequisites: BIO 115, BIO 120, BIO 125, and BIO 318. Three lecture hours weekly. (3 crs.)

BIO 480. CELL BIOLOGY. The biology of the cell with emphasis on the relationship of structure and function within the cell. It is a study of cell organelles, growth, division, macromolecules, membranes, synthesis, and regulation. Prerequisites: BIO 115, BIO 120, BIO 125, and CHE 331. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 486. ENVIRONMENTAL PHYSIOLOGY. A comparative approach to the study of physiological systems in animals relative to environmental pressures and phylogenetic standing. Prerequisite: BIO 115 and BIO 125 . Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 492. BIOLOGICAL AND ENVIRONMENTAL SCIENCE INTERNSHIP. Student interns are placed with an organization or institution which most nearly approximates their goals for employment. The intent of the internship is to provide students with practical work experience in an environment in which they will be dealing with practical problems requiring real solutions in a relatively short time frame. Advisor and department chairperson approval is required before course enrollment. A total of 6 credits may be applied towards graduation in the following manner: A maximum of 3 credits may be applied to an appropriate core area in the Biology curriculum. In the Environmental Studies and Pre-Professional programs, a maximum of 3 credits can be applied to the related electives area. In addition, a maximum of 3 credits may be applied to the free electives area in the general education requirement of any program. Prerequisite: Junior or Senior standing and permission of the department (Variable: 1-12 crs.)

BIO 520. NEUROBIOLOGY. An examination of the structure and function of nervous systems. The course is designed to develop a detailed understanding of nervous system structure and function from the molecular level to the level of complex circuits such as learning and memory. A central theme is the comparison of the neurological circuits across phyla to identify basic organizational principles. Prerequisites: BIO 115, BIO 120, BIO 306, BIO 328, or permission of the instructor. 3 hours of lecture weekly. (3 crs.)

BIO 575. WATER POLLUTION BIOLOGY. A survey of the impacts of various types of environmental pollutants on aquatic biological communities. Community responses are analyzed in a lecture/laboratory format with emphasis on collection in the field. Three lecture hours and three laboratory hours weekly. Prerequisites: BIO 115, BIO 120, BIO 125, CHE 101 & CHE 103. (4 crs.)

Business - BUS

BUS 100. INTRODUCTION TO BUSINESS. The internal and functional setting of business enterprise, its organization and control (3 crs.)

BUS 242. BUSINESS LAW I. A study of commercial law as it relates to contracts, agency and criminal and constitutional law pertaining to business. Prerequisites: ECO 100 and at least sophomore standing. (3 crs.)

BUS 243. BUSINESS LAW II. A continuation of Business Law I. Basic legal concepts of sales, commercial paper, secured transitions and related topics. Prerequisite: BUS 242. (3 crs.)

BUS 271. ANALYTICAL METHODS. This is a course designed to teach mathematical methods of solving business problems. This will be especially useful to anyone who has opted not to take any calculus. Prerequisite: MAT 181. (3 crs.)

BUS 342. BUSINESS, SOCIETY AND GOVERNMENT. A survey of the historical and contemporary relationship between government and business in the United States. Special emphasis is given to the developments of the past two decades. Prerequisite: ECO 100 or equivalent. (3 crs.)

BUS 343. CORPORATE SOCIAL RESPONSIBILITY. Incorporating the concept of social responsibility or corporate social responsiveness in the corporate business strategy; how to assess organizational performance on social issues and design information systems to monitor policies in a large complex organization; the identification of the stages of this process and the characteristic problems and tasks associated with each stage; the evolution and/or design of structures and procedures for handling social issues consistently with business strategies. (3 crs.)

BUS 379. SPECIAL PROBLEMS IN BUSINESS. (3 crs.)

BUS 492. BUSINESS INTERNSHIP. The student is placed with a business firm, a bank, a government agency, or a non-profit organization for on-the-job and/or counselling experience. It offers a practical training ground for students which supplements academic training by permitting them to address actual problems in a real business environment. Prerequisite: Senior standing or permission of instructor. (Repeatable; Variable crs.; a maximum of 12 credits may be used towards a baccalaureate degree.)

BUS 495. SEMINAR IN BUSINESS. An intensive examination of selected subjects from the general field of business. Prerequisite: Consent of instructor. This course is repeatable one time if the subject matter is different. (3 crs.)

Career Planning - XCP

XCP 194: CAREER PLANNING. A course designed to help individuals integrate educational and personal resources needed for employment and career success. Topics include self discovery and evaluation, decision-making, information gathering, resume development, interview techniques, and overall career strategies. (1 cr.)

Chemistry - CHE

CHE 100. INTRODUCTION TO CHEMISTRY. A preparatory course emphasizing the mathematical and reasoning skills needed to be successful in General Chemistry. There are no prerequisites, and the course satisfies requirements in the Natural Science area for non-science majors. This course is not an elective for Chemistry majors. Three class hours each week. (3 crs.)

CHE 101. GENERAL CHEMISTRY I. An introductory course for majors and non-majors. Topics covered include atomic structure, bonding, stoichiometry, chemical reactions (including redox reactions), solutions, and the liquid state. Three class hours and three laboratory hours each week. (4 crs.)

CHE 102. GENERAL CHEMISTRY II. A continuation of General Chemistry I. The gaseous state, solutions, thermodynamics, kinetics, acids and bases, gaseous and ionic equilibria. Three class and three laboratory hours each week. Prerequisite: CHE 101. (4 crs.)

CHE 150. CHEMISTRY FOR THE HEALTH PROFESSIONS. The basic principles of general chemistry, organic chemistry, and biochemistry needed for the health sciences (specifically nursing chemistry). Three lecture hours and three laboratory hours each week. (4 crs.)

CHE 205. INORGANIC CHEMISTRY. A continuation of General Chemistry II. Descriptive chemistry of metals and nonmetals, electrochemistry, nuclear chemistry, solid state molecular orbitals, coordination chemistry. Laboratory: Equilibrium and qualitative chemistry of the elements. Three class and three laboratory hours each week. Prerequisite: CHE 102. (4 crs.)

CHE 255. GEOCHEMISTRY. Basic chemical principles employed in the solution of some geologic problems. Geologic dating, sedimentary geochemistry, chemical weathering, colloids and structural aspects of clay minerals and soils. Three class hours each week. Prerequisite: CHE 102 (3 crs.)

CHE 261. ANALYTICAL CHEMISTRY I. An introduction to quantitative analytical techniques and procedure including volumetric, gravimetric, and spectroscopic methods. Three lecture hours and three laboratory hours each week. Prerequisites: CHE 101 & CHE 102. (4 crs.)

CHE 331. ORGANIC CHEMISTRY I. An introduction to the basic principles which govern the reactions of carbon compounds. Particular emphasis is placed on the structure and stereochemistry of organic molecules, acid-base theory, reaction mechanisms, and an introduction to the reactions and synthesis of alkanes, alkenes, alkynes, alicyclics, alkyl halides and aromatic compounds. Three hours lecture and three hours laboratory. Prerequisites: CHE 101 & CHE 102. (4 crs.)

CHE 332. ORGANIC CHEMISTRY II. A continuation of the study of organic compounds. The student is introduced to the important functional groups present in such families as alcohols, ethers, carboxylic acids, esters, amides, aldehydes, ketones, amines, phenols, aryl halides, and reactions, and synthetic interconversion of these compounds. Three hours lecture and three hours laboratory. Prerequisites: CHE 331. (4 crs.)

CHE 340. ORGANIC SPECTROSCOPIC INTERPRETATION. Introductory theory and interpretation of infrared spectroscopy, ultraviolet spectroscopy, nuclear magnetic resonance spectroscopy, and mass spectrometry. Three class hours each week. Prerequisites: CHE 101 & CHE 331. (3 crs.)

CHE 350. COMPUTER APPLICATIONS IN CHEMISTRY. This course engages the student in activities which focus on computer solution of chemical problems. Both software coding and usage, as well as interfacing of microcomputers to chemical instruments, are covered. Three class hours each week. Prerequisites: CHE 101, CHE 102 & CSC 105. (3 crs.)

CHE 361. INSTRUMENTAL ANALYSIS I. An introduction to various instrumental and separation techniques including such topics as chromatography, electrochemistry, and atomic absorption spectroscopy. Three lecture hours and three laboratory hours each week.Prerequisite: CHE 261. (4 crs.)

CHE 368. INDIVIDUAL WORK I. An opportunity for students specializing in chemistry to organize, investigate, and report on a specific problem of their own selection. (1 cr.)

CHE 410. CHEMISTRY INTERNSHIP. The student is provided an opportunity to work in an industrial or non-profit research laboratory. This practical training is intended to supplement the academic program. Prerequisite: Junior or Senior standing and permission of the department. (Variable: 1-12 crs.)

CHE 411. BIOCHEMISTRY I. A comprehensive survey of the properties, reactions, and structure of amino acids, proteins, enzymes, carbohydrates, fats and lipids, and nucleic acids. Three class hours each week. Prerequisites: CHE 331 & CHE 332. (3 crs.)

CHE 445. MATHEMATICS FOR CHEMISTS. Mathematical techniques including differential and integral calculus, ordinary and partial differential equations, graphical methods, approximation methods, complex numbers, Fourier series expansions, determinants, coordinate systems, vector analysis, vector and matrix algebra with emphasis on application to chemical systems. Three class hours each week. Prerequisites: Differential and Integral Calculus. (3 crs.)

CHE 451. PHYSICAL CHEMISTRY I. Properties of gases, kinetic-molecular theory, molecular energies, classical and statistical development of thermodynamics, with applications to thermochemistry and chemical equilibria. Three lecture hours and three laboratory hours each week. Prerequisites: CHE 261 and mathematics through Integral Calculus. (4 crs.)

CHE 452. PHYSICAL CHEMISTRY II. Kinetics of chemical reactions, properties of liquids, phase equilibria, solutions, thermodynamics, properties of electrolytes in solution, and electrochemistry. Three lecture hours and three laboratory hours each week. Prerequisite: CHE 451. (4 crs.)

CHE 495. CHEMISTRY SEMINAR. Students may choose a particular topic in chemistry and, under the supervision of a faculty member, prepare and present a seminar report. The topics are to be on material not covered in the undergraduate courses, or extensions of some particular aspect of chemistry included in less detail in an undergraduate course. (1 cr.)

Communication Disorders - CMD

CMD 100. SURVEY OF SPEECH PATHOLOGY. This is the introductory course to communication disorders and the field of speech/language pathology. (3 crs.)

CMD 105. LANGUAGE AND SPEECH DEVELOPMENT. Emphasizes the normal development of speech, language, and communication. The form and function of language are considered, i.e., phonology, syntax, morphology, semantics, and pragmatics. (3 crs.)

CMD 203. PHONETICS. Introduces practical phonology and phonetics as they apply to the communicative process. The student is required to learn and use the International Phonetic Alphabet. (3 crs.)

CMD 204. ANATOMY AND PHYSIOLOGY. The structure and normal function of the components of the human body participating in the production and reception of speech and language. Prerequisite: CMD 213. (3 crs.)

CMD 213. ACOUSTICS AND PSYCHOACOUSTICS. A basic analysis of how sound is generated and measured. In addition, the manner in which the human auditory system encodes sound information and subsequently extracts meaning from it will be investigated. Prerequisite: 6 credits of Physical Science or Mathematics. (3 crs.)

CMD 300. SPEECH PATHOLOGY I. This course provides students with introductory knowledge of children with language and speech disorders. They will become aware of procedures and principles utilized by speech-language

pathologists in the assessment and management of children with language and speech delays/disorders. Prerequisites: CMD 100, 203, 204 and 213. (3 crs.)

CMD 301. SPEECH PATHOLOGY II. Primary emphasis is placed on several of the major speech disorders, namely: fluency disorders, voice disorders, language disorders in adults, dysarthria, apraxia, and dysphagia. Prerequisites: CMD 203, CMD 204, CMD 213. (3 crs.)

CMD 305. INTRODUCTION TO AUDIOLOGY. The course will provide the student with an understanding of the genetic and disease processes producing hearing loss in children and adults and the procedures used to assess hearing loss and rehabilitate persons with hearing impairment. Prerequisites: CMD 204 and CMD 213. (3 crs.)

CMD 320. ASSESSMENT OF SPEECH AND LANGUAGE. The student learns to administer, score, and interpret speech and language tests and write diagnostic reports based upon the administration of results of such tests. (3 crs.)

CMD 400. CLINICAL PRACTICUM. Provides the student clinician with a variety of therapeutic and evaluation experiences with children or adults having speech, language or hearing disorders. Prerequisites: CMD 300, CMD 301 and a 3.0 in all CMD courses. (3 crs.)

Communication Studies - COM

COM 100. PERSPECTIVES ON COMMUNICATION. An introductory course intended primarily for majors in Communication Studies. The course explains the many perspectives from which communication may be studied and serves as an introduction to the discipline. (3 crs.)

COM 101. ORAL COMMUNICATION. Designing, rehearsing, and delivering extemporaneous speeches to facilitate solving group and public problems; reporting and evaluating other speakers' intent, content, format, and delivery. (3 crs.)

COM 102. GROUP DISCUSSION: MANAGEMENT. Participation in, and analysis of, group decision-making processes to develop communication and listening skills in group situations, to develop understanding of the role of small group communication in business, to identify and develop styles and functions of group leadership. (3 crs.)

COM 105. SURVEY OF RADIO, TELEVISION, AND FILM. Introduction to communication in radio, television, and film; effects of mass media on the audience and the individual; role of mass media in news, documentaries, commercials, and entertainment broadcasting. (3 crs.)

COM 107. FUNDAMENTALS OF DISCUSSION. Introduction to group forms, techniques, participation, and chairmanship in informal and formal discussions of contemporary issues. (3 crs.)

COM 141. AUDIO PRODUCTION I. Fundamentals of radio production including the theory and use of Audio Lab equipment, writing and producing various types of basic radio programs, and the study of FCC rules and regulations as they apply to radio broadcasters. (3 crs.)

COM 142. VIDEO PRODUCTION I. Fundamentals of television studio production, including the use of equipment. This course has both a lecture and a laboratory component. Students must register for both the lecture and laboratory components in the same term. (3 crs.)

COM 165. INTERPERSONAL COMMUNICATION. This course seeks to help the student develop an awareness of the nature and complexity of interpersonal communication, recognize how perception of the self affects the ability to relate to others, and gain an understanding of those elements that shape the interpersonal communication process. (3 crs.)

COM 201. INTERCOLLEGIATE FORENSIC ACTIVITIES. Instruction, practice, and performance of various forms of debate and competitive individual speaking and reading events. Participation in intercollegiate competition, largely on some weekends, is required. Open to students in any major. (3 crs.)

COM 203. INTRODUCTION TO PUBLIC RELATIONS. Examines PR as the communication function that allows organizations to interface with their environments and publics. It describes the public relations process as well as its history, the guiding principles and concepts of organizational advocacy, and explores the various career opportunities in the field. (3 crs.)

COM 210. VOICE AND ARTICULATION. Introduction to phonetics and to voice production and control, with exercises to develop adequate quality, loudness, pitch, rate, and articulation. (3 crs.)

COM 224. INTRODUCTION TO ORAL INTERPRETATION. Techniques of discovering denotative and connotative meanings in literature for presentation to listeners; solo presentations of different literary forms. (3 crs.)

COM 230. ARGUMENTATION AND DEBATE. Logical advocacy: briefing and supporting logically adequate cases advocating propositions of policy, negative positions, exposing fallacious evidence and reasoning, refutation and rebuttal. Applications to intercollegiate and mass media topics. Prerequisites: COM 101 or 250 or permission of instructor. (3 crs.)

COM 235. PRESIDENTIAL RHETORIC, 1960 TO THE PRESENT. A study of the written texts, audio tapes, and video tapes of selected speeches by American presidents. The course explores the use of rhetoric in campaigns, in governance and in crises, by the presidents in order to illustrate contemporary political speaking and is an examination of how to understand and evaluate presidential speaking. (3 crs.)

COM 241. AUDIO PRODUCTION II. Students will build upon the knowledge and skills learned in Audio Production I, including creating, writing, producing and evaluating various types of more sophisticated production projects. Strong emphasis on theory and practice of field production, creating sound and special effects. Prerequisite: COM 141 or permission of instructor. (3 crs.)

COM 242. VIDEO PRODUCTION II. A course designed to prepare a student to perform in the various areas of single camera electronic field production, including the fundamentals of scripting, planning and budgeting field shoots; gathering audio and video in the field; field lighting; skills and aesthetics of editing field produced video; and the understanding and reading of test equipment for video signals. Prerequisites: COM 142 or permission of instructor. (3 crs.)

COM 246. RADIO AND TELEVISION ANNOUNCING. Theories and practice of gathering, evaluating, writing, and delivering newscasts, sports, commercials, interviews, for radio and television audiences. Prerequisites: COM 141 or COM 142 or permission of the instructor. (3 crs.)

COM 250. ORAL COMMUNICATION: MANAGEMENT. Develop an awareness of, and an appreciation for communication in the business world; preparing and presenting oral reports and speeches designed especially for persons who function in organizations, businesses, or industries. (3 crs.)

COM 303. PUBLIC RELATIONS APPLICATIONS. This course seeks to develop the production skills necessary to function in an entry-level public relations position. Many assignments will help students develop: 1) proficiency using the host of vehicles PR practitioners use, and 2) a portfolio. Effort will be made to create an atmosphere similar to the first job in PR. The instructor will be the first PR supervisor - the boss - editing the work; criticizing style; asking for research; forcing the student to plan, analyze, write, rewrite, prepare, repair, organize, and reorganize. Prerequisite: COM 203. (3 crs.)

COM 315. LANGUAGE AND BEHAVIOR. Developing language habits that improve sensory and symbolic perception, inference-making, evaluation, and conflict management/resolution. Prerequisite: COM 165 or permission of instructor. (3 crs.)

COM 324. ADVANCED ORAL INTERPRETATION. Detailed analysis and evaluation of literary forms. Creative experimentation in adapting performing literature for solo and group presentations. Prerequisite: COM 224. (3 crs.)

COM 331. RADIO AND TELEVISION COMMERCIALS. The writing of commercial messages in varying lengths for both radio and television, including preparation of storyboards. Prerequisites: COM 141 or COM 142 or permission of the instructor. (3 crs.)

COM 332. RADIO AND TELEVISION WRITING: NEWS. The writing of news, commentary and documentary, scripts for radio and television; includes

the press conference. Prerequisites: COM 141 or COM 142 or permission of instructor. (3 crs.)

COM 335. RADIO AND TELEVISION WRITING: DRAMA. Writing and analyzing teleplays, film and/or radio plays for understanding of dramatic composition and unique needs of specific writing genres and audiences. (3 crs.)

COM 336. BROADCAST REPORTING. A further exploration of the principles of reporting for the electronic media. Students will apply reporting techniques, ethical principles, and legal principles in actual field experiences. (3 crs.)

COM 341. AUDIO: AESTHETICS & APPLICATIONS. This course is designed as a discussion of various aesthetic principles in audio followed by application of these principles in student productions. Students must have mastered the mechanics of studio and field audio mixing, recording and editing prior to enrollment. Prerequisites: COM 141 & COM 241, or permission of instructor. (3 crs.)

COM 342. VIDEO: AESTHETICS & APPLICATIONS. This course is designed as a discussion of various aesthetic principles in video followed by application of these principles in student produced programming. Students must have mastered the mechanics of shooting and editing video tape prior to enrollment in this course. Prerequisites: COM 142 & COM 242. (3 crs.)

COM 350. PERSUASION. Methods of changing attitudes and behaviors through communication; analysis of individuals, audiences, occasions, and subjects for persuasive appeals. Study of logical and psychological arrangements and the ethics of persuading and being persuaded. Preparation of persuasive speeches. Prerequisites: COM 101 or 250 or permission of instructor. (3 crs.)

COM 355. BROADCAST MANAGEMENT. Development of a working knowledge of the managerial structures of broadcast organization. Prerequisite: COM 141 or COM 142. (3 crs.)

COM 360. APPRECIATION OF FILM. Preparation for intelligent response to cinema. Discussion of the screen play, director, and actor. Critical evaluation of outstanding films of the past and present. (3 crs.)

COM 370. PUBLIC COMMUNICATION LAW AND POLICY. This course examines the meaning of the speech and press clauses of the First Amendment and the application of those clauses to the formulation of public communication policy. It considers electronic media policy formulation in the area of commercial speech, contemporary speech controversies, privacy, public interest, and evolving communication technologies, from the perspectives of statute limitations, court constitutional interpretations, common law, regulatory mandates, and international treaties. (3 crs.)

COM 401. INTERNATIONAL BROADCAST SYSTEMS. An overview of world broadcasting systems. It prepares the student to function as a person with a world view of the field of electronic mass communication. Prerequisites: COM 355, COM 105. (3 crs.)

COM 410. PROFESSIONAL VIDEO COMMUNICATIONS. The field of business and institutional video. The course prepares the student to function as a corporate writer, producer, director, and editor of desktop videos, video press releases, videoconferences, training tapes, and other business and institutional videos. Prerequisites: COM 100 & COM 105. (3 crs.)

COM 429. SPECIAL PROBLEMS IN COMMUNICATION. Independent study and reporting of topics of interest to the student but not available in scheduled courses. (Variable crs.)

COM 438. PUBLIC RELATIONS CAMPAIGN MANAGEMENT. Seeks to increase understanding of the management of public relations campaigns by integrating communications theory with professional practice. Special attention is given to techniques for designing, implementing and evaluating effective campaign strategies for clients. Prerequisites: COM 203, COM 303. (3 crs.)

COM 445. RADIO AND TELEVISION IN A FREE SOCIETY. A study of the rights and obligations of the mass media producer, purveyor, and audience. Prerequisite: COM 105 or permission of the instructor. (3 crs.)

COM 459. COMMUNICATIONS STUDIES INTERNSHIP. Opportunities for practical, professional communication work and field experiences in various off-campus settings. Internships are to be jointly administered by an on-site supervisor and the departmental internship supervisor. (Variable crs.)

COM 461. COMMUNICATION CRITICISM. The study and application of the methods and critical perspectives used in communication criticism. Students will critique a wide range of communication artifacts which may include speeches, advertisements, films, and the messages of public relations. (3 crs.)

COM 463. MEDIA CRITICISM. The study of critical approaches to audio, video and cinematic texts. Emphasis on the discussion and application of approaches that examine: the meaning of media texts, the author's role in producing media texts, the impact of media texts on audiences, and the impact of the social and cultural milieu on the creative and critical process. Prerequisites: COM 105. (3 crs.)

COM 481. COMMUNICATION RESEARCH TECHNIQUES. This course is intended to provide an introduction to and practice in the construction of research that is appropriate to the student's area of interest in Communication Studies. It seeks to provide basic research skills to those anticipating graduate studies, and to those anticipating employment in areas of Communication Studies. Prerequisites: Major, junior standing or permission of instructor. (3 crs.)

COM 484. PUBLIC RELATIONS CASES AND PROBLEMS. This is the capstone course for students in the public relations option. It seeks to develop analytical skills so that graduates may function in the four primary roles of the public relations practitioner: 1. monitor of public opinion and change, 2. voice of the corporate conscience, 3. advocate for organizations, and 4. monitor of organizational policies and programs. Prerequisite: COM 438 or permission of instructor. (3 crs.)

COM 490. COMMUNICATION THEORY. A seminar in which the theories of human communication are analyzed, debated and evaluated. (3 crs.)

Computer Information Systems - CIS

CIS 150 INTRODUCTION TO DATABASE APPLICATION SOFTWARE. This course is an introductory study of database application software as it is used on a microcomputer. The more commonly used operations of a selected database applications software package will be presented. Introductory database design techniques will be presented. Laboratory assignments and projects will be used to combine database theory and database software to solve information management problems. (3 crs.)

CIS 215 TELECOMMUNICATIONS AND LOCAL AREA NETWORKS. This course is an introductory study of telecommunications and local area networks. The major topics include voice and data communication concepts and hardware, data transmission, link layer responsibilities, local area networks and network management. (3 crs.)

Computer Science - CSC

CSC 101. MICROCOMPUTER AND APPLICATION SOFTWARE. An introductory study of microcomputers and how to use them. The major topics include computer literacy, use of an MS-DOS microcomputer, and an introduction to and laboratory hands-on use of selected microcomputer applications software packages. (3 crs.)

CSC 105. BASIC PROGRAMMING LANGUAGE. This course will provide the student with the knowledge to write well structured, modular programs on a personal computer. It assumes no prior knowledge of computers or programming. The fundamentals of programming are taught in a style consistent with current thinking in the computing field. Prerequisites: High school algebra or equivalent. (3 crs.)

CSC 120. PROBLEM SOLVING AND PROGRAMMING CONSTRUCTIONS. Basic literacy of computers, introduce the operation of the VAX and DOS computers, present problem solving heuristics and structured programming techniques, present language independent data types, operations, programming constructs and statements, introduce arrays and linked lists, and implement fundamental programs using an appropriate programming language. Prerequisites: High school algebra or equivalent. (3 crs.)

CSC 123. INTRODUCTION TO COMPUTER SCIENCE WITH PASCAL. An introduction to computers, algorithms, and programs. Emphasis is on efficient program design using structured programming methods. Students are required to write and test programs on the main frame VAX system or on microcomputers. Prerequisites: One year of high school algebra or permission of instructor. (3 crs.)

CSC 199. FIELD EXPERIENCE IN COMPUTER SCIENCE. Designed for the Associate Degree person majoring in computer science, this course will enable the student to apply her/his knowledge of computers to the real world of computer technology. The field experience will provide the student with an opportunity to see and work with many aspects of computers in the work place and should enhance the student's job opportunities when the student graduates. Prerequisites: Students should have completed 32 credits with a good QPA plus sufficient background to meet the needs of the field experience in which they will be participating. (3 crs.)

CSC 201. DOS, WINDOWS, INTERNET. This primarily hands-on course will review computer system concepts, develop proficiency using Windows, introduce the student to all facets of the Internet, and develop a student's proficiency in web page design and publishing. Prerequisite: CSC101 or permission of the instructor. (3 crs.)

CSC 202. VISUAL PROGAMMING. This course uses a visual programming language for Windows and is designed for the beginning course in visual programming. It is an object-oriented/event driven language, designed to teach programming concepts related to Windows skills and file management. (3 crs.)

CSC 218. COBOL I. An introduction to the essential elements of the COBOL language using well structured programming techniques. Students are required to write COBOL programs and run them on the university's mainframe VAX system. Students will write and execute report programs, control break programs, data validation programs that implement tables. Good analysis, design and structure will be emphasized. Prerequisites: CSC 120. (3 crs.)

CSC 223. C PROGRAMMING. This course builds on CSC 120. It gives the student a thorough understanding of the C language so that the student will develop the ability to program well in the C language. Emphasis is placed on efficient software development using structured programming techniques. Students are required to run programs using an appropriate version of C. Prerequisite: CSC 120. (3 crs.)

CSC 224. FORTRAN. The FORTRAN language will be studied. Most of the major programming constructs of FORTRAN will be covered including assignment statements, loops, decisions, subprograms, arrays, character manipulation and file processing. Comparisons with other languages will be made and documentation of programs will be emphasized. Prerequisites: CSC 120. (3 crs.)

CSC 300. COMPUTER OPERATIONS. This course is designed for the computer science major who is looking for a general overview of computers, how they operate, how they store and use information, and how peripheral equipment associated with the computer world operates. Students will be given "hands-on" experiences to enhance their knowledge of computers. Prerequisites: At least two computer science courses. (3 crs.)

CSC 309. SURVEY OF OPERATIONS RESEARCH. A survey of the operations research (also known as management science or quantitative analysis) tools that are available to help a manager make better decisions, this course encompasses a number of mathematically oriented techniques that have been developed for/adapted to management problems in the areas of private industry, education, military, health care, and government applications. Mathematical modeling techniques will be studied in both lecture and microcomputer laboratory session formats. Prerequisite: CSC 101, MAT 181 or MAT 182, MAT 215 or MAT 225, & ECO 201, MAT 272 is recommended. (3 crs.)

CSC 316. LOGIC AND SWITCHING THEORY OF THE COMPUTER. An in-depth study of Boolean algebra and its application to switching and gating networks. Prerequisites: CSC 105 or CSC 121 or CSC 123 or MAT 272. Recommended courses: MAT 273 or MAT 281 & CSC 323. (3 crs.)

CSC 318. COBOL II. An in-depth study of the basis of digital computers. Number systems, arithmetic operations, codes, boolean algebra, boolean minimization techniques, state transition tables, and state transition graphs are discussed. Extensive emphasis is placed on the analysis and synthesis of synchronous combinational networks which form digital computers. Prerequisite: MAT 218. (3 crs.)

CSC 323. ASSEMBLER LANGUAGE PROGRAMMING. A study of the VAX Assembly language and some concepts related to the architecture and operations of the VAX computer. Programs will be written and implemented using the instructions in this assembly language. Constructs, such as selection, looping, and subprograms, will be implemented. Prerequisite: CSC 316 & CSC 377. (3 crs.)

CSC 324. COMPUTER GRAPHICS. An introduction to "state of the art" computer graphics software. Lecture and laboratory sessions will use this software in the development of advanced graphics concepts. Hardware devices will also be discussed. Prerequisites: CSC 323. (3 crs.)

CSC 333. OBJECT-ORIENTED PROGRAMMING. An introduction to object-oriented programming. Object-oriented offers a natural method for designing software systems that build on the concepts of data abstraction, information hiding, and modularity. Prerequisites: CSC 396. (3 crs.)

CSC 357. HYPERMEDIA AND CAI. The design, development, and evaluation of instructional software. Students will learn two software authoring systems, HyperCard on the Macintosh and ToolBook on the IBM, in order to design CAI. Prerequisites: CSC 120. (3 crs.)

CSC 375. SYSTEMS ANALYSIS. This project course in systems analysis experientially introduces the student to some of the basic concepts and tools of system analysis, within the competitive American free-enterprise system. This course introduces the "real world" to future data processing professionals who must also be familiar with "system's concepts": how to analyze a business's additional data processing needs, and then how to design and implement an appropriate computer system (both hardware and software) at minimum cost and maximum information processing power. Prerequisites: CSC 101 CSC 456, MGT 201, MGT 371, ENG 217, & PSY 326. (3 crs.)

CSC 377. INFORMATION STRUCTURES. The design, use, and programming of stacks, queues, linked lists, binary trees, and sorting and searching methods are discussed in this course. The analysis of algorithms will be considered as well as the applications of data structures. Prerequisites: MAT 272 & CSC 323. (3 crs.)

CSC 378. COMPUTER ARCHITECTURE. An in-depth study of the organization of the central processing unit, control unit, instructions formats, and addressing schemes of digital computers. Extensive emphasis is placed on the translation of assembly language instructions into their microsequence operations within the control unit and the interconnection which form the central processing unit and the digital computer. Prerequisite: CSC 323. (3 crs.)

CSC 396. SOFTWARE ENGINEERING. An introduction to software engineering through the use of the Ada programming language. Students will study software requirements, specifications, design, module coding and testing, integrationand software maintenance. Prerequisites: CSC 223. (3 crs.)

CSC 400. OPERATING SYSTEMS. An introductory study of the main elements of an operating system-memory management, process management, device management, and file management. Prerequisites: CSC 323 -Co-requisite CSC 378. (3 crs.)

CSC 405. DATA COMMUNICATIONS. A study of the theory, implementation procedures, and problems associated with data communications. Prerequisite: CSC 377, CSC 378, MAT 272 & MAT 341. (3 crs.)

CSC 410. LISP PROGRAMMING. An introduction to LISP (List Processing) as a vehicle for encoding intelligence-exhibiting processes. Topics include a survey of lamda calculus and recursive function theory. Prerequisites: CSC 377. (3 crs.)

CSC 419. COMPUTER SCIENCE INTERNSHIP. This course is designed for the computer science major who is seeking work in the computer science area. This intern experience will enable the student to apply her/his

knowledge of computers in the work place. The internship will provide the student with the valuable computer experience that should enhance the student's job opportunities upon graduation. Prerequisites: Students should have completed 64 credits with a good QPA plus have sufficient background to meet the needs of the particular internship in which they will be participating. (Variable crs.)

CSC 420. ARTIFICIAL INTELLIGENCE. This course offers a selective survey of key concepts and applications of artificial intelligence, and an in-depth experience with a language commonly used for building AI systems. Prerequisite: CSC 410. (3 crs.)

CSC 424. NUMERICAL ANALYSIS. In this course, various mathematical concepts relating to the computer are investigated. These concepts include: roundoff errors and computer arithmetic; numerical instability; error analysis and estimation; approximation; Gaussian elimination and pivoting strategies for linear systems; numerical integration and solution of differential equations. Prerequisites: CSC 377, MAT 273 & MAT 341. (3 crs.)

CSC 455. STRUCTURE OF PROGRAMMING LANGUAGES. In this course, the power and limitations of algebraic languages, string manipulation languages and interactive languages will be studied. Also, Object-oriented programming languages will be discussed. Prerequisite: CSC 377. (3 crs.)

CSC 456. DATA BASE MANAGEMENT SYSTEMS. The design, motivation, implementation, and application of data base management systems. There is an intense study of the design of data bases including the normalization of the files of a data base. Techniques of updating and retrieving from data bases are learned using several commercially available data base management systems and hands-on experience is gained in at least one of them. Prerequisite: CSC 218. (3 crs.)

CSC 460. LANGUAGE TRANSLATION. This course studies the design and construction of compilers. Lexical analysis, syntactic analysis, and code generation are investigated in detail. Language design, interpreters, semantic analysis, intermediate code generation, and code optimization are also considered. Prerequisite: CSC 323. (3 crs.)

CSC 475. THEORY OF LANGUAGES. An introduction to abstract machine theory, combinational systems, computable functions, and formal linguistics. Topics include finite-state machines, regular sets, Turing machines, Chomsky hierarchy grammars and languages. Emphasis is on surveying basic topics and developing an intuitive understanding in the theory of languages. Prerequisites: CSC 377 & MAT 272 or MAT 351. (3 crs.)

CSC 485. SPECIAL TOPICS IN COMPUTER SCIENCE. This course allows current topics in computer science to be offered in a timely fashion. Topics are not covered in other courves and will not be regularly offered as a special topic. The course topic depends on current trends in computer science, the interests of the student and the instructor. Prerequisite: Permission of instructor. (3 crs. May be repeated if a different topic is covered.)

CSC 496. SEMINAR IN COMPUTER SCIENCE. For the highly motivated student wishing to develop certain topics in Computer Science found in current journals. Topics to be developed in this course are chosen by the student under the guidance of the instructor. This class does not meet regularly; it meets by arrangement between the student and the instructor. Prerequisite: Minimum of 21 hours in computer science course work and permission of the department chair and permission of the instructor. (1 to 3 crs.)

Criminal Justice - XJJ

XJJ 132. INTRODUCTION TO SECURITY. The practical and legal basis of security, the role of the security agent in modern society, and the interaction with law enforcement are addressed. Basic goals of security and loss prevention, areas of specialization, and career opportunities are discussed. (3 crs.)

XJJ 134. COMMUNICATION SKILLS FOR SECURITY OFFICERS. The aim of this course is to develop effective and basic writing and communication strategies for security officers. (3 crs.)

XJJ 155. ADMINISTRATION OF CRIMINAL JUSTICE. An overview of the American criminal justice system dealing with the role of the police, courts, and correctional institutions. The course also covers constitutional limits of police power; the trial process; and sentencing structure; and the functions of the numerous agencies within the criminal justice system. (3 crs.)

XJJ 156. NARCOTICS & DRUG ABUSE. Study of narcotics, dangerous drugs, and the people who abuse them. Implementation, evaluation and coordination of drug control programs. Consideration of private treatment programs, civil commitment, procedures, public education programs, and medical treatment programs. (3 crs.)

XJJ 157. CORRECTIONAL ADMINISTRATION. Organization, objectives and functions of a correctional agency will be studied. Principles of Administration relating to the sound and efficient operation of correctional facilities will be discussed with emphasis on the special problems encountered in the field. (3 crs.)

XJJ 158. PROTECTIVE SECURITY LAW. The course acquaints the student with the basic legal issues facing the private security officer. An overview of legal powers, limitations, and general liabilities will be addressed. Major topics include the powers of detention, arrest, search and seizure, use of force, interrogation, and most importantly, probably cause. Special emphasis will be placed on criminal and civil penalties applicable to security agents concerning abusive powers or illegal activities. (3 crs.)

XJJ 160. CRIMINAL LAW I. The laws of arrest, use of force, interrogation, and evidence are studied. Pennsylvania law applicable to the law enforcement officer will be emphasized. (3 crs.)

XJJ 165. SECURITY OPERATIONS & PRINCIPALS OF LOSS PREVENTION. The course introduces the technical and applied practice of security. Emphasis will be on procedures and practices of security personnel, the theoretical use of alarm systems, locks, surveillance equipment, the application of safety practices and risk assessment. Uniform security standards, survey techniques will be discussed, Loss prevention programs related to internal employee theft, retail theft, and insurance considerations will be emphasized. Presents and overview of security investigative equipment, interview and interrogation skills and preparing investigative reports will be highlighted. (3 crs.)

XJJ 170. SUPERVISORY TECHNIQUES. This course is an introduction to the duties and responsibilities of the supervisor in all organizations. Topics to be covered are business tools and skills a supervisor utilizes as manager; interrelationships between the supervisor and other departments and techniques dealing with employee problems and groups. (3 crs.)

XJJ 175. FIRST AID & CPR/FIRST RESPONSE. Theory and practice of general first aid techniques are covered, including the treating of illness, wounds, shock, and emergency rescue. Also included will be Hazmat Response, identification and treatment of communicable diseases, and identification of local health organizations. (3 crs.)

XJJ 180. OCCUPATIONAL SAFETY & FIRE PREVENTION. The course provides an introduction and examines regulations regarding "Right To Know Laws, Material Safety Data Sheets (MSDS), basic Occupational Safety & Health Act (OSHA) requirements, hazardous materials identification and response. The course examines occupational hazards, injuries, diseases and relative prevention. (3 crs.)

XJJ 185. SPECIAL SECURITY ISSUES & PROBLEMS. This course is a study of requirements and specific problems in security such as substance abuse, organized labor awareness, domestic violence, and protection from abuse petitions, work place violence and employee escort. The course also examines typical improprieties of the industry, security officer negligence, stress management, and interactions with public law enforcement. (3 crs.)

XJJ 215. INVESTIGATIVE CONCEPTS. This course reveals fundamentals of investigative theory developing informational processes; principles of interviewing and question construction; instrumentation techniques; identification of persons and things; and investigation, and current issues involving invasion of privacy are also considered. (3 crs.)

XJJ 249. DIRECTED STUDIES. This is a seminar for advanced criminal justice students who will study and analyze typical criminal justice problems. Extensive library work is required along with independent study of various problems. Special seminars may be considered for course credit at the discretion of the criminal justice coordinator. (3 crs.)

XJJ 256. PROBATION, PARDON & PAROLE. Probation, pardon and parole are examined as judicial process and an executive function. Emphasis is to be placed on the philosophical approach to probation, pardon and parole. Contemporary methods such as work release programs, halfway houses, and parole clinics are to be examined. (3 crs.)

XJJ 257. RULES OF CRIMINAL PROCEDURE. A study of criminal procedures which will examine the process by which the criminal law is brought to bear on individuals in society - as spelled out in the Pennsylvania rules. The course considers all aspects of the criminal processes from the filing of the complaint through the pretrial and trail stages and into the sentencing and pretrial or trial sentencing phases such as probation, parole, and post correctional proceedings as controlled by these rules. (3 crs.)

XJJ 261. INTERVIEW & INTERROGATION. Fundamentals of the interviewing process and interrogative technology, taking into consideration the nature, methods, and principles of interviewing with emphasis on role playing in interviews. (3 crs.)

XJJ 262. CRIMINAL EVIDENCE. A comprehensive analysis of the rules of evidence. Particular subjects include Judicial Notice Presumptions, the Nature of Real and Circumstantial Evidence, Burden of Proof, Province of Court and Jury, Documentary Evidence, Confessions, Admissions and Witnesses. The course will give particular emphasis to evidence in criminal cases. Prerequisites: XJJ 155. (3 crs.)

XJJ 270. CRIMINOLOGY. The nature and causation of crime. Approaches to the study of crime and its treatment and prevention. The sociology of criminal law and the nature of criminal behavior: theories and research. Prerequisite: HS155. (3 crs.)

XJJ 275. JUVENILE DELINQUENCY. Biological, psychological and sociological factors in juvenile delinquency. A survey of theories of juvenile delinquency. Modern trends in prevention and treatment. (3 crs.)

XJJ 281. ORGANIZED CRIME. This course is a study in the development, structure, and operation of organized crime in the United States today. Emphasized will be the major crime families, the extend and types of their criminal activities, as well as present efforts utilized to combat organized crime in both the public and private sectors. (3 crs.)

XJJ 282. POLICE ETHICS & PROBLEMS. Police Ethics and Problems introduces the student to the psychological and sociological factors effecting law enforcement and community response. Critical issues examined will include dissent and civil disobedience, discriminatory and selective law enforcement, police militancy, police ethics, and the effects of stress and job burnout in the criminal justice profession. (3 crs.)

XJJ 283. CRIMINAL JUSTICE INTERNSHIP. The Criminal Justice Internship affords second year students an opportunity to work with a local law enforcement or criminal justice agency. Cooperating agencies include the Sheriff's office, a local magistrate, a police department, Juvenile and Adult Probation, and Drug and Alcohol Services. (Variable crs.)

Early Childhood Education – ECE

Prerequisites for all ECE courses include completion of 48 college or university credits with a minimum 2.5 Q.P.A., and achievement of a satisfactory score on the General Knowledge and Communication Skills tests of Praxis II: Core Battery.

ECE 203. FIELD EXPERIENCES WITH INFANTS, TODDLERS, AND PRESCHOOLERS. This course is intended to provide the student with an introduction to working with young children ages infancy through five, by providing field experiences in infant/toddler day care centers and preschool centers (day care, Head Start, or nursery school). The student observes, plans activities, and prepares learning materials for children in group settings. Lectures and classroom teaching are combined to give students an opportunity to discover their aptitude for and interest in working with very young children. Prerequisites: EDF 290 & PSY 208. (3 crs.)

ECE 302. EMERGING LITERACY. The purpose of this course is to prepare early childhood students to become facilitators of early literacy learning. The content of this class deals with concepts of emerging literacy and instruction in language arts strategies for children from infancy throughout the primary grades. (3 crs.)

ECE 304 . THEMATIC TEACHING IN EARLY CHILDHOOD. This course introduces a thematic approach to teaching integrated curricula and focuses on teaching science, social studies, and health concepts. Students will gain understanding and skill in developing and implementing thematic units. (3 crs.)

ECE 315. MATHEMATICAL CONTENT IN EARLY CHILDHOOD. The student is introduced to how mathematics develops in the very young child and how to assess this development. The student is introduced to the teaching of arithmetic, measurement, and geometry to the young child. Skills and understandings that children acquire from infancy to age eight are covered. (3 crs.)

ECE 319. PARENT AND COMMUNITY INVOLVEMENT IN EDUCATION. This course emphasizes the role of parents and community in the framework of educational planning for young children. The student will demonstrate skills in planning education workshops. Students will use interview and conferencing techniques to learn from parents and community people actively involved in programs for children. (3 crs.)

ECE 405. EARLY CHILDHOOD EDUCATION SEMINAR. This course investigates how young children have been viewed and educated by society throughout history. The present-day circumstances of children and families are studied. Students receive background in how to work together with parents, communities, other professionals, and policy-makers to ensure a quality, developmentally-appropriate education for young children. Prerequisites: EDF 290 & PSY 208. (3 crs.)

Earth Science - EAS

EAS 100. INTRODUCTION TO EARTH SCIENCE. This introductory course is designed to acquaint the student with the four general areas of earth science: astronomy, geology, meteorology, and oceanography. The course consists of two hours of lecture and one hour of lab work. (3 crs.)

EAS 131. INTRODUCTION TO ENVIRONMENTAL GEOLOGY. This course deals with the interaction between man and his geologic environment. Emphasis is placed on the understanding of basic geologic principles and case studies of some of the classic examples of environmental problems. Laboratory exercises and problems are an integral part of the course. This is intended as a survey course and a student needs only a limited background in geology. (3 crs.)

EAS 150. INTRODUCTION TO GEOLOGY. A survey course intended primarily for the non-science major. Topics considered include the make-up of the earth, internal and external processes that occur within or on the earth, rocks and minerals, fossils, earth's origin and evolution, and the origin and evolution of life on this planet. Laboratory work is an integral part of the course. (4 crs.)

EAS 160. PHYSICAL GEOGRAPHY. The study of the physical aspects of human environment including climate, soils, water, vegetation, and topography. Map reading and map air photo interpretation are also treated. (3 crs.)

EAS 163. INTRODUCTION TO OCEANOGRAPHY. An introductory course in the study of the four main branches of oceanography: (1) Geology of the oceanic basins (origins of the oceans, structure and geomorphology of the ocean's floor, methods of investigation); (2) Chemistry of the ocean waters; (3) Physics of the oceans (currents, waves, tides, etc.); (4) Biology of the oceans (marine plants and animals). No preliminary studies required but previous course work in EAS 100 or EAS 150 recommended. (3 crs.)

EAS 166. GEOLOGY OF PENNSYLVANIA. A survey of the Commonwealth's geologic setting, geologic history, and mineral resources. There are no prerequisites. Students will be introduced to the necessary geologic concepts and terminology. Students are expected to participate in at least three of the four planned field trips. (3 crs.)

EAS 170. AREAL GEOLOGY. This course involves travel to selected points of geologic interest in the Rocky Mountains and Great Plains of the western part of the United States. Most activities will be in field situations. Activities will focus on rock, mineral, and fossil identification, topographic map

interpretation, and the role of geologic processes in landform development. (3 crs.)

EAS 175. FIELD COURSE IN EARTH SCIENCE I. This course provides the student with opportunities to study meteorological, climatological, geological and oceanographic phenomena in situ, to apply the scientific method, to acquire critical thinking skills by examining earth features and processes and by examining anthropogenic effects on selected natural phenomena, to understand the value of selected earth processes and features and to quantify natural phenomena. Students will participate in an excursions. (3 crs.)

EAS 200. HISTORICAL GEOLOGY. A study of the geologic history of Earth and the succession of the major groups of plants and animals as based on the geologic interpretation of rock formations and fossils. Field trips are an integral part of the course. (4 crs.)

EAS 202. HYDROLOGY. A survey course about the existence of water on Earth. Topics include the occurrence and movement of water, physical and chemical characteristics of water, and climatologic and geologic considerations of surface and sub-surface water. (3 crs.)

EAS 210. SOILS. The study of the distribution of the soils of the earth, their characteristics, and how they developed. Emphasis will be placed upon the relationship between man and the soils of a given environment. (3 crs.)

EAS 232. EARTH RESOURCES. An introductory course in metallic and nonmetallic resources with emphasis on the nature of minerals, the lithosphere, and economic uses of earth resources. (3 crs.)

EAS 241. METEOROLOGY. The physics of the atmosphere as influenced by the earth-atmosphere interaction. The effects of the physical controls as they alter the elements are emphasized. The construction and analysis of weather maps are an integral part of the course. (3 crs.)

EAS 242. CLIMATOLOGY. In this course the elements and controls of climate are analyzed in a systematic fashion. Various methods and techniques of classifying climates are presented. The climate of each continent is regionalized and the factors which produce the climatic patterns are investigated. (3 crs.)

EAS 250. SYNOPTIC METEOROLOGY. An examination of the development and structure of large-scale weather systems and fronts. Emphasis on the technique of analyzing and forecasting synoptic scale weather situations. (3 crs.)

EAS 264. SCENIC AREAS OF THE UNITED STATES. This course provides an analysis of the physical setting of some scenic areas in the United States. The focus is on differences in soils, vegetation, climates and landforms in scenic areas with special emphasis given to natural history. (3 crs.)

EAS 270. SCENIC AREAS OF THE WORLD. This course provides an analysis of the physical setting of scenic areas of the world. The focus is on differences in soils, vegetation, climates, and landforms with special emphasis given to natural history. (3 crs.)

EAS 271. CARTOGRAPHY. A laboratory course designed to acquaint the student with the nature and function of maps, including concepts of scales and cartographic symbols; graphic layout and design; and the use of cartographic tools and equipment in map construction. (3 crs.)

EAS 273. COMPUTER CARTOGRAPHY. This course provides an analysis of different methods and techniques of representing spatial data through the use of various computer-based technologies. The focus is centered upon the cartographic representation of surface data through the use of a personal-computer based program. (3 crs.)

EAS 304. CARBONATE GEOLOGY. A study of carbonate deposition, lithification, and diagenesis. Includes chemical sedimentology, textural classification, cyclicity of shelf strata, facies interpretation for oil exploration, and correlation. Lab component. Prerequisites: EAS 200 & EAS 421. (3 crs.)

EAS 331. MINERALOGY. An introduction to the morphology and internal structure of crystals and the chemical and physical characteristics of minerals. Laboratory time is devoted to the study of crystal models and the identification of selected mineral specimens. (3 crs.)

EAS 332. PETROLOGY. A complete survey of the major rock types (igneous, sedimentary, and metamorphic) forms the basis of this course. Consideration is given to their origin, description, and classification. Of particular importance is the relationship of the various rock types to the composition and historical development of the solid earth. Laboratory component emphasizes hand specimen identification, but some microscopic thin section work is also done. (3 crs.)

EAS 335. REMOTE SENSING: MAP AND AERIAL PHOTOGRAPHY INTERPRETATION. This course covers the composition and interpretation of aerial photographs and various types of maps. Students will learn how to interpret photos and maps for quantitative and qualitative information on natural and anthropogenic features. Some of the work requires independent and group interpretation of maps, photographic slides of satellite imagery, computer processed and enhanced images, and SLAR imagery. (3 crs.)

EAS 343. GEOMORPHOLOGY. This course involves the study of the origin, history, and characteristics of landforms and landscapes as they are produced by the processes of weathering, mass-wasting, fluvial, glacial, wind, and wave erosion (or a combination of these) acting upon the geological materials and structures of Earth's crust. (3 crs.)

EAS 345. SYNOPTIC METEOROLOGY II. Continuation of EAS 250. Emphasis is placed on the application of synoptic principles to specific types of atmospheric circulation systems and case studies of storm complexes. (3 crs.)

EAS 350. MICROPALEONTOLOGY. Micropaleontology deals with the essential biological and geological principles which are basic to all paleontological studies. In addition, considerable time is devoted to the study and identification of various microfossil groups. Consideration is also given to the origin of life and to its preservation in ancient Precambrian rocks. Laboratory work is emphasized. Problems to be solved are similar to those that would be encountered in the petroleum industry. (3 crs.)

EAS 352. THERMODYNAMIC METEOROLOGY. An in-depth examination of the forces and laws that govern atmospheric flow. Topics investigated and analyzed include scale analyses, geostropic and gradient wind models, vorticity, vertical motion and boundary layer dynamics. (3 crs.)

EAS 353. STATISTICAL ATMOSPHERIC SCIENCE. A statistical and scientific writing course designed as a follow-up to basic meteorology. The course is concerned with the use of meteorological instruments to measure local weather conditions; analyzing and plotting and analyzing these conditions. Other weather problems and two research papers are part of the course. (3 crs.)

EAS 361. WEATHER ANALYSIS. Introduction to real-time weather information such as DIFAX charts, satellite and radar imagery, and text data, and its analysis. (3 crs.)

EAS 365. REMOTE SENSING: SATELLITE & RADAR INTERPRETATION. This course emphasizes the characteristics and scientific role of radar and satellite interpretation, as well as computer assisted processing of spectral data acquired by satellites as they relate to atmospheric analysis. (3 crs.)

EAS 371. WEATHER FORECASTING. Introduction to the process of creating and disseminating weather forecasts. Use of actual weather data in creating daily forecasts for the local area, including oral and written forecasts. (3 crs.)

EAS 372. FIELD MAPPING. This is a field-oriented course in which the student will learn proper use of measuring and mapping instruments and the techniques used in the construction of basic maps. (3 crs.)

EAS 373. STATISTICAL CARTOGRAPHY. The statistical approach to cartographic representation. Methods of data manipulation, problems of symbolization and techniques of presentation are emphasized. (3 crs.)

EAS 381. SEVERE WEATHER. An introduction to the various types of severe weather, atmospheric circulation patterns that are associated with them, and tropical atmospheric phenomena. Special attention is applied to tornadoes and hurricanes. (3 crs.)

EAS 385. HYDROMETEOROLOGY. An advanced class designed to provide an understanding of the interrelationships between the atmosphere and the hydrosphere, and their applications to problems in the physical environment. (3crs.)

EAS 402. GROUNDWATER HYDROLOGY. This course is designed as a follow-up course to Hydrology. It gives students the opportunity to study the principles governing the movement and occurrences of groundwater. (3 crs.)

EAS 421. SEDIMENTOLOGY. An advanced course that deals with the detailed analysis of sediments and sedimentary rocks. Both qualitative and quantitative techniques are utilized to derive the maximum information from rock samples. This information relates to the erosional, transportational and depositional history of rocks. To the greatest extent possible, the student works independently through a complete set of problems. (3 crs.)

EAS 422. STRATIGRAPHY. In this course a study is made of the basic principles governing the origin, interpretation, correlation, classification, and naming of stratified rock units. The gross stratigraphy of the United States is considered, with particular emphasis placed on the rocks of the Pennsylvanian System. (3 crs.)

EAS 425. STRUCTURAL GEOLOGY. The primary and secondary structures of rock masses and their formation are covered in this course. Actual structures are examined in the field. Geologic maps are utilized. (3 crs.)

EAS 430. OPTICAL MINERALOGY. An in-depth examination of the optical behavior of mineral crystals in polarized light with emphasis on identification. (3 crs.)

EAS 431. PRACTICUM IN BROADCAST METEOROLOGY I. Introduction to television weather broadcasts with emphasis on creating accurate forecasts and on the techniques of communicating weather information to the public. (3crs.)

EAS 432. PRACTICUM IN BROADCAST METEOROLOGY II. Continuation of EAS 431. Emphasis is placed on studio performance of weather casts. (3crs.)

EAS 436. FIELD METHODS IN EARTH SCIENCE. This is a course designed to provide majors with knowledge of problems encountered in field work and the techniques utilized to solve these problems. This course consists of planned trips. Lectures and discussions are used to supplement the trips. (3 crs.)

EAS 437. FIELD METHODS IN GEOLOGY. This is a course designed to provide students with a knowledge of geologic problems encountered in field work and the techniques utilized to solve those problems. The student is exposed to geologic and topographic maps as well as various geologic instruments. The course consists of planned trips to areas of geologic interest. Summary reports, field exercises, and laboratory problems constitute the students' work responsibility. (3 crs.)

EAS 463. SEMINAR IN OCEANOGRAPHY. This seminar is designed for those who wish to improve their scientific writing abilities and to learn more about the oceans. The course is built around an excursion to sites of oceanographic interest, library information and data collection, the writing of both short and long papers and the presentation of research. (3 crs.)

EAS 465. SEMINAR IN ATMOSPHERIC SCIENCE. A scientific writing and speaking course that covers recent and historical developments in the atmospheric sciences. Students are required to participate in group presentstions, complete two written research projects, and produce a critique of classmates' research projects. (3 crs.)

EAS 491. FIELD COURSE IN EARTH SCIENCE. This course is designed for Earth Science students who desire to apply their classroom knowledge to specific sites and earth science field problems. Each semester will include trips to various sites at which geologic, meteorological, or oceanographic processes, principles, and phenomena can be studied. (Variable crs.)

EAS 492. FIELD COURSE IN GEOLOGY. This course provides advanced geology students with opportunities to study geology *in situ*. Field trips to classic and less well known sites will be incorporated with lectures, data collection, and scientific reporting. Laboratory exercises will reflect field experiences. (Variable crs.)

EAS 494. GEOLOGY WORKSHOP. Provides the student with a variety of geologic experiences. Included are lectures, laboratory exercises, field work, and problems. To the greatest extent possible, the course also is tailored to meet the needs of individual students. Prerequisite: Permission of the instructor. (Variable crs.)

EAS 495. SEMINAR IN EARTH SCIENCE. A scientific writing course in which the student pursues a earth science topic through library or field research. Students learn to define a problem, to obtain relevant literature, to gather data, and to write and defend a research paper. (3 crs.)

EAS 496. SEMINAR IN GEOLOGY. A scientific writing course in which the student pursues a geologic topic through library or field research. Students learn to define a geologic problem, to obtain relevant literature, to gather raw data and to write and present a research paper. (3 crs.)

EAS 498. INTERNSHIP IN GEOLOGY. The student combines academic theory with practical on-the-job experience by spending up to a full semester in one of several state or local governmental agencies. The practicum can be taken for from 3 to 17 credits and includes supervision by the participating agency as well as performance evaluation by the academic advisor. Prerequisite: Geology majors. (Variable crs.)

EAS 527. TECTONICS. To evaluate tectonic theories within a framework of worldwide historical geology, but special attention is given to the Appalachian and the North American Cordilleran orogenic events. (3 crs.)

EAS 538. COMPUTER APPLICATIONS IN WATER RESOURCES. An upper-level course designed to provide students opportunity to apply computer and mathematical procedures to the solution of hydrologic problems Application from other areas within the earth sciences may be considered. (3 crs.)

EAS 541. ADVANCED ENVIRONMENTAL GEOLOGY. This course deals with man's natural environment, particularly geologic factors that may impact upon his life or his way of life. Emphasis is placed on an in-depth study of environmental problems and possible alternative solutions to such problems. Basic engineering principles as applied to geological problems are considered. Laboratory exercises, problems, and written reports are an integral part of the course. (3 crs.)

EAS 542. APPLIED CLIMATOLOGY. An advanced course that deals with the application of various analytical methods and classification systems in climatology. The Koppen classification of climates is stressed. The climate patterns of each continent and the factors which produce them are investigated. Prerequisite: EAS 242 or permission of the instructor. (3 crs.)

EAS 548. WATERSHED EVALUATION. The purpose of this course is to analyze in detail rocks which serve for the storage and ultimately for the production of petroleum. The characteristics of these rocks will be studied in hand specimen, in thin section, in cores, and on well logs. Laboratory work and problem solving are emphasized. (3 crs.)

EAS 551. INVERTEBRATE PALEONTOLOGY. This course involves a detailed study of fossil representatives of the various invertebrate phyla as well as a consideration of the more important of these as index fossils. Emphasis is on laboratory exercises and problem solving. It is hoped that this course will prove to be of interest to students in biology as well as those in geology. (3 crs.)

EAS 563. COASTAL GEOMORPHOLOGY AND MARINE RESOURCES. A study of the physical processes that shape coastal landforms and the pelagic and neritic resources of the oceans. Topics include longshore transport, wave action, swash zone dynamics, estuarine and deltaic geomorphology, ferromanganese and petroleum resources, and beach structure. Prerequisite: EAS 163 or permission of the instructor. (3 crs.)

Economics - ECO

ECO 100. ELEMENTS OF ECONOMICS. An introduction to the elements of economic analysis, structured particularly for the nonmajor. The student is exposed to the mechanics of the market system and a survey of modern macroeconomic theory and policy. (3 crs.)

ECO 200. CURRENT ECONOMIC ISSUES. An application of contemporary economic principles. Current readings in economics are examined. Prerequisite: ECO 100 or ECO 201. (3 crs.)

ECO 201. INTRODUCTORY MICROECONOMICS. An introduction to the market mechanism in a modern mixed economy; supply and demand analysis is applied to consumer markets as well as resource markets. (3 crs.)

ECO 202. INTRODUCTORY MACROECONOMICS. An introduction to the determination of national income; problems of inflation and unemployment; international trade and economic growth. Emphasis is placed on the roles of monetary and fiscal policy in the conduct of macroeconomic policy. Prerequisite: ECO 100 or ECO 201 is recommended. (3 crs.)

ECO 242. GOVERNMENT AND BUSINESS. A study of the legal framework within which business operates, including the Sherman Anti-Trust Act, Clayton Act, Robinson-Patmon Act, Federal Trade Act, and other newer forms of social control regulation. The course explores the relationships between government and business: government as regulator, subsidizer, partner, and competition. (3 crs.)

ECO 251. DEVELOPMENT OF THE AMERICAN ECONOMY. A survey of the beginning, development, and growth of the American economy with emphasis on the business sector. Prerequisite: ECO 100 or ECO 201 or ECO 202. (3 crs.)

ECO 301. INTERMEDIATE MICROECONOMICS. An analysis of the theories of consumer behavior and of firms in the allocation of resources, and of general price and distribution theory, with application to current economic issues. Prerequisites: ECO 201 & ECO 202 or permission of instructor. (3 crs.)

ECO 302. INTERMEDIATE MACROECONOMICS. Analysis of the determination of national income, employment and price levels. Discussion of consumption, investment, inflation, and government fiscal and monetary policy. Prerequisite: ECO 201 & ECO 202. (3 crs.)

ECO 304. MONEY AND BANKING. Relation of money and credit to economic activity and prices; impact of public policy in financial markets and for goods and services; policies, structure and the functions of the Federal Reserve System; organization, operations, and functions of the commercial banking system, as related to questions of economic stability and public policy. Prerequisites: ECO 201 & ECO 202. (3 crs.)

ECO 307. STATE AND LOCAL FINANCE. Principles and problems of financing state and local governments. Topics include taxation, expenditures, intergovernmental grants, and governmental fiscal relations. Prerequisite: ECO 100 or equivalent. (3 crs.)

ECO 311. LABOR ECONOMICS. An introduction to labor economics, theories of the labor movement, the American labor movement, wage and employment theory, comparative labor movements and trade union impact on wages, prices, and national income. Prerequisites: ECO 201 & ECO 202. (3 crs.)

ECO 320. MATHEMATICAL ECONOMICS. A course designed to enable Economics and Business majors to understand the simpler aspects of mathematical economics. Relationships of functions and graphs, simultaneous equations, maximization techniques, and those parts of algebra and calculus required for economic analysis are presented. Prerequisites: ECO 201, ECO 202 & MAT 181 or MAT 182. (3 crs.)

ECO 322. MANAGERIAL ECONOMICS. A survey of analytical techniques available to the modern business manager. Topics include economics for managers, business forecasting, cost and production functions, industrial pricing, profit planning, business decision making. Prerequisites: ECO 201, ECO 202 & ECO 320 or a course in calculus. (3 crs.)

ECO 331. REGIONAL ECONOMICS. An introduction to regional analysis: theories of city locations and hierarchies, industrial location patterns, land-use patterns, the short-run impact of industrial change upon employment in one community and on long-run differentials of per capita income between regions. Prerequisite: ECO 100 or ECO 201 or ECO 202. (3 crs.)

ECO 342. ENVIRONMENTAL ECONOMICS. Environmental pollution, failure of the market system, and optimum resource allocation; levels of pollution abatement and public policy; energy and public policy. Prerequisite: ECO 201 & ECO 202. (3 crs.)

ECO 351. COMPARATIVE ECONOMIC SYSTEMS. An analysis of the institutional structure of each type of economy and understanding of the reasons for the similarities and differences of institutional structures by comparing capitalist, socialist, and communist economic systems. Prerequisites: ECO 100 or ECO 201 or ECO 202. (3 crs.)

ECO 379. SPECIAL PROBLEMS IN ECONOMICS. This course is designed to meet the changing interests of students and faculty. Topics vary in response to those interests. Prerequisites: ECO 201 & ECO 202 or permission of instructor. (Variable crs.)

ECO 401. INDUSTRIAL ORGANIZATION. Analysis of market structure and its relation to market performance, changing structure of U.S. industry, and pricing policies in different industrial classifications of monopoly and competition in relation to the problems of public policy. Prerequisite: ECO 201. (3 crs.)

ECO 405. PUBLIC FINANCE. A study of the role of federal, state, and local governments in meeting public wants. Topics include analysis of tax theory and policy, government expenditures, public debt management, government budgeting, benefit cost analysis and income redistribution. Prerequisites: ECO 201 & ECO 202. (3 crs.)

ECO 421. APPLIED ECONOMETRICS. The formulation, estimation and testing of economic models. Topics include single variable and multiple variable regression techniques, estimation of lagged relationships, use of dummy variables, problems of multicolinearity and autocorrelation and system of equations. Prerequisites: MAT 225, ECO 201 & ECO 202. (3 crs.)

ECO 431. INTERNATIONAL ECONOMICS. A descriptive and theoretical analysis of international trade, balance of payment accounts, comparative costs, mechanisms of international financial relations. Prerequisites: ECO 201 & ECO 202. (3 crs.)

ECO 433. ECONOMICS OF GROWTH AND DEVELOPMENT. Understanding of the obstacles to economic growth, requirements for growth, and other topics related to economic growth in underdeveloped countries. Prerequisites: ECO 201 & ECO 202. (3 crs.)

ECO 451. HISTORY OF ECONOMIC THOUGHT. An extensive survey of the development of economic thought from ancient times to the present stressing the contributions of Smith, Ricardo, Marx, Marshall and Keynes. This course should be taken quite late in the undergraduate career. Prerequisites: ECO 201 & ECO 202. (3 crs.)

ECO 492. ECONOMICS INTERNSHIP. The student is placed with a business firm, a bank, an industrial firm, a government office, a health care facility or a similar institution for on-the-job experiences related to classroom course work. This course should be taken quite late in the undergraduate career. Credit hours will range from 1 to 12 depending upon the nature of the particular assignment. Prerequisite: Senior standing or permission of instructor. A maximum of 12 credits can be used toward the completion of degree. (Variable crs.)

ECO 495. SEMINAR IN ECONOMICS. An intensive examination of selected subjects from the fields of Economics, Management, Business and Labor Relations. It is a repeatable course if course content is different. Prerequisite: Permission of instructor. (3 crs.)

Education - EDU

EDU 210. TEACHING IN A MULTI-CULTURAL SOCIETY. The development of intergroup-interpersonal awareness to promote a better understanding of different races, sexes, religious beliefs, national origins, and socio-economic backgrounds found in our multicultural society. Emphasis on developing the awareness, knowledge skill and competency needed for positive human relationships. (3crs.)

EDU 340. MAINSTREAMING EXCEPTIONAL LEARNERS. This course is designed to prepare educational personnel with the information and skills necessary for accommodating exceptional learners in a variety of school arrangements. Focus is on assessment and remediation of learning problems, classroom organization and management, teaching resources, legal issues,

curriculum considerations, parent involvement, condition of professional services, and many other issues pertinent to the education of exceptional learners in the "mainstream" of education. (3 crs.)

EDU 449. STUDENT TEACHING - SPECIAL EDUCATION. This course is only for those students who are student teaching overseas or through another college or university. (Variable crs.)

EDU 459. STUDENT TEACHING - ELEMENTARY EDUCATION. This course is only for those students who are student teaching overseas or through another college or university. (Variable crs.)

EDU 469. STUDENT TEACHING - SECONDARY EDUCATION. This course is only for those students who are student teaching overseas or through another college or university. (Variable crs.)

Educational Foundations - EDF

EDF 290. POLICY STUDIES IN AMERICAN EDUCATION. A course for prospective teachers designed to study the educational policy process at all levels, from local school districts to the federal government, as well as a study of the policies that have shaped educational practices in today's schools. Through a critical examination of a number of timely and interesting developments in contemporary education, students will relate historical, philosophical and social perspectives to contemporary interpretation. Prerequisite: Must have sophomore standing. (3 crs.)

EDF 301. COMPUTERS FOR TEACHERS. This course in educational computing provides the learner with fundamental concepts and skills that build a foundation for applying computers and other hardware and software in educational settings. The course focuses on the computer as an object of instruction, a productivity tool, and an adjunct to instruction in the classroom. Laboratory assignments requiring use of the university computer facilities are designed to provide generalizable and transferable competencies. (3 crs.)

EDF 302. APPLIED INSTRUCTIONAL TECHNOLOGY. This course is the study of the principles of selection, use and development of basic and advanced instructional technology. The student will study "Instructional Systems Technology," and appropriate media. Laboratory sessions include learning and practicing the proper operation of equipment and identifying and solving typical instructional problems. Prerequisite: EDF 301 Computers for Teachers or computer literacy by examination. (3 crs.)

Educational Studies - EDS

EDS 300 PROBLEMS OF SECONDARY EDUCATION. This is a course in professional development which focuses on the practical problems of teaching and learning in the secondary school. Field experiences enable student participation in a range of activities which provide real life experiences with the problems confronting public school teachers today. (3 crs.)

EDS 430. EDUCATIONAL TESTS AND MEASUREMENTS IN SECONDARY SCHOOLS. A consideration of the simpler statistical measures, with particular stress on the application to classroom work and of the principles underlying the construction of valid, reliable objective tests. Alternative forms of assessment such as journals, portfolios and culturally relevant strategies are also studied. (3 crs.)

EDS 440. TEACHING OF ENGLISH IN SECONDARY SCHOOLS. The application of principles of educational psychology, philosophy, and sociology to the teaching of English in secondary schools. The course includes both practical techniques of classroom practice and an investigation of the larger problems of the profession. Adequate prior content courses in English are necessary to the student undertaking this course. (3 crs.)

EDS 445. TEACHING OF SOCIAL STUDIES IN SECONDARY SCHOOLS. Methods that may be used in teaching social studies. Emphasis is placed on the philosophy, objectives, courses of study, and organization of subject matter for teaching purposes; curriculum materials; procedures; and development. (3 crs.)

EDS 455. MODERN METHODS IN SECONDARY SCHOOLS. A general methods course for those students unable to schedule specialized methods. Different approaches are modeled, then students present lessons and experiences. Classroom management and organization are included as well as extensive utilization of Information Age Technology. (3 crs.)

EDS 460. TEACHING MATHEMATICS IN SECONDARY SCHOOLS. To further develop the mathematics required to be an effective teacher of secondary school mathematics. To acquaint the student with general procedures in classroom preparation, organization, control and evaluation. To acquaint the student with specific procedures for developing a problem-solving approach to the teaching of mathematics. Results of mathematical standards according to recent research, studies and trends are indicated. The evaluation and use of technological and visual aids pertaining to mathematics are considered. (3 crs.)

EDS 461. STUDENT TEACHING AND SCHOOL LAW. This is the final and most extensive clinical experience. Students are assigned to a supervising teacher or teaching team at one of our clinical sites. The students spend full time in classroom teaching for a semester of fifteen weeks. A university supervisor observes periodically and a weekly practicum brings student teachers together to discuss common problems and concerns and those aspects of school law pertinent for classroom teachers. Student teaching is scheduled during either the fall or spring terms of the senior year. Pass/fail grade. (12 crs.)

EDS 465. DEVELOPMENTAL READING IN THE SECONDARY SCHOOL. Intended to help the prospective teachers of the Secondary Education academic subject areas develop an understanding and appreciation of the reading skills needed by their students. Methods of establishing awareness of general reading needs as well as the special skills unique to their subject areas are stressed. (2 crs.)

EDS 466. TEACHING MODERN LANGUAGES (K through 12). The course covers the theory and practice of teaching modern languages. Instruction in the use of the laboratory is given. Emphasis is given to the student developing an adequate understanding of the needs, interests, learning characteristics and motivations of students at various ages of development, K through 12. (3 crs.)

EDS 467. TEACHING OF SCIENCE IN SECONDARY SCHOOLS. This course prepares pre-service middle school and high school science teachers to engage students in understanding science through personal experience. The course emphasizes strategies that engage students in active inquiry, collaboration with peers, and acquiring and using tools of learning in an experiential learning environment. The approach of the course is experiential, inquiry-oriented and reflective. Prerequisite: 12 hours of work in the major field and junior-level status. (3 crs.)

EDS 494. STUDENT TEACHING WORKSHOP. For those individuals who have had at least one year of teaching experience in a private school, college, military, etc. Approval by the department chair and director of student teaching is required. Typically, students are placed in a public school during the month of May until the close of the school year (5-6 weeks) in order to determine competence in a public school setting for state certification. (6 crs.)

Electrical Engineering Technology - EET

EET 110. DC CIRCUITS. An introduction to the study of electrical circuits. Topics include resistance, voltage, current, mesh analysis, and nodal analysis. Network theorems pertaining to dc sources are presented. Corequisite: MAT 181. (4 crs.)

EET 160. AC CIRCUITS. An introduction to the study of electrical circuits in the sinusoidal steady state. Topics include capacitors, inductors, complex numbers, ac mesh analysis, ac nodal analysis and network theorems pertaining to ac sources. Prerequisite: EET 110. Corequisite: MAT 191. (4 crs.)

EET 170. DIGITAL ELECTRONICS DESIGN. An introduction to the design of combination and sequential digital logic circuits. Topics include number systems, codes, gates, latches, decoders, multiplexers, flip-flops, counters, A/D and D/A concepts and memory circuits. (3 crs.)

EET 210. LINEAR ELECTRONICS I. A study of solid state diodes and transistors. Methods of biasing, temperature stabilization, determining voltage gain and input resistance for small signal amplifiers. Prerequisite: EET 160. (4 crs.)

EET 220. INTRODUCTION TO ELECTRIC POWER. A study of the fundamentals of three-phase circuits, transformers, dc machines, polyphase ac machines, and single-phase ac machines. Prerequisite: EET 160. (4 crs.)

EET 260. LINEAR ELECTRONICS II. An introduction to power amplifiers, differential amplifiers, field effect transistors, operational amplifiers, frequency effects, voltage regulation, and operational amplifier applications. Prerequisites: EET 210 & MAT 281. (4 crs.)

EET 270. INTRODUCTION TO MICROPROCESSOR DESIGN. Introduction to programming concepts includes branching, stack operations, subroutines and vector interrupts. Interfacing topics include coding, drivers, D/A and A/D conversion. Prerequisite: EET 170. (3 crs.)

EET 310. METHODS IN ENGINEERING ANALYSIS. Introduction to matrix theory, classical first and second order transient analysis, active filter and oscillator design, and Fourier analysis. Computer solutions to special problems will be presented. Prerequisites: EET 260 & MAT 281. Corequisites: EET 320 & MAT 282. (4 crs.)

EET 320. NETWORK ANALYSIS. A calculus-based circuit theory course. Topics include the introduction to Laplace transforms, and the use of Laplace transforms in the study of circuit analysis, transfer functions and frequency response. Circuit analysis programming is used to compare computer solutions with analytic solutions. Prerequisites: EET 260 & MAT 281. Corequisites: EET 310 & MAT 282. (4 crs.)

EET 330. ADVANCED MICROPROCESSOR DESIGN. Applications of microprocessors and microcomputers to instrumentation, control, and communications. Topics include machine and assembly language programming, I/O interfacing circuits, advanced A/D and D/A conversions, handshaking, interrupts, serial and parallel communications and programmable timer algorithms. A semester project is required. Prerequisite: EET 270. (3 crs.)

EET 360. MICROPROCESSOR ENGINEERING. The analysis and development of MCU stand-alone controllers. The requirements for the design of industrial applications and the use of advanced software development tools and PCs as development systems will be presented. Prerequisite: EET 330. (4 crs.)

EET 370. INSTRUMENTATION DESIGN I. The design of electronic instruments utilizing linear and digital integrated circuits and opto-electronic devices. Topics will include dual slope digital voltmeters, electronic thermometers, isolation amplifiers, frequency counters and function generators. Numerical linearization methods for non linear transducers are introduced. Prerequisite: EET 320. (4 crs.)

EET 400. SENIOR PROJECT PROPOSAL. The student will submit a written proposal for a project. After approval of the project the student will be assigned a faculty advisor. Minimum requirements for the proposal are submission of a functional specification and a time schedule for completion. Prerequisite: Senior Status. Corequisite: ENG 217. (1 cr.)

EET 410. AUTOMATIC CONTROL SYSTEMS. Design of feedback control systems and devices as applied to electrical machinery and transducers. Topics will include Bode plots, the root-locus method and nyquist diagrams. Prerequisite: EET 370. Corequisite: EET 420. (4 crs.)

EET 420. INSTRUMENTATION DESIGN II. A microprocessor-based instrumentation design course utilizing linear, digital and opto-electronic devices. Software solutions to input/output problems will be considered along with software solutions to nonlinear transducer data. Prerequisite: EET 370. Corequisite: EET 410. (4 crs.)

EET 430. RF COMMUNICATIONS. Communication systems principles including: AM/FM modulation, AM/FM demodulation, transmitters, receivers, antennas, transmission lines, digital techniques and protocols. Prerequisite: EET 320. (4 crs.)

EET 440. COMPUTER NETWORKING. This course involves the electronic hardware of networking systems such as those used to connect heterogeneous computers. Major topics include locality, topologies, media standards, internetworking devices and protocols. Hands-on application of network theory is provided via a laboratory style term project involving a multi-user network computer system. The student will design and develop the hardware and communication software required to implement a multi-node microprocessor-based packet network. (4 crs.)

EET 450. SENIOR PROJECT. Employs the design, construction and analysis of an electronic device or instrument. Depending on the complexity of the project, total construction may not be required. With the approval from the advisor, group projects may also be involved. Prerequisite: EET 400. (3 crs.)

EET 460. DIGITAL SIGNAL PROCESSING. Introduction to linear systems, digital filters and the Z-Transform, and the Fast Fourier Transform. Fundamentals of sampling concepts and the interfacing of analog and digital signal processing will also be covered. Prerequisites: EET 410 & EET 360. (4 crs.)

EET 475. BIOMEDICAL ENGINEERING TECHNOLOGY. A study of widely used medical devices with emphasis upon those types used for patient care in the hospital. The Physics and Engineering of various devices will be presented and their relationship to human anatomy and physiology will be emphasized. Hospital organization and the role of the Clinical Engineering department will be examined. Prerequisite: EET 420. (4 crs.)

EET 476. BIOMEDICAL ENGINEERING TECHNOLOGY INTERNSHIP. Upon acceptance to a hospital the student will work with a Clinical Engineer and/or a Biomedical Equipment Technician inspecting, maintaining, calibrating and modifying biomedical equipment. Programs of instruction will vary from hospital to hospital, but the student will be exposed to medical devices from all special and critical care areas. Prerequisite: EET 475. (4 crs.)

Elementary Education - EDE

Prerequisites for all EDE (except EDE 100) and ECE courses include completion of 48 college or university credits with a minimum 2.5 Q.P.A., and achievement of a satisfactory score on the General Knowledge and Communication Skills tests of Praxis II: Core Battery.

EDE 100. READING, STUDY AND LISTENING SKILLS. The purpose of this course is to develop reading, study, and listening skills at the college level. Included are suggestions for taking more efficient notes, time management, locating and utilizing library resources, development of vocabulary, and improving reading and listening skills for college reading purposes. (3 crs.)

EDE 205. ART FOR THE ELEMENTARY GRADES. Emphasis is placed on the nature of creativity and its values in the development of the whole child. Creativity is given personal meaning through the exploration of art materials and techniques. The role of the classroom teacher teaching art is established. (3 crs.)

EDE 211. INSTRUCTIONAL STRATEGIES IN ELEMENTARY AND EARLY CHILDHOOD EDUCATION. This course is designed to teach students a set of teaching behaviors that are related to student achievement in the elementary and early childhood classrooms. Topics covered include: conception of elementary/early childhood curriculum, Bloom's taxonomy of cognition, questioning and discussion behaviors, utilization of thinking skills, integration of subject areas, inductive and deductive teaching, observation and assessment of children, cognitive and affective concerns of children as outlined by Piaget, and content presentation skills. Through class discussions, practice sessions, role-playing, and microteaching, the students will learn how to plan for and utilize strategies based on research in effective teaching and in the cognitive and affective development of children. (3 crs.)

EDE 300. LANGUAGE AND LITERACY IN THE ELEMENTARY SCHOOL I. This is the first in a series of two required courses that examine the development of literacy in elementary-age children. Students are taught how to teach reading, writing, listening, and speaking skills using an integrated approach, consistent with the constructivist theory of teaching and learning. Theoretical orientations to several approaches of literacy instruction are introduced, analyzed, and evaluated. Practical implications of these theories are examined in detail, and students are expected to demonstrate strategies through the use of microteaching, as well as in field work. (3 crs.)

EDE 305. MATHEMATICAL CONTENT AND METHOD IN THE ELEMENTARY SCHOOL. Emphasis is on understanding children's cognitive development and perception and their work with mathematics. To

accomplish this it is suggested that students work with children. The professor demonstrates learning activities appropriate to the developmental and academic levels of children. As time permits, and on the basis of the experiences gained through observing and working with children, critical analyses of commercial arithmetic materials and texts, as well as recent trends and current projects in arithmetic, will be considered. Prerequisites: 32 college credits, 9 natural science credits. (3 crs.)

EDE 306. TEACHING OF SOCIAL STUDIES FOR ELEMENTARY GRADES. The foundations of the social studies are examined. Instructional strategies for the constructivist classroom will be emphasized. Attention will be given to current trends and the present status of social studies. Prerequisites: 32 college credits, 9 social science credits. (3 crs.)

EDE 307. SCIENCE FOR THE ELEMENTARY SCHOOL. This course is designed to acquaint students with the history of science curricula, the content of science, and the process of science teaching. The instructor will generate enthusiasm for science, encourage scientific inquiry, demonstrate positive attitudes, enhance appreciation for science and science interests, and model effective science teaching consistent with the Elementary/Early Childhood Department's Constructivist Model for Teaching. Prerequisites: 32 college credits; 9 natural science credits. (3 crs.)

EDE 311. CHILDREN'S LITERATURE. This course acquaints the student with literature available for children and various techniques that may be employed in elementary classrooms to stimulate interest in reading and telling stories and poems. Prerequisites: 32 college credits; 9 humanities credits. (3 crs.)

EDE 320. FIELD EXPERIENCES MIDDLE SCHOOL. The student receives background and experience in working with intermediate grade children in the classroom. Lectures and classroom teaching experiences are combined to give the student an opportunity to discover an aptitude and interest in working with children. (3 crs.)

EDE 321. FIELD EXPERIENCES ELEMENTARY SCHOOL. The students receive background and experience in working with elementary grade children in the classroom. Lectures and classroom teaching experiences are combined to give students an opportunity to discover their aptitude and interest in working with young children. (3 crs.)

EDE 330. TEACHING IN THE MIDDLE SCHOOL. Successful instruction in the middle school calls for creating an environment which is responsive to the developmental needs of early adolescents. This course provides the student with an understanding of the overall structure of middle school curriculum and instruction. The historical development, goals, philosophy, and mission of middle level education will be explored. The student will be introduced to a variety to instructional strategies appropriate for the wide diversity of development among middle school students. (3 crs.)

EDE 340. LANGUAGE AND LITERACY IN THE ELEMENTARY SCHOOL II. This is the second in a series of two required courses that examine the development of literacy in elementary-age children. Students review the theoretical bases of an integrated approach to teaching the language arts. Specific strategies that reflect these theories are then investigated, demonstrated, and practiced. Such strategies teach children necessary literacy skills through a meaning-centered approach, and emphasize the integration of all subject areas, as well as the connection between the language arts modes. Students are expected to demonstrate their abilities to connect theory to practice in field work. (3 crs.)

EDE 450. ASSESSING CHILDREN'S PERFORMANCE. This course presents practical methods and techniques for planning, construction and use of oral, performance, essay, and objective tests with an assumption that evaluation's role in the teaching/learning process is both active and fundamental. (3 crs.)

EDE 461. STUDENT TEACHING. During this course the student is assigned to work in two classrooms in the public schools. Under supervision, the student observes and participates in all teaching activities related to the performance of a teacher's work in the elementary grades. Besides field work, students attend practicum class once a week. Discussions are centered around the current materials utilized in all subject areas. Pennsylvania school laws relevant to the work of the classroom teacher are analyzed and discussed. Opportunities are provided to discuss problems encountered by students in their student teaching experiences. Teaching opportunities are identified and discussed on a weekly basis. (12 crs.)

English - ENG

ENG 100. ENGLISH LANGUAGE SKILLS. A beginning course which provides guided practice in writing and reading, with emphasis on the interrelationship of reading, thinking, and writing. English Language Skills stresses fundamental principles of and attitudes toward writing, as well as how to put these principles and attitudes into practice. It emphasizes the ability to read correctly and to organize material effectively and, by adherence to the innate logic of language (revealed in its rules of grammar, syntax, punctuation and vocabulary choice), to express ideas clearly and precisely. (3 crs.)

ENG 101. ENGLISH COMPOSITION I. Composition I is a sequel to English Language Skills. It provides guided practice in writing, with emphasis on thoughtful analysis of subject matter, clear understanding of the writing situation, flexible use of rhetorical strategies, and development of stylistic options, particularly those related to an understanding of a variety of purposes and voices. ENG 101 continues the development of the essential writing, reading and thinking skills stressed in ENG 100. (3 crs.)

ENG 102. ENGLISH COMPOSITION II. The sequence of Composition I - Composition II provides guided practice in writing, with an emphasis on more demanding writing situations. It continues the work begun in Composition I with more complicated rhetorical strategies and stylistic options, especially audience-centered considerations. ENG 102 introduces research and research writing at the undergraduate level. (3 crs.)

ENG 106. INTRODUCTION TO POETRY. An introduction to the elements of poetry through the close analysis and explication of selected poetry from a variety of poets. (3 crs.)

ENG 107. INTRODUCTION TO FICTION. An introduction to the elements of fiction through the close reading of selected short stories and novels by a variety of authors. (3 crs.)

ENG 108. INTRODUCTION TO DRAMA. An introduction to the basic elements of drama. Readings will be selected from works from the Greek Classical Period to the Modern Age. (3 crs.)

ENG 151. WORD PROCESSING. An introduction to the basic concepts of word processing. The student learns such operations as disk formatting, editing and printing standard document files, copying files from other sources, creating simple database files, and merging files to do mass-mailings. The course assumes no prior knowledge of computers. This course may not be used to satisfy Humanities requirements in the General Education program. (1 cr.)

ENG 155. BLACK LITERATURE. An introduction to the writings of Black Americans in poetry, fiction, and drama, ranging from the Harlem Renaissance of the 1920s to the contemporary productions of Leroi Jones, Ishmael Reed and Toni Morrison. (3 crs.)

ENG 167. JOURNALISM I (NEWSWRITING). An introduction to basic news gathering and newswriting taught by in-class exercises early in the semester, followed by weekly assignments that require submissions to the California Times. (3 crs.)

ENG 169. JOURNALISM II (FEATURE WRITING). Feature writing and in-depth news reporting. Students write four feature articles suitable for publication in the California Times. (3 crs.)

ENG 191. STUDENT PUBLICATIONS WORKSHOP. The university newspaper and yearbook serve as laboratories. The student practices writing, editing, photography, layout, and production. Above all, the student learns to work against the clock, a journalistic necessity. (1 cr.)

ENG 203. GREAT BOOKS. The texts and historical backgrounds of selections from the most highly regarded literature of the world. The range is from the classical Greek era to the twentieth century. (3 crs.)

ENG 205. WORLD LITERATURE TO 1600. Examples of works from a variety of periods and cultures through 1600 are examined for their literary merit and national characters. Works are read in translation. (3 crs.)

ENG 206. WORLD LITERATURE FROM 1600. Examples of works from a variety of cultures and periods after 1600 are examined for their literary merit and national characters. Works are read in translation. (3 crs.)

ENG 211. BUSINESS WRITING I. An introduction to the analysis, writing, and oral presentation of formal and semi-formal documents essential to the business communities. Prerequisite: ENG 101. (3 crs.)

ENG 212. BUSINESS WRITING II. A continuation in the practice of those skills developed in Business Writing I. Prerequisite: ENG 211 Business Writing I or equivalent writing ability. (3 crs.)

ENG 215. LITERATURE AND AGING. The study of literature that includes aging as a thematic device. (3 crs.)

ENG 217. SCIENTIFIC AND TECHNICAL WRITING. An introduction to the specific techniques used in the preparation of reports and other scientific documents. Recommended for Science and Technology majors. Prerequisite ENG 101. (3 crs.)

ENG 218. SCIENTIFIC AND TECHNICAL WRITING II. A problem solving approach to technical writing: adapting to various audiences, organization of complex documents, computer documentation. Students will prepare extensive technical reports. (3 crs.)

ENG 254. AMERICAN JOURNALISM: A study of the recent history of journalism and of the present state of the profession. The emphasis is on print journalism; however, the news gathering and reporting aspects of radio and television are covered. Prerequisites: ENG 167 & ENG 169. (3 crs.)

ENG 265. THE AMERICAN EXPERIENCE IN LITERATURE: NINETEENTH CENTURY. A survey of selected works which were very popular; were influential in the course of American history; and reveal facets of American life in the 19th century. (3 crs.)

ENG 266. THE AMERICAN EXPERIENCE IN LITERATURE: TWENTIETH CENTURY. A study of selected literature of twentieth century America in the context of major social, historical, economic, and intellectual trends. In addition to the treatment of standard twentieth century classics, books which have had a wide popular appeal or which have influenced or interpreted the cultural life of modern America are studied. All genres are included, with special emphasis on fiction and non-fiction. (3 crs.)

ENG 301. ENGLISH LITERATURE I. A survey of English literature from the beginnings in the sixth century to the late eighteenth century. (3 crs.)

ENG 302. ENGLISH LITERATURE II. A survey of English literature from the Romantic poets to the present day. (3 crs.)

ENG 306. PRESS LAW AND ETHICS. This course helps student journalists understand not only what they can or can not do by law, but what they should or should not do within commonly accepted standards of good taste and morality. (3 crs.)

ENG 308. RESEARCH FOR WRITERS. For students in each of the Professional Writing concentrations. Basic library materials and techniques, on-campus resources, government documents, research libraries, and advanced techniques of interviewing, document analysis, etc. Concludes with a prepublication draft of a researched paper in the student's area of specialization. (3 crs.)

ENG 310. SURVEY OF OLD AND MIDDLE ENGLISH LITERATURE. A study of English literature from the beginnings to approximately 1500. Some of the topics, authors, and works are Beowulf, elegiac and Christian poetry, the rise of the drama, the romance (Sir Gawain and the Green Knight and Thomas Malory's Morte D'Arthur), and selections from Geoffrey Chaucer's Canterbury Tales. Most of the writing is read in Modern English versions. Attention is paid to historical and social backgrounds. (3 crs.)

ENG 312. JOURNALISM III. Working on college publications, editing, proofreading, and rewriting materials for print are learned in the classroom and in the production of actual publications. (3 crs.)

ENG 313. SPORTSWRITING I: A study of the history of sportswriting in America and the techniques of writing daily coverage of sports and athletes. Students will study interviewing, finding and using statistics, the standards and practices of the profession and the make-up, layout and design of the daily sports page. Students will be assigned beats and will be asked to write at least one story per week. (3 crs.)

ENG 314. SPORTSWRITING II: A study of the techniques of writing lengthy, in-depth stories about sports and athletes. Students will be asked to write columns, feature stories and profiles and to do investigative reporting. Prerequisites: ENG 167 & ENG 313. (3 crs.)

ENG 315. SURVEY OF AMERICAN WOMEN WRITERS: METHOD AND TEXT. The importance of both text and method in the study of American women writers is emphasized in this course. Assigned readings and research workshops introduce students to a variety of texts and sources as well as to methods for reading, discovering, and interpreting writings. Integration of text and method is achieved through a series of writing and research projects that are tied to the assigned readings. (3 crs.)

ENG 316. MYTHOLOGY I. An exploration of the origins of mythology and various myths through a study of samples from Greek, Roman, Nordic, Oriental, African, and American Indian mythologies. The roles of gods and heroes in the indicated cultures are also studied. (3 crs.)

ENG 317. MYTHOLOGY II. A further examination of mythology, with emphasis on legends and folktales, through study of English, Irish, German, Italian, French, and American mythologies. (3 crs.)

ENG 318. POETICS. Through readings from a text on poetic theory, essays on poetry by poets, and an anthology of poetry, students learn to analyze poems in great detail, stressing poetry as an act of language and something which is made as much as it is inspired. Students become acquainted with the variety of means by which the literary craftsman creates feeling and meaning. (3 crs.)

ENG 321. THE ENGLISH RENAISSANCE: SKELTON THROUGH DONNE. A study of nondramatic prose and poetry chosen from such writers as Thomas Wyatt, the Earl of Surrey, Thomas Sackville, John Skelton, Sir Philip Sidney, Edmund Spenser, William Shakespeare, and John Donne, with emphasis on such literary genres as the lyric and sonnet, and an examination of various philosophical, historical, and social documents. (3 crs.)

ENG 322. THE ENGLISH RENAISSANCE: BACON THROUGH MARVELL. A study of the nondramatic prose and poetry of England in the seventeenth century from the works of John Donne, Ben Jonson, Robert Herrick, George Herbert, John Milton, and Henry Vaughan. Emphasis on the three schools of poetry of this century. (3 crs.)

ENG 334. NEWSPAPER REPORTING. A professional level course that acquaints students with basic newsroom procedures and assignments. Prerequisites: ENG 167 & ENG 169. (3 crs.)

ENG 336. COMPUTER ASSISTED NEWSREPORTING. An advanced level journalism course designed to show students how to gain access to computer records and how to arrange that material into meaningful patterns using an interrelational data base program and a simple spread sheet program. The course assumes no prior knowledge of computers and is designed for the computer novice. (3 crs.)

ENG 337 SURVEY OF AMERICAN LITERATURE I. This course spans American literature from its colonial inception to the end of the Civil War, the literature's formative years, focusing on diverse forms and voices of expression. This literature presents writings of Native Americans, Colonialists, Federalists, Romantics, Trancendentalists, Slaves, and others as formative expressions of our American heritage. (3 crs.)

ENG 338 SURVEY OF AMERICAN LITERATURE II. The second course of the two-course survey begins with the literature of the Reconstruction period, Realism and later Naturalism, and moves to the Experimental writing of the Twentieth Century, culminating in works by contemporary authors. The emphasis is on showing the development of an electic and uniquely American literature. (3 crs.)

ENG 341. ROMANTIC LITERATURE. An intensive study of selected works by such Romantic poets as William Blake, William Wordsworth, Samuel Taylor Coleridge, Percy Bysshe Shelley, John Keats, and Lord Byron. (3 crs.)

ENG 342. VICTORIAN LITERATURE. An historical and critical survey of the poetry and nonfictional prose of the Victorian period through such writers as Alfred Tennyson, Robert and Elizabeth Barrett Browning, Thomas Carlyle, Matthew Arnold, Dante Gabriel and Christina Rossetti, Gerard Manley Hopkins, John Stuart Mill, John Ruskin, John Henry Newman, T. H. Huxley, and Walter Pater. (3 crs.)

ENG 345. ENGLISH GRAMMAR AND USAGE. Provides future English teachers, professional writing majors, and other interested students, with a sophisticated background in English grammar. The course covers a variety of grammatical theories, issues of mechanical correctness in writing, and the sociology of usage. (3 crs.)

ENG 346. HISTORY OF THE ENGLISH LANGUAGE. A survey of the development of the language from its Germanic base to the emergence of American English. Explanations of sound shifts and foreign and social influences. (3 crs.)

ENG 347. INTRODUCTION TO LINGUISTICS. An examination of the several areas of language study: history of the language, phonology and morphology, grammars (traditional and modern), and contemporary American usage, dialects, lexicography, and semantics. (3 crs.)

ENG 348. HISTORY OF LITERARY CRITICISM. An examination of major critical documents from Plato through the modern critics. An intensive examination of the works themselves, with some additional concern on their place in literary history. (3 crs.)

ENG 351. PUBLISHING THE MAGAZINE. Students in this course publish a magazine, Flipside. They contribute works of literature and reportage, illustrate it with original work or with photographs, solicit contributors, finance the magazine through advertising, and establish editorial policy. (3 crs.)

ENG 352. STUDIES IN WRITING. A study in style, its definition, its analysis, and the techniques modern writers of creative nonfiction use to achieve it. Students analyze the work of such writers as Tom Wolfe, Joan Didion, Hunter Thompson and Truman Capote, then apply to their own prose the techniques these writers use. (3 crs.)

ENG 355. SURVEY OF THE ENGLISH NOVEL I: THE BEGINNING THROUGH SCOTT. A study of the development of the novel from its beginnings through the Romantic period, with emphasis on Daniel Defoe, Samuel Richardson, Henry Fielding, Tobias Smollett, and Jane Austen. (3 crs.)

ENG 356. SURVEY OF THE ENGLISH NOVEL II: DICKENS TO THE PRESENT. A study of the novels and novelists of the Victorian period and the twentieth century, including Charles Dickens, Charlotte, Emily and Ann Brontë, W. M. Thackeray, George Eliot, Joseph Conrad, James Joyce, and Virginia Woolf. (3 crs.)

ENG 357. TWENTIETH CENTURY BRITISH LITERATURE TO WORLD WAR II. A study of fiction, drama, and poetry with emphasis on W. B. Yeats, D. H. Lawrence, George Bernard Shaw, James Joyce, Joseph Conrad, Virginia Woolf, E. M. Forster, and W. H. Auden. (3 crs.)

ENG 358. CONTEMPORARY LITERATURE SINCE WORLD WAR II. An exploration of texts, in a variety of genre including major movements, critical, social and political from writings both in English and in translation. (3 crs.)

ENG 371. CRITICAL THEORY AND THE TEACHING OF LITERATURE. A required course for English majors in the Secondary English track, Critical Theory and the Teaching of Literature shows students how to relate contemporary literary criticism to the teaching of literature. The varieties of literary criticism covered include New Criticism, reader-response criticism, deconstructive criticism, psychological criticism, feminist criticism, and New Historicism. The literature studied emphasized items typically taught in secondary schools, including both canonical (e.g., Shakespeare's plays) and non-canonical (e.g., Young Adult literature and Multicultural literature) works. (3 crs.)

ENG 372. COMPOSITION THEORY AND THE TEACHING OF WRITING. A required course for English majors in the Secondary English track, Composition Theory and the Teaching of Writing is an introduction to rhetorical theory as it concerns the nature of writing and the teaching of writing. The course also offers practical information about, and experience with, modern course design and pedagogy, as well as discussion of the politics of writing instruction in contemporary schools. (3 crs.)

ENG 375. ADVANCED WRITING. The theories and practice of expository, persuasive, and specialized report writing. Prerequisites: ENG 101, ENG 102 or equivalent writing ability. (3 crs.)

ENG 376. CREATIVE WRITING: FICTION. Techniques of fiction are studied and applied to the writing of short stories, and students are encouraged to use and shape their own experience, transmitting those everyday things around them into fictional realities. (3 crs.)

ENG 377. CREATIVE WRITING: POETRY. Aspects of poetry, such as line length, rhythm, sound patterns and imagery, are discussed. Students will apply those techniques to their own experience and vision, developing a poetic voice or style. (3 crs.)

ENG 378. CREATIVE WRITING: DRAMA. Writing techniques for the modern stage; students progress from idea through written text to the production of a scene or a one-act play. (3 crs.)

ENG 401. COPYWRITING. Students who have already taken the basic advertising course are expected to improve preexisting writing skills through individual and group projects in the areas of direct mail advertisements, newspaper and magazine space advertisements, industrial newsletters and brochures, radio and TV advertisements. Each student writes at least two usable advertisements for off-campus and one for a campus program or organization. Not for beginners. Prerequisite: ENG 437. (3 crs.)

ENG 415. CHAUCER. The Canterbury Tales and other works. (3 crs.)

ENG 419. INTERNSHIP IN PROFESSIONAL WRITING. Introduces students to the competitive world of professional writing. Students and cooperating institutions conclude a formal agreement whereby they work at a job and simultaneously receive undergraduate credit. All details of the course are to be worked out with the Coordinator of Professional Writing. (Variable crs.)

ENG 425. SHAKESPEARE. Explores in considerable depth, and with special reference to the condition of Shakespeare's times and theater, some of his greatest plays, especially (a) those most often studied in secondary school and (b) his great tragedies. (3 crs.)

ENG 427. MILTON. An examination of the major poetry: Paradise Lost, Paradise Regained, Samson Agonistes, and Lycidas. The prose is treated insofar as it is related to the poetry. (3 crs.)

ENG 430. ADAPTATION OF LITERARY MATERIALS. Adaptation of literature to the mechanical demands of television, radio, theater, and film. While remaining faithful to an author's intent, the student must adapt written texts to each of the following: television, theater, and film. (3 crs.)

ENG 435. ARTICLE WRITING. The styles and techniques of article writing. The student learns the editorial demands of numerous magazines, and demonstrates versatility and writing ability by tailoring the work to the demands. Promotes astuteness by showing how to illustrate, "package," and market a special kind of writing. (3 crs.)

ENG 437. ADVERTISING. An introduction to marketing theories, behavior patterns, and techniques of advertising campaigns: copywriting, layout, and production of advertising through working for an actual client. (3 crs.)

ENG 440. LINGUISTICS AND THE TEACHING OF ENGLISH. The purpose of this course is to help prepare English and Language Arts majors through an understanding of two applications of linguistics to language learning and research. In the first application, students will examine linguistic research focused upon the study of schooling and the teaching and learning of language to advance an understanding of students' developing reading, writing and literary practices. In the second application, students will analyze various linguistic research methodologies to develop a sense of how they might apply one or more of them to their own teaching. Assignments and course readings are intended to encourage students to acquire a critical sense of pedagogical practice used in the teaching of reading and writing, as well as a critical sense of the relative merit of various research approaches to the study of language learning. (3 crs.)

ENG 445. DESCRIPTIVE LINGUISTICS. An examination of the methods used by linguists to describe languages in terms of their internal structures. Topics explored include world language families, language classification, writing systems, inventories of speech sounds, and other related material. (3 crs.)

ENG 448. PRACTICAL CRITICISM. Provides examples of criticism and the opportunity to criticize poetry, fiction, and drama. (3 crs.)

ENG 478. DIRECTED PROJECTS. (Variable crs.)

ENG 481. STUDIES IN OLD AND MIDDLE ENGLISH LITERATURE. Arthurian romance, medieval drama, Beowulf, medieval ballads, Old English poetry. (3 crs.)

ENG 482. STUDIES IN RENAISSANCE LITERATURE I. Elizabethan lyric poetry, pre-Shakespearean drama, Jacobean drama, Renaissance prose, the school of Spenser, Metaphysical poetry, Cavalier poetry. (3 crs.)

ENG 483. STUDIES IN THE RESTORATION AND EIGHTEENTH CENTURY. Restoration drama, Augustan satire, the Scriblerus Club, periodical literature, neoclassical criticism. (3 crs.)

ENG 484. STUDIES IN NINETEENTH CENTURY LITERATURE. Nineteenth century drama, Romantic prose, nineteenth-century literary criticism, the pre-Raphaelites, the Edwardians, and the Georgians. (3 crs.)

ENG 485. STUDIES IN TWENTIETH CENTURY ENGLISH LITERATURE. Contemporary trends in literature, the war novel, the poets of the thirties, Irish literature, the British novel and theater. (3 crs.)

ENG 487. STUDIES IN AMERICAN LITERARY GENRES. The American short story, the nineteenth century American novel, the twentieth century American novel, modern American poetry, American drama, American nonfiction. (3 crs.)

ENG 488. STUDIES IN DRAMA. Classical drama, theater of the absurd, continental drama, film and television as drama, realism and naturalism in drama. (3 crs.)

ENG 495. CREATIVE WRITING SEMINAR. The fictional principles learned in ENG 376 are applied to the writing of major creative work, such as novella, and the student is given the opportunity to polish and extend writing skills previously acquired. (3 crs.)

ENG 496. WRITING FOR PUBLICATION. Students analyze regional and national markets and refine their work for publication. They are expected to publish at least one work during the semester. (3 crs.)

Environmental Studies - ENS

ENS 101. INTRODUCTION TO ENVIRONMENTAL SCIENCE. The broad field of environmental management including humans' biological basis, soil and land use, water, air pollution and noise pollution, and agencies and laws associated with the above topics. No one area is covered in depth. Rather, the student is introduced to each problem, its source, current corrective measures, and possible future technology. Three lecture hours weekly. (3 crs.)

ENS 341. TECHNIQUES IN WATER AND WASTEWATER ANALYSIS. A study of the chemical testing of water in wastewater plants, streams, and drinking water sources. Emphasis is placed on learning acceptable levels of chemicals in different types of water. Samples of water from sources of concern are analyzed in the laboratory portion of the course. Three lecture hours and three laboratory hours weekly. Prerequisites: CHE 101 & CHE 102. (4 crs.)

ENS 380. WILDLIFE ISSUES. This course is designed to familiarize students with current issues in wildlife biology allowing them to propose and discuss possible solutions. The course will consist of field trips and projects emphasizing wildlife issues in the Northeastern United States. Trips will be supplemented with discussions of national and international wildlife issues from current literature. (4 crs.)

ENS 420. PRINCIPLES OF WILDLIFE MANAGEMENT. This course is designed to provide students with an understanding of the philosophies and concepts of scientific wildlife management. Major emphasis will be placed on wildlife management in North America, but differing perspectives from other regions of the world will be incorporated into the course. Topics to be covered will include monitoring habitats and habitat management, population exploitation and administration, economics, and socio-political topics as they relate to wildlife management. Three lecture hours and three laboratory hours weekly. Prerequisites: BIO 115 & BIO 120. (4 crs.)

ENS 423. WILDLIFE MANAGEMENT TECHNIQUES. This course will cover techniques commonly used by wildlife biologists with emphasis on those applicable to birds and mammals. Important techniques covered in the course include aging and sexing of important game species, habitat measurement and evaluation, population analysis, and analysis of food habits. The lecture portion of the course provides an introduction to common techniques and the lab emphasizes practical use and application of those techniques. Three lecture hours and three laboratory hours weekly. Prerequisites: BIO 115, BIO 120 & BIO 125. (4 crs.)

ENS 430. AIR QUALITY MONITORING. The technologies involved in the abatement of emissions from mobile and stationary sources, monitoring techniques, and air quality standards. Three lecture hours weekly. Prerequisites: CHE 331, CHE 361, PHY 121, PHY 122, & MAT 215. (3 crs.)

ENS 431. SOLID WASTE MANAGEMENT. The fundamental techniques involved in the collection, processing, and disposal of urban, industrial, and agricultural wastes. Three lecture hours weekly. Prerequisites: CHE 331. (3 crs.)

ENS 432. ENVIRONMENTAL REGULATIONS. This course will cover the history of natural resource protection, local, state, and federal laws and policy, enforcement, and current issues. Lectures will include discussion of laws ranging from the Clean Air act to local Fish and Wildlife regulations. (3 crs.)

ENS 459. ENVIRONMENTAL RESEARCH PROBLEMS. An independent study with a cooperating faculty member. Emphasis on scientific research on contemporary environmental problems. These independent studies are as field-oriented as possible, with a final research paper written in proper scientific format. This course is not repeatable. (3 crs.)

ENS 475. WETLANDS ECOLOGY. A coordinated lecture/laboratory approach that will emphasize wetlands within the continental United States. The course will provide a background in both historical and modern wetland issues; characteristics of freshwater, estuarine and marine wetland types, including important plants and animals of each; processes of wetland determination and delineation; regulatory framework of wetlands protection; and procedures involved in wetland restoration and conservation. Prerequisites: BIO 310 and permission of instructor. (4 crs.)

ENS 492. ANIMAL POPULATION DYNAMICS. This course is designed to provide students with an understanding of theoretical and applied aspects of animal population dynamics. The course will examine variation in population size and sex/age composition, reproduction and mortality, and quality and condition of animals in populations. Emphasis will be placed on principles and techniques used by wildlife ecologists to quantify and predict populations of vertebrate animals. The lecture portion of the course will include lecture and discussion on issues and concepts in population dynamics. The lab portion of the course will emphasize application of common techniques and models used by wildlife population ecologists. Three lecture hours and three laboratory hours weekly. Prerequisites: BIO 310 & MAT 215. (4 crs.)

ENS 495. DESIGN AND ANALYSIS. The purpose is to provide with the theoretical and applied basis of experimental design, sampling theory and sampling designs, data input and output, statistical analysis and interpretation of research studies. The application of computer methods for data base, spreadsheet, word processing, and statistical packages will also be emphasized. Three lecture hours weekly. Prerequisites: BIO 115 & MAT 273 or MAT 281 or permission of the instructor. (3 crs.)

Finance - FIN

FIN 201. INTRODUCTION TO FINANCE. A survey course which covers an introduction to financial markets and institutions responsible for the flow

of funds in the economy. The basic principles and concepts which assist the market participants in making sound financial decisions are discussed. Prerequisite: ECO 100 is recommended. (3 crs.)

FIN 211. PERSONAL MONEY MANAGEMENT. A guide to personal finance to best meet one's objectives and make financial decisions easier. Topics include budgets, major purchases, use of credit and bank loans, insurance, real estate and investment in securities, taxes and estate planning. Prerequisite: ECO 100 or permission of instructor. (3 crs.)

FIN 301. FINANCIAL MANAGEMENT. The study of financial analysis, planning and control, including working capital management, capital budgeting, cost of capital, and other selected subjects. Advanced techniques of financial analysis are employed. Prerequisites: ECO 201 & MAT 171. MAT 225 is recommended. (3 crs.)

FIN 302. ADVANCED FINANCIAL MANAGEMENT. A continuation of FIN 301. An intensive study of cost of capital, long-term financing and analysis of cases relating to financial decisions of firms. Prerequisite: FIN 301. (3 crs.)

FIN 305. INVESTMENTS. An introduction to financial investments. Topics include securities and securities markets, investment risks, returns and constraints, portfolio policies, and institutional investment policies. Prerequisite: MAT 171 or permission of instructor. (3 crs.)

FIN 341. INSURANCE AND RISK MANAGEMENT. A survey of the nature and significance of risk and the basic ideas, problems, and principles found in modern insurance and other methods of handling risk. (3 crs.)

FIN 351. REAL ESTATE FUNDAMENTALS. A basic cognitive course covering physical, legal and economic aspects of real estate. Topics include valuation, agreements of sale, title, leasing, settlements and landlord-tenant relations. (2 crs.)

FIN 352. REAL ESTATE PRACTICE. Role of the real estate agent in listing, sales contract, financing, and completion of RESPA approved settlement sheet. The course examines the legal and ethical aspects of brokerage. (2 crs.)

FIN 405. ADVANCED INVESTMENT ANALYSIS. Systematic approach to security analysis and valuation; portfolio construction and management. Prerequisite; FIN 305 or permission of instructor. (3 crs.)

FIN 411. FINANCIAL MARKETS AND INSTITUTIONS. Description and analysis of major financial institutions, money and capital markets. Current topics in financial market and institutions. (3 crs.)

FIN 531. BANK MANAGEMENT. Detailed analysis of operational decisions faced by bank managers in the areas of loans, investments, sources of funds, and liability management. (3 crs.)

French - FRE

FRE 101. ELEMENTARY FRENCH I. For the student without previous knowledge of French. The development of the fundamentals of correct idiomatic French. Instruction in basic audio-lingual comprehension, sentence structure, reading, writing, and speaking. Classroom instruction is supplemented by laboratory study and practice. Three class hours each week and one hour language laboratory per week. (3 crs.)

FRE 102. ELEMENTARY FRENCH II. A continuation of French 101. Three class hours each week and one language laboratory per week. Prerequisite: FRE 101 or one year of high school French. (3 crs.)

FRE 203. INTERMEDIATE FRENCH I. French grammar and reading. A review of essential French grammar. Development of audio-lingual comprehension, reading and writing facility. Three class hours each week; one hour language laboratory per week. Prerequisites: FRE 101 & FRE 102 or two years of high school French. (3 crs.)

FRE 204. INTERMEDIATE FRENCH II. Continuation of French 203. Oral-aural work continues but is accompanied by a development of reading skill through discussion of selected prose and poetry. Three class hours and one hour language laboratory each week. Prerequisite: FRE 203 or equivalent. (3 crs.)

Culture Courses are taught in English and are intended to satisfy General Education Humanities requirements as well as those in the major. One culture course is offered each semester.

FRE 240. THE MIDDLE AGES AND THE RENAISSANCE (800-1600). This course surveys the evolution of French culture from the Middle Ages to the end of the sixteenth century, from an age of analogy to one of skepticism. While it follows sociological, political, philosophical and historical developments to a certain degree, the course puts its primary emphasis on the artistic domains of literature, music, architecture, and the visual arts of the period. In so doing, this course illustrates the ways in which France has been influenced by its rich cultural heritage. (3 crs.)

FRE 241. THE SEVENTEENTH CENTURY AND THE CLASSICAL AGE. This course surveys the evolution of French culture from the early seventeenth century or the Baroque (1600-1640) to the classical period (1640 to the end of the century). The course seeks to introduce the student to the history of French thought in the Splendid Century. While it follows sociological, political, philosophical and historical developments to a certain degree, its primary emphasis is on the artistic domains of literature, music, architecture, and the visual arts of the period. In so doing, this course illustrates the ways in which France has been influenced by its rich cultural heritage. (3 crs.)

FRE 242. THE EIGHTEENTH CENTURY AND ENLIGHTENMENT. This course surveys the evolution of French culture throughout the Age of Enlightenment, when scientific discovery and new historical methods acted as agents of change upon the traditional foundations of belief. We will consider how these changes affected French thought, especially in the artistic domains of literature, music, architecture, and the visual arts of the period. The course will introduce the student to this age of criticism and reconstruction, an age viewed as the crisis of the European mind and gave birth to the philosophe, or philosopher, one who was not only involved with the theories but with social reform as well. These reforms in human institutions and thought will be shown to terminate in the revolution of 1789 and the end of the Ancient Regime. (3 crs.)

FRE 243. THE AGE OF FRENCH ROMANTICISM: FROM THE NAPOLEONIC EMPIRE TO THE REVOLUTION OF 1848. This course surveys the evolution of French culture throughout the romantic movement which permeated the sensibility of the young in France under the reign of Louis XVI and which reached a true flowering in the nineteenth century, particularly from 1820 to 1845. Both the precursors and the masters of this movement are considered through a study of the artistic expression of the times. (3 crs.)

FRE 244. THE AGE OF FRENCH REALISM: THE SECOND EMPIRE TO THE AFTERMATH OF THE FRANCO-PRUSSIAN WAR. This course surveys the evolution of French culture during the Age of Realism; including the Franco-Prussian War, positivism and its aftermath. This period encompasses the dictatorship of Napoleon III, a monarchy marked by material success among the middle class and by disappointment and pessimism among thinkers, writers, and artists. This course considers the artistic achievements of the period within the framework of the sociological, political, and historical setting. It studies two separate schools of art, naturalism and symbolism and seeks to illustrate how these conflicting schools of artistic expression manifested themselves in the principle works of literature, philosophy, music, and the visual arts. (3 crs.)

FRE 245. THE BIRTH OF THE MODERN FRENCH CULTURE IN THE ARTS 1900-WORLD WAR II. This course surveys the evolution of French culture from 1900, the time of the Belle Epoque or Beautiful Period at the turn of the century, to the advent of the Second World War. While the course follows the sociological, political, and historical developments of the period, it puts emphasis on the artistic ramifications of this period of conflict and rapid change. The inter-war years are treated in all their artistic output, especially in inter-war theater, fiction, and the presence of the school of Surrealism in poetry, fiction, theater, and art. (3 crs.)

FRE 246. CONTEMPORARY FRENCH CULTURE IN THE ARTS SINCE WORLD WAR II. This course surveys the evolution of French culture from the Occupation and Vichy Regime in France to the present day. It seeks to introduce the student to the literature, philosophy, music, films, and visual arts of the period which reveal the rich cultural heritage of France. As an orientation to the cultural arts, consideration will be given to the impact

which important geographical, social, and historical elements had upon them. (3 crs.)

FRE 311. FRENCH CONVERSATION, COMPOSITION, AND PHONETICS I. Cultural themes as a basis for idiomatic conversation and discussions. Written compositions are assigned to teach the student how to write correct French. The course also provides a systematic study of the sounds and sound patterns of the French language. Three class hours and one hour language laboratory each week. Prerequisite: FRE 204. (3 crs.)

FRE 312. FRENCH CONVERSATION, COMPOSITION, AND PHONETICS II. Continuation of French 311 on a more advanced level as reflected in conversation, composition, and exercises in phonetic transcription. Prerequisite: FRE 311. (3 crs.)

FRE 401. ADVANCED COMPOSITION: GRAMMAR AND STYLISTICS. An in-depth grammatical analysis of the French language through intensive practice in exercises, compositions, and translations. It is required of all majors in Liberal Arts as well as those seeking a teacher certification degree or certification in French. Prerequisite: FRE 312. (3 crs.)

FRE 421. SURVEY OF FRENCH LITERATURE I. An introduction to French literature from the Middle Ages to 1800 through an examination of representative novels, plays, and poems of the period. Three class hours each week. (3 crs.)

FRE 422. SURVEY OF FRENCH LITERATURE II. An introduction to French literature from 1800 to the present through an examination of representative novels, plays, and poems of the period. Three class hours each week. (3 crs.)

FRE 450. FOREIGN LANGUAGE COLLOQUIUM IN FRENCH. An advanced course in intensive spoken contemporary French required of all French majors as well as those seeking teacher certification in French. Prerequisite: FRE 311. (3 crs.)

FRE 469. STUDIES IN FRENCH LITERATURE. Subject matter to be arranged. Designed for French majors who wish to take additional credits and/or study aboard. Prerequisite: 18 hours of French. (Variable crs.)

General Engineering Technology – GET

GET 101. INTRODUCTION TO ENGINEERING TECHNOLOGY. As the first course in the engineering technology core, this course introduces students to the various fields of engineering technology and presents an overview of career possibilities. The courses focuses on fundamental principles that cross the boundaries of engineering technology curricula, demonstrates how mathematics and physical sciences are integrated into the solution of problems, and introduces students to computer aided drafting. Two lecture hours and three laboratory hours per week. (3 crs.)

Geography - GEO

GEO 100. INTRODUCTION TO GEOGRAPHY. Introduces students to regional differences throughout the world in terms of landforms, climates, soils and vegetation as well as population characteristics and economic activities. Representative areas such as Western Europe, Russia, Japan and Latin America are developed. (3 crs.)

GEO 105. HUMAN GEOGRAPHY. The course provides insights into the existing patterns and distributions of various social groups. Broad outlines of human evolution, development and demographic patterns are emphasized. (3 crs.)

GEO 110. MAP PRINCIPLES. A non-technical course to develop competence in development, recognition, understanding and evaluation of map information. Interpretation of thematic maps, both regional and world, is emphasized. (3 crs.)

GEO 150. SURVEY OF TRAVEL AND TOURISM. An overview of the travel and tourism industry is emphasized. Topics include introductory principles, measuring and forecasting demand, tourism planning, tourism marketing, tourism development, and the role of the geographer. (3 crs.)

GEO 155. HOSPITALITY INDUSTRY & OPERATIONS. An introduction to the field of hospitality services. Topics covered relate directly to the operation of resorts and hotels. (3 crs.)

GEO 200. ECONOMIC GEOGRAPHY. The study of areal variation on the earth's surface in man's activities related to producing, exchanging, and consuming resources. (3 crs.)

GEO 205. WORLD CITIES/GEOGRAPHY OF TOURISM. The geography of tourism in selected cities of the world with an emphasis on form and function. Topics include an analysis of resources for tourism, the organization of related land use patterns, and developmental processes. (3 crs.)

GEO 210. URBAN GEOGRAPHY. An investigation of city environments. Topics investigated and analyzed about cities include their classification, location, distribution, function, growth, type, and pattern of land use. Emphasis toward urban planning is incorporated. (3 crs.)

GEO 217. DEMOGRAPHIC ANALYSIS. A basic course on demographic processes and trends. Emphasis is placed on distribution patterns and environmental ramifications. (3 crs.)

GEO 220. GEOGRAPHY OF THE UNITED STATES AND PENNSYLVANIA. A study of the physical and cultural environment throughout the United States and Pennsylvania particularly as it relates to spatial patterns of population, agriculture, industry, service and transportation patterns. (3 crs.)

GEO 240. HUMAN ECOLOGY. A social science approach to the relationship between humanity and the organic and inorganic environment. Emphasis is placed on the physical, biological and cultural basis of human adaptation. (3 crs.)

GEO 285. RETAIL TRAVEL. The skills used in the worldwide travel industry that are essential for a career as a travel agency owner, manager, or agent, as a tour operator, or as a corporate, convention travel planner or manager. (3 crs.)

GEO 306. MARKETING GEOGRAPHY. Spatial patterns associated with the consumption of goods and services. Emphasis is placed on the collection and distribution of goods and services as related to aspects of the cultural environment. (3 crs.)

GEO 311. GEOGRAPHIC INFORMATION SYSTEMS. This course provides an analysis of different methods and techniques of representing geographic data through the use of various manual and computer-based technologies. The focus is upon the processes involved in the collection, compilation, and display of geographic data within a data base. (3 crs.)

GEO 317. LAND USE ANALYSIS. An analysis of the structure of urban and rural land use which emphasizes patterns and trends in land use. Methods of analysis are developed so that land use can be effectively understood. (3 crs.)

GEO 325. GEOGRAPHY OF EUROPE. A study of forces which have shaped the human landscape of Western Europe. National and regional disparities ranging from land relief and climate to social and economic phenomena are studied. (3 crs.)

GEO 328. GEOGRAPHY OF LATIN AMERICA. A regional analysis of the physical and cultural environments that make the human landscape. Present Latin America society is studied through a historical perspective. (3 crs.)

GEO 331. GEOGRAPHY OF RUSSIA. A regional study of the physical and cultural features of Russia. The emphasis is placed upon those factors responsible for the current position of Russia as a major world power and on potential future development. (3 crs.)

GEO 338. GEOGRAPHY OF THE PACIFIC BASIN. A regional study of the physical and cultural environments of the Pacific rimland . Emphasis on Australia, Indonesia, Japan, New Zealand, and the Philippines. (3 crs.)

GEO 340. HISTORICAL GEOGRAPHY. A study of the interrelationships between the natural and cultural environments and the historical development

of the cultural landscape. Historical development of the United States is emphasized. (3 crs.)

GEO 345. POLITICAL GEOGRAPHY. The state is the focus of the course, emphasis on the role played by the physical and cultural environment in terms of its form and function. Particular emphasis placed on frontiers, boundaries, law of the seas, transportation and ecology. (3 crs.)

GEO 350. SYSTEMS APPLICATION FOR TRAVEL INDUSTRY. An applied course in the principles and practices of travel industry automation. (3 crs.)

GEO 358. COMPREHENSIVE TRAVEL PLANNING. A basic understanding of the procedures and components of travel planning and promotion. The student is introduced to the major principles and techniques used in the development of travel programs, trip packages, and group tours. (3 crs.)

GEO 362. SITE PLANNING AND DESIGN. The components of the site design process. Specific tools and procedures necessary for effective planning of recreation and park facilities. Introduction to the complete planning process from concept to construction. (3 crs.)

GEO 374. DEVELOPING AND MANAGING LEISURE ENTERPRISES. An overview of the commercial leisure industry, specifically focusing on the procedures involved in the developing, marketing, and managing of the enterprise. The student is introduced to the methods used in starting a leisure business. The emphasis is placed on the management skills necessary for the effective and profitable management of the enterprise. (3 crs.)

GEO 378. RECREATION INDUSTRY MANAGEMENT. Analysis of managerial and administrative practices and processes in recreation, park and agency departments, including departmental organization, policy making, liability and negligence, personnel management and staffing, fiscal management, budgeting, finance, records and reports, office management, and public relations. (3 crs.)

GEO 412. PROGRAM PLANNING AND ADMINISTRATION. The course emphasizes the analysis of a community, assessment of its residential leisure needs, and implementation of recreational programs into the community. The course stresses planning, objectives, goal setting, structural organization, advertising, and evaluation. (3 crs.)

GEO 425. CORPORATE TRAVEL OPERATIONS. An applied course in the principles of corporate travel managing such as corporate travel requirements, policies, economics, and travel industry automation. (3 crs.)

GEO 474. DEVELOPING THE MASTER PLAN. The course examines planning as a process. Attention is focused on the elements and activities necessary to prepare and implement a comprehensive plan. The course provides an opportunity for the student to apply acquired planning skills to specific urban and regional problems. (3 crs.)

GEO 479. INTERNSHIP. The internship provides the student with the opportunity to apply classroom theory to realistic, professional-level situations. It is intended to give the student a concentrated practical experience in a professional organization. The concepts and experiences acquired in the classroom are honed and fine-tuned at this level to prepare students for their career undertaking. (Variable crs.)

GEO 491. FIELD COURSE IN GEOGRAPHY. Field investigation utilizing geographic tools and techniques concentrating on primary data. (Variable crs.)

GEO 493. SEMINAR IN GEOGRAPHY. Consideration of evolving geographic thought, evaluation of selected geographic literature, and the development of individual or group research projects. Recommended as a culminating course for majors in geography. (3 crs.)

GEO 520. PHYSIOGRAPHY OF THE UNITED STATES. This course is for students with a background that includes Principles of Geomorphology. It involves a systematic survey of the major physiographic provinces in the United States. Emphasis is placed on the relationship of the underlying geology, geologic history, and climate to the development of today's landscapes. Laboratory work principally involves interpretations from air photos and topographic maps. (3 crs.)

Gerontology - XGE

XGE 101. INTRODUCTION TO GERONTOLOGY. An introduction to the field of aging for majors and non-majors. A general overview of the psychosocial, biological, cultural, and behavioral aspects of late life. (3 crs.)

XGE 102. AGING IN AMERICAN SOCIETY. Examination of psychosocial aspects of work, retirement, leisure, institutionalization, and death as experienced in contemporary America. Examination of roles and adjustments in later life. (3 crs.)

XGE 201. AGING POLICIES AND SERVICES. An overview of programs and services available to older adults, including the past, present, and future of aging policies. Covered are the Older Americans Act and amendments. Prerequisites: XGE 101. (3 crs.)

XGE 202. MIDDLE YEARS OF LIFE. Multidisciplinary life cycle approach to middle scene. Relationship of middle-age to family, work, and community examined. Adult developmental tasks and stages emphasized. (3 crs.)

XGE 204. BIOLOGY OF AGING. Introduction to biological aspects of aging, both normal and pathological. Studied are age-related changes in the digestive, skin, musculoskeletal, endocrine, and reproductive systems. Prerequisite: XGE 205.(3 crs.)

XGE 205 MEDIA & LIBRARY RESOURCES IN AGING. This course provides research skills for Gerontology students, Aging Certificate students and others interested in conducting gerontological research. (3 crs.)

XGE 210. GROUP WORK WITH OLDER ADULTS. Focuses on basic principles of group dynamics and information about aging as it applies to group work. Students are introduced to skills and specific techniques required to facilitate groups with older adults in institutional and community based settings. (3 crs.)

XGE 249. AGING AND THE FAMILY. Overview of the theory/research on families in later life including a synthesis and review of existing literature, identification of research issues and needs, and implications of this information for practitioners, researchers, and family members. (3 crs.)

XGE 289. MINORITY AGING / INSTITUTIONALIZATION. An overview of the theory, research, and policy issues regarding minority aging and institutionalization, and implications of this information for practitioners, researchers, and society. (3 crs.)

XGE 300. HEALTH AND SAFETY IN AGING. Information and experience relative to health assessment, maintenance, and promotion of wellness among older adults. Safety issues for older adults will be presented. (3 crs.)

XGE 320. COUNSELING THE OLDER ADULT. Combines information about the aging process with information and skills practice in counseling intervention. (3 crs.)

XGE 340. ACTIVITIES IN LONG-TERM CARE. Basic principles of therapeutic recreation and activity program planning as it applies to serving older adults in long-term care settings; primarily nursing homes, personal care homes, and adult day care facilities. Students will be introduced to the skills needed to develop and implement a well-balanced activity program. (3 crs.)

XGE 349. SELECTED TOPICS. Roundtable discussions of selected gerontological topics. For students wanting to study either a new topic or a topic in more detail. Topics vary according to students and instructor. Prerequisite: XGE 101. (Variable crs.)

XGE 350. EXERCISE FOR THE ELDERLY. Course provides information and experiences to develop and conduct physical activity programs for the elderly. Activities to maintain and improve health and fitness, and corrective and therapeutic activities are also presented. Prerequisites: XGE 204, HPE 314. (3 crs.)

XGE 369. RURAL AGING. Overview of rural, non-metropolitan areas as they relate to older adults. Course compares rural older adults to their urban metropolitan counterparts. (3 crs.)

XGE 370. NURSING HOMES. Examines nursing homes from historical, medical, managerial, environmental, and psychosocial perspectives. (3 crs.)

XGE 380. ADULT DEVELOPMENT AND AGING. Introduction to psychology of aging. An overview of late life cognitive processes including intelligence, learning, memory, problem solving, and creativity. Examination of adult socialization, personality adjustment, psychopathology, and death. Prerequisites: XGE 101, XGE 102, XGE 204, XGE 205, and junior level standing. (3 crs.)

XGE 439. SEMINAR IN AGING. For advanced Gerontology students to intensively examine and discuss selected aging subjects. Topics chosen by instructor, research paper/project required. Prerequisites: XGE 101, 102, 201, 204, senior standing, and permission of instructor. (3 crs.)

XGE 449. GERONTOLOGY PRACTICUM. Opportunity to apply theoretical knowledge to practice through placement in agency or institution serving older people. Practicum sites include senior centers, nursing homes, adult day care centers, independent living facilities, or area agencies on aging. Prerequisites: Permission of instructor and extensive coursework. (Variable crs.)

Graphic Communication Technology - GCT

GCT 100. GRAPHIC COMMUNICATION PROCESSES I (LAB). This course offers the student an opportunity for experiences of practical application in the five major printing processes. It covers image design, conversion, assembly, carrier preparation, transfer and finishing techniques related to lithographic, screen, letterpress, flexographic, and gravure printing. Related areas of studies include duplication, ink chemistry, paper use and selection, and photography. Course will meet for two hours of lecture and four laboratory hours per week. (3 crs.)

GCT 110. SCREEN PRINTING TECHNIQUES (LAB). The first in a series of three courses that define and analyze the process of screen printing, this course is an introduction to the various applications of screen printing. Emphasis of the course is centered on establishing repeatability of the printing process by controlling variables; photographically generated stencil systems; single and multiple color image generation, conversion, assembly and transfer; sheet-fed manual and semi-automatic presswork; flat substrate printing applications of simple and complex close register line artwork. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisite: GCT 100. (3 crs.)

GCT 200. GRAPHIC COMMUNICATION PROCESSES II (LAB). Emphasis in this second course is on equipment, processes, materials and supplies utilized by the industry for phototypesetting, photo-composition, darkroom techniques, image assembly, platemaking, and offset duplicator operations. Learning experiences develop a comprehensive understanding of the scope, structure, products and related process of the printing industry. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisite: GCT 100 or TED 111. (3 crs.)

GCT 210. ADVANCED SCREEN PRINTING TECHNIQUES (LAB). A study of the techniques used for image transfer of line and halftone copy on substrates commonly used by the screen printer. Each student has the opportunity to identify, calibrate and print upon selected substrates. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisite: GCT 110. (3 crs.)

GCT 220. BLACK AND WHITE PHOTOGRAPHY (LAB). This course emphasizes techniques involved in monochromatic still photography and introduces color photography. It covers the basic aspects of picture taking, camera operation, film processing, enlarging, print processing, finishing procedures and selecting photographic equipment and supplies. Course will meet for two hours of lecture and four laboratory hours per week. (3 crs.)

GCT 225. PRINCIPLES OF LAYOUT AND DESIGN. A presentation of design elements principles used to produce various layouts for printing production. The individual must strive to develop harmonious relationships between these design elements and principles and various printing applications through practical activity assignments. The fundamentals of producing mechanical layouts for newspaper, magazine, direct mail, poster, display and point of purchase advertising are considered. Use of computers for electronic/desktop publishing is emphasized. Production and practical application assignments are to be performed in conjunction with theory explanations as out of class activities. (3 crs.)

GCT 230. COLOR PHOTOGRAPHY (LAB). A study of the concepts and techniques involved in producing color prints and color transparencies from color negatives. Emphasis is placed on picture composition, developing color negatives, contact printing, filter fundamentals, enlarging calibration procedures and photo finishing. Microphotography and digital photography techniques are also covered. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisite: GCT 220. (3 crs.)

GCT 240. ELECTRONIC DESKTOP PUBLISHING (LAB). This course provides an in-depth study into the electronic desktop publishing systems and their concept of architecture, operation, networking, financing and design role in the publishing industry. It covers the basic aspects of graphic designing, creating page layouts, scanning of text and continuous tone photographs, connectivity, telecommunications, image setting and encryption of data. Each student will experience hands-on activities with microcomputers utilizing high-end design, draw, paint, scanning, and integrated layout software packages. Course will meet for two hours of lecture and four laboratory hours per week. (3 crs.)

GCT 270. LITHOGRAPHIC TECHNIQUES (LAB). An in-depth study of photographic process as it relates to line and halftone reproduction of graphic materials. Projects representing the various combinations of line and halftone materials as they are used in the industrial setting are produced. Besides the projects required of each student, the theoretical aspects of the optical system are investigated, as well as the areas of sensitive materials, light and related chemical reactions. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisites: GCT 100 and GCT 200. (3 crs.)

GCT 310. SCREEN PRINTING PRODUCTIONS (LAB). This course is directed study relevant to the individual's career objectives based on specific screen printing applications. The student formulates specifications, estimates and a procedural rationale for self-determined screen printed product. Student productions are organized as a portfolio consistent with the individual career objective that has been developed through previous screen printing course work. Four-color process screen printing with ultraviolet curing theory and practice is analyzed for application through student independent study course work. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisite: GCT 210. (3 crs.)

GCT 330. FLEXOGRAPHY AND PACKAGE PRINTING (LAB). This course provides an in-depth study of the processes and techniques involved in the printing and converting of packaging and labeling materials. Laboratory applications include the design, preparation and flexographic printing and converting of various paper, foil and plastic substrates. Emphasis is placed on establishing repeatability of the printing process by controlling variables. Methods and techniques of quality assurance are implemented as an integral part in the production of flexographic printed products. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisite: GCT 100. (3 crs.)

GCT 342. ESTIMATING AND COST ANALYSIS. A critical examination of the operations involved in the production of graphic materials for the purpose of determining costs of the operations to be included. The procedures necessary to assemble this information to produce estimates of typical printing matter are discussed. The identification and study of cost centers as they relate to the hour costs and ultimately to the selling price are examined. Students are required to prepare a number of cost estimates for the course. Prerequisite: GCT 210 or GCT 270. (3 crs.)

GCT 365. COLOR IMAGING (LAB). Primary emphasis is placed on developing an understanding of the nature of light, the nature of color, its relation to filters and printing inks used in the graphics industry and the problems caused by color contamination in making color separations. A presentation of direct and indirect methods of color separations as well as the various masking techniques is included. The use of various control devices is discussed and employed in the laboratory. Special techniques required to strip projects, make the plates, and produce them on the press are also covered. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisites: GCT 225, GCT 230, GCT 320 and GCT 370. (3 crs.)

GCT 370. ADVANCED LITHOGRAPHIC TECHNIQUES (LAB). A continuation of GCT 270 which utilizes the film elements produced in order to complete required projects for this course. This course treats the subjects

of stripping, platemaking and presswork. A critical study of imposition of various type of jobs, from simple single-color to more complex multi-color jobs. The latest techniques of platemaking as well as information on types of plates presently in use are discussed. Feeder-delivery setup, press packing methods, inking/dampening systems, control devices, rollers, blankets and other related press activities are thoroughly discussed. Also, some folding and binding techniques are included. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisite: GCT 270. (3 crs.)

GCT 380. ADVANCED FLEXOGRAPHIC TECHNIQUES (LAB). This course provides advanced study of the processes and techniques involved in the printing and converting of packaging and labeling materials. Laboratory applications include the design, preparation and flexographic printing and converting of tonal and special effects images on various substrates. Emphasis is placed on establishing repeatability of the printing process by controlling variables related to advanced flexographic reproduction. Methods and techniques of quality assurance are implemented as an integral part in the production of flexographic printed products. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisites: GCT 100, GCT 200 and GCT 330. (3 crs.).

GCT 390. GRAVURE PRINTING (LAB). This course is a comprehensive study of gravure printing. You will examine the various products printed by gravure including: publications, labels, package, wallcovering, vinyl flooring and wrapping paper. Industry visits to gravure printing plants that specialize in each of these products will be made. Product design for each gravure printing product will be explored. Environmental compliance in the gravure industry will be covered in depth. Course will meet for two hours of lecture and four laboratory hours per week. (3 crs.)

GCT 430. FLEXOGRAPHIC PRINTING PRODUCTIONS (LAB). The third and final course in a series which is directed study relevant to the individual's career objectives based on specific flexographic printing applications. The student generates specifications, estimates, and procedures for the production of self-directed flexographic printed products. The student productions are organized as a portfolio consistent with the individual career objective that has been developed through previous flexography coursework. Process color flexographic printing, ultraviolet curing theory and practice, statistical process control, and current trends in flexographic printing are analyzed for application through student coursework. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisites: GCT 100, GCT 200, GCT 330 and GCT 380. (3 crs.)

GCT 460. SUBSTRATES AND INKS (LAB). This course is a comprehensive study of all the substrates and inks used in offset lithography, screen printing, flexography, gravure, and other specialty printing processes. The course covers the fundamentals of substrate and ink manufacturing, selection, and testing. How substrates and ink interact and the identification and prevention of potential problems will be included in the course. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisites: GCT 100 and GCT 200. (3 crs.).

GCT 470. WEB OFFSET (LAB). This course is a comprehensive study of the web offset printing industry and covers both heatset and non-heatset printing. The student will study all aspects of prepress, press, and post-press activities that are unique to web offset printing. The course includes the design and printing of two magazine format products to be printed on a heatset web offset press and a non-heatset web offset press. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisites: GCT 365 and GCT 370. (3 crs.).

GCT 485. GRAPHICS SEMINAR. This is an all-encompassing seminar-type course designed to provide graduating seniors in Graphic Communications Technology with opportunities to enhance their knowledge base in the following areas: process photography/photographic techniques, lithographic applications, layout and design, estimating/cost analysis, paper/ink, electronic imaging, desktop publishing, screen printing and flexography. Additionally, students will be exposed to selected visitation sites, guest lecturers from the field, and an exploration of current problems and issues relating to the Graphic Communications industry. Each student is required to do a major research paper on a particular problem or issue relating to the graphics industry. Career services workshops will also be included. Prerequisites: Senior Standing. (3 crs.).

GCT 495. GRAPHIC COMMUNICATIONS INTERNSHIP. Student interns are placed with an organization which most nearly approximates employment goals. If this is not possible, students are placed in some type of graphics environment which is available at the time. The intent of the internship is to provide students with practical work experience in an environment in which they will be dealing with real problems requiring real solutions in a relatively short time frame. Advisor and Department chairperson approval is required before course enrollment. This is a repeatable course and may be taken as follows: Students may earn up to seven credits of internship. Prerequisite: Upper Level Standing. (1-7 crs.)

Harrisburg Internship Program - HIN

HIN 374. HARRISBURG INTERNSHIP ASSIGNMENT. This internship gives selected students an opportunity to work in various state government offices including the Governor's office, the Senate, and the House of Representatives. Prerequisites: 45 credits, 3.0 QPA, and permission of program director. (Variable crs.)

HIN 375. HARRISBURG INTERNSHIP. This course is completed in conjunction with HIN 374. (3 crs.)

HIN 376. PUBLIC POLICYMAKING. This seminar is completed in conjunction with HIN 374. (3. crs)

Health and Physical Education - HPE

HPE 102. AIDS PREVENTION. This course is designed to meet the following objectives: learn the facts about HIV and AIDS; gain skills for safer behaviors; and increase an awareness for coping with HIV and other STDs for improving the overall quality of life. (1 cr.)

HPE 103, BEGINNING KARATE. This course will provide students with the opportunity to learn basic martial arts techniques. Students will learn basic blocks and strikes, prearranged forms, and self defense techniques. (1 cr)

HPE 105. CURRENT HEALTH ISSUES. This course is designed to convey information concerning the individual's role in establishing a healthful lifestyle as well as encouraging a sense of responsibility about that role. The current health framework encompasses topics such as basic fitness and nutrition, the prevention of disease, as well as a focus on healthful living. Topics will be covered in lecture and interactive sessions by the instructor and the health student. (3 crs.)

HPE 202. COED AEROBIC FITNESS AND NUTRITION. The course is designed to increase an individual's fitness through higher level exercises. The activity portion of the class will include low impact aerobics, rope jumping, swimming, etc., to improve the student's cardiopulmonary endurance, strength and flexibility. There will be lectures on nutrition and basic exercise physiology. (2 crs.)

HPE 312. WATER SAFETY INSTRUCTOR. Conducted under the auspices of the American Red Cross, the course is designed to equip the individual with the basic knowledge and skills necessary to save one's own life or the lives of others. The course provides certification in water safety instruction. Prerequisite: Current lifeguard training certificate. (3 crs.)

HPE 314. FIRST AID AND PERSONAL SAFETY. Provides an understanding of the cause-effect, prevention and treatment of emergency situations. This course is helpful to all students, especially students in the teacher education program. Three year certification is offered by the American Red Cross. (3 crs.)

HPE 315. CARDIOPULMONARY RESUSCITATION. Includes preventive heart practices, basic concepts of heart and lung functions and skills for managing obstructed airways and cardiac arrest. Certification is by the American Heart Association. Offered when there is student need and interest. (1 cr.)

HPE 316. LIFEGUARD TRAINING. An American Red Cross Certification course designed to prepare individuals to be lifeguards in pools and (non-surf) facilities. Course includes certification in community first aid and CPR for the professional rescuer. Prerequisite: Water Test. (3 crs.)

HPE 338. PHYSICAL EDUCATION FOR THE EXCEPTIONAL CHILD. An introduction to the principles, techniques, and research in the physical education training for the exceptional child. Major emphasis is on gross motor skills and physical activities leading to lifetime recreation and sports. (3 crs.)

HPE 345. SKIN AND SCUBA DIVING. Prepares students to become National Certified Divers. There is an additional fee for the certification dives. Prerequisite: Deep water swimmer. (2 crs.)

HPE 500. EMERGENCY MEDICAL TECHNICIAN (EMT). Prepares students to become certified as Emergency Medical Technicians. Emphasis is placed upon the care and treatment of the ill or injured in a variety of emergency situations. Students are required to devote at least ten hours to actual in-hospital observation. Prerequisite: Age 16. (4 crs.)

Health Science and Sport Studies – HSC

HSC 270. PHYSIOLOGY OF EXERCISE. The course covers the scientific theories and principles underlying strength, muscular endurance, cardio–vascular endurance, flexibility, training and conditioning in human movement. Prerequisite: ATE 205 & ATE 215. (3 crs.)

HSC 275. FUNCTIONAL KINESIOLOGY. The biomechanics of motor performance. Prepares students to analyze movement in order to teach, correct, or improve human performance. Prerequisite: ATE 205 & ATE 215. (3 crs.)

HSC 290. THERAPEUTIC MODALITIES WITH LABORATORY. Lectures and laboratory exercises that explain the use and theory of physical therapy modalities that are used in the sports medicine clinical setting. Prerequisite: Athletic Training or Physical Therapist Assistant major or by permission by the instructor. (4 crs.)

Highway Safety and Drivers Education - HSD

HSD 300. INTRODUCTION TO SAFETY EDUCATION. The history and development of the safety movement. Psychological variables such as attitudes, habits, emotions and values are considered in terms of their importance in the total accident picture. Home, farm, traffic, fire industrial and many other areas of safety are discussed. (3 crs.)

HSD 305. DRIVER EDUCATION AND TRAFFIC SAFETY. Designed to prepare a teacher to teach a complete thirty-and-six Driver Education class. Emphasis upon essential facts, principles, skills and psychological variables necessary for good driving and the teaching of the same to beginning drivers. Enrolled students are required to teach a beginner the behind-the-wheel driving sequence. Prerequisite: a driver's license. (3 crs.)

HSD 306. MATERIALS AND METHODS IN SAFETY IN THE SECONDARY AND ELEMENTARY SCHOOLS. Develop various teaching methods and materials that can be used to teach safety in the elementary or secondary schools. (3 crs.)

HSD 307. MOTORCYCLE SAFETY. A comprehensive study of all aspects of motorcycle safety. Various classrooms and range experiences are provided to enable each student to become a proficient cyclist. The course also prepares the student to teach others how to ride. Prerequisite: HSD 305. (3 crs.)

HSD 405. ORGANIZATION AND ADMINISTRATION OF SAFETY EDUCATION. Organizing and administering Safety Education programs ranging from the elementary school through college. School safety programs, environmental safety, and safety services are analyzed in detail. Prerequisite: HSD 300. (3 crs.)

HSD 408. PROBLEMS IN DRIVER AND TRAFFIC SAFETY. Current problems in many areas of the driver and traffic safety. Federal Highway Safety Program Standards are analyzed. (3 crs.)

History - HIS

HIS 101. HISTORY OF THE U.S. TO 1877. American history from the Pilgrims to the age of modern industry: the colonial heritage, American Revolution, the emergence of a new nation, westward expansion, Civil War and postwar Reconstruction. (3 crs.)

HIS 102. HISTORY OF THE U.S. SINCE 1877. The emergence of modern America, its achievements and its problems; prosperity and depression, war and social unrest, World War I through the Vietnam era and beyond, the computer age and its challenges. (3 crs.)

HIS 104. HISTORY OF WESTERN SOCIETY TO 1740. Western society from its origins in the near East to the period of Absolutism in Europe. (3 crs.)

HIS 106. HISTORY OF WESTERN SOCIETY SINCE 1740. Western society from the Enlightenment to the present. (3 crs.)

HIS 107. HISTORY OF SOUTHWESTERN PENNSYLVANIA. This course surveys the role of southwestern Pennsylvania from the local, regional, national and international perspectives. These include the reactions of the Native Americans to the coming of the "white" frontier; the military events leading to the French and Indian War; the Whiskey "insurrection"; the evolution of transportation from the flatboat/keelboard and steamboat eras to the railroad and automobile; the rise and decline of the iron/steel industry; immigration and agriculture; and education and culture, particularly the influence of the former and the significance of the latter. (3 crs.)

HIS 111. DEVELOPMENT OF MAJOR WORLD CIVILIZATIONS. The process and interplay of the major world cultures in their evolution: Indian, Moslem, East Asian (China, Korea, Japan), Slavic, Western European, Latin American, and African. (3 crs.)

HIS 112. MAJOR WORLD CIVILIZATIONS IN TRANSITION. Significant factors influencing change in the world's major cultural areas: industrialization and urban conflict, the democratic revolution, and the rise of charismatic leaders from Napoleon to Hitler. (3 crs.)

HIS 147. HISTORY OF THE MIDDLE EAST. A history of the region, emphasizing the twentieth century interplay of cultural changes with traditional ways; Islam and modernization; Soviet-American rivalry; the politics of oil; the Arab-Israeli conflict; and Arab nationalism; its leaders; the role of terrorism. (3 crs.)

HIS 188. LOCAL HISTORY. An introduction to the location, evaluation, and significance of local history by using the problem-solving and genealogical approach. Specific topics are analyzed in order to get to know at first hand the importance of local and family history at the grass roots level. (3 crs.)

HIS 200. HISTORY OF PENNSYLVANIA. The history of Pennsylvania from colonial times to the present; the changes involved in social, economic, and political life are treated from internal and external points of view. (3 crs.)

HIS 201. CIVIL WAR AND RECONSTRUCTION. The causes of the Civil War; the military, political, economic, and social developments during the war; the consequences of the postwar period from the standpoint of contemporary developments and their applications today. (3 crs.)

HIS 203. HISTORY OF TRANSPORTATION IN PENNSYLVANIA. The roles that Pennsylvania has played in the development of transportation systems since Colonial times, including turnpikes, canals, river transport (flatboats to steamboats), railroads, and motor transportation. (3 crs.)

HIS 204. HISTORICAL PERSPECTIVES ON AGING. A chronological survey of aging in American culture from colonial times to the present. Principle subjects for examination are the emergence and development of retirement programs, and institutional and non-institutional treatment of the elderly in social, religious, political, and cultural contexts. (3 crs.)

HIS 211. INTRODUCTION TO PUBLIC HISTORY. This course is an overview of the methods and arenas of the public historian. Through hands-on experience in such areas as museum design, collection development, museum education, archival management, historic preservation and historical editing, the student will gain an understanding of the challenges and rewards of the public historian. (3 crs.)

HIS 215. EXPANSION OF AMERICAN FOREIGN POLICY. The emergence of modern American foreign policy and the factors that have influenced its operation in the twentieth century: the interplay of military strategy and the conduct of foreign relations, the role of an expanding intelligence activity since World War II, global economic problems, modern revolutionary movements, and the scientific revolution. (3 crs.)

HIS 217. AFRO-AMERICANS IN U.S. HISTORY. A survey of the role of Afro-Americans in the course of American history. The course explores

African roots, American slavery, the rise of black protests, the Civil Rights movement, and the rise of the Black City. (3 crs.)

HIS 220. UNITED STATES MILITARY HISTORY. The development of America's military strategy and the growth of the United States military establishment; principle campaigns and battles; the role of the armed forces as a social and political institution from the Revolution to the post-Vietnam Era. Emphasis is given to twentieth century strategy and related policy problems. (3 crs.)

HIS 224. HISTORY OF THE ANCIENT WORLD. This course investigates life and culture in the ancient world, from ancient Mesopotamia and Egypt through to classical Greeece and late imperial Rome. The emphasis is socio-cultural, but economic, political and military aspects will also be explored. (3 crs.)

HIS 225. HISTORY OF CONTEMPORARY EUROPE. Major developments in Europe within the last 45 years which have significance in challenging and transforming many of the traditional values of society. The decline in the pre-eminent position of Europe in world affairs and the rise of a global civilization. (3 crs.)

HIS 226. HISTORY OF MEDIEVAL EUROPE. A study of the political, social, economic, and cultural forces of the Middle Ages, with emphasis on institutional and cultural life from the fall of Rome to the Renaissance. (3 crs.)

HIS 228. EARLY MODERN EUROPE. An introduction to the history of early modern Europe from the sixteenth century to the French Revolution, including the growht of monarchies, European overseas exploration, cultural and social characteristics, the scientific revolution and the Enlightenment. Prerequisites: HIS 104 or HIS 106 are recommended. (3 crs.)

HIS 230. HISTORY OF EASTERN EUROPE. The medieval origins of Poland, Czechoslovakia, Hungary, Yugoslavia, and Bulgaria. Romania through the period of national revival of the nineteenth century, independence after World War I, sovietization after World War II, and reemerging nationalism. (3 crs.)

HIS 234. URBAN PLANNING IN HISTORICAL PERSPECTIVE. The planning implications of urbanization; the early city planning of the pre-industrial era, and the efforts by city planners and developers to make the city more attractive and livable in various periods of urban growth. (3 crs.)

HIS 236. HISTORY OF URBAN AMERICA. The urban experience in America from the seventeenth century to the present. Urban America in the context of world urbanization, industrialization, technology and the rise of mass culture. The emergence of progressive reform and the implication of these forces on urban spatial development. (3 crs.)

HIS 238. HISTORY OF AMERICAN LABOR. American labor from early colonial times to the present. (3 crs.)

HIS 240. HISTORY OF THE COLD WAR. The origins and continuance of Soviet-American rivalry since World War II. Confrontation in Europe; NATO; the Warsaw Pact; the growing nuclear arsenal; regional conflict in Africa, Latin America and Asia; the Congo, Angola, Cuba, Iran, China, Vietnam; the politics and leadership of both nations; the emergence of Russia as a global power. (3 crs.)

HIS 245. HISTORY OF RUSSIA. Russian history, culture, and institutions from the inception of the Kievian state to the present; the pre-Soviet periods and those aspects of development of the Russian state and people that have played a dominant role in the shaping of Russian character, temperament, and history. (3 crs.)

HIS 247. HISTORY OF ETHNIC AMERICA. The immigrant in United States history from the eighteenth century through the contemporary period. (3 crs.)

HIS 260. WOMEN IN U.S. HISTORY. A study of women from the colonial era until the present, arranged around topics such as reform, abolition, political activism, working conditions, and contemporary issues. (3 crs.)

HIS 265. HISTORY OF LATIN AMERICA. The emergence of modern Latin America from the Aztecs to Castro; economic and social development of the region in the twentieth century; struggle for social justice among diverse cultures; conflicts within Latin American political life; military dictatorships; parliamentary democracy; guerrilla warfare and counterterrorism. (3 crs.)

HIS 275. PITTSBURGH HISTORY. Examines the history of the City of Pittsburgh from 1750 to the present. The course focuses on the evolution of Pittsburgh first into a quintessential Industrial City, then into a pioneer renaissance city, and finally into a post-industrial, service-oriented city. Therefore, the course affords a unique urban perspective on the social, spatial, and political implications of both industrialism and post-industrialism. Pittsburgh History features lectures, field trips, as well as class discussions. (3 crs.)

HIS 304. GREAT DEPRESSION AND WORLD WAR II. The stresses and strains of the 1930-1945 period of United States history using recent trends in scholarship. (3 crs.)

HIS 305. CONTEMPORARY HISTORY OF THE U.S. The unprecedented changes that have occurred in the United States since the end of World War II. (3 crs.)

HIS 308. HISTORY OF THE AMERICAN CONSTITUTION. The growth of the American constitutional system, with special emphasis on those aspects of constitutional growth that relate closely to the fundamental structure of American government and social order. (3 crs.)

HIS 310. CHRISTIANITY TO 1700. This course discusses the development of Christianity from earliest times to the seventeenth century. Explores Christianity's role in transforming society through study of its belief system, the growth of monasticism and the institutional church, issues of dissent and reform before and after the Reformation, European wars of religion in the sixteenth and seventeenth centuries, and the expansion of Christianity to the New World. (3 crs.)

HIS 312. WOMEN IN ANCIENT AND MEDIEVAL EUROPE. A study of the lives and attitudes of women living in ancient and medieval times, from Classical Greece to late medieval Northern Europe. Social, cultural, religious, economic and political matters will be discussed, with special consideration given to the role women played in the shaping of western civilization. (3 crs.)

HIS 314. ISSUES IN THE HISTORY OF WESTERN SCIENCE: ORIGINS TO THE SCIENTIFIC REVOLUTION. This course explores scientific thought from the ancient Greeks to the scientific revolution of the early modern period, focusing on the historical interaction of scientific, religious, philosophical and sociocultural forces. Open to students of all disciplines. Prerequisite: HIS 104 is recommended. (3 crs.)

HIS 320. ANATOMY OF DICTATORSHIP. The basic, social, economic, psychological, and political elements that make up the modern dictatorship. (3 crs.)

HIS 329. HISTORY INTERNSHIP. Application of historical methodologies to various professional environments, under faculty supervision. (Variable crs.)

HIS 345. SOCIAL HISTORY OF THE U.S. The major groupings and ways of the United States from colonial days to the present. (3 crs.)

HIS 348. HISTORY OF AMERICAN SPORT. Sport as a pervasive facet of our popular culture, as a social institution, as an arena of human activity, and as a drama; sports and cultural values and values conflict; the relationship of sport to social change throughout American history. (3 crs.)

HIS 350. ADOLF HITLER. The philosophical and psychological elements that led to the rise of National Socialism, and its impact upon the western world. (3 crs.)

HIS 379. SPECIAL PROBLEMS IN HISTORY. Development of individual programs by students. (Variable crs.)

HIS 416. HISTORY OF BRITAN. The history of England from the reign of Henry VII to the modern era, with particular attention to the social and cultural aspects of British life. (3 crs.)

HIS 418. HISTORY OF BOURBON FRANCE. This course examined the Bourbon monarchy in France from its late sixteenth century origins to the French Revolution. The cultural, social and political influences that shaped

France and Europe from 1598 to 1789 arer discussed in their historical context. Prerequisites: HIS 104 & HIS 106 are recommended. (3 crs.)

HIS 420. RENAISSANCE AND REFORMATION IN EUROPE. A study of Renaissance culture in Europe from the fourteenth to the sixteenth century, with emphasis on Italian Renaissance and the German Reformation, considering late medieval civilization, humanism, the artistic Renaissance, the universal church, and the appearance and character of the principle branches of Protestantism. (3 crs.)

HIS 491. READINGS IN EUROPEAN HISTORY. This course presents a series of guided readings in European history with emphasis given to the significant trends in the writing of history and historical scholarship since the mid-twentieth century. Prerequisites: HIS 104 & HIS 106 are recommended. (3 crs.)

HIS 495. SEMINAR IN U.S. HISTORY. A study of American historians and their writings; the changing interpretations of major topics in American history. (3 crs.)

Honors Program - HON

HON 100. HONORS AND UNIVERSITY ORIENTATION. This course provides the honors student with a fairly comprehensive introduction to university life in general and the honors program in particular. Practical matters including a comprehensive review of the honors program curriculum, requirements to remain in the program, advisement and registration procedures to be followed and an elaboration and description of ancillary university services available to the student are covered. The meaning and function of a university, the importance of the liberal/general education part of the curriculum, the relationship between the university and society and current issues affecting the academy are addressed through selected readings and discussion. Also, students will be required to establish a portfolio that will be maintained throughout the undergraduate experience. (1 cr.)

HON 150. HONORS COMPOSITION I. Honors Composition I, a course designed specifically for first-year students in the Honors Program, is an introduction to the advanced literacy of the academy. In this course, students will develop an understanding of how diverse scholarly disciplines employ differing strategies and conventions for organizing and transmitting knowledge. (3 crs.)

HON 187. INFORMATION LITERACY. Knowledge is of two kinds: we know a subject ourselves, or we know where we can find information upon it." Dr. Samuel Johnson (1709-1784). The course will focus its attention on the second kind of knowledge described by Dr. Johnson. The honors student will learn how to find information, and evaluate and use it effectively. The Louis L. Manderino Library, the Internet, and other electronic resources will be the primary emphases of the course. The course will provide the honors student with practical research and bibliographic skills that can be utilized in any area of study. (3 crs.)

HON 197. EURASIAN AND NORTH AFRICAN CIVILIZATION. This course is the first in a two semester sequence on the origin, nature, accomplishments and failures of the diverse civilization of this planet. A panoramic, balanced picture of human achievement in technology, government, religion, and the arts is provided. A decided emphasis is placed on the student critically analyzing some enduring themes and questions common to the different civilizations. (3 crs.)

HON 201. QUANTITATIVE PROBLEM SOLVING. This course will provide the student with an application-oriented, investigative mathematics curriculum. The students will use technology and cooperative group work to solve real-life problems and strengthen their understanding of mathematics. The goals of the course are parallel to those of the National Council of Teachers of Mathematics Curriculum and Evaluation Standards. The topics covered target Pre-Calculus where the problems associated with engineering, physical and life sciences, business, finance and computer science drive the mathematics. This course will provide the student with a foundation to pursue further study in calculus, finite mathematics, discrete mathematics and statistics. (3 crs.)

HON 250. HONORS COMPOSITION II. Honors Composition II, a course designed specifically for first-year students in the Honors Program, is a companion and follow-up course to Honors Composition I. In Honors Composition II, students will investigate an academic research question on a topic and in a field of their choosing and produce a research paper addressing this question. Research results will be presented before a panel of interested peers and faculty. (3 crs.)

HON 281. KNOWLEDGE AND CULTURE: SOME EXPLORATIONS. To be culturally literate is to possess the basic information needed to thrive in the modern world." E. D. Hirsch. This course explores what every student needs to know to read intelligently. Class sessions focus on skills needed to acquire cultural literacy, i.e., the grasp of a coherent community of values and recognitions. The course provides honors students with a framework of reference and bibliographic skills that they can utilize in their areas of study. (3 crs.)

HON 285. PROTEST MOVEMENTS IN THE 1960S. This course affords a general and comprehensive perspective on the unique, exciting, and dangerous world of 1960s politics. Understanding the period entails the use of films, videos, and records as well as extensive reading. (3 crs.)

HON 286. COMMENTARIES ON TECHNOLOGY. A study of the history of the development of science and technology from the humanity point of view. The view that technology is good and beneficial to man is examined along with the way that man looks at himself. Diverse literature is used to explore and examine modern institutions with the expectation of identifying why things are the way they are and how they might have been different under other circumstances. What is and what has been will be studied to predict future developments and their effect on humanity. (3 crs.)

HON 287. THE LITERATURE OF SOCIAL UNREST. This course will analyze the relationship between literature and social change by studying contemporary fiction and drama from Eastern Europe, Latin America, and South Africa. Class discussion will emphasize the historical and political significance of works by such authors as Jerzy Kosinski, Milan Kundera, Vaclav Havel, Gabriel García Márquez, Athol Fugard, and Nadine Gordimer. (3 crs.)

HON 295. LITERATURE, THE VISUAL ARTS AND THE WORLD VIEW. This course investigates the relationship between literature and the visual arts, primarily sculpture and painting, as revealed in various periods of history and culture-Ancient Greece, the Renaissance, Mannerism, the Baroque, the Rococo, Romanticism, Realism, and Naturalism, Impressionism, and Expressionism. The course focuses on an exploration and analysis of the historical, social, and philosophical backgrounds and "world view" of each period, and how these factors contribute to the emergence of artistic movements or schools (3 crs.)

HON 297. SCIENTIFIC INQUIRY. Scientific Inquiry is an interdisciplinary foray into the hard sciences. It presumes no prior acquaintance with chemistry, physics, or biology. It defines science, its terminology and its methodology, and exposes students to its essential elements. A perspective of scientific evolution will be developed by examining salient events and personalities. Various topics, especially from the physical sciences will be examined with an emphasis on how scientific knowledge is used to elicit technical innovations, solve problems, and shape the future. Later class discussions will focus on defining possible and probably future yields and prioritizing national efforts. (3 crs.)

HON 315. EXPRESSION OF SELF IN THE ARTS AND HUMANITIES. This course, broadly conceived as a humanities appreciation course, focuses on three general themes-Relationships: The Impact of Love, Family, and Friends; Passages: An Exploration of Life's Transitional Periods; and The Search for Meaning and Understanding. By examining and critically analyzing selected works from literature, the fine arts, music, theatre, photography, and film, the student is expected to develop a nonprescribed but comprehensive and integrative overview of these central themes. Also, students will have the opportunity to explore their own self-expression through a creative, artistic assignment. (3 crs.)

HON 381. EVOLUTION OF EARTH SYSTEMS. The evolutionary dynamics of living systems; namely, how the interrelationships between plants, animals, humans and environment shape their evolution, extinction, diversity, geographic distribution, geologic history, and, for humans, their cultural history. Specific examples of past and present biotic communities include Ice Age vertebrates, living mammals, amphibians and reptiles, continental and island faunas, and human cultures from Peru, Egypt, the Amazon Basin and the Arctic. Lectures are strongly supplemented with study of specimens, artifacts, and exhibits from The Carnegie Museum of Natural History. (3 crs.)

HON 385. BIOLOGICAL ORIGINS OF SOCIAL BEHAVIOR. The purpose of this course is to develop an understanding of sociobiology and the influence of the process of natural selection on social behavior in nonhuman and human animals. Findings from the biological and social sciences are integrated to provide a comprehensive view of the origin and nature of various social behaviors. Field and laboratory observations of animal behavior are used to demonstrate a complex variety of social behaviors. (3 crs.)

HON 388. PRINCES AND PAUPERS: STUDIES IN SOCIAL CLASS, WEALTH AND POVERTY IN WORLD HISTORY. The course examines the impact of social and economic inequality on world history. Using a case study approach, students will explore the existence of wealth and poverty in Ancient Rome, in Medieval and Reformation Europe, in Colonial America, in Victorian England, and in 20th century urban America. (3 crs.)

HON 499. HONORS THESIS. The seniors honors project serves as the capstone of the university honors program. Under the supervision of a faculty advisor of the student's choice, the honors student seeks to make a substantive contribution to the discipline. Considerable latitude in the form of the contribution is permitted. Empirical and historical research as well as creative products are all appropriate. A reader/reviewer is assigned to independently pass judgment on the student's scholastic effort. An oral defense, demonstration or display of the completed honors project is required. (3 crs.)

Industrial Technology - ITE

ITE 101. INDUSTRIAL SAFETY. An introduction to the fundamentals of safety as well as sound management-oriented practices related to the development of a safe work place. Legal requirements of OSHA and worker's compensation laws are discussed. Students will be able to identify cause of accidents, identify safety hazards, and apply methods of accident prevention. (3 crs.)

ITE 181. MATERIALS TECHNOLOGY I (LAB). A study of the theory and application of materials and materials testing used in a wide variety of industrial applications. Study includes the chemical, physical, mechanical and dimensional properties of metallic materials including ceramics. Sufficient background in general chemistry is included to provide a proper foundation. Course includes two hours of lecture and four hours of laboratory per week. (3 crs.)

ITE 311. INDUSTRIAL ERGONOMICS. An introduction to techniques and procedures for developing and applying the principles of human factors and ergonomics to system design and the systematic analysis, identification and evaluation of human-machine systems. Current advances in practical biomechanics and ergonomics in industry in combating musculoskeletal injury and illness will be discussed. Prerequisite: ITE 101. (3 crs.)

ITE 325. STATICS AND STRENGTH OF MATERIALS (LAB). The study of statics and strength of materials focuses on the pragmatic technologist who needs a better understanding of the fundamentals of mechanics. The statics portion of the course is concerned with parts (bodies) of machines and structures, while the strength portion covers the ability of these individual parts to resist applied loads. Then the technologist will be able to determine the dimensions to ensure sufficient strength of the various industrial materials and manufactured components. Course includes two hours of lecture and four hours of laboratory per week. (3 crs.)

ITE 375. PRINCIPLES OF PRODUCTION. An introduction to the methods used in analyzing the production flow from raw material to the finished product. Topics covered include a study of the major manufacturing processes, materials handling, plant layout, operations analysis, industrial engineering, inventory control and shipping. An overview of the role of production management as it relates to the various areas of industrial environment will be presented. (3 crs.)

ITE 385. INDUSTRIAL COST ESTIMATING. An introduction to the methods used to cost and budget a production organization. Topics include some accounting basics, cost accounting, the time value of money and cost estimating as related to industrial operations. (3 crs.)

ITE 420. PRODUCTION ANALYSIS. A continuation of the principles of production with an emphasis on the calculations associated with production management. Topics include linear programming, scheduling and project management as with pert, simulation and inventory control. Use is made of personal computers for the calculations involved. Prerequisite: ITE 375. (3 crs.)

ITE 445. QUALITY CONTROL. An introduction to the methods used in analyzing quality control. Topics include a study of the fundamentals of statistics and probability, the construction and use of control and attribute charts, the definition and use of acceptance criteria and the use of computers in modern quality control operations. An overview of the role of quality control department of a manufacturing facility will be presented. (3 crs.)

ITE 460. PRINCIPLES OF MANUFACTURING. An introduction to the methods used in manufacturing processes. Topics covered include a study of the manufacturing ability, fabricability, and marketability of manufactured products. Problems encountered by production managers in changing raw materials into a consumable product are discussed. The use of personal computers for the solution of manufacturing problems is included. Prerequisites: ITE 375 and ITE 385. (3 crs.)

ITE 480. PROBLEMS IN INDUSTRIAL TECHNOLOGY (LAB). This is a multidiscipline course that combines the various elements in industrial technology, giving the student the opportunity to study problems typically encountered by an industrial technologist. The exact content of the course will vary depending upon the background and experience of the instructor but it is intended to include problem solving and role playing in a wide variety of industrial settings. Industrial consultants will also be used to expose the student to modern industry. Course includes two hours of lecture and four hours of laboratory per week. Prerequisite: Senior Standing. (3 crs.)

Industry and Technology - IND

IND 101. DRAWING AND DESIGN. An introductory course for those who wish to become more skilled and confident in their ability to draw and design. Design elements, principles and practices are studied. Creativity, self-discovery, and self-expression are encouraged. The student is required to develop a disciplined approach to problem solving and a sensitivity to craftsmanship in order to create solutions to a wide variety of challenging design assignments. Class meets for two lecture and four laboratory hours per week. (3 crs.)

IND 110. TECHNICAL DRAWING I. A beginning course with emphasis on the graphic language, mechanical drawing, lettering, geometric construction, sketching and shape description, multi-view projection, sectional views, dimensioning, axonometric projection, and oblique projection. Class meets for two lecture and four laboratory hours per week. (3 crs.)

IND 130. INTRODUCTORY CIRCUIT ANALYSIS. An introduction to DC and AC circuit theory and analysis. The theory includes electrical measurement systems, Ohm's Law, Kirchoff's Laws, circuit theorems, and component characteristics. Laboratory work provides experiences with electrical components, schematics, electrical tools, and basic electrical and electronic instrumentation. Class meets for two lecture and four laboratory hours per week. Prerequisite: MAT 181. (3 crs.)

IND 135. DIGITAL ELECTRONICS. An introduction to the theory and application of logic gates, Boolean algebra, combinational logic, sequential logic, shift registers, counters, and arithmetic circuits. Laboratory experiments provide experiences with digital integrated circuits, circuit behavior, and digital trouble-shooting techniques. Class meets for two lecture and four laboratory hours per week. (3 crs.)

IND 165. MACHINE PROCESSING I. An introduction to basic foundry (metal casting) and machine metalworking. Includes sand moldmaking and gating, layout, tool geometry, lathe work, milling, shaping, drilling, and bench work. Class meets for two lecture and four laboratory hours per week. (3 crs.)

IND 184. ENERGY AND POWER SYSTEMS. An application of the systems approach to the study of energy sources and converters, power transmission, and controls. Instruction will focus on energy as it is applied to propulsion systems, residential conservation, and industrial uses. Energy alternatives, system efficiency and conservation are emphasized. Class meets for two lecture and four laboratory hours per week. (3 crs.)

IND 210. TECHNICAL DRAWING II. Provides experiences in problem-solving through the use of technical working drawings. Special emphasis is placed on American National Standards drawing practices, shop processes,

conventional representation, standardization of machine parts and fasteners, preparation of tracings, the reproduction of drawings, and surface development. Class meets for two lecture and four laboratory hours per week. Prerequisite: IND 110. (3 crs.)

IND 215. COMPUTER-AIDED DRAFTING (CAD) I. This course involves the use of computer software and hardware as applied to mechanical design and drafting. Students learn to manipulate basic geometric entities (points, lines, and arcs) to create 2-D and 3-D models. Experiences dealing with dimensioning, level/layer surfaces and planes are also explored. Class meets for two lecture and four laboratory hours per week. Prerequisite: IND 110. (3 crs.)

IND 218. DESCRIPTIVE GEOMETRY & SURFACE DEVELOPMENT. Adding to the knowledge and experiences gained in Technical Drawing I, this course covers the theory of projection in detail with emphasis on the manipulation of points, lines and planes in space. In addition, surface development and design in order to serve of value in future advances such as computer-aided drafting, computer-aided instruction and computer-aided manufacturing. Class meets for two lecture and four laboratory hours per week. Prerequisite: IND 110. (3 crs.)

IND 230. INTRODUCTION TO LINEAR ELECTRONICS. An investigation into the fundamental concepts of analog electronics including semiconductor device theory, power supplies, amplifiers, operational amplifiers, oscillators, linear integrated circuits, and control circuits. Laboratory experiments provide experiences with electronic instrumentation, electronic components, and electronic circuit behavior. Class meets for two lecture and four laboratory hours per week. Prerequisite: IND 130. (3 crs.)

IND 235. INTRODUCTION TO MICROPROCESSORS. A presentation of number systems and codes, microprocessor architecture, computer arithmetic, machine language programming, and microprocessor interfacing. Emphasis is placed on laboratory experiments dealing with machine language program execution and microprocessor interfacing. Class meets for two lecture and four laboratory hours per week. Prerequisite: IND 135. (3 crs.)

IND 250. CONSTRUCTION PROCESSES I. An introductory course in construction with an emphasis on residential housing. Instruction and experiences will include aspects of construction such as, planning and estimating, personnel and time management, site preparation, footings and foundations, framing, and roofing. The safe and intelligent use of tools and materials is stressed. Class meets for two lecture and four laboratory hours per week. Prerequisite: TED 115. (3 crs.)

IND 265. MACHINE PROCESSING II. Current foundry (metal casting) processes are studied. Advanced machine metalworking processes, including indexing and gear cutting are emphasized. Students are responsible for determining the sequence of operations necessary to produce a product. Class meets for two lecture and four laboratory hours per week. Prerequisite: IND 165. (3 crs.)

IND 270. HYDRAULIC/PNEUMATIC FLUID POWER. This is an introductory course in the study of basic hydraulic and pneumatic circuits and systems. Topics covered are: physical laws applicable to fluid power components, circuit construction and analysis, the use of manually and remotely controlled devices, the use of linear and rotary actuators, and the operation of hydraulic pump and air compressor systems. Theoretical concepts are verified by practical hands-on laboratory activities. Class meets for two lecture and four laboratory hours per week. (3 crs.)

IND 278. PLASTICS TECHNOLOGY. This is a survey course designed to provide the student with an opportunity to gain information about the industrial and technological uses of plastic-like materials. In the laboratory the student designs, constructs and uses a variety of tools, forms and molds. Depending upon the activity and the time allotted, students will be encouraged to create well-designed products for personal and/or professional use. Class meets for two lecture and four laboratory hours per week. (3 crs.)

IND 282. SMALL GASOLINE ENGINES. An introduction to the theory, operation and major overhaul procedures of small 2 and 4- cycle gasoline engines. Engine components, diagnosis, testing, maintenance, disassembly, reassembly, and trouble shooting are stressed in the course to afford the participants the opportunity to develop the expertise in course content skills and the background to repair small gasoline engines. Laboratory work provides for the opportunity to apply theoretical concepts in general practices. Class meets for two lecture and four laboratory hours per week. (3 crs.)

IND 310. TECHNICAL DRAWING III. An extension of Technical Drawing I and II with continued emphasis on skill, technique, and the use of ANSI and ISO drafting standards. The course is developed around current industrial drafting practices and includes instruction in geometric tolerancing, surface texture, weldments, metrication, etc. Prerequisites: IND 101, IND 110 & IND 210. Class meets for two lecture and four laboratory hours per week. (3 crs.)

IND 315. COMPUTER AIDED DRAFTING (CAD) II. This course is an extension of Computer Aided Drafting (CAD) I and will include more complex problems and procedures in the development of graphic solutions. The use of extended geometry will comprise an important part of the course. Students will gain additional experiences on PC based computer drafting systems. Class meets for two lecture and four laboratory hours per week. Prerequisite: IND 215. (3 crs.)

IND 320. ARCHITECTURAL DRAFTING AND DESIGN. Experience is provided in basic residential design. The fundamental sequences in designing and drawing are stressed as the student completes the architectural drawings necessary for the construction of a residence. Elements of the course include architectural styles, area planning, structural detailing, pictorial rendering, building specifications, and cost analysis. Class meets for two lecture and four laboratory hours per week. Prerequisite: IND 110. (3 crs.)

IND 330. INDUSTRIAL ELECTRICITY/ELECTRONICS. An investigation into the theory and applications of motors and motor controllers, thyristors, transducers, programmable controllers, microprocessor controllers, servomechanisms, and Robotics. Laboratory experiences include motor identification, motor disassembly and repair, motor testing, control circuitry, and servomechanisms. Class meets for two lecture and four laboratory hours per week. Prerequisites: IND 130 & IND 230. (3 crs.)

IND 332. COMMUNICATION ELECTRONICS. The application of devices and circuits to electronic communications. The major topics include modulation, demodulation, transmission, data transfer, optical techniques, test equipment, and system analysis. Class meets for two lecture and four laboratory hours per week. Prerequisites: IND 230 & IND 235. (3 crs.)

IND 335. ADVANCED MICROPROCESSORS. This course deals with advanced concepts in machine language programming. It introduces the world of editors, assemblers, and debuggers. It also covers the advanced architecture of modern microprocessors and their more sophisticated instruction sets and addressing modes. The student will learn to develop hardware and software required to apply microprocessors to real world problems. Class meets for two lecture and four laboratory hours per week. Class meets for two lecture and four laboratory hours per week. Prerequisite: IND 235. (3 crs.)

IND 336. ELECTRONIC SYSTEMS AND PRODUCT DEVELOPMENT. An experience in developing electronic systems and/or products. The student will select a project subject to instructor approval and develop that project to the prototype stage. The student will also verify all performance specifications for the project. Prerequisites: IND 235 and IND 230. Class meets for two lecture and four laboratory hours per week. (3 crs.)

IND 345. CONSTRUCTION PROCESSES I. A course in construction with an emphasis on residential housing. Instruction and experiences will include aspects of construction such as planning and estimating, personnel and time management, site preparation, footings and foundations, framing and roofing. The safe and intelligent use of tools and materials is stressed. One third class time and two thirds lab time. (3 crs.)

IND 355. WOOD TECHNOLOGY. A study of woodworking providing instruction in furniture and case work. The safe use and care of machines and hand tools is stressed. Emphasis is placed on project planning and design, cost analysis, wood technology, material selection and product development. Students design and produce a project involving operations on basic machines. Class meets for two lecture and four laboratory hours per week. (3 crs.)

IND 365. SPECIAL MACHINE PROCESSING. A special course designed to allow the student to investigate a specific area of interest in the metal machining field. Students interested in taking this course will complete a document identifying the scope of their interest, specifying the activities that

will be pursued throughout the semester, and have it approved by the instructor six weeks before the beginning of the class. The student's background in the metal machining processes will be broadened by completing the laboratory experiences outlined in the approved proposal. Class meets for two lecture and four laboratory hours per week. Prerequisites: IND 165 and IND 265. (3 crs.)

IND 415. COMPUTER-AIDED DRAFTING AND DESIGN. This course uses a PC-based CADD package along with in associated tool design software package in a design application. The students will explore advanced CADD problems using solid modeling, analysis, and the introduction of standard components from the tool design software. Prerequisites: IND 215 & IND 315. (3 crs.)

IND 416. INTRODUCTION TO SOLID MODELING AND FINITE ELEMENTS. This could will use a PC-based CADD program to introduce the concepts of mathematical modeling and engineering analysis. The student will use a drawing created with a CADD program to generate a solid model of the drawing component and to mesh that solid model into a finite element model. The student will also be introduced to the concepts of bottom-up and top-down solid modeling and will perform simple structural analyses using the generated finite element model. The transfer of data between computer programs, using the IGES format, will also be presented. Prerequisites: IND 215, ITE 325 & PHY 110. (3 crs.)

Literature - LIT

LIT courses are introductions to literature, with emphasis on the subject indicated in the title. They are primarily intended for the general student and may not be used to fulfill requirements for the English major.

LIT 111. STAR TREK AND MODERN MAN. A multi-media literature course wherein the Norton Anthology of English Literature and the cinematic works of Gene Roddenberry constitute a two-fold study: "Star Trek" as literature and literature in "Star Trek" to study the nature and evolution of modern human consciousness. (3 crs.)

LIT 115. MAN'S VIEW OF GOD. An introduction to the Bible as a chronicle of Hebrew history in light of recent archeological and philological discoveries, to demonstrate how deeply this book has affected the western mind. (3 crs.)

LIT 116. MYTH, MAGIC AND MYSTICISM. A study of the four basic paths into the unknown: magic, mysticism, fantasy, and myth. (3 crs.)

LIT 118. THE AMERICAN HERO. The development of the American hero in fiction, with specific emphasis on the hero's nature, character, and maturation. (3 crs.)

LIT 125. THE AMERICAN WEST. A general introduction to the literature of the Great American West through an examination of a variety of literary types. (3 crs.)

LIT 127. WOMAN AS HERO. An exploration of heroic roles assigned to women in literature, the contrast between reality and the literature, and the differences between fictional women created by male and female authors. An analysis of the reasons for these differences forms part of the subject. (3 crs.)

LIT 138. WAR IN THE NOVEL. A study that limits itself to those wars fought after 1900 and to their treatments in literature. In particular, the course is interested in the effects of war upon individuals, and in the ambivalence toward war shown by novelists. (3 crs.)

LIT 147. SCIENCE FICTION. An introductory survey of the forms of science fiction, with particular emphasis on the author's ability to detail and predict future developments. (3 crs.)

LIT 148. HORROR IN LITERATURE. An examination of the tradition of horror literature in England and America from a literary, historical, and psychological viewpoint. Some emphasis on the sociological implications of the popularity of the form. (3 crs.)

LIT 150. BASEBALL IN LITERATURE. This course requires the student to read, write, and talk about a game that Steinbeck called a "state of mind," a game that is, in the words of Jacques Barzun, a way "to know America." Thus the student that works learns about both himself and his country. (3 crs.)

LIT 160. AMERICAN NATURE WRITERS. An introduction to the best of America's great naturalists emphasizing the development of informed and educated attitudes towards America's natural resources and issues of protection and exploitation. (3 crs.)

LIT 166. SACCO AND VANZETTI. A study of the journalism and literature surrounding one of the twentieth century's most notorious trials. (3 crs.)

LIT 170. ALL ABOUT WORDS. An introduction to the total complexity and fascination of words. The course deals with words as shapes, analogues, formulas, and games. Indirectly, but significantly, it instructs in vocabulary by introducing a sizable vocabulary for talking about words and nurturing a student's natural curiosity about words. (3 crs.)

LIT 178. LITERATURE AND FILM. A study of the total relationship between literature and film, with emphasis on the involvement of literary writers in motion pictures and television, the process of literary adaptation, and the influence of motion pictures on literary critics and writers. (3 crs.)

Management - MGT

MGT 201. PRINCIPLES OF MANAGEMENT. A survey of the theories in the field of management, covering concepts developed by the classical school, the behavioral school, and the management science school. Emphasis is on human factors, but the influences of economics and technological factors are also considered. Prerequisite: PSY 100 or permission of instructor. (3 crs.)

MGT 205. ENTREPRENEURSHIP I: SMALL BUSINESS FUNDAMENTALS. Entrepreneurship and new venture initiation. A study of the development of a business appropriate to the objectives and resources of the individual entrepreneur. This course deals with the initiation of a new business venture rather than the management of ongoing enterprises, and treats new venture formation primarily from the standpoint of the individual entrepreneur rather than that of an established enterprise expanding into a new area. (3 crs.)

MGT 271. COMPUTER APPLICATIONS IN BUSINESS I. An introduction to the basic tools and techniques of software used to solve business problems. This course is taught on a lecture-laboratory basis in which the computer is utilized to present applications of the spreadsheet in business situations. (1 cr.)

MGT 273. COMPUTER APPLICATIONS IN BUSINESS II. A continuation of Computer Applications in Business I with an emphasis on more advanced topics and problem-solving. This course is taught on a lecture-laboratory basis in which the computer is utilized to present applications of the spreadsheet in business situations. (1 cr.)

MGT 301. ORGANIZATIONAL BEHAVIOR. An examination of theories and concepts relating the individual to the organization. The course analyzes the forces which influence behavior within an organization. Prerequisite: MGT 201 or permission of instructor. (3 crs.)

MGT 305. ENTREPRENEURSHIP II: SMALL BUSINESS MANAGEMENT. A management course designed to integrate all business functions at a small business level. Study of the development and management of a business plan appropriate to the objectives and resources of the individual entrepreneur. This course deals with the management of ongoing enterprises. A computer software package is utilized to develop various cases and problems found in the text. Each student develops a business plan in either Retailing Operations, Service Business, or Manufacturing Operations. (3 crs.)

MGT 311. ORGANIZATION THEORY AND DESIGN. Organizations are essential to the way our society operates and permeate and shapes our lives. In addition to being the means for providing goods and services, organizations create the settings in which most people will spend a good part of their lives working either as subordinates or managers or both. This course offers students an understanding of the components that make up an organization, its complexity, its structure and design and the interrelationships that exist among all of its components. Prerequiiste: MGT 201. (3 crs.)

MGT 315. ORGANIZATION DEVELOPMENT AND CHANGE. Change pervades modern society. All organizations exist within a changing environment. To survive and develop, organizations must be able or adapt to

these changes and respond to opportunities for growth. Change is also an inherent aspect of management. Managers must understand and manage change if the organization is to thrive and grow. This course is about planned organization change and is designed to introduce the student to the field of organization development, its definition, goals, precedents, emergence, approaches, and current status. Prerequisite: MGT 201. (3 crs.)

MGT 352. HUMAN RESOURCE MANAGEMENT. Decision-making and analyses of major management problems that arise in manpower planning, recruitment, selection, development, compensation, and appraisal of employees in various organizations. Prerequisite: MGT 201. (3 crs.)

MGT 353. COMPENSATION MANAGEMENT. The design, implementation and evaluation of wage and salary packages in both private and public sectors. Prerequisite: MGT 352. (3 crs.)

MGT 362. LABOR RELATIONS. A survey of the many facets of employee-management relations. The course examines the historical, statutory and social bases for modern workplace relationships with emphasis given to the role of organized labor. Prerequisite: Junior level standing or permission of instructor. (3 crs.)

MGT 371. MANAGEMENT INFORMATION SYSTEMS. An introduction to management control systems, which include control of production costs, standard costs, flexible budgets, managed costs, profit centers and capital acquisitions. Prerequisite: MGT 201, CSC 101, & MGT 271. (3 crs.)

MGT 373. COMPUTER BASED MANAGEMENT INFORMATION SYSTEMS. An introduction to the technology, application, and management of computer-based information systems. Topics covered include business computer systems, computer hardware, computer software, data-based management systems, general accounting application, materials control application, management information processing, systems planning, and operations management. Prerequisites: CSC 101, MGT 371 & ACC 202. (3 crs.)

MGT 402. STRATEGIC MANAGEMENT. The integrated decision making of general management. Topics include corporate strategy and implementing corporate strategy. Prerequisites: MGT 201, MKT 301 & FIN 301, or permission of instructor. (3 crs.)

MGT 431. INTERNATIONAL BUSINESS MANAGEMENT. The concepts, problems and policies of international business enterprises for managers. Prerequisite: Junior level standing. (3 crs.)

MGT 452. HUMAN RESOURCE STRATEGY AND PLANNING. The human resource is emerging as a significant contingency in organizational strategic plans. Personnel policies and programs as well as the available skills, knowledge, and attitudes can provide particular opportunities or limitations to management . This course examines organizational human resources management from a strategic perspective. The key focus is on exploring HR planning and strategy concepts, developing an understanding of the related analytical tools, and determining how these concepts and tools can be used to enhance an organization's competitive position. (3 crs.)

MGT 492. SMALL BUSINESS INTERNSHIP. A program in which business majors intern with a local firm for a semester. Students draw upon their academic knowledge to aid the local enterprise in its over-all operation. The type and scope of the problems vary with each individual situation. The course is open to students with junior or senior standing who have submitted a formal application, have the recommendation of a faculty member, and have a satisfactory Q.P.A. (Repeatable; Variable crs.; a maximum of 12 credits can be used toward the completion of a baccalaureate degree.)

Manufacturing Technology - MTE

MTE 236. NUMERICAL CONTROL PROGRAMMING I (LAB). An introduction to the procedures for manually programming numerically controlled equipment. Students write programs following a machine format detail, using Cartesian coordinates for motion command and incorporating preparatory and miscellaneous commands necessary to manufacture parts on a machining and turning center. Course includes two hours of lecture and four hours of laboratory per week. (3 crs.)

MTE 250. INTRODUCTION TO AUTOMATION (LAB). This course provides a variety of introductory experiences in industrial automation. Instruction will include theoretical applications as well as practical hands-on laboratory applications in robotics, automatic guided vehicles (AGV's), computer aided drafting (CAD), machine vision, automatic identification, and programmable logic controllers (PLC's). Students learn what automation is, its advantages and disadvantages, and how it is applied. Course includes two hours of lecture and four hours of laboratory per week. (3 crs.)

MTE 265. PROGRAMMABLE CONTROL SYSTEMS (LAB). This course focuses on the use of programmable logic controllers (PLCs) to control industrial sequences. Students are provided with theoretical and hands-on experience in designing, programming, testing and controlled by a PLC. Course includes two hours of lecture and four hours of laboratory per week. (3 crs.)

MTE 268. AUTOMATED SUPPORT SYSTEMS (LAB). This course emphasizes the use of non-robotic types of automation. These types include sensors, automatic guided vehicles (AGVs), machine vision, and automatic identification. Students are provided with theoretical and hands-on experience that will enable them to understand the appropriate application of non-robotic types of automation in industrial situations. Additional topics include artificial intelligence, computer interfacing, connectors, and cables. Course includes two hours of lecture and four hours of laboratory per week. Prerequisite: MTE 250. (3 crs.)

MTE 336. NUMERICAL CONTROL PROGRAMMING II (LAB). The second of two courses in the manual programming of numerically controlled machines. Concentration is placed on continuous path machining of parts using the linear interpretation capability of machines to cut chords of arcs to closely approximate curves. Circular interpolation is studied with the additional word addresses that are necessary. Assignments provide experiences in three axis linear interpolation programming and two axis circular interpolated programming. Course includes two hours of lecture and four hours of laboratory per week. Prerequisite: MTE 236. (3 crs.)

MTE 337. COMPUTER PROGRAMMING NUMERICALLY CONTROLLED EQUIPMENT (COMPACT II) (LAB). A study of the COMPACT computer language used to produce machine tape instructions for manufacturing parts. Students learn to access and utilize a computer to produce part geometry and direct a machine tool to accomplish a variety of metal machining operations. The graphics capability of BRAVO software will be explored. Course includes two hours of lecture and four hours of laboratory per week. Prerequisite: MTE 236. (3 crs.)

MTE 338. COMPUTER PROGRAMMING NUMERICALLY CONTROLLED EQUIPMENT (APT) (LAB). An investigation of the APT machine tool language for programming numerically controlled machine tools. Students write APT programs and operate equipment with the produced tapes to manufacture milled and turned parts. Course includes two hours of lecture and four hours of laboratory per week. Prerequisite: MTE 236. (3 crs.)

MTE 350. ROBOTIC SYSTEMS (LAB). This course emphasizes the use of robots in automated applications. Students are provided with theoretical as well as hands-on experience in the design, programming, debugging, setup, and interfacing of industrial robotic applications. Also discussed are servo systems, their operation, components, functions, and application to automated equipment. Course includes two hours of lecture and four hours of laboratory per week. Prerequisite: MTE 250. (3 crs.)

MTE 437. ADVANCED COMPUTER PROGRAMMING NUMERICALLY CONTROLLED EQUIPMENT (COMPACT II) (LAB). An investigation into the more sophisticated processes of the COMPACT II machine tool programming language. Parts are programmed and manufactured on a CNC milling machine and lathe using the COMPACT II language and the BRAVO3 graphic software. Course includes two hours of lecture and four hours of laboratory per week. Prerequisite: MTE 337. (3 crs.)

MTE 438. ADVANCED COMPUTER PROGRAMMING NUMERICALLY CONTROLLED EQUIPMENT (APT) (LAB). The machining of parts using matrixes, loops, pocketing, macros, and other advanced techniques. These methods are applied to the operation of a CNC vertical milling machine and a CNC lathe. Course includes two hours of lecture and four hours of laboratory per week. Prerequisite: MTE 338. (3 crs.)

MTE 450. APPLICATIONS OF INDUSTRIAL AUTOMATION (LAB). An advanced automation course that incorporates many of the topics of previous courses, but in a more in-depth and integrated manner. The focus is

to provide students with the opportunity to learn about automated systems through the planning and implementing of such a system. Students are involved in the design, programming, setup, installation, and troubleshooting of an automated system that includes robots, but may also include an automatic guide vehicle (AGV), machine vision system, programmable logic controllers, bar code scanners, computers, and a computerized numerical control (CNC) machine. Course includes two hours of lecture and four hours of laboratory per week. Prerequisites: MTE 250, MTE 268, and MTE 350. (3 crs.)

MTE 495. MANUFACTURING TECHNOLOGY INTERNSHIP. Student interns are placed with an industrial organization which most nearly approximates their goals for employment. The intent of the internship is to provide students with practical work experience in an environment in which they will be dealing with practical problems requiring real solutions in a relatively short time frame. Advisor and Department Chairperson approval is required before course enrollment. This is a repeatable course and may be taken as follows: Students may take up to six credits. The extra credit may be used as a free elective or for a credit deficiency due to other program changes. Prerequisite: Junior or Senior Standing. (1-6 crs.)

Marketing - MKT

MKT 222. PRINCIPLES OF SELLING. A study of basic principles of persuasive communications with emphasis on proven, practical selling techniques. Activities include interactive class discussions and video role-playing. Prerequisite: BUS 100. (3 crs.)

MKT 271. PRINCIPLES OF MARKETING. An introduction to basic principles of marketing management. Other topics covered are selecting target markets, developing marketing mixes, functions of marketing management. Prerequisite: ECO 100 or ECO 201& MGT 201. (3 crs.)

MKT 321. SALES MANAGEMENT. Proven management techniques for remotely located field sales force member, are fully explored. Motivation, evaluation, and control of sales force activities are developed through case presentations and class discussions. Prerequisites: MGT 201, MKT 222. (3 crs.)

MKT 331. RETAILING. A management and marketing analysis of department, discount, specialty and chain stores with special emphasis on location, human resources, merchandising and effective pricing. Prerequisite: BUS 100 recommended. (3 crs.)

MKT 341. MARKETING FOR NON-PROFIT ORGANIZATIONS. A marketing course designed for both business and nonbusiness majors that differentiates between for-profit and not-for-profit organizations, investigates the competitive environment facing nonprofits (e.g., hospitals, churches, charities, colleges, performing artsgroups), and applies research techniques and marketing management tools (product policy, distribution and delivery systems, monetary pricing, and communication strategies) to the nonbusiness entity. (3 crs.)

MKT 351. ADVERTISING MANAGEMENT. A study of the basic components of the advertising mix, establishing media selection techniques, and determining the best vehicles for specific selling and promotional efforts commonly confronting marketing managers today. Prerequisite: MKT 301. (3 crs.)

MKT 401. MARKETING MANAGEMENT. Description and analysis of the nature, strategies and techniques of marketing management. Prerequisite: MKT 301. (3 crs.)

MKT 421. CONSUMER BEHAVIOR. This integrates the disciplines of psychology, anthropology, economics and sociology with marketing to explain, understand, and predict consumer decisions. This is achieved by exploring both the theoretical and practical implications of (1) individual behavior variables such as motivation, learning, perception, personality, and attitudes; (2) group influences such as family, culture, social class and reference group behavior; and (3) consumer decision processes such as cognitive dissonance, brand loyalty, new product adoption and risk reduction. (3 crs.)

MKT. 431. MARKETING RESEARCH. Description of behavioral and statistical tools for designing and implementing research projects. Prerequisites: MKT 301, MAT 225. (3 crs.)

MKT 452. BUSINESS MARKETING. The characteristics of business-to-business marketing are explored and developed focusing on environment, pricing, planning, distribution, evaluation and strategy development for marketing business and industrial products to the professional user or buyer. Prerequisite: MKT 301. (3 crs.)

MKT 501. INTERNATIONAL BUSINESS MARKETING. Upon completion of the course, the student will be able to evaluate and make recommendations and decisions concerning the strategy and tactics of real-life targeting and marketing mix development for both global and country-specific markets. The course will also cover selected elements of international marketing research. (3 crs.)

Mathematics - MAT & DMA

DMA 092. INTRODUCTORY ALGEBRA. Designed to aid the student in the transition from arithmetic to algebra. It may be a terminal course for some or may be a preparation for a traditional College Algebra course and topics will include: Operations on integers and polynomials, factoring and linear equations. This course may not be used as a Natural Science elective. This course does not earn credit toward graduation. (3 crs.)

DMA 094. INTERMEDIATE ALGEBRA. Designed for the student who has recently and successfully completed a course covering concepts and skills associated with an Introductory Algebra course. Intermediate Algebra was established to provide the student with further development of the basic essentials of algebra and serve as a bridge to a required college mathematics course such as College Algebra or Technical Mathematics I. Expected topics to be covered: set notation, solving linear equations and related applications, solving linear inequalities, graphs of linear equations, functional notation, solving systems of linear equations, polynomials, rational exponents, radicals, complex numbers, rational expressions, solving quadratic equations. (3 crs.)

MAT 100. FUNDAMENTALS OF MATHEMATICS. Sets and their language, numeration systems; properties of natural numbers, whole numbers, integers, rational and real numbers; elementary number theory; modular arithmetic; mathematical systems; logic. (3 crs.)

MAT 171. MATHEMATICS OF FINANCE I. Simple interest, compound interest, value of money relative to time and interest, discounting, accumulation, mortgage points, annuities, amortization schedules, and equations of value. Prerequisite: MAT 181 or MAT 182 (3 crs.)

MAT 181. COLLEGE ALGEBRA. Fundamental operations; factoring and fractions, exponents and radicals; functions and graphs; equations and inequalities; systems of equations. Prerequisite: DMA 092 or high school algebra. (3 crs.)

MAT 182. TECHNICAL MATHEMATICS I. An introduction to algebraic topics usually covered in a high school algebra course, such as functions, graphs, exponents and radicals, and linear and quadratic equations. Emphasis on technology applications. (3 crs.)

MAT 191. COLLEGE TRIGONOMETRY. Polar coordinates; identities; solving trigonometric equations; functions and inverse functions, complex numbers and logarithms. Prerequisite: The student should have an adequate background in algebra, and some plane geometry is desirable. (3 crs.)

MAT 192. TECHNICAL MATHEMATICS II. An emphasis on trigonometry: trigonometric functions, vectors, graphs of trigonometric functions, exponents and logarithms, and additional topics in trigonometry. Emphasis on technology applications. Prerequisite: MAT 181 or MAT 182. (3 crs.)

MAT 199. PRE-CALCULUS. Fundamental notions (functions, lines, segments, slopes, angle between lines, graphs and equations), conics, algebraic and transcendental curves. (3 crs.)

MAT 201. MATHEMATICAL MODELING. This course provides an introduction to mathematical modeling for majors as well as non-majors. An in-depth study of Discrete Dynamical Systems (DDS) is covered along with an introduction to calculus. The course affords the student an early opportunity to see how the pieces of an applied problem fits together. Using computer technology (simulation and spreadsheet software) the student investigates meaningful and practical problems chosen from many academic

disciplines, including mathematical sciences as well as management and life sciences. Prerequisites: CSC 101 & MAT 181. (3 crs.)

MAT 203. GEOMETRY. Analysis of axiomatic systems, axiomatic development of elementary Euclidean geometry and non-Euclidean geometry. Prerequisites: MAT 181 & MAT 191, or three years of high school mathematics. (3 crs.)

MAT 215. STATISTICS. For non mathematics majors; not counted toward a mathematics major. Frequency distribution, percentiles, measures of central tendency and variability, normal distribution and curve, populations, samples, sampling distribution of means, sampling distribution of proportion, null and alternative hypotheses, type I and type II errors, tests of means, confidence intervals, decision procedures, correlation, chi-square, simple analysis of variance and design of experiments. Prerequisite: MAT 181. (3 crs.)

MAT 225. BUSINESS STATISTICS. Statistical techniques relevant to business applications. Primary emphasis is placed upon identification of appropriate statistical methods to use, proper interpretation and appropriate presentation of results. Topics include descriptive statistics, probability concepts, the normal probability distribution, estimation techniques, tests of hypotheses, simple and multiple linear regression. Statistical software is used to implement many of the statistical methods. Prerequisite: MAT 181 or MAT 182. (3 crs.)

MAT 271. MATHEMATICS OF FINANCE II. Generalized annuities; bonds, amortization of premiums and accumulation of discount; cash flows; depreciation schedules; comparison of depreciation; net cash flow; rate of return; capitalized cost and annual return; life annuities; life insurance. Prerequisite: MAT 171 (3 crs.)

MAT 272. DISCRETE MATHEMATICS. An introduction to theories and methods of mathematics that are relative to computer science. Topics include: logic, sets, elementary number theory, mathematical induction, combinatorics, relations, digraphs, Boolean matrices, trees. (3 crs.)

MAT 273. BASIC CALCULUS. The techniques of differentiation and integration are covered without the theory of limits and continuity. Applications in business and biological science are considered. Prerequisites: MAT 181 or MAT 182 & MAT 191 or MAT 192. (3 crs.)

MAT 281. CALCULUS I. A review of absolute value and inequalities; an introduction to analytic geometry; functions, limits, and continuity; the derivative; applications of the derivative. Prerequisite: MAT 181 or MAT 199 or four years of high school mathematics. (3 crs.)

MAT 282. CALCULUS II. The integral; fundamental theorem of integral calculus; applications of the integral; inverse functions; logarithmic functions; exponential functions; trigonometric functions; hyperbolic functions; techniques of integration. Prerequisite: MAT 281. (3 crs.)

MAT 300. MATHEMATICAL INSIGHTS. A gradual introduction to the basic concepts of logic, set theory, and abstract algebra. The axiomatic structure is emphasized. (3 crs.)

MAT 304. HISTORY OF MATHEMATICS. This course is a historical summary of the development of mathematics. Emphasis will be relating mathematics to the development of world culture and its relationship with all aspects of our culture. The lives and discoveries of many mathematicians are discussed. Methods of incorporating the history of mathematics into high school mathematics courses are a major focus of the course. Prerequisites: MAT 203 & MAT 282. (3 crs.)

MAT 305. THEORY OF EQUATIONS. Complex numbers; theorems involving polynomials in one variable; cubic and biquadratic equations; separation of roots, Sturm's theorem, and approximate evaluation of roots. Prerequisite: Junior or Senior standing. (3 crs.)

MAT 341. LINEAR ALGEBRA I. Systems of linear equations and matrices; determinants; vectors in 2-space and 3-space; vector spaces; linear transformations. (3 crs.)

MAT 351. ABSTRACT ALGEBRA I. Fundamental concepts of logic; natural numbers, well-ordering property, induction, elementary concepts of number theory; groups, cosets, Lagrange's theorem, normal sub-groups, factor groups; homomorphism, isomorphism, and related topics including Cayley's theorem, natural hemomorphism, and the three fundamental homomorphism theorems. (3 crs.)

MAT 381. CALCULUS III. Indeterminate forms and improper integrals, polar coordinates and conic sections, infinite series, and the theory of infinite series. Prerequisite: MAT 282. (3 crs.)

MAT 382. CALCULUS IV. Vectors in the plane; vectors in three space; theory or curves and surfaces; the differential calculus and the integral calculus of functions of several variables. Prerequisite: MAT 381. (3 crs.)

MAT 406. DIFFERENTIAL EQUATIONS. Ordinary differential equations and their solutions. The existence and uniqueness of solutions. Various types of differential equations and the techniques for obtaining their solution. Some basic applications, including numerical techniques. Computer solution techniques are discussed. Prerequisite: MAT 282 & MAT 381. (3 crs.)

MAT 441. LINEAR ALGEBRA II. Extends the concepts learned in Linear Algebra I. The content is not fixed, but usually includes the following topics: linear transformations, change-of-bases matrices, representation matrices; inner-product spaces, eigenvalues and eigenvectors, diagonalization. Prerequisite: MAT 341. (3 crs.)

MAT 451. ABSTRACT ALGEBRA II. Study of rings, ideals, quotient rings, integral domains, and fields; ring homomorphisms; polynomial rings, division algorithms, factorization of polynomials, unique factorization, extensions, fundamental theorem; finite fields. Prerequisite: MAT 351. (3 crs.)

MAT 461. STATISTICAL ANALYSIS I. Basic concepts of both discrete and continuous probability theory. The study of random variables, probability distributions, mathematical expectation and a number of significant probability models. Introduction to statistical estimation and hypothesis testing. Prerequisites: MAT 282 (3 crs.)

MAT 462. STATISTICAL ANALYSIS II. Statistical theory and application of statistical estimation techniques and hypothesis testing methods. Simple linear and multiple linear regression models. Statistical techniques are implemented with microcomputer statistical software. Prerequisites: MAT 461. (3 crs.)

MAT 469. HONORS COURSE IN MATHEMATICS. Mathematics majors must, as a prerequisite for this course, have completed 64 credits with a QPA of 3.25 in all work and the permission of the department chair. (3 crs.)

MAT 481. ADVANCED CALCULUS I. Logic and techniques of proof; relations, functions, cardinality, and naive set theory; development of real numbers from natural numbers through topology of the line; convergence and related ideas dealing with functions (sequences and series) including continuity. (3 crs.)

MAT 482. ADVANCED CALCULUS II. Further development of the limit concept pertaining to functions including differentiation and integration along with appropriate theorems and properties; continuation of development of sequences and series including functions. Prerequisite: MAT 481. (3 crs.)

MAT 490. TOPOLOGY. Set theory as applied to topological spaces including the real line; metric spaces. Prerequisite: MAT 351 or MAT 481. (3 crs.)

MAT 495. SEMINAR IN MATHEMATICS. Topics in this course are chosen jointly by the instructor and the student or students involved. Prerequisite: Permission of instructor and chair of the department. (Repeatable for a maximum of 3 crs.)

MAT 500. TECHNOLOGY FOR MATHEMATICS. This course, designed for mathematics and science majors and for prospective and practicing educators, explores the facets of using technological tools in the teaching, learning, and application of mathematics. The course, which will be taught from a laboratory-based perspective, consists of four components – using graphing calculators, using calculator-based laboratories, using the internet, and using mathematical software. Prerequisites: CSC 101, MAT 281 & MAT 282 or permission of instructor. (3 crs.)

Multimedia Technology – MMT

MMT 310. DIGITAL PORTFOLIO. This course focuses on the integration of multimedia components including conventional photography/scanned images, digital photography, stock art/images, animation, sound and

videography for creating effective assessment portfolios. Emphasis will be placed on the process of integrating the assessment components using various hardware platforms and software tools, and incorporating basic image manipulation. As a terminating project, the student will create and master a CD-ROM based professional digital portfolio. Students should have a resource bank of materials suitable for inclusion in a professional digital portfolio and must have a working knowledge of computer operating systems. Prerequisite: Junior status. (3 crs.)

Music - MUS

MUS 100. INTRODUCTION TO MUSIC. Exposes the student to the various historical, analytical and aesthetic elements of music, thereby providing an opportunity to broaden and enrich personal enjoyment. This exposure to music is made through the use of visual aids, audio and video recordings, and concerts. (3 crs.)

MUS 104. VOICE CLASS I. This course is designed for students who want to improve their singing voice as a musically expressive instrument. Breathing, vocal placement and diction will be emphasized. Attention will also be given to improving sight-singing ability. (3 crs.)

MUS 115. FUNDAMENTALS OF MUSIC. Provides a knowledge of the fundamentals of music and an ability to execute basic skills, including the study of notation, rhythms and meter signatures, major and minor scales and key signatures, intervals and chords. The reading and executing of basic rhythms and an introduction to piano keyboard is also included. Strongly recommended for Elementary Education students and any others interested in strengthening their knowledge of music fundamentals. (3 crs.)

MUS 191 UNIVERSITY CHOIR. The California University Choir provides an opportunity for students to sing a wide variety of music from both contemporary and tradition repertoire. The choir performs frequently on campus and throughout Southwestern Pennsylvania. Choir members is elective; an interview with the director is required. (1 cr., repeatable up to a maximum of 4 crs.)

MUS 192 CALIFORNIA SINGERS. A small (12-18 members) vocal ensemble, with membership determined by audition. The group performs popular entertainment music of all eras and many cultures; the style of performance is adapted to fit the music being performed, the audience, and the season. Smaller groups within the ensemble, such as the women's trio or men's quartet, may rehearse separately to prepare extra concert repertoire. Some choreography, dialogue or mime is part of most performances (1 cr., repeatable up to a maximum of 4 crs.)

MUS 196. JAZZ ENSEMBLE. Entrance by interview with Jazz Ensemble Director. Required attendance at rehearsals and all public performances. Membership granted only by audition. (1 cr., repeatable up to a maximum of 4 crs.)

MUS 197 CALIFORNIA CHORALE. This mixed group will create a "choral union" between the university and its surrounding communities. Membership is open to committed students, staff, faculty and members of the community who wish to rehearse together to produce concerts of choral masterworks of every historical era. The ensemble will ordinarily rehearse once a week for three hours. Audition is required for placement. (1 cr., repeatable up to a maximum of 4 crs.)

MUS 198 UNIVERSITY MARCHING BAND. The University Marching Band performs at football games and parades, and is the featured band at numerous marching band festivals. Membership in this ensemble is open to any interested instrumentalist or equipment technician. There is no audition, but an interview with the director is required. Membership is also open to any student interested in auditioning for Feature Twirler or for a position on the Auxiliary Unit as a Silk, Dancer, or Rifle. (1 cr., repeatable up to a maximum of 4 crs.)

MUS 199 UNIVERSITY CONCERT BAND. The University Concert Band performs at convocations and concerts both on and off campus. Membership in this ensemble is open to any interested instrumentalist. No audition is necessary, but an interview with the director is required. (1 cr., repeatable up to a maximum of 4 crs.)

MUS 200. SIGHT SINGING AND EAR TRAINING. This course is designed for the student who wishes to acquire comprehensive musicianship skills. The student will learn the sol-fa system of note reading and interval identification, using both stationary and moveable tonic. Through sightsinging and ear training exercises, the student will refine his or her aural skills. Students will learn to notate simple melodies dictated as well as to sing, whistle or hum melodies and chords represented by notation. Prerequisite: MUS 115. (3 crs.)

MUS 202 NORTH AMERICAN MUSIC Presents a panoramic view of the musical activities in America from Colonial times through the present. Included in this study of American folk, popular and art music are the various aspects of primitive music, psalmody, early opera, and concert life, African and European folk music's influence in America, the singing school, the musical effect of European immigrants, and the roots of jazz and its ramifications. Prerequisite: MUS 100 is strongly recommended. (3 crs.)

MUS 204. SURVEY OF THE AMERICAN MUSICAL. This course will present the various historical, cultural, and social elements of the American Musical. This will be accomplished through the use of visual aids, audio recordings, television, video tapes, films, and whenever possible, attendance at live performances. Experts in the field will be utilized as guest lecturers. Prerequisite: MUS 100 is strongly recommended. (3 crs.)

MUS 210. VOICE CLASS II. This course is designed for students who have taken Voice I, or have had comparable vocal training and who want to continue to improve their singing voice as a musically expressive instrument. Breathing, vocal placement and proper diction will be emphasized. A more demanding level of vocal literature, commensurate with the student's singing ability will be performed. Attention will also be given to further improvement of sight-singing ability. Prerequisites: MUS 104, MUS 115, & MUS 200. (3 crs.)

MUS 211. KEYBOARD I. For the beginning students interested in achieving facility at the piano. Includes playing of major and minor scales, patterns and fingerings. Chords (I, IV, V) in both major and minor keys followed by their inversions and the common tone chord sequence pattern. A student completing the course should be able to play simple songs by combining melody with chord accompaniment. It is expected that students will be at an entry level in keyboard experience. Prerequisite: MUS 115. (3 crs.)

MUS 300. JAZZ: HISTORY, FORM & ANALYSIS. This course presents the historical background of jazz from 1900 to the present, the important artists and ensembles and their contributions to the art form, and analysis of jazz styles and forms via guided listenings to recordings, videos, and attendance at live performances. Prerequisite: MUS 100. (3 crs.)

MUS 301. 20TH CENTURY MUSIC: HISTORY, FORM & ANALYSIS. This course will demonstrate and analyze the compositional and performance techniques developed in 20th century art and popular music, and will identify those techniques as continuing earlier procedures or reacting to and breaking away from the music of earlier eras. The connection of new musical expression with societal, artistic, economic and historical developments of the 2oth century will be shown. The student should acquire from this course an aural and intellectual grasp of new music trends, the vocabulary to discuss these trends and an acquaintance with the composers of the 20th century and with some of their works. Prerequisites: MUS 100 & MUS 115. (3 crs.)

MUS 303. MUSIC MATERIALS & METHODS FOR THE CLASSROOM TEACHER, GRADES K-8. This course is designed to show future teachers many effective ways to use music in the elementary and middle school classroom, as well as techniques to reinforce the teaching of the music specialist. Basic performance skills are developed, as well as K-8 classroom use of rhythm instruments, singing games, recordings, dances, part-singing and other creative activities. Information on resource material is researched and shared. Students will have the opportunity to practice-teach selected music topics in the K-8 classroom. Prerequisite: MUS 115, MUS 211 is strongly recommended. (3 crs.)

MUS 306. THE OPERA: HISTORY, FORM & ANALYSIS. This course will examine the origins, the history and the elements of opera and related dramatic works for voices with instruments. The analysis of various operas will reveal the relationship of plots and music to historical and national events taking place at the time of their composition. The entire class will attend a live opera performance if at all possible. Prerequisite: MUS 100, MUS 115 is strongly recommended. (3 crs.)

MUS 308. THE SYMPHONY: HISTORY, FORM & ANALYSIS. This course studies both the symphony as an orchestral performing ensemble and, in much greater depth, the symphony as a musical form or development that has been evolving and reinventing itself since the 18th century. Special notice will be taken of the effect of social, technological, philosophical, and economic changes on the historical development of the symphony to the present day. Prerequisite: MUS 100, MUS 115 is strongly recommended (3 crs.)

MUS 312. KEYBOARD II. A continuation of Keyboard I for the more advanced student. Review of scales, chords, inversions and sight readings followed by the improvisation of simple accompaniments from chord symbols. Modulation study is begun with the study of the circle of fifths; further methods of modulation are introduced as time permits. Transposition at both the second and third is introduced. A thorough study of dominant sevenths, ninths and eleventh chords is undertaken in various keys. Prerequisite: MUS 211 (3 crs.)

MUS 109, 209, 309, 409. PRIVATE INSTRUCTION, BRASS I-IV (1 cr.)

MUS 119, 219, 319, 419. PRIVATE INSTRUCTION, PIANO I-IV (1 cr.)

MUS 129, 229, 329, 429. PRIVATE INSTRUCTION, PERCUSSION I-IV (1 cr.)

MUS 149, 249, 349,449. PRIVATE INSTRUCTION, WOODWINDS I-IV (1 cr.)

MUS 159, 259, 359, 459. PRIVATE INSTRUCTION, VOICE I-IV (1 cr.)

Nursing (BSN Program) - NUR

NUR 101. WOMEN'S HEALTH ISSUES. This course addresses various health care issues, needs and concerns of women. Emphasis is on the biological, developmental, psychological and social concepts related to women's health care. OPEN TO ALL STUDENTS. (3 crs.)

NUR 105. PARENTING: INSIGHTS AND ISSUES. This course examines the challenge of parenthood and effective parenting. Explication of the functions, process and problems of parenting serves as a foundation for discussion of effective parenting skills and behaviors. OPEN TO ALL STUDENTS. (3 crs.)

NUR 120. THE INFORMED HEALTH CONSUMER. This course examines the role of consumer movement and its relationship to the health care delivery system. Emphasis is placed on educating the consumer to knowledgeably and effectively use the health care delivery system. OPEN TO ALL STUDENTS. (3 crs.)

NUR 200. TRANSITIONS IN NURSING. This RN/BSN transition course is designed to assist the registered nurse student in developing and achieving professional goals. Emphasis is on educational trends in nursing, concepts of professionalism, theories of role transition, and culture shock. (3 crs.)

NUR 330. PHILOSOPHY OF PROFESSIONAL NURSING. Focuses on theoretical frameworks for professional nursing practice, including an introduction to the nursing process and general systems theory. Assignments help students develop and apply a personal philosophy of professional nursing, and to independently plan appropriate interventions for multicultural clients of all ages. Prerequisite. BSN Status. (3 crs.)

NUR 350. HEALTH ASSESSMENT. Concepts and skills of history-taking and physical assessment are emphasized, focusing on the variations in approach as well as in findings at different stages of human development. Prerequisite: BSN Status. (3 crs.)

NUR 370. METHODS OF NURSING RESEARCH. Basic concepts and methods related to the research process. Opportunity is provided for the development of critical thinking and decision-making skills needed by the professional nurse to analyze and evaluate research findings for application to practice. Prerequisite. BSN Status. (3 crs.)

NUR 375. LEADERSHIP AND CHANGE IN NURSING. Enhances leadership skills through analysis of theories/concepts and experiential exercises. Practicums provide for application of general systems theory in critical analysis of situations and decision-making within the practice of nursing to meet emerging health needs of consumers. Prerequisite: BSN Status. (6 crs.: 3 crs. Theory, 3 crs. Clinical)

NUR 406. SCHOOL HEALTH NURSING. Examines the role of the school nurse in relation to child health supervision and health education for the schoolage population. Clinical practicum involves preceptorships with certified school nurses in local districts. Prerequisite: BSN Status. (4 crs.: 3 crs. Theory, 1 cr. Clinical).

NUR 410. RESEARCH UTILIZATION IN NURSING. Differentiates between conducting research and research utilization. Through participation in research utilization activities, students learn to synthesize research-based knowledge into applicable protocols of care and to utilize research on an organizational level. Prerequisite: NUR 370. (2 crs.)

NUR 450. TRENDS AND ISSUES IN NURSING. Analysis of professional nursing as well as bio-ethical issues from historical and contemporary viewpoints with implications for professional nursing practice in the health care delivery system. Prerequisite: BSN Status. (3 crs.)

NUR 470. FAMILY HEALTH NURSING. An introduction to the theory and practice of family nursing. A variety of nursing theories, as well as general systems theory, will provide the basis for serving families as units as well as family subsystems and individual family members. Clinical experiences will focus on home care of families for health promotion, restoration, and/or rehabilitation. Prerequisite: NUR 330 & NUR 350. (6 crs.: 3 crs. Theory, 3 crs. Clinical)

NUR 475. COMMUNITY HEALTH NURSING. Focuses on the synthesis of theories from nursing and the public health sciences with emphasis on improving the health of the community by identifying sub-groups that are at risk. Clinical activities focus primarily on health promotion directed toward a total community or population group. Prerequisite: BSN Status. (6 crs.: 3 crs. Theory, 3 crs. Clinical)

NUR 485. PROFESSIONAL DEVELOPMENT IN NURSING. Examines professional growth from entry into the BSN program to graduation. This capstone course culminates in completion of a professional portfolio. Prerequisite: This course must be taken the final semester in the nursing major. (1 cr.)

Nursing (ASN Program) – NSG

These courses are offered by CCAC faculty as part of the Cooperative Associate Nursing Program.

NSG 101 UNIVERSAL SELF-CARE REQUISITES. This course is designed to provide the beginning nursing student with a theoretical knowledge base for delivering nursing care in a variety of health care settings. (8 crs.)

NSG 102 BASIC HEALTH DEVIATION SELF-CARE REQUISITES. This course is designed to provide the nursing student with an expanded theoretical knowledge base for delivering nursing care in a variety of health care settings. (9 crs.)

NSG 105 INTRODUCTION TO INVESTIGATIVE FUNCTION OF NURSING. This course will introduce the beginning nursing student to the basic principles of research. The student will learn to apply a systematic approach to the survey of nursing literature appropriate to the beginning level. (1 cr.)

NSG 201 DEVELOPMENTAL SELF-CARE REQUISITES. This course is designed to build upon knowledge acquired in previous nursing courses. Students assess focal clients according to development self-care requisites with consideration given to basic health deviation self-care requisites and universal self-care requisites. (5 crs.)

NSG 202 DEVELOPMENTAL SELF-CARE REQUISITES. This course is designed to build upon knowledge acquired in previous nursing courses. Students assess focal clients according to development self-care requisites with consideration given to basic health deviation self-care requisites and universal self-care requisites. (5 crs.)

NSG 203 COMPLEX HEALTH DEVIATION SELF-CARE REQUISITES. This course is designed to build upon knowledge acquired in previous nursing courses. Students investigate the focal client's response to

the hazards affecting universal self-care requisites which lead to health care deviations. (5 crs.)

NSG 204 COMPLEX HEALTH DEVIATION SELF-CARE REQUISITES. This course is designed to build upon knowledge acquired in previous nursing courses. Students investigate the focal client's response to the hazards affecting universal self-care requisites which lead to health care deviations. (5 crs.)

NSG 211 DEVELOPMENTAL SELF-CARE REQUISITES. This course has specific progression criteria based on established competencies. Students assess focal clients according to developmental self-care requisites with consideration given to basic health deviation self-care requisites and universal self-care requisites. (5 crs.)

NSG 212 DEVELOPMENTAL SELF-CARE REQUISITES. This course has specific progression criteria based on established competencies. Students assess focal clients according to developmental self-care requisites with consideration given to basic health deviation self-care requisites and universal self-care requisites. (5 crs.)

NSG 213 COMPLEX HEALTH DEVIATION SELF-CARE REQUISITES. This course has specific progression criteria based on established competencies. Students investigate the focal client's response to the hazards affecting universal self-care requisites which lead to health care deviations. (5 crs.)

NSG 214 COMPLEX HEALTH DEVIATION SELF-CARE REQUISITES. This course has specific progression criteria based on established competencies. Students investigate the focal client's response to the hazards affecting universal self-care requisites which lead to health care deviations. (5 crs.)

Philosophy - PHI

PHI 100. PERSPECTIVES IN PHILOSOPHY. An introduction to such major philosophical issues as the nature of knowledge, reality, religion and morals. (3 crs.)

PHI 115. LOGIC AND LANGUAGE. An introduction of basic principles and techniques for distinguishing correct from incorrect reasoning. (3 crs.)

PHI 200. WORLD RELIGIONS. The study of the seven world religions, including their origins and doctrines. (3 crs.)

PHI 201. HISTORY OF ANCIENT PHILOSOPHY. Study of the pre-Socratic philosophers, Plato, Aristotle, the Stoics, Epicureans, and the Skeptics. (3 crs.)

PHI 206. SIXTEENTH TO EIGHTEENTH CENTURY PHILOSOPHY. From Descartes to Kant; modern philosophy in the wake of the Scientific Revolution and the Reformation. (3 crs.)

PHI 211. FORMAL LOGIC I. Introduction to the syntax and semantics of truth-functional and first-order languages and also to proof theories for such languages. (3 crs.)

PHI 220. ETHICS. An examination of selected ethical systems and their philosophical foundations, with special emphasis on understanding such basic moral concepts as good, right and duty. (3 crs.)

PHI 225. SOCIAL AND POLITICAL PHILOSOPHY. An examination of selected social or political systems and their philosophical foundations. Special emphasis on such basic concepts as natural rights, equality, justice, individual freedom and political authority. (3 crs.)

PHI 231. PHILOSOPHY OF RELIGION. A consideration of the nature of religion, speculations and arguments about the nature and existence of God, the possibility of religious knowledge, claims to religious experience and revelation, the problem of evil, the belief in immortality and the meaning of religious language. (3 crs.)

PHI 247. SCIENCE, TECHNOLOGY, AND SOCIETY. Examines the philosophical issues that stem from the impact that evolving science and technology have on people's beliefs, values, and behavior. (3 crs.)

PHI 270. PHILOSOPHY OF MARXISM. An examination of the basic texts of Marx and Engels and the subsequent development of Marxist Philosophy. Attempts a critical evaluation in light of contemporary political Philosophy. (3 crs.)

PHI 305. MEDIEVAL PHILOSOPHY. Begins with Neo-Platonism and proceeds with such thinkers as Augustine, Eigena, Anselm, Thomas Aquiliam of Ockham. (3 crs.)

PHI 307. MEDICAL ETHICS. This course extends the study of ethics – theoretical and applied – to moral dilemmas and decision making in the field of medicine and health related professions. (3 crs.)

PHI 310. NINETEENTH CENTURY PHILOSOPHY. A survey of the development of German idealism after Kant and the voluntaristic reactions to it. Also considers British Empiricism and French Positivism. (3 crs.)

PHI 312. FORMAL LOGIC II. A continuation of PHI 211 Formal Logic I, with emphasis on the meta-theory of truth-functional and first-order languages. It also considers selected topics in the Philosophy of logic and the Philosophy of mathematics. Prerequisite: PHI 211. (3 crs.)

PHI 320. ETHICAL THEORY. An examination of the possibility and nature of ethical knowledge and the meaning of moral discourse. Special consideration is given to contemporary discussions. (3 crs.)

PHI 325. PHILOSOPHY OF SCIENCE. A study of the methods, concepts and presuppositions of scientific inquiry. An attempt is made to understand the historical development of science in the context of various theories of knowledge and reality. (3 crs.)

PHI 335. AESTHETIC THEORY. An examination of the nature and basis of criticism in the fine arts and literature, the nature and function of art, aesthetic standards, the concept of beauty, artistic creativity and the meaning of truth in literature and the arts. (3 crs.)

PHI 370. THE PHILOSOPHY OF LAW. A survey of the debate about the concept of law in the history of Philosophy and an examination of the recent revival of the debate in greater detail. Specific topics include the nature of legal reasoning, the legal enforcement of morality, the problem of responsibility, and the concept of justice. (3 crs.)

PHI 405. EPISTEMOLOGY. An examination of selected theories of knowledge including contemporary discussions. (3 crs.)

PHI 410. METAPHYSICS. Studies general problems and theories concerning the nature of reality. (3 crs.)

PHI 415. PHILOSOPHY OF MIND. An examination of important stages in the philosophical development of the notion of mind. Discusses such contemporary problems as the relation of mind and body and the nature of consciousness, and analyzes such notions as will, emotion, action and memory. (3 crs.)

PHI 426. PHENOMENONOLOGY AND EXISTENTIALISM. A study of the historical background and development of twentieth century European Philosophy, with particular emphasis on such philosophers as Husserl, Heidegger, Sartre and Merleau-Ponty. (3 crs.)

PHI 431. ANALYTIC PHILOSOPHY. An exploration of selected philosophical issues (e.g., knowledge, truth and meaning), utilizing recent work in conceptual and methodological analysis. Though the course is usually problem-oriented, a good deal of the history of recent Anglo-American Philosophy is covered. Recommended prerequisites: PHI 206 and a Logic course. (3 crs.)

PHI 459. TUTORIAL IN PHILOSOPHY. (Variable crs.)

PHI 470. SPECIAL PROBLEMS IN PHILOSOPHY. A discussion of some special problem or issue in Philosophy. (3 crs.)

PHI 490. SEMINAR IN PHILOSOPHY. A discussion of either one prominent philosopher or a movement in philosophy. (3 crs.)

Physical Science - PHS

PHS 117. BASIC PHYSICAL SCIENCE. An elementary, non-laboratory approach to the physical world. Topics may be selected jointly by the students and the instructor. Three class hours each week. (3 crs.)

PHS 125. OBSERVATIONAL ASTRONOMY. This course is designed to present an opportunity to acquire a general understanding of the Night-Time sky as it relates to Astronomy as well as experiences and opportunities for observation. Two class hours each week. (2 crs.)

PHS 135. CHEMISTRY OF MATERIALS. An introduction to the science of chemistry. This course is intended primarily for Graphic Arts Majors. This course shows how chemistry is an integral part of our lives and how it has both solved and created many problems in a modern technological society. Three class hours each week. (3 crs.)

PHY 136. ENVIRONMENTAL CHEMISTRY. This course provides a knowledge of basic chemical principles and applies that knowledge to a consideration of current enrironmental issues such as ozone depletion, global warming, air and water pollution, and the hazards of radioactivity. It is primarily intended for the nonscience major. (3 crs.)

PHS 145. ASTRONOMY. A presentation of methods of investigation and results of astronomical discoveries. Survey of facts and important astronomical theories. Solar system, what is a star, multiple star systems, variable stars and stellar evolution will be discussed. Instruments of the astronomer, telescopes, spectroscopes will be used. Three class hours each week. (3 crs.)

Physical Therapist Assistant - PTA

PTA 100. INTRO TO PTA. An overview of the discipline of physical therapy and the role and function of the physical therapy assistant. Additional topics include examinations of the history of physical therapy, physical therapy professsional organizations, legal and ethical issues, and commonly encountered pathologies. (3 crs.)

PTA 110. INTRO TO PATHOLOGY. This course examines the disease process on the cellular, histological and systemic levels. Particular emphasis is placed upon those pathologies commonly encountered by the physical therapist assistant in pediatric, geriatric, orthopedic and neurologic patients populations. (2 crs.)

PTA 150. PHYSICAL THERAPY CLINICAL INTERNSHIP. This introductory clinical internship provides the physical therapist assistant student with extensive observation of activities such as patient care, administration, quality assurance, and supervision of other supportive personnel. In addition, students begin to treat patients using principals common to all procedures. Prerequisite: Formal admission into the physical therapy assistant program and completion of PTA 100. (3 crs.)

PTA 200. PROFESSIONAL ISSUES FOR THE PTA. This course is an examination of the legal, ethical and professional aspects of a career in physical therapy. Important issues such as liability, malpractice, practive acts, and reimbursement are discussed. Special attention is focused on the importance of research and preparation for the PTA state board examination. Prerequisite: Formal admission into the physical therapy assistant program. (2 crs.)

PTA 205. CARDIOPULMONARY REHABILITATION. An examination of the anatomy, physiology and pathology of the cardiopulmonary system. Specific methods of assessment and intervention, including indications and contraindications are explored for a myriad of cardiolpulmonary conditions. The laboratory portion of the course enables students to develop and practice specific psychomotor skills pertaining to cardiopulmonary rehabilitation. Prerequisite: Formal admission into the physical therapy assistant program. (2 crs.)

PTA 210. NEUROLOGICAL REHABILITATION. This course is an examination of the etiology, signs and symptoms and effects of pathologies to the central and peripheral nervous systems. Development of patient goals and physical therapy plans for specific neurological disorders are also presented. Specific treatment procedures and techniques are demonstrated and practiced in the laboratory setting. Prerequisite: Formal admission into the physical therapist assistant program. (3 crs.)

PTA 215. PEDIATRIC REHABILITATION. This is a lecture/laboratory course that encompasses etiology, signs and symptoms and issues specific to orthopedic and neurologic disorders in children. Development of evaluation skills, strategies for treatment plans and physical skills needed to treat children are emphasized. Prerequisite: Formal admission into the physical therapist assistant program. (3 crs.)

PTA 220. GERIATRIC REHABILITATION. This course examines the etiology, signs and symptoms, and treatment protocols associated with disorders in gerontological populations. Development of intervention strategies and physical therapy protocols for common geriatric problems are emphasized. Prerequisite: Formal admission into the physical therapist assistant program. (3 crs.)

PTA 225. ORTHOPEDIC REHABILITATION. This course guides the physical therapist assistant student from fundamentals and theory through practice in orthopedic rehabilitation. Emphasis is placed on rehabilitation treatment options for all major joints to reduce pain and swelling, increase motion and strength, enhance balance and proprioception, and restore function. The course will also examine the role of the physical therapist assistant in prosthetic and orthotic management. Prerequisite: Formal admission into the physical therapist assistant program. (4 crs.)

PTA 250. PHYSICAL THERAPY CLINICAL INTERNSHIP II. This clinical internship provides physical therapist assistant with the opportunity to perform their responsibilities under appropriate physical therapist or physical therapist assistant supervision and with positive role modeling. The experience provides exposure to a variety of patients and learning activities. Prerequisite: All physical therapist assistant coursework must be completed with the exception of PTA 200. (12 crs.)

Physics - PHY

PHY 101. COLLEGE PHYSICS I. Introductory Physics. Vectors, mechanics, energy, momentum, conservation principles and oscillatory motion. Three class hours and three laboratory hours each week. Corequisite: MAT 281 (4 crs.)

PHY 121. GENERAL PHYSICS I. An introductory non-calculus course dealing with mechanics and heat. Three class hours and three laboratory hours each week. Functional knowledge of algebra and elementary trigonometry is assumed. (4 crs.)

PHY 122. GENERAL PHYSICS II. An introductory non-calculus course addressing the areas of sound, light and electricity and magnetism. Three class hours and three laboratory hours each week. Prerequisite: PHY 121. (4 crs.)

PHY 202. COLLEGE PHYSICS II. A continuation of College Physics I. Heat and thermodynamics, hydrostatics, waves and acoustics, electricity, magnetism and AC circuits. Three class hours and three laboratory hours each week. Prerequisite: PHY 101. Corequisite: MAT 282. (4 crs.)

PHY 203. COLLEGE PHYSICS III. A continuation of College Physics II. Maxwell's equation and electromagnetic waves, light, atomic and nuclear physics, and special relativity. Some review of material from College Physics I and II. Three class hours and three laboratory hours each week. Prerequisite: PHY 202. Corequisite: MAT 381. (4 crs.)

PHY 221. INTERMEDIATE MECHANICS. Vector calculus, Newtonian kinematics, and dynamics of many particle systems with emphasis on integral relations, motion in a central potential, scattering theory, systems with constraints, variational principles in mechanics, small oscillations, wave equations, and special relativity. Three class hours and three laboratory hours each week. Prerequisite: PHY 202. Corequisite: MAT 381. (4 crs.)

PHY 301. INTERMEDIATE ELECTRICITY AND MAGNETISM. Electric and magnetic fields and energy, the effects of matter on them, circuits, Maxwell's equations, electromagnetic waves. Vector calculus and differential equations used. Prerequisites: PHY 203 and MAT 381. Recommended PHY 221, MAT 382 and MAT 341. Three lecture hours and three laboratory hours each week. (4 crs.)

PHY 331. MODERN PHYSICS I. Relativistic kinematics and dynamics, particle and wave aspects of radiation and particles, the structure of the hydrogen atom, and the many-electron atoms. Quantum mechanics

introduced for the first time here. Prerequisites: PHY 203, MAT 381. Three class hours each week. (3 crs.)

PHY 341. MATHEMATICAL METHODS OF PHYSICS I. Vector calculus, Fourier series and integrals, ordinary differential equations, partial differential equations, general series representations of functions and special functions. Prerequisites: PHY 203 and MAT 381. Three class hours each week. (3 crs.)

PHY 410. PHYSICS INTERNSHIP. The student is provided an opportunity to work in an industrial or non-profit research laboratory, and the practical training is intended to supplement the student's coursework. Prerequisite: Junior standing and permission of the department chair. (Variable crs.)

PHY 451. ADVANCED LABORATORY I. Experiments selected from topics discussed in Modern Physics I. The lecture time is used to discuss error analysis, curve fitting, and points of interest to the laboratory reports. Prerequisite: 12 Physics credits. One class hour each week and three laboratory hours each week. (1 cr.)

PHY 495. PHYSICS SEMINAR. An introduction to literature, history, teaching, and research methods in the physical sciences. Prerequisites: Junior standing and at least 19 hours of physics (including College Physics I-II) (1 cr.)

Political Science - POS

POS 100. INTRODUCTION TO POLITICAL SCIENCE. This course is designed to introduce students to key ideas, institutions, processes, and actors in the political world. It is intended to be a general, not detailed, examination, and attempts to encourage understanding, reflection and critical thinking. (3 crs.)

POS 105. AMERICAN GOVERNMENT. This is an introductory course in American government, focusing on the major institutions and processes in the American political system. Topics discussed in the course include separation of powers, checks and balances, civil liberties, political parties, the Congress, the President, the Supreme Court, federalism, and policy-making processes. (3 crs.)

POS 205. MUNICIPAL GOVERNMENT. The organizational forms of municipalities, the process of decision-making and implementation, and proposed solutions to problems of an urban society. (3 crs.)

POS 210. POLITICS OF WESTERN EUROPE. A comparative analysis of the institutions, processes, and policies of the nations of Great Britain, France, and Germany, and how these nations relate to the United States system. Prerequisites: POS 100 and POS 105. (3 crs.)

POS 218. POLITICAL PARTIES, CAMPAIGNS, AND ELECTIONS. The organization and operations of political parties in the United States. Careful attention is given to the methods used by parties in nominating candidates and in conducting campaigns and to the significance of pressure groups, public opinion, and the electorate in our political life. Prerequisite: POS 105. (3 crs.)

POS 219. THE MASS MEDIA AND AMERICAN POLITICS. The interaction of politics and the mass media within American society. Topics include media effects on political socialization, techniques of opinion manipulation, propaganda, press responsibility, public opinion polling, and government control of the media. Special attention is devoted to the use of television as an instrument of communication. Prerequisite: POS 105. (3 crs.)

POS 220. INTRODUCTION TO PUBLIC ADMINISTRATION. Primarily an introduction to the study of American public administration, this course seeks to achieve several broad objectives. First, it conveys an understanding of the significant role played by administration in present-day American government and of the implications of that role for a democratic society. It has the further purpose of providing insight into the specific relationships between administration and the broad political environment from which it arises and in which it operates. Finally, and mainly, the course offers opportunity for consideration of those more specialized and technical factors, such as public organization, public personnel, budgeting, and executive leadership, that are involved in the formulation and administration of public policy. Prerequisites: POS 100, POS 105. (3 crs.)

POS 222. THE ADMINISTRATION OF CRIMINAL JUSTICE IN THE UNITED STATES. The operations of the criminal justice system in the United States. Topics include crime in American, the rule of law, the role of the police, the function of the prosecuting and defense attorneys, criminal courts and trial processes, sentencing, corrections, incarceration, probation and parole. Prerequisite: POS 105. (3 crs.)

POS 228. DEVELOPMENT OF POLITICAL THOUGHT: CLASSICAL AND MEDIEVAL. The basic ideas, values, and methods of the profound political thinkers and philosophers from Classical Greece, Rome, and the Christian Church. Prerequisites: POS 100 and POS 105. (3 crs.)

POS 229. DEVELOPMENT OF POLITICAL THOUGHT: MODERN. A sequel to the questions and approaches raised in POS 228. The major political philosophers from the Renaissance to the beginning of the twentieth century. Prerequisites: POS 100 and POS 105. (3 crs.)

POS 235. STATE AND LOCAL GOVERNMENT. A treatment of the organization, powers, functions, and problem of state and local governmental units. Emphasis is placed on the growing complexity of relationships among the various levels of government as a result of technological developments and the growth of metropolitan areas. (3 crs.)

POS 236. INTRODUCTION TO INTERNATIONAL RELATIONS. A practical and theoretical introduction to a study of systematic patterns in international relations. Includes analysis of rules, instruments, processes, decision-making factors, and conflict resolution. (3 crs.)

POS 237. INTERNATIONAL ORGANIZATIONS. An analysis and evaluation of the United Nations and other international organizations, and of some of the theoretical concepts and practical problems involved. Prerequisite: POS 100 or permission of instructor. (3 crs.)

POS 281. POLITICS OF RUSSIA. Basic components of Russian politics: background history, Marxist ideology, and the historical development of Russian political institutions and practices from the Revolution to the present. Prerequisites: POS 100, POS 105. (3 crs.)

POS 379. SPECIAL PROBLEMS IN POLITICAL SCIENCE. (Variable crs.)

POS 300. INTRODUCTION TO PUBLIC POLICY. Primarily in seminar fashion. Students present and discuss major ideas from assigned readings. Formal lectures are also scheduled when needed to present basic ideas and information. Prerequisite: Any Political Science course or permission of the instructor. (3 crs.)

POS 301. METHODS OF POLITICAL ANALYSIS. A description, analysis, and application of basic research tools in the discipline of Political Science. Prerequisite: POS 101, 105, or permission of the instructor. (3 crs.)

POS 306. CONGRESS. An intensive examination of the legislative problems and procedures of Congress. Students are introduced to such topics as the representational functions of Congress, the role of parties and leaders in Congress, the importance of the committee system, and the forces affecting congressional decision-making. Prerequisite: POS 105 or permission of the instructor. (3 crs.)

POS 307. REVOLUTION. A comparative study of the phenomenon of revolution, encompassing the causes, events, and principal actors in those periods that culminate in the outbreak of violent political change. Prerequisites: POS 100 and POS 105. (3 crs.)

POS 310. THE PRESIDENCY. Intensive study of the American presidency, focusing on personality, organization of the office, use and misuse of power, and policy making. Prerequisite: POS 105 or permission of instructor. (3 crs.)

POS 314. CONSTITUTIONAL LAW: GOVERNMENTAL POWERS. A study of the major provisions of the American Constitution and the growth of American constitutional law based on analysis and discussion of leading judicial decisions. Prerequisite: POS 105 or permission of instructor. (3 crs.)

POS 315. CONSTITUTIONAL LAW: CIVIL LIBERTIES. A study of the development and meaning of the rights and liberties guaranteed to persons under the Constitution of the United States. Special emphasis is placed on the antecedents of and the adoption of the Bill of Rights and a description of the court structure through which the meaning of civil liberties is determined in specific situations. Prerequisite: POS 105 or permission of the instructor. (3 crs.)

POS 316. JUDICIAL PROCESS. Intensive study of the judicial process in the United States and the relationship between the judicial system and the larger American social system. Prerequisite: POS 105 or permission of the instructor. (3 crs.)

POS 320. U. S. FOREIGN POLICY. Policy objectives, patterns of decision-making, and U.S. foreign policy actions. The roles of interest groups, public opinion, Congress, and other external influences in U. S. foreign policy are also examined. Prerequisite: POS 105. (3 crs.)

POS 322. POLITICS OF THE MIDDLE EAST. A comparative analysis of institutions, processes, and politics of Middle Eastern governments and how these have been shaped by international relations of the region. Prerequisite: POS 100. (3 crs.)

POS 323. POLITICS OF LATIN AMERICA. A comparative analysis of institutions, processes, and politics of Latin American countries and how these have been shaped by the international relations of the region. Prerequisite: POS 100. (3 crs.)

POS 325. POLITICS OF ASIA. A comparative analysis of the institutions, processes, and policies of China, Japan, and India and how these nations relate to the system in the United States. Prerequisites: POS 100 and POS 105. (3 crs.)

POS 326. POLITICS OF AFRICA. A comparative analysis of the institutions, processes and politics of selected African nations, and their place in the international arena. (3 crs.)

POS 327. CONTEMPORARY POLITICAL THOUGHT. A general survey of the major political ideas and thinkers of the twentieth century, drawing connections between these ideas and contemporary developments in philosophy, psychology, economics, and sociology. Prerequisites: POS 100 and POS 105. (3 crs.)

POS 329. INTERNSHIP IN POLITICAL SCIENCE. Practical field experience to supplement academic work, developing professional competencies in research and communication skills. (Variable crs.)

POS 330. AMERICAN POLITICAL IDEAS. An advanced course in political theory: the major political ideas and controversies that are associated with the development of American political thought. Prerequisite: Any Political Science course or permission of the instructor. (3 crs.)

POS 335. ADMINISTRATIVE LAW. The legal structure and political environment within federal administrative agencies in the United States that formulate public policy. Emphasis is given to the growth of the administrative state within the United States, the necessity for the delegation of legislative authority to administrative agencies and the need for judicial control of the bureaucracy. Prerequisite: POS 100 & POS 105 or permission of the instructor. (3 crs.)

POS 450. SEMINAR IN AMERICAN POLITICS. This seminar, required of all Political Science majors, is designed to provide intensive examination of a specific and narrowly focused area in the field of American politics. The course is research-oriented and consists of individually prepared contributions by all participants, which are discussed and critically appraised by all members of the class. Prerequisite: Students taking this course must be Seniors majoring in Political Science. (3 crs.)

Psychology - PSY

PSY 100. GENERAL PSYCHOLOGY. This course is a general introduction to the scientific study of behavior. It explores topics such as methods of research, physiological development of the individual, learning, motivation, emotions, cognitive processes, sensation, perception, testing, personality, behavior disorders, and individual differences. Experimental research as well as practical application is stressed. (3 crs.)

PSY 205. CHILD PSYCHOLOGY. Age-related changes in social, cognitive, emotional, and physical characteristics. Development from prenatal stages through later childhood is included. Socialization of the child is examined. Prerequisite: PSY 100. (3 crs.)

PSY 206. ADOLESCENT PSYCHOLOGY. Factors that influence the growth and development of adolescents. Emphasis on the relationship among physiological, psychological and sociological factors and theoretical systems used to describe, explain, predict, and work with adolescents. Prerequisite: PSY 100. (3 crs.)

PSY 207. DEVELOPMENTAL PSYCHOLOGY. The patterns of physical, mental, social and emotional development throughout the life span. Prerequisite: PSY 100. (3 crs.)

PSY 208. EDUCATIONAL PSYCHOLOGY. The learning process is examined, with emphasis on learning in school settings. The application of current theories and research findings to classroom situations is stressed. This course examines cognitive development, intelligence, motivation, discipline, behavioral objectives, and measurement and evaluation. Prerequisite: PSY 100. (3 crs.)

PSY 209. INDUSTRIAL PSYCHOLOGY. This course is a comprehensive introduction to the field of Industrial Psychology. It demonstrates the application of psychological principles of behavior to people work conditions. An examination of business and industrial activities and the role a psychologist plays in such activities. A strong emphasis on the practical and every day problems that confront people in the world of work. Prerequisite: PSY 100. (3 crs.)

PSY 211. SOCIAL PSYCHOLOGY. The interaction between the individual and social groups within a cultural context: the individual in a social role, social groups, and social institutions. The course will cover such topics as aggression, interpersonal attraction, group behavior, persuasion, and helping behavior. Prerequisite: PSY 100. (3 crs.)

PSY 215. PSYCHOLOGY OF EXCEPTIONAL CHILDREN. The psychological problems of children who have hearing, speech, mental and personality deficits, and of children who are culturally disadvantaged are explored, as well as characteristics of children of superior ability. A major purpose is to gain a functional understanding of these problems and of the procedures for helping to cope with them. The student is given the opportunity to gain firsthand experience with exceptional children in an observation of a special class in the public schools. Prerequisites: PSY 100, PHY 205 for Psychology Majors, PSY 100 and PSY 205 or PSY 207 for non-Psychology Majors. (3 crs.)

PSY 222. PSYCHOLOGY OF STRESS MANAGEMENT. Source of stress, effects of stress, manifestations of stress and methods of coping with stress will be examined with the focus being on practical application. Prerequisites: PSY 100. (3 crs.)

PSY 225. PSYCHOLOGICAL STATISTICS. This course provides the student with a working knowledge of statistical procedures, and their application to psychological measurement and research in the social and behavioral sciences. A variety of statistical methods, including measures of central tendency, variability, and correlation coefficients, are presented. Hypothesis testing and prediction are also included. The student uses the computer to analyze data and interprets the results generated. The application of statistical procedures to research questions in the fields of behavioral and social sciences is emphasized. Prerequisite: PSY 100 & MAT 181 (3 crs.)

PSY 235. PSYCHOLOGY OF LEARNING. The major areas of learning which are focused on are behavioral, (classical conditioning, operant conditioning and observational learning), cognitive and neural networks. In each of these areas study progresses from basic research to applications. Prerequisite: PSY 100. (3 crs.)

PSY 305. PSYCHOLOGY OF PERSONALITY. The essential factors that result in creating individual differences of human behavior. Current theories used to explain the development and structure of personality are presented. The characteristics of the normal and the maladjusted personality are identified, with special concern for developmental patterns. Prerequisite: PSY 100. (3 crs.)

PSY 310. MENTAL HEALTH/PSYCHOLOGY OF ADJUSTMENT. Problems of personality and mechanisms of adjustment, including a study of the origin and resolution of conflicts, and the role of emotion in the patterns of behavior. Prerequisite: PSY 100. (3 crs.)

PSY 311. PSYCHOLOGY OF GENDER ROLES. How gender roles develop, the factors that sustain these roles, and how gender roles influence the daily lives of men and women. Sex differences are viewed from historical, biological, psychological, sociological, and anthropological perspectives. Prerequisite: PSY 100. (3 crs.)

PSY 340. PSYCHOLOGICAL TESTING. The nature and function of measurement in psychology with concentration on test construction problems and procedures and an examination of some typical tests in the fields of intelligence, personality, aptitudes, abilities, and interests. Prerequisites: PSY 100 & PSY 225. (3 crs.)

PSY 345. HISTORY AND SYSTEMS OF PSYCHOLOGY. This course explores the evolution of psychological thought starting with its philosophical roots. The major perspectives of psychology explored are Structuralism, Functionalism, Behaviorism, Gestalt, Psychoanalysis, Humanism, and Cognitive. When looking at the impact of central figures in the field, a more inclusive approach will be utilized. Understanding the contextual forces which shaped the discoveries and thinking of the times on the course of the development of psychology as a science is emphasized. Prerequisite: PSY 100. (3 crs.)

PSY 350. PRINCIPLES OF BEHAVIOR MODIFICATION. A consideration of the application of the principles of contemporary behaviorism to the problem of behavior modification in educational and clinical settings. Major emphasis is placed on the remediation of problems of academic, emotional, and social adjustment in the classroom context. Prerequisite: PSY 100. (3 crs.)

PSY 360. EXPERIMENTAL PSYCHOLOGY. This is a survey course emphasizing the design of research strategies for evaluating hypotheses about behavior and the quantitative analysis of research results. The major content areas explored are psychophysics, perception, learning, memory, cognition, individual differences, social influences, environmental and human factors. Each of these content areas will be studied using the statistical and research techniques of scientific psychology. Prerequisite: PSY 100 & PSY 225. (3 crs.)

PSY 365. METHODS OF RESEARCH. Hands-on experiences in conducting research and the scientific study of behavior. Students apply a variety of methods to research problems in a number of content areas and are exposed to the research literature in these areas. Also included is instruction in the preparation of a formal research report. Students will be expected to conduct one research study and write one research proposal. Prerequisites: PSY 100, PSY 225 & PSY 360. (3 crs.)

PSY 370. INTERVIEWING SKILLS. For students who will soon be seeking employment in an organizational setting, providing knowledge and practical experience in several different and specific types of interviews, especially the selection interview for employment, the career planning interview, exit interview and the performance evaluation interview. Prerequisites: PSY 100 & PSY 209. (3 crs.)

PSY 375. PSYCHOPATHOLOGICAL DISORDERS OF CHILDHOOD. This course explores the various psychopathological disorders of childhood. The particular manifestation in children will be discussed for each disorder, with emphasis on the quantitative nature of clinical symptom characteristics as illustrated by case studies. The differentiation between similar diagnoses and symptoms, as well as the relationships between each disorder and other emotional familial problems, will be discussed. Prerequisites: PSY 100 & PSY 205. (3 crs.)

PSY 400. ABNORMAL PSYCHOLOGY. A survey of behavior pathology including psychoses, neuroses, and character disorders including drug addiction and psychophysiological disorder together with a general consideration of etiology, treatment, and prognosis. Prerequisites: PSY 100 and 12 credits in Psychology. (3 crs.)

PSY 410. CLINICAL CHILD PSYCHOLOGY. This course is a comprehensive introduction to the field of Clinical Child Psychology. It will explore the major concepts, research findings, and professional issues influencing the practice of Clinical Child Psychology. Prerequisites: PSY 100, PSY 205 & PSY 375. (3 crs.)

PSY 420. SCHOOL PSYCHOLOGY. This course is a comprehensive overview of the field of school psychology. It will explore issues related to the role and functions of school psychologists including the psychoeducational assessment of children and adolescents, therapeutic interventions for school-age children, consultation, and legal and ethical issues in the practice of school psychology. This course has relevancy for students pursing careers in education as well as for students pursuing careers in psychology. Prerequisite: PSY 100. (3 crs.)

PSY 421. CLINICAL METHODS IN PSYCHOLOGY. This course introduces students to lthe theory and practical application of major models utilized in the treatment of psychological disorders. Behavioral, Cognitive, Psychoanalytic and Systems approaches (among others) are explored with emphasis on their theoretical assumptions, techniques of intervention and associated personality theory. Students will learn to take into account individual differences (race, gender, and age among others) when considering the theories, techniques and other activities in clinical psychology endeavors. Prerequisites: PSY 100, PSY 305 & PSY 400. (3 crs.)

PSY 422. CLINICAL SKILLS IN PSYCHOLOGY. The focus of this course is on the specific techniques psychologists and other mental health practitioners use to create positive change in people. Students will learn the skills of active listening, empathy, cognitive reframing, crisis management, rapport building, and treatment planning, among others. Students will also learn to enhance their effectiveness as positive change agents through self-reflection as well as acquisition of knowledge about the targets of intervention and their effectiveness. This course is considered the applied companion course to PSY 421. Prerequisites: PSY 100, PSY 350, PSY 400 & PSY 421. (3 crs.)

PSY 425. SENIOR THESIS. This course is an opportunity for the student to integrate and synthesize all aspects of their prior collegiate academic experience as it relates to their chosen major of psychology. The student will review research methods and current research literature in an area that is of special interest to them, develop a proposal for further research on an approved project in an area of interest, conduct the research proposed, write a thesis, and present the findings in an appropriate forum. Students will be required to present their work for presentation and defense in a public forum, and will be encouraged to submit the thesis for publication. Prerequisites: PSY 100, PSY 365 and senior standing. (3 crs.)

PSY 428. ADVANCED INDUSTRIAL PSYCHOLOGY. A more in-depth survey of several important issues considered in PSY 209, including organizational dynamics, psychological evaluations, employee rights laws, worker motivation, training and performance evaluation. Prerequisite: PSY 100, PSY 209, PSY 225 or equivalent. (3 crs.)

PSY 430. PHYSIOLOGICAL PSYCHOLOGY. The relationships between bodily processes and behavior. The relationship between psychological phenomena and the physiological functioning of the organism. Sensation and perception, reflexive behavior, motivation, emotional behavior, and critical functioning. Some laboratory experience is included. Prerequisite: PSY 100. (3 crs.)

PSY 452. CLINICAL PRACTICUM IN PSYCHOLOGY I. Students will integrate the various knowledge bases and skill areas necessary to become effective change agents in people's lives. Major emphasis will be on case study methods, psychological testing and psychological diagnosis as well as treatment planning and implementation. Prerequisites: PSY 100, PSY 305, PSY 340, PSY 400, PSY 421, PSY 422 and admission to Psychology Technician Certificate Program. (3 crs.)

PSY 453. CLINICAL PRACTICUM IN PSYCHOLOGY II. A continuation of Clinical Practicum I, but with greater emphasis on real-world applications of topics including psychotherapy, use of clinical instruments and diagnostic cases. Extensive video-taping, visits to hospitals and clinics, and self assessments will be utilized. This course is preparatory to the internship required for the Psychological Technician Certificate. Prerequisites: PSY 100, PSY 305, PSY 340, PSY 400, PSY 421, PSY 422, PSY 452 and admission to Psychology Technician Certificate Program. (3 crs.)

PSY 469. PSYCHOLOGY INTERNSHIPS. Students will be placed with professional psychological agencies off campus. They will integrate, under supervision, what they have academically been studying with the duties and responsibilities assigned to them by practicing psychologists in the field. Eligibility requirements and procedures for application are available at the departmental office. Prerequisite: PSY 100. (Variable crs.: 3-16)

Sociology - SOC

SOC 100. PRINCIPLES OF SOCIOLOGY. This survey course permits students to explore the rich variety of topics studied by sociologists. Central to all the topics are the structures and processes of human interaction. Emphasis is placed on the relationship of natural and social factors in human behavior. Attention also is given to topics such as the meaning and function of culture; the origin, function and characteristics of social institutions; and, the genesis and nature of social pathology. (3 crs.)

SOC 110. ETHNIC, RACIAL AND SEXUAL MINORITIES. Disadvantaged, or powerless, not simply numerical, minorities are studied in terms of their demographic and ecological characteristics. Contemporary issues are studied in historical context. (3 crs.)

SOC 125. MEN, WOMEN AND WORK. Through readings, audio-visual materials, panels and informal student reports, class members investigate the roles of men and women in the existing economic structure, the reasons for these roles and the development of trends and changes in the economic area. Discussion-centered. (3 crs.)

SOC 155. CHARISMATIC LEADERS. The characteristics of charismatic leaders and the methodology used to study this phenomenon are central themes of this course. Discussion-centered classes. (3 crs.)

SOC 165. MODERN FREEDOM MOVEMENTS. The study of social movements in American society. Basic focus is upon social change brought about by social movements. (3 crs.)

SOC 175. CONTEMPORARY WOMEN'S MOVEMENT. An investigation of themes, philosophies, and activists in the current women's movement. (3 crs.)

SOC 205. CONTEMPORARY SOCIAL PROBLEMS. Social issues of popular concern in America today, such as poverty, ecology, violence, and homosexual rights, are discussed and analyzed from a sociological perspective. Attention is not only given to the content of the issues; attention also is given to the place of statistics in data reporting and analysis, what are the objective data used in support of interest group claims, and the use of various theoretical schemes in providing alternative explanations for each issue being a social problem. Prerequisite SOC 100 or the permission of the instructor. (3 crs.)

SOC 210. SOCIAL STRATIFICATION. The student is made more aware of the class, status, and power inequities of our stratified society. Class, caste, and estate systems are compared. Prerequisite: SOC 110. (3 crs.)

SOC 216. SOCIOLOGY OF WORK. Basic patterns of work behavior in American culture. Some emphasis is placed upon career paths and the impact of technological changes upon work. (3 crs.)

SOC 220. THE FAMILY. The institution of the family within the context of American culture. Prerequisite: SOC 100. (3 crs.)

SOC 225. SOCIOLOGY OF AGING. Theoretical and research methodological issues in the sociological study of human aging are considered. Special emphasis is placed upon the interaction of pertinent biological and sociological variables as they relate to a variety of topics, including work, retirement, leisure, institutionalization, and death. Prerequisite: SOC 100. (3 crs.)

SOC 235. URBAN SOCIOLOGY. Focuses on the relationship between the demographics of urbanization and the social-psychological characteristics of urbanism. Determinist, compositional, and sub-cultural theories are compared. Prerequisite: SOC 100. (3 crs.)

SOC 240. SOCIAL INSTITUTIONS. Designed as a descriptive study of the basic institutions of society (particularly family, religion, economic, government, and education), the course uses a cross-cultural and comparative perspective. American institutions form the core of the comparative analysis. Prerequisite: SOC 100 or permission of the instructor. (3 crs.)

SOC 260. CRIME. Types of criminal behavior, the epidemiology of crime in the United States, the social basis of law, and major etiological forces responsible for lawbreaking. General systems theory is the basic theoretical perspective used in this course. Prerequisite: SOC 100. (3 crs.)

SOC 285. SOCIOLOGY OF SUBSTANCE USE AND ABUSE. The sociology of substance use and abuse, as well as the approaches for treatment. Special emphasis is given to alcohol and the more commonly abused drugs (e.g., nicotine, marijuana, cocaine). The course focuses on the social processes that influence substance abuse and the societal costs and consequences. Prerequisite: SOC 100 or permission of the instructor. (3 crs.)

SOC 300. SOCIOLOGY OF DEVIANCE. Discusses the various forms of deviant behavior, public responses to such behavior, and the causes of such behavior. Particular attention is given to the interactive processes which result in behavior being labeled as deviant. How the criminal justice system copes with deviant behavior also is considered. (3 crs.)

SOC 305. SYMBOLIC INTERACTIONISM. An in-depth study of one of the major theoretical perspectives in sociology. Its particular relationship with social psychology is considered. Prerequisite: SOC 100. (3 crs.)

SOC 308. SOCIAL SCIENCE RESEARCH METHODS. Course develops the technical and analytical skills necessary for the conduct of social science research. Students will learn what methods are appropriate to various types of research inquires; and, they will learn how to evaluate research reports. (3 crs.)

SOC 310. COLLECTIVE BEHAVIOR. Course is a descriptive and analytical inquiry into the relatively unstructured social responses to social change. War resistance movements, militia movements, stock market panics, popular fads and crazes are among the topics considered. Attention is given to the processes, emergent structures and theoretical explanations associated with various types of collective behavior. Prerequisite: SOC 100 or permission of the instructor. (3 crs.)

SOC 329. SOCIOLOGICAL INTERNSHIP. Designed to supplement the classroom studies of sociology majors with practical field experience, internships provide students not only with additional knowledge and skills but with the opportunity to apply what was learned previously to on site situations. Internships are intended to develop the major's professional competencies in observational, analytical and research skills. (Variable crs.)

SOC 330. RELIGION AS A SOCIAL PHENOMENON. The course is a descriptive and analytic, a scientific, study of religious phenomena. Although the course focuses on religion in American Society, it uses a comparative approach to understand the nature, forms and functions of religion in society. Prerequisite: SOC 100 or the permission of the instructor. (3 crs.)

SOC 370. SOCIOLOGICAL THEORY BUILDING. Intensive study of how theories are constructed with special attention to logic. Logical fallacies and the relation of theories to research hypotheses are discussed in depth. Prerequisite: SOC 100. (3 crs.)

SOC 376. SOCIOLOGICAL THEORY. Considers the historical development of sociological theory, as well as how theories are constructed and used to explain social phenomena. Special attention is given to the understanding and analysis of classical theorists, including Marx, Weber and Durkheim Prerequisite: SOC 100 or the permission of the instructor. (3 crs.)

SOC 379. SPECIAL PROBLEMS IN SOCIOLOGY. (Variable crs.)

SOC 495. SEMINAR IN SOCIOLOGY. Capstone course for sociology majors. The seminar will center around a current theme in sociology. Students will be expected to demonstrate the use of major concepts, methods and theories in analyzing the theme. Prerequisite: Sociology major with junior or senior status. (3 crs.)

Social Work - SOW

SOW 150. INTRODUCTION TO SOCIAL WORK. Social, political, economic and historical dimensions of poverty and welfare services in the United States. Complements other beginning courses in the social sciences by integrating this knowledge in a fashion which aids in the comprehension of welfare services while establishing a basis for movement toward higher level courses. (3 crs.)

SOW 208. MINORITY GROUP RELATIONS. Analysis of the historical, economic and political relation of American religious, ethnic, and racial minorities in terms of social change and social structure. Special attention given to Puerto Rican, Chicano and Indian subcultures, as well as minority

experience in the rural environment. Sources of prejudice and discrimination and social processes including conflict, segregation, assimilation, accommodation and cooperation. Prerequisite: SOC 100. (3 crs.)

SOW 215. HUMAN GROWTH AND BEHAVIOR I. Foundation knowledge, contribution of studies, research and theory in understanding human development. SOW 215 begins the life cycle from prenatal influence through middle school age. Emphasis is on both normal development/behavior and on differences. Illustrates how diverse groups are affected in their development through the life cycle, with examples from rural experience. . Prerequisites: BIO 103, PSY 100 & SOW 150; or permission of instructor. (3 crs.)

SOW 216. HUMAN GROWTH AND BEHAVIOR II. Foundation knowledge, contribution of studies, research and theory in understanding human development. SOW 216 continues the life cycle from adolescence through old age. Emphasis is on both normal development/behavior and on differences. Illustrates how diverse groups are affected in their development through the life cycle, with examples from rural experience. Prerequisites: SOW 215 or permission of instructor. (3 crs.)

SOW 231. FOUNDATION FOR FAMILY SERVICE. This course provides a foundation for the delivery of social services to children and families and emphasizes the knowledge, values and skills of the social work process. (3 crs.)

SOW 232. FOUNDATION FOR COMMUNITY SERVICE. This course integrates the abilities acquired in SOW 231 and strengthens macro skills for effective practice with individuals and families. The course refines and enhances the problem solving and case management skills of practitioners working with individuals and families. (3 crs.)

SOW 233. BASIC PRACTICAL EXPERIENCE. This course consists of exercises that require students to demonstrate their competence in the major intervention areas presented in SOW 231 and SOW 232 – working with families, communication skills, personal development, problem solving, group work, case management and advocacy/community development. (3 crs.)

SOW 256. SOCIAL WORK INTERVIEWING. Theory, value, and skill components necessary for effective interviewing with diverse client systems. Communication techniques and personal attributes which enhance problem solving are explored. Demonstration and practice of core skills are thoroughly integrated. Prerequisites: SOW 150, PSY 100 & ENG 102. (3 crs.)

SOW 265. JUVENILE DELINQUENCY. Causes, prevention, and treatment of deviancy among youth. Explores impact of sex, race, poverty, urban/rural context, and other social factors on deviance. Examines juvenile court system, its non-adversary role, changing attitudes toward treatment, and questions regarding change. Prerequisite: PSY 100. (3 crs.)

SOW 270. CHILD WELFARE. Welfare of children, rights, policies, problems, and programs. Historical and current practices, working with natural parents, supportive services, substitutes and residential care. Prerequisite: SOW 150 or permission of instructor. (3 crs.)

SOW 295. HISTORY AND PHILOSOPHY OF SOCIAL WELFARE. Historical trends and philosophical perspectives on social welfare programs and policy development. An overview of the relationship of cultural and professional values to social, political and economic institutions, with emphasis on the impact on oppressed and vulnerable client systems. Prerequisite: SOW 150. Recommended: POS 100 & ECO 100. (3 crs.)

SOW 296. POVERTY AND RELATED SOCIAL PROBLEMS. Poverty as a dependent and independent variable in its relationship to other social problems and human behavior. Social policy and programs that attempt to respond to the variety of conditions that are both causes and effects of poverty and related behavior will be studied. Prerequisites: SOC 100, PSY 100 & SOW 150. (3 crs.)

SOW 302 MICRO PRACTICE METHODS. Assumes that human service workers perform varied tasks with basic skills, attitudes and knowledge, and that their development will increase self awareness with subsequent emergence of a professional self. Students learn problem assessment, caseload management and a variety of counseling theories and interventive strategies with special emphasis on unique characteristics of the rural client. Prerequisite: SOW 215 & SOW 256. (3 crs.)

SOW 303. HUMAN SEXUALITY AND SOCIETY. Biological, social and cultural underpinnings of human sexuality, how sexual behavior is learned, individual and societal problems resulting in sexual dysfunction, practice interventions which alleviate individual and collective societal problems. Increase students' level of comfort with own sexuality enabling them as practitioners to address a variety of sexual concerns. Prerequisite: Junior status or permission of instructor. (3 crs.)

SOW 306. SOCIAL WORK IN THE RURAL ENVIRONMENT. This course exposes the undergraduate social work student to the unique problems and social needs of non-metropolitan communities, in particular small towns and rural areas. Students will come to understand the social structure of such communities and the pervasiveness of many social problems, especially poverty. Existent social welfare systems will be examined along with recommendations for program development, resource identification, and social planning. Prerequisites: SOW 216, SOW 295 & SOW 302. (3 crs.)

SOW 348. MEZZO PRACTICE METHODS. This course is the third in a four-course practice methods sequence. It builds on the skills developed in Interviewing and Micro Practice Methods, utilizing the ecological approach to assessment and problem-solving. The course covers the history of social group work, the stages of group development, assessment of goals and objectives for groups and families, and the principles and values for intervention and problem solving with groups and families. Prerequisites: SOW 216 & SOW 302. (3 crs.)

SOW 349. MACRO PRACTICE METHODS. Macro Practice Methods refer to those skills that enable the generalist social worker to act at an organizational and community level to effect change in larger social systems. These skills encompass planning, organizing, and administrative tasks. Proficiency at the macro level is particularly important for the rural practitioner who may be relatively isolated from other service providers. Through a semester-long class project, students gain "hands on" experience in committee work, program development, action, research, budgeting, and many other specific skills. Prerequisite: SOW 348. (3 crs.)

SOW 350. SOCIAL WORK WITH THE AGING. Development and current status of policies and services related to the elderly, service delivery systems and implication for social work practice concepts for working with the elderly. Prerequisite: SOW 256 or permission of instructor. (3 crs.)

SOW 353. PSYCHOPATHOLOGY FOR SOCIAL WORKERS. Builds on psychosocial study, assessment and treatment introduced in Micro Practice Methods. Acquaints student with DSM-IV-R terminology and its use for generalist social work practice. Explores scope and depth of individual psychopathology, community concerns, prevention and intervention approaches. Prerequisites: SOW 216 & SOW 302. (3 crs.)

SOW 366. POLICY ANALYSIS/SERVICE DELIVERY. This course examines the basic process of policy development and helps social work students develop a conceptual framework for analyzing and evaluating policies and their consequences. Students pay particular attention to the impact of social policy on people and human service organizations. Built on an interdisciplinary base (economic, political science, and sociological theories), the course prepares students for policy practice skills taught in SOW 370. Prerequisite: SOW 295. (3 crs.)

SOW 370. SOCIAL CHANGE. Social change processes, strategies, reactions to change, the impact of change on social policy and social welfare institutions. Prerequisite: SOW 366. (3 crs.)

SOW 393. RESEARCH UTILIZATION FOR PRACTICE. This course enables students to utilize the concepts and principles of program evaluation as a form of research in the completion of a program evaluation project. (3 crs.)

SOW 402. ADVANCED PRACTICAL EXPERIENCE. A 150 hour internship in a community social agency. (3 crs.)

SOW 405. SOCIAL WORK RESEARCH METHODS. Social work scientific endeavor presented as a special type of problem-solving and analytical thinking activity. Thrust is toward becoming critical consumers of research reports, fundamentals for evaluating one's professional practice, and understanding critical importance of research as a professional endeavor. Prerequisites: SOW 302 & SOW 295. (3 crs.)

SOW 419. SOCIAL WORK PRACTICUM I. Supervised placement in a practice setting under a trained social worker. Application of theoretical knowledge and skills, demonstrating competencies in working with various client systems. Minimum of 480 clock hours. Prerequisites: Permission of the instructor, Advanced Senior standing, SOW 208, SOW 216, SOW 295, SOW 302, SOW 303, SOW 348 & SOW 366. This course must be taken concurrently with SOW 420. (6 crs.).

SOW 420 SOCIAL WORK PRACTICUM II. Supervised placement in a practice setting under a trained social worker. Application of theoretical knowledge and skills, demonstrating competencies in working with various client systems. Minimum of 480 clock hours. Prerequisites: Permission of the instructor, Advanced Senior standing, SOW 208, SOW 216, SOW 295, SOW 302, SOW 303, SOW 348 & SOW 366. This course must be taken with concurrently SOW 419. (6 crs.)

SOW 495 SEMINAR IN SOCIAL WORK. Selected topics of particular significance or current importance and interest to the social work profession. Prerequisite: Permission of instructor. (Variable crs.)

Spanish - SPN

SPN 101. ELEMENTARY SPANISH I. For the student without previous knowledge of Spanish who wishes to achieve a command of language fundamentals. Acquisition of speech skills in the classroom is reinforced in the language laboratory. Progressively greater emphasis is placed on reading and writing. Three class hours and one hour language laboratory per week. (3 crs.)

SPN 102. ELEMENTARY SPANISH II. A continuation of Spanish 101. Three class hours and one hour language laboratory per week. Prerequisite: SPN 101 or one year of high school Spanish. (3 crs.)

SPN 203. INTERMEDIATE SPANISH I. A review of the essentials of Spanish grammar through intensive oral and written practice to facilitate the use of Spanish grammar and to develop the use of words and expressions accepted throughout the Spanish-speaking world. Three class hours and one hour language laboratory per week. Prerequisites: SPN 101 & SPN 102 or their equivalents. (3 crs.)

SPN 204. INTERMEDIATE SPANISH II. Develops control of the principal structural patterns of the language through dialogue and oral reading, as well as through written exercises based on selected readings. Three class hours and one hour language laboratory per week. Prerequisites: SPN 203. (3 crs.)

Culture courses are taught in English and are intended to satisfy General Education Humanities elective requirements as well as those in the major. One culture course is offered each regular semester.

SPN 240. ORIGINS OF SPANISH CULTURE. The style of art, literature and music of the twelfth and thirteenth centuries in Spain, in which the tendency to recount wars, weddings and conquests is evident. (3 crs.)

SPN 241. FOURTEENTH CENTURY SPAIN. This course examines the style of art, literature and music of the 14th century in Spanish culture. This is a period of consolidation, of gradual assimilation of many influences and of significant contributions to western culture. One of the outstanding books in literature, Libro de buen amor, and, in music, Las Huelgas Codex will be studied as well as Ferrer Bassa's murals and Luis Borrassa's three-dimensional works. (3 crs.)

SPN 242. GOLDEN AGE AND BAROQUE. The Golden Age of Spain is a course designed to capture the significance of Spain's reawakening. It describes Lope de Vega's revolutionizing the entire concept of dramatic form; it details Spain's contributions to Western Civilization in the form of great characters like Don Juan and Don Quixote and how they influenced the cultures of the world. (3 crs.)

SPN 243. 1700-MID NINETEENTH CENTURY. This course will examine the style of Peninsular art, literature and music in the 18th and first half of the nineteenth centuries. Members of the House of Bourbon are on the Spanish throne and thereby there is a strong French influence upon artistic expression. This is the Age of Reason and the age of false and dictatorial sophistication of neoclassic standards which ends with the flowering of romanticism. (3 crs.)

SPN 244. GENERATION OF 1898 MODERNISM. This course examines the latter part of the nineteenth century, a time in Spain when a new literary and social awareness was being expressed in the arts. Developments in the arts set the atmosphere in which an entire generation of artists the generation of 1898, as they were referred to, set about the business of representing the heart and soul of Spain. This course closes by examining the work of the intellectuals who brought the Modernismo of Rubin Dario of Nicaragua to Spain. (3 crs.)

SPN 245. TWENTIETH CENTURY SPAIN PART I. In this course we will consider the concept of a generation and two earlier movements in Spanish poetry (Ultraism and Creationism) before dealing with the poetry and the theater of the artists known as the generation of '27. Also, the composers of the Grupo de Madrid, an international film-maker, Luis Bunuel, as well as a very notorious painter, Salvador Dali, will be discussed. (3 crs.)

SPN 246. TWENTIETH CENTURY SPAIN PART II. The explosive growth and rebirth of Spanish culture during the present century, especially the period following the repressive years of the Franco regime, is studied through the works of notable intellectuals and artists such as Salvador Dali, Pablo Picasso and Federico Garcia Lorca. The student is offered a panoramic orientation to the culture of contemporary Spain. (3 crs.)

SPN 247. SPANISH CARIBBEAN. The cultural achievements of contemporary Spanish Caribbeans. It reviews changes in Caribbean societies since the movement de avance (Vanguardism, 1927). A sampling of the countries' art, unique music, architectural styles and folk dances will be presented. (3 crs.)

SPN 248. ROMANTICISM IN LATIN AMERICA. The style of art, literature and music of nineteenth century in Latin America. Attention will be given to the subordination of form to content, the emphasis given to imagination and emotion which often celebrates nature, and the utilization of common man and freedom of spirit themes. (3 crs.)

SPN 249. MEXICO TWENTIETH CENTURY. The cultural achievements of contemporary Mexicans. Changes in Mexican society since the 1910 revolutions and the concern of Mexican writers with social and political themes. A sampling of the country's art, unique music, architectural styles, murals and folk dances will be presented. (3 crs.)

SPN 250. CONTEMPORARY ARGENTINA. A view of Argentina's cultural tendencies in the twentieth century such as Surrealism, as well as the intellectuals' choice of a simpler expression of reality, surrealism, as well as the existential and neo-natural styles in literature, music and visual arts. (3 crs.)

SPN 311. SPANISH CONVERSATION, COMPOSITION, AND PHONETICS I. Intensive practice in conversation, composition and phonetics, based on modern prose provides models of natural, spontaneous speech, including colloquialisms. Written compositions use orthographic rules. Three class hours and one hour language laboratory per week. Prerequisite: SPN 311. (3 crs.)

SPN 312. SPANISH CONVERSATION, COMPOSITION, AND PHONETICS II. A study of the essential Spanish morphology, syntax, semantics, and linguistics as reflected in some representative authors. Prerequisite: SPN 312. (3 crs.)

SPN 401. ADVANCED COMPOSITION: GRAMMAR AND STYLISTICS. This course is intended to provide an in-depth grammatical analysis of the Spanish language, emphasizing shades of differences in the meaning of words and expressions as used in oral and written expression. (3 crs.)

SPN 421. SURVEY OF SPANISH LITERATURE. An introduction to the masterpieces of Spanish literature, ranging from Poema de Mio Cid to current authors. Represented will be all of the important Spanish literary genres: narrative poetry (epic and ballad), lyric verse, the short story, and selections from novels and dramas. (3 crs.)

SPN 422. SURVEY OF SPANISH-AMERICAN LITERATURE. A study of representative selections from the Colonial period to the present, with emphasis on the salient characteristics and the distinctive contributions of each literary form in the period or movement under study. (3 crs.)

SPN 450. FOREIGN LANGUAGE COLLOQUIUM IN SPANISH. This course is intended to promote interaction, to stimulate critical thinking, to provide argumentative situations which will develop the student's capacity and ability in oral and written expression. (3 crs.)

SPN 469. STUDIES IN SPANISH LITERATURE. Subject matter to be arranged. Designed for Spanish majors who wish to take additional credits and/or study abroad. Prerequisite: 18 hours of Spanish (Variable crs.)

Special Education - ESP

ESP 101. EXCEPTIONAL CHILD I. Exceptional Child I is the first of a two-course introductory sequence to handicapped children and to the field of special education. This course examines the range of handicaps in children and their broad sociological, educational, and vocational implications. Specifically, the sequence develops competencies in such areas as the historical development of services for handicapped children, definitions and classification of children's handicaps, the impact of labelling children and mainstream programs, preschool and post-school programs for the handicapped, family services, prosthetic devices and program modifications for the physically handicapped and a behavioral analysis of normal child development. (4 crs.)

ESP 200. EXCEPTIONAL CHILD II. Exceptional Child II is the second of a two-course introductory sequence to handicapped children and to the field of special education. (4 crs.)

ESP 301. BEHAVIOR PRINCIPLES I. Behavior Principles I is the first of a two-semester introduction to the professional discipline of Applied Behavior Analysis. Applied Behavior Analysis is an educative approach due to three of its fundamental characteristics it is always responsive to some form of human problem; it restructures the problem into behavior(s); such as underdeveloped academic skills or socially undesirable responses, and; it applies the principles of behavior to change these problematic behaviors and, in the process, identifies important functional relationships contributing to an expanding technology of human behavior change. Truly this is consistent with most conceptions of the purposes of education. (4 crs.)

ESP 401. BEHAVIOR PRINCIPLES II. Behavior Principles II is the second of a two-semester introduction to the professional discipline of Applied Behavior Analysis. (4 crs.)

ESP 461. STUDENT TEACHING AND SCHOOL LAW. The student teaching program is designed to ensure that Special Education majors are exposed to the full range of children covered under the comprehensive certification, i.e., mentally retarded, emotionally disturbed, learning disabled, brain damaged, and physically handicapped. The major practicum provides an intensive experience for the student in two of the handicapping areas for a period of 16 weeks. The practicum seminar component meets weekly to provide Special Education majors with an opportunity to discuss problems encountered by the students in their teaching experiences. Students are provided with opportunities to demonstrate the effectiveness and functionality of their teacher-made devises, learning centers, and curriculum materials used in their classrooms. (12 crs.)

ESP 501. INTRODUCTION TO EXCEPTIONALITY. This course introduces the student to the physical, social, emotional and educational characteristics; incidence; prevalence and educational intervention for the major categories of exceptionality enrolled in public and private educational facilities in the K-12 grade range. In addition, the course will identify ancillary services and agencies frequently impacting special populations including the major professional organizations and those concerned with residential programming and vocational training. The course will also identify the major litigation and legislation that have significantly influenced the nature of service to exceptional populations. (3 crs.)

ESP 502. EDUCATION OF THE SEVERELY/PROFOUNDLY HANDICAPPED. This course prepares students to work with children and/or adults who possess severely or profoundly handicappping conditions. Students are required to do tutoring at facilities for this population. (Variable crs.)

ESP 503. DIAGNOSTIC TESTING AND PRESCRIPTIVE TEACHING. This course teaches students how to administer, score, and interpret both norm-referenced and criterion-referenced assessment devices and how to prescribe programs of remediation based on the results of these devices. (Variable crs.)

ESP 504. CURRICULUM PLANNING AND METHODS I. This course is offered to Special Education majors the semester prior to their student teaching experience. Curriculum Planning and Methods I is a materials and methodology course for pre-service special education teachers. An emphasis is placed on assessment, instructional techniques, and materials necessary to teach reading and language arts skills and concepts to children with disabilities. The course stresses a behavioral diagnosis of communication strengths and weaknesses, the development and implementation of intervention strategies for various populations of exceptional children, the selection and/or development of appropriate materials for instruction, and the procedures and techniques for continuous evaluation for the instructional process. (Variable crs.)

ESP 505. CURRICULUM PLANNING AND METHODS II. This course is offered to Special Education majors the semester prior to their student teaching experience. Curriculum Planning and Methods II is a methods course for Special Education teachers in training which emphasizes the assessment, instructional skills and materials necessary to teach arithmetic concepts to children with disabilities. The course stresses a behavioral diagnosis of arithmetic strengths and weaknesses, the development and implementation of intervention strategies for various populations of exceptional children, the selection and/or development of appropriate materials for instruction, and the procedures and techniques for continuous evaluation for the instructional process. (Variable crs.)

ESP 506. HABILITATION TRAINING. This course deals with special education programs for senior high school students as well as those persons who reside in the community. Emphasis is placed on vocational preparation and training. Specific techniques for task analysis of jobs, daily living skills, and social adaptation constitute a major portion of this course. Emphasis is placed on the development of functional skills that contribute to normalized development. (Variable crs.)

Sports Management – SPT

SPT 200. INTRODUCTION TO SPORT MANAGEMENT. An introduction to basic skills and competencies required to successfully manager in the sport management industry. The course utilizes general management theory and principles, which make direct application to the sport management field. (3 crs.)

SPT 299. PRACTICA IN SPORT MANAGEMENT. A supervised observation/work experience in a sport management setting. The practicum experience requires 70 hours of observation/work in an approved sport management environment. (3 crs.)

SPT 301. PSYCHOLOGY OF SPORT. This course is designed to cover a diversity of concepts associated with formal recreational or sport activity. These include but are not limited to: motor skill learning, coaching characteristics and techniques, nervous system correlates of athletic activity, research on relaxation, imagery, and cognitive techniques and peak athletic performance. (3 crs.)

SPT 302. ETHICS IN SPORT MANAGEMENT. This course will provide both background in ethical theory to sport. Ethical problems, dilemmas, and conflicts in sport will be discussed. As well as, coaching practices, funding practices, management problems, and social (cultural) roles. At the completion of this course the student should be able to practice applying these ethical theories to typical problems in the world of sport. (3 crs.)

SPT 303. SPORT MARKETING. A study of basic marketing science as it applies to all realms of the sport industry. This fundamentals course is intended to give students the depth and breadth of marketing principles and practices as they apply to the sport industry. (3 crs.)

SPT 304. FACILITY AND EVENT MANAGEMENT. This course is designed to provide students with the basic knowledge of the facility planning process, as well as, how to manage specific sport facilities and the events staged in these facilities. (3 crs.)

SPT 400. LEGAL ASPECTS OF SPORT. To enhance the student's knowledge about the legal system as it pertains to sport law. Basic legal concepts concerning both contract law and tort law in sport will provide the

student a sound foundation so that the student will be better able to recognize legal liability exposure in the sport work place. (3 crs.)

SPT 401. ORGANIZATION AND ADMINISTRATION OF SPORT. A study of the application of organizational theory to the understanding and management of sport organizations. (3 crs.)

SPT 402. GOVERNANCE IN SPORT. A study of the growing spread and development of sport throughout the world, as well as how the governing bodies involved affect the structure, organization, and delivery of sport. (3 crs.)

SPT 403. SPORT FINANCE. A study of how sport organizations develop financial strategies and utilize financial indicators in developing organizational strategic plans. (3 crs.)

SPT 404. ECONOMICS OF SPORT. An analysis of how economic models are used to measure the impact of sport on various economies. (3 crs.)

SPT 405. SPORT MANAGEMENT SENIOR SEMINAR. This course provides the student with a basic understanding of the developments, trends, and social processes that explain the widely popular sporting experience of society today. (3 crs.)

SPT 499. INTERNSHIP IN SPORT MANAGEMENT. This course is the sport management student's capstone experience. Students will be assigned to an internship site based on their unique educational needs and experience. Internship students will work directly with sport management professionals in one or more work settings. (3 crs.)

Technology Education - TED

TED 100. INTRODUCTION TO TECHNOLOGY EDUCATION. The purpose of this course is to launch the professional development of each Technology Education student. Activities will afford each student the opportunity to become well grounded in the philosophy, theory and practice of Technology Education and of pedagogy. Following extensive modeling activities within a campus-based classroom/laboratory environment, all students will participate in similar activities at selected field locations (K-12). (3 crs.)

TED 111. COMMUNICATION SYSTEMS (LAB). This course provides a broad overview of communication systems, specifically, print, acoustic, light, audiovisual and electronic media as they relate to the realm of communications. The student will experience individualized and group laboratory activities in the combined area of generating, assembly, processing, disseminating and assimilating of a communicative message. Course will meet for two hours of lecture and four laboratory hours per week. (3 crs.)

TED 115. MATERIAL PROCESSING (LAB). This laboratory-based course is an introduction to basic types of materials and processes of industry. Students will study and execute a variety of industrial processes including: casting and molding, forming, separating, conditioning, assembling, and finishing. Students will become proficient in processing various industrial materials such as metals, woods, and plastics. This course serves as a foundation for all other laboratory courses which require the processing of materials. Course will meet for two hours of lecture and four laboratory hours per week. (3 crs.)

TED 125. MATERIAL PROCESSING I. This laboratory-based course is an introduction to basic wook and composite materials and processes of industry. Students will study and execute a vareity of industrical processes including forming, separating, fabricating, conditioning and finishing. Students will become proficient processing various industrial materials. This course serves as a foundation for all other laboratory courses that require the processing of materials. The safe and efficient use of tools and machines is stressed. (3 crs.)

TED 225. MATERIAL PROCESSING II. This course serves as an introduction to metallic, ceramic and plastic materials including the selection, preparation, conditioning, forming, shaping and finishing of these materials. These activities allow students to explore many facets of materials science, selection, processing, and testing. Additionally, this course serves as the foundation for other laboratory courses that require the processing of materials. There will be approximately two lecture hours and four laboratory hours per week. (3 crs.)

TED 305. INTRODUCTION TO TECHNOLOGY EDUCATION/EARLY FIELD EXPERIENCE. A class for all technology education majors; to be taken during the sophomore year. Students study the development of general education in relationship to technology as found in a pluralistic society. Readings and discussions will focus on the taxonomies and systems for technology education, professional organizations, development rates of youth, special needs students, laboratory safety, teacher liability and certification requirements. The technology education major will be required to spend each Friday visiting industrial sites, urban schools and a regular teaching center. Prerequisites: IND 110, TED 111, & TED 115. (3 crs.)

TED 310. STUDIES IN COMMUNICATION (1-3 crs.)
TED 330. STUDIES IN TRANSPORTATION (1-3 crs.)
TED 340. STUDIES IN CONSTRUCTION (1-3 crs.)
TED 350. STUDIES IN MANUFACTURING (1-3 crs.)
In independent study courses, the student works in an area of interest under the guidance of an instructor with similar interests. The student prepares triplicate copies of a proposal which presents the objectives to be achieved, a procedural outline, special conditions, expected findings, and assessment methods. Students are entitled to a minimum of five hours of individual faculty time per credit. Proposals must receive instructor and department approval before the student registers in the course.

TED 315. CONSTRUCTION SYSTEMS (LAB). Students will develop a basic understanding of the design and behavior of structures. Through laboratory activities, students will learn how structures are designed, why certain materials are used, how structures withstand loads, and the impacts of structures on societal, biological, and technological systems. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisites: IND 110, TED 111, & TED 115. (3 crs.)

TED 325. MANUFACTURING SYSTEMS (LAB). The class begins with an introduction to manufacturing technology, technical systems, and a look at the historical evolution of manufacturing. Students will examine the organization and management of manufacturing endeavors. Finally, students will explore the various aspects of research and development and will work through the process of identifying, designing, selecting and producing products. This will be done in a production laboratory using current equipment and processes. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisites: IND 110, TED 111, & TED 115. (3 crs.)

TED 335. TRANSPORTATION SYSTEMS (LAB). This course focuses on developing a basic understanding of the behavior of land, water, air, and space transportation systems. Students engage in problem solving activities to design, produce, test, and analyze transportation systems while studying the technical subsystems of propulsion, structure, suspension, guidance, control, and support. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisites: IND 110, TED 111, & TED 115. (3 crs.)

TED 425. MANUFACTURING ENTERPRISE (LAB). An advanced study course designed to provide laboratory based applications of a variety of content related to the field of manufacturing. Students will participate in the design and production of a product in a manufacturing enterprise situation which closely parallels the functions of a manufacturing corporation. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisites: TED 325 or Junior/Senior Status. (3 crs.)

TED 435. TRANSPORTATION RESEARCH & DEVELOPMENT (LAB). This course provides individual and/or small groups of students within a laboratory class the opportunity to conduct a focused investigation of a particular transportation system or subsystem. The nature of this investigation requires direct contact by the student with corporate, university, and governmental libraries, laboratories, and associations. The scope of the research and development problem could relate to local, national, as well as international topics. The time frame of the research could be historical, contemporary, or futuristic. Each student and/or group is required to design, build, operate, and analyze some type of transportation model, prototype, or simulation that demonstrates with precision the essence of the research problem. Portfolio documentation of the progress of the research and development problem is required. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisites: TED 335 & PHY 121. (3 crs.)

TED 450. TEACHING TECHNOLOGY IN THE SECONDARY SCHOOL (LAB). In this course, participants learn to apply pedagogical skills

in developing curriculum materials, applying teaching techniques, assessing student achievement and designing laboratory layouts in the systems of communication, construction, manufacturing, transportation and bio-related technologies. Integrating math and science concepts in a technology learning activity is an integral component of the course as students learn to design, produce, use and assess technological systems. Course will meet for two hours of lecture and four laboratory hours per week. Prerequisite: TED 305. (3 crs.)

TED 461. STUDENT TEACHING - TECHNOLOGY EDUCATION. Student teaching is the culminating experience of teacher education majors in the Technology Education curriculum. The student teacher is assigned to and works under the supervision of two different master teachers at two different field locations during the semester. The development and refinement of contemporary pedagogical skills constitute the primary learning purpose for each student teacher. Specific teacher-learning skills which are developed are lesson planning, delivery methods, organizational procedures, class control, laboratory management, safety practices, record keeping, and educational measurement and evaluation. An integral component of the student teaching experience is a weekly practicum. The practicum serves as a means of coordinating activities and interchanging ideas and experiences of the student teachers. (12 crs.)

TED 460. HONORS STUDY IN COMMUNICATION (1-3 crs.)
TED 465. HONORS STUDY IN CONSTRUCTION (1-3 crs.)
TED 475. HONORS STUDY IN MANUFACTURING (1-3 crs.)
TED 480. HONORS STUDY IN TRANSPORTATION (1-3 crs.)
Honors courses are reserved for those with a 3.0 quality point average or better in the Technology Education curriculum specialty courses taken.

TED 500. TEACHING TECHNOLOGY IN THE ELEMENTARY SCHOOL. This course is designed for pre-service and in-service Technology Education majors. The primary objectives are to define the study of technology as an academic discipline and develop a perspective of the role of technology as a universal integrator of primary school learning activities. Each student is required to develop a series of technology-based thematic units that integrate the learning of math, science, social science, language arts, etc., constructs. This course includes three lecture hours and one laboratory hour per week. Prerequisite: PSY 208 and Junior Standing. (3 crs.)

Theatre - THE

THE 100. INTRODUCTION TO THEATRE. A study of the art and craft of theatre from play script to play production. The course surveys theatre history, literature, architecture, acting, directing, and design for the student who wants to know what goes on in theatre and what it means. Students can expect to participate in classroom performances. (3 crs.)

THE 101. VOICE AND SPEECH. A practical and useful course for the performer or anyone who wants a flexible, strong, controlled voice. The Lessac method involving the natural ways in which the body produces vocal sounds is primarily studied for clear and articulate speech which is free of regional qualities, affectation, imitation and annoying physical habits. The course also involves transcription of the International Phonetic Alphabet for correct pronunciation. (3 crs.)

THE 126. MAKEUP. This course covers modeling the face and the body with makeup and with three dimensional prostheses. Historical, character, fantasy, corrective, street, and fashion makeup will be researched and applied. Students with an advanced interest will construct three-dimensional prostheses and hair pieces. (3 crs.)

THE 131. FUNDAMENTALS OF ACTING. An introduction to the basic tools of the actor's craft and personal discipline for the student through the use of acting exercises, sensitivity exercises, theatre games, and improvisation. (3 crs.)

THE 132. BALLET TECHNIQUE I. Introductory instruction in the basic techniques applicable to ballet as practiced in western Europe and in the United States. Basic techniques include barre exercises, port de bras, and center practice with jumps, beats, and turns. This course is only suitable for the student who has no previous experience. (3 crs.)

THE 133. JAZZ TECHNIQUE I. Introductory, entry level experience instruction in the basic techniques applicable to American jazz dance. The focus is on lengthening muscles and developing isolation techniques necessary for most forms of jazz dance. The Luigi Technique which includes standing floor, warm-up/stretch, and center practice jumps, turns, and isolations is studied. (3 crs.)

THE 141. STAGECRAFT I. Introduction to the theory and practice of stagecraft, involving basic set construction, painting, and play reading. Practical experience for students majoring in all performance media (e.g., television, film). (3 crs.)

THE 201. VOICE AND INTERPRETATION. Introduction to the basic vocal and analysis techniques necessary for effective interpretation and presentation of non-dramatic literature; poetry, prose, and narrative literature. (3 crs.)

THE 211. LIGHTING I. The basic theory and practice of lighting for the stage primarily, as well as film, and television. Practical experience for students majoring in performance media (stage, television, film) is stressed. (3 crs.)

THE 225. COSTUME CONSTRUCTION. Basic pattern drafting and sewing techniques applied to the construction of costumes. (3 crs.)

THE 231. INTERMEDIATE ACTING. The development of a personal and useful acting method to develop believable characters for the stage. The acting method is developed through intense scene work that includes character and script analysis. Prerequisite: THE 131 Fundamentals of Acting or permission of instructor. (3 crs.)

THE 232. BALLET TECHNIQUE II. The development of strength and fluidity through an extension of techniques demonstrated in specialized study and drill. Emphasis is placed on quick retention of complex combinations. Further emphasis is placed on center work to develop the student's artistry in the dance form. Prerequisite: THE 132 or permission of instructor. Variable credits are awarded depending on the student's experience and abilities. (1-3 crs., repeatable only for a maximum of 7 credits to count toward graduation.)

THE 233. JAZZ TECHNIQUE II. The development of strength and fluidity through an extension of jazz techniques demonstrated in specialized study and drill. Emphasis is placed on quick retention of complex combinations. Further emphasis is placed on center work to develop the student's artistry in the dance form. Prerequisite: THE 133 or permission of instructor. Variable credits are awarded depending upon student's experience and abilities. (1-3 crs., repeatable only for a maximum of 7 credits to count toward graduation.)

THE 240. CREATIVE DRAMATICS. The stimulation and development of creativity through playmaking exercises, storytelling, improvisation, and sensitivity techniques useful for potential teachers and parents. (3 crs.)

THE 245. CHILDREN'S THEATRE. The selection, direction, and production of plays for children. This course includes matching the proper plays with the stages of child development. Excellent class for potential teachers, parents and recreational personnel. Prerequisites: ENG 101, ENG 102 are suggested. (3 crs.)

THE 255. PUPPETRY. The planning and production of puppet plays. (3 crs.)

THE 271. SCENE DESIGN I. Introduction to the theories and practice of designing scenery with emphasis on designing for various environments. Prerequisite: THE 141 or permission of instructor. (3 crs.)

THE 300. THEATRE DANCE I. Introductory instruction in the basic techniques applicable to the various dance forms used in the musical theatre. Basic forms include tap, jazz, ballet, ethnic, and modern dance. Choreographic styles originated by Agnes DeMille, Jerome Robbins, Bob Fosse, and Jack Cole will be demonstrated and applied. Prerequisite: THE 232, THE 233 or permission of instructor. (3 crs.)

THE 301. THEATRE DANCE II. The development of strength and fluidity through an extension of techniques demonstrated in specialized study and drill. Emphasis is placed on the principles stressed in Theatre Dance I with the addition of character shoes for the women, and partnering work. . Prerequisite: THE 300 or permission of instructor. Variable credits are awarded depending upon student's experience and abilities. (1-3 crs., repeatable only for a maximum of 7 credits to count toward graduation.)

THE 302. HISTORY OF THEATRE I. The development of theatre from the Classics through the Baroque, including representative plays. Prerequisites: ENG 101, ENG 102 are suggested. (3 crs.)

THE 303. AMERICAN THEATRE HISTORY. A survey of the American theatre from colonial times to the present, including representative plays. (3 crs.)

THE 304. WORLD DRAMA. Classical to 19th century plays (excluding Shakespeare) studied as blueprints for theatrical presentation. Prerequisites: ENG 101, ENG 102 are suggested. (3 crs.)

THE 305. SHAKESPEARE IN THE THEATRE. Representative Shakespearean plays studied as theatrical presentation. Prerequisites: ENG 101, ENG 102 are suggested. (3 crs.)

THE 306. MODERN DRAMA. 19th and 20th century plays studied as blueprints for theatrical presentation. Prerequisites: ENG 101, ENG 102 are suggested. (3 crs.)

THE 308. HISTORY OF COSTUME. A survey of the history of costume in the western world. (3 crs.)

THE 309. READER'S THEATRE. Advanced theory and practice of oral interpretation techniques. Focus moves from solo to group performance and the basic staging techniques of both Reader's Theatre and Chamber Theatre. Prerequisite: THE 201 or COM 224 or permission of instructor. (3 crs.)

THE 311. LIGHTING II. Advanced theory and practice of lighting design for stage, television and film. Practical experience is stressed. Prerequisite: THE 211 or permission of instructor. (3 crs.)

THE 312. HISTORY OF THEATRE II. The development of western theatre from the Baroque to the present, including representative plays. Prerequisites: ENG 101, ENG 102 are suggested. (3 crs.)

THE 320. FUNDAMENTALS OF DIRECTING. The comprehensive study of the director's pre-production planning of a dramatic production for the stage. The directorial analysis of plays and basic fundamentals of composition, picturization, movement, and improvisation with gesture, costume, and properties is studied. The in-class preparation of a complete directorial script of a one act or a cutting from a longer play may be directed as part of a public program of student-directed plays. (3 crs.)

THE 325. COSTUME DESIGN. Basic principles of costume design. Students complete various design projects for specific plays selected from a variety of historical periods. (3 crs.)

THE 328. SCENE PAINTING. The practice of scenery painting for the theatre. Students work with a variety of paints, texturing materials, and application techniques. Particular emphasis is placed on the enlargement of existing art works to a size suitable for stage use. (3 crs.)

THE 331. ADVANCED ACTING. This course challenges the actor's ability to demonstrate a personal and useful acting method through a wide range of textual problems, historical and modern plays and acting styles. Prerequisite: THE 231 or permission of the instructor. (3 crs.)

THE 341. STAGECRAFT II. Advanced practice and principles of scenery and property construction. Practical experience with plastics, metals, drafting, and advanced woodwork is stressed. Prerequisite: THE 141 or permission of instructor. (3 crs.)

THE 350. THEATRE PRACTICUM: ACTING.(Variable crs.)
THE 351. THEATRE PRACTICUM: DANCE. (Variable crs.)
THE 352. THEATRE PRACTICUM: DIRECTING. (Variable crs.)
THE 353. THEATRE PRACTICUM: DESIGN. (Variable crs.)
THE 354. THEATRE PRACTICUM: MANAGEMENT. (Variable crs.)
THE 355. THEATRE PRACTICUM: TECHNICAL DIRECTOR. (Variable crs.)
THE 356. THEATRE PRACTICUM: TECHNICAL PRODUCTION. (Variable crs.)
THE 357. THEATRE PRACTICUM: TOURING THEATRE. May be repeated only to a maximum of 10 credits. (Variable crs.)

THE 358. THEATRE PRACTICUM: SUMMER THEATRE. May be repeated only to a maximum of 10 credits. (Variable crs.)

Theatre Practicum courses are the application of learned skills in specific areas of theatre and dance. Credit is variable to a maximum of five credits per term and a maximum of eighteen to be counted toward graduation. (Variable crs.)

THE 359. THEATRE PRACTICUM: SENIOR THESIS. Special acting, directing, management, and design or technical involvement in a play production. Prerequisite: Senior level only. (3 crs.)

THE 371. SCENE DESIGN II. Advanced theory and practice of designing scenery and lighting, with emphasis on designing for various environments. Prerequisite: THE 271 or permission of instructor. (3 crs.)

THE 439. SPECIAL PROBLEMS IN TECHNICAL PRODUCTION. An introduction to the rigor of professional work. This course will acquaint the student with immovable deadlines and budgets in preparation of graduate or professional work. (3 crs.)

University College - UNI

UNI 100. FIRST-YEAR SEMINAR. First-Year Seminar helps students to achieve their educational goals through the utilization of a full range of institutional and community resources. (1 cr.)

UNI 200. CAREER READINESS. This course provides knowledge of an practical preparation for the world of work. Students conduct self-assessment for career planning; learn how to research particular jobs, careers, and employers; develop skills needed for obtaining a job; learn how the workplace is organized; and explore the options for combining career and life expectations. (1 cr.)

Women's Studies - WST

WST 200. INTRODUCTION TO WOMEN'S STUDIES. An overview of a fast growing multi-disciplinary field, focusing on the effect of gender on human lives, including cultural beliefs about women's nature, abilities, and role; the realities of women's personal family, economic and political lives; and the dynamics of change. Western and especially US materials predominate, but diverse situations of women internationally will be considered. (3 crs.)

WST 300. SELECTED TOPICS IN WOMEN'S STUDIES. Discussion and research on selected topics in women's studies. Topics may be developed on an experimental basis according to the instructor's expertise and student interest. (3 crs.)

WST 400. FEMINIST SCHOLARSHIP AND RESEARCH: A SEMINAR. An exploration of classic and current controversies in feminist theory and the impact of feminist scholarship on the pursuit of knowledge, particularly in terms of method. The emphasis will be on individual research on topics relevant to the student's major field. (3 crs.)

WST 425. PRACTICUM IN WOMEN'S STUDIES. Provides practical experience in women's studies related work. field. In consultation with the advisor, a student may seek placement in such situations as women's centers, shelters, health clinics, political organizations, special interest organizations, or newspapers. Coursework may include individual student-instructor consultations, presentations, reading discussions, guest lectures, field trips, research, and experiential papers. (3 crs.)

University Services

Louis L. Manderino Library

The Louis L. Manderino Library houses a collection of some 365,000 volumes, 1.4 million microforms, 60,000 audiovisual materials, over 30,000 US government Documents, and subscribes to over 1300 serial publications. In addition, the library provides access to databases with over 4000 periodical titles available in full-text. As part of the Keystone Library Network, the library shares a common integrated library system (PILOT) with the other 13 university libraries in the State System of Higher Education. In addition to California's on-line catalog, students can also access the on-line catalogs of the other libraries in the system. To supplement the research potential of students, the library provides on-line searching of databases at remote sites via DIALOG and FirstSearch, as well as providing document delivery service of periodical articles through subscription to the UMI/British Library Document Supply Centre. As a member of the Interlibrary Delivery Service of Pennsylvania, shipping and receiving library materials is accomplished in three days or less. For additional information, please check the library's homepage at **www.library.cup.edu.**

The library also offers such services as a large reference collection, Netscape access to the World-Wide Web, photocopiers, syllabi for California University courses, computer software, a collection of art slides, a curriculum library for teacher education students, and a media services center with equipment and audiovisual materials, plus lamination and binding services. In addition, Manderino Library is an official federal Government Documents Depository and regularly receives large numbers of government documents, such ad census data, reports, maps, and the Congressional Record. The Documents Librarian will assist with the use of these important resources.

The staff of the Louis L. Manderino Library is "user-friendly" and welcomes any suggestions not only for materials to add to the collection but also for improvement of services.

PILOT

Computerized information retrieval has made library research faster, more through, and more efficient. PILOT, the on-line public access catalog, is a user-friendly resource that can be used to quickly locate any books, audiovisual materials, or government documents in the library's collection, and also to print, download, ore-mail the retrieved information. PILOT uses a Web interface and is accessible from any computer connected to the World Wide Web, whether in the library, on campus, or anywhere in the world.

Electronic Resources

The Manderino Library provides access to the following electronic resources: *

* Manderino Library is committed to offering quality on-line resources. This list reflects our offerings as of Spring 1999. Given the dynamic nature of electronic resources, changes may occur - including the addition of more resources.

Britannica Online

Buckmaster Annual Stockholder reports

CIOS: Communication Institute for Online Scholarship

EBSCOhost: Academic Search FullTEXT Elite-scholarly journals covering the social sciences, humanities, education, and more (some full-text since 1990)
Business Source Elite - business periodicals, including The Wall Street Journal (some full-text)

FirstSearch: MLA Bibliography

InfoTrac SearchBank:
Expanded Academic- liberal arts subjects
Business and Company - business, management, finance, etc.
Health Reference Center - health, medicine, drugs, etc.

Lexis-Nexis Academic Universe

Proquest Direct: Some full-text coverage of twelve newspapers: *Atlanta Journal-Constitution, Boston Globe, Chicago Tribune, Christian Science Monitor, Angeles Times, The New York Times, The New York Times Book Review, The New York Times Magazine; USA TODAY, Washington Post, Pittsburgh Post-Gazette,* and *The Wall Street Journal.*

STAT-USA

WebSPIRS: GENERAL - Books in Print, Books Out of Print, Current Biography, Essay & General Literature
EDUCATION - ERIC, Education Abstracts Full Text
HEALTH and SPORTS - CINAHL, SPORT Discus
HUMANITIES - Art Abstracts
SCIENCE - Applied Science and Technology Abstracts, Biological Abstracts, GeoRef, GeoRef in Process, GeoRefSerials
SOCIAL SCIENCE - Criminal Justice Abstracts, NASW Clinical Register, PAIS Internationl, PsycINFO, Sociological Abstracts, Social Work Abstracts, Mental Measurements Yearbook.

Brief tutorial sessions, on-line help, and individual assistance from reference librarians aid the student who might need additional help. The library faculty also presents in-depth library-use training sessions, in conjunction with specific university classes.

Computing Services Center

The University Computing Services Center is located in the basement of Manderino Library. Staff offices are open Monday through Friday from 8:00 A.M. until 4:00 P.M. User facilities in the World Culture Building are available for student use.
The computer facilities at the university are separated into two distinct functional areas. One area deals with providing computer resources to meet the instructional and research needs of the university, such as student access for coursework and the Manderino Library on-line catalog. The other area deals with providing resources to meet the administrative needs of the university.

Computer Accounts

Students who register for classes automatically have a VMS and Windows/NT computer account created for their use during the semester. There is no charge for the service or for the use of the computer network.

Campus Network

The university campus buildings are connected together via a high-speed state-of-the-art ATM local area network. Fiber Optic ATM connects every floor to the campus backbone and each floor has switched Ethernet to every room including offices, classrooms, labs and dorm rooms. Southpointe Center is connected via a high-speed ATM WAN which extends all computer resources to Southpointe. The network also provides the capability for distance learning programs. The university is connected to the Internet via SSHENET II. This statewide network includes all of the State System of Higher Education Universities and the Office of the Chancellor.

Instructional Computing Facility

The Instructional Computing Facility (ICF) located in the basement of the World Culture building, is the main center for student campus network access and general use desktop computing. This facility contains various personal computer systems and printers in the laboratories and classroom. The facility provides access to adaptive technology systems.
Entrance to the ICF is through the University Avenue (west) entrance or via the elevator. Generally, the labs are open seven days a week during fall and spring semesters and five days a week during summer sessions. However, schedules may change and the hours are posted each semester in the ICF and can be requested by calling 724-938-4335 or by typing HOURS at the system prompt. The labs are closed during holidays and session breaks.

Distance Education

As a leader in technology instruction, California University of Pennsylvania has numerous courses that are currently delivered via distance learning. Classes can originate, and be received at, the main campus and from off-campus sites like the Southpointe Center. These courses are delivered instantly using state-of-the-art videoconferencing systems across the university's data network.
Distance Education equipment allows the transmission of audio and video between two or more locations for the purpose of delivering instruction, enhancing educational experiences, conducting meetings, and participating in conferences. Some of the equipment includes a multimedia projection system; document stand for displaying documents, photos, and objects; automatic tracking camera; and computer for demonstrating software, accessing the Internet, and making multi-media presentations.

Distance Education classrooms contain video cameras and sensitive microphones that can be controlled from a remote site. Always assume what you are doing and saying is being seen and heard ANYTIME you are in or near a classroom. Also, be aware that transmission of audio and video can occur with the monitors off, and conversations in the hall outside of classrooms may be heard. Private conversations should occur at some other location than the Distance Education classroom.

Other Campus Facilities

Many departments have microcomputers for student and staff use; only some of the facilities are listed here.
Additional campus microcomputer laboratories are located in and operated by various departments on campus including: Applied Engineering and Technology, Business and Economics, Mathematics and Computer Science, College of Education, and the English Department's Word Processing Laboratory and Computer Center. The College of Education and Human Services maintains a Teacher Education Computer Lab in the Keystone Education Building. There is also a Student Access Center Computer Lab located on the first level of the Natali Student Center. The Office of Life Long Learning also features a microcomputer laboratory. The Southpoint Center provides a laboratory for instructional use. Contact your department for specific information about laboratory facilities available for educational purposes.

Campus Learning Labs

Mathematics Lab

The following services and resources are offered free in the Mathematics Laboratory:
1. tutorial support in math and math-related courses
2. video tape tutorials on most algebra topics
3. computer-directed instruction software for many topics
4. math anxiety software and reference books

Success in a math course is achieved by working on assignments as soon as possible after class and by making accomplishments each day. Students who have difficulty with math courses should call 724-938–5893 to schedule a 30–minute appointment. They should bring attempted homework with them.

The Lab's video tape tutorials are written by one of the authors of the Introductory Algebra text. They are informative to students who need algebra assistance in any course. The tapes, 15-30 minutes long, are available for use in the Math Lab and on overnight sign-out basis.

One hundred fifty computer–directed instruction software disks are available. The disks give two to three screen overviews, three or four worked problems, and three or four practice problems. Software is available for topics from basic mathematics to calculus. Most computer software lessons can be completed in 15 minutes.

Nationally renowned authors claim that half of all college students are math anxious. Many math anxious students have physiological symptoms, including headaches or stomach aches. Students with these symptoms only in math environments should discuss this with a Math Lab tutor or with the Math Lab Director.

Reading Clinic

When your reading assignments make you feel as if you are lost in the university jungle, come to the Reading Clinic for a free one–hour tutoring session. Staffed by one faculty member and two graduate assistants, the Clinic teaches techniques to improve reading comprehension and vocabulary.

The Clinic offers help in identifying main ideas, making inferences, drawing conclusions, understanding concepts and facts, test–taking skills and building vocabulary. In addition, education majors can be tutored in preparation for taking the Communications and General Knowledge sections of the National Teachers' Examination. Students make appointments to work privately with a tutor or schedule an independent lab session that is staff-directed.

The Reading Clinic is housed in the Keystone Building, Room 200A and is open from 9:00 a.m. to 4:00 p.m., Monday through Friday.

Writing Center

The Writing Center is a non-credit English language resource provided by, and administered through, the English department.

An integral part of the three-course Composition Program, the Writing Center's main purpose is to assist students at every level and from every academic discipline with their writing projects. Students visit the Writing Center for various types of assistance, including help in getting started on a writing assignment; consultation about thesis, organization and development; assistance with grammar; information about bibliographies and footnotes; and help with proofreading and editing. Proceeding entirely on a one-to-one basis, visitors receive the optimal amount of individual attention from trained tutors who use a collaborative model tutoring method. In this model, tutors function not as authoritarian experts who take over a student's paper in order to "fix it up," but rather as coaches and guides who collaborate with writers in ways that facilitate the process of writers solving their own writing problems and developing their own ideas.

The Center is open during the regular academic year from 9:00 a.m. to 9:00 p.m., Monday through Thursday, 9:00 a.m. to noon on Friday, and 4:00 p.m. to 9:00 p.m. on Sunday (a variable summer schedule is also offered). In addition, the Center provides on-line tutorial services via its "Virtual Writing Center," accessible at the following URL:
www.english.cup.edu/wcenter/wcenter.html

At this web site, students can utilize the "Virtual Library," a collection of eight rich links dealing with just about any writing subject imaginable, from scores of grammar handouts, to on-line dictionaries and search engines, to the broad world of publishing and more. In addition, students can receive on-line tutoring assistance with their writing via the OWL (On-line Writing Lab). The OWL allows a writer to electronically pose a question about her writing, or to electronically send a portion of her writing, to which she will receive an e-mail answer or response from one of the Writing Center tutors.

A completely free service, anyone is welcome to walk in, call 724-938-4336 for an appointment, or visit via the Virtual Writing Center.

CARE Project-
Services for Students with Learning Disabilities

The CARE Project is the designated provider of services to students with learning disabilities who are enrolled in California University of Pennsylvania. The university is committed to providing services for this population, which will increase the prospects for success. Students with learning disabilities have two different levels of service available to them.

All reasonable accommodations appropriate per the student's documentation to offset the disability and which do not change the academic/technical standards are available upon request for both programs.

Specialized Support Service Program (SSSP)

The Specialized Support Service Program (SSSP) serves a maximum of 40 participants each semester on a fee-for-service basis. A commitment by the student to the required responsibilities and procedures of the SSSP is carried out through a contractual agreement with the participants, parents and CARE staff. All SSSP students must participate in Structured Academic Management Seminars. First semester students attend seminars for a minimum of eight hours per week. Subsequent levels of participation are based on the student's academic performance. Support services may include:

- Daily study plans with assigned undergraduate and graduate monitors.
- Academic assignment task management and sequencing.
- Daily performance monitoring by staff and participant.
- Referral to/liaison with other campus support facilities and departments.
- Individual and small group assistance with study strategies by CARE staff.
- Progress reports to parents.
- Access to computer lab and appropriate software.

Additional services include regular communication with the participant's instructors, scheduling recommendations and guidance for the development of self-advocacy skills. Basic, non-fee accommodation services are available to students on an as-needed basis.

Modified Basic Support Program (MBSP)

The Modified Basic Support Program (MBSP) insures the availability of basic services for all students with learning disabilities enrolled in the university and is consistent with 504/ADA guidelines. When SSSP enrollment is at maximum, or when students eligible for SSSP decline those services, students may request services from the MBSP.

MBSP participants generally function independently with the university system. Participants may meet with a member of the CARE Project staff in a conference setting, if requested, for assistance with self-advocacy, e.g. for assistance with accommodation requests and for information regarding university procedures/tutorial centers. Non-fee, basic accommodations are provided on an as-needed basis.

Application Information

It is recommended that applicants begin correspondence with the CARE Project office when they begin the application process with the university. Students with learning disabilities who are applying to California University of PA and for CARE Project services should do the following:

Request an admissions packet from the California University Admissions office AND request a CARE application from the CARE Project office.

Under separate cover, submit the completed admissions packet to the Admissions office AND submit the completed documentation packet to the CARE Project office.

Special Notes

Students with learning disabilities follow the same admission procedures and standards as required by California University's Admissions office for all students.
Questions regarding admission procedures and acceptance status should be directed to the Admissions office at 724-938-4404.
Questions regarding CARE application procedures and eligibility for services should be directed to the CARE Project office in the Keystone Education Building – Room 110 or call 724-938-5781. Applicants may also write to:
CARE Project
California University of PA
250 University Avenue – Box #66
California, Pennsylvania 15419

Career Services

The primary purpose of Career Services is to assist students in developing, evaluating, and effectively implementing appropriate career plans. Undergraduates, seniors, graduate students, and alumni may obtain general advice and information on career and job search strategies.

On-campus interviews and informational sessions are scheduled for students interested in meeting with representatives from business firms, government agencies, industries, and school districts seeking candidates for employment. The "career center" houses career planning and company literature as well as information on current job opportunities. The Career Services Department provides evening hours three days a week while classes are in session.

Students are encouraged to visit Career Services to:

- schedule a session on the computerized guidance system, CHOICES;
- one-on-one career guidance;
- use the career center media, including: videos, audiotapes, and computerized software resources;
- see a staff member about any career issues, including graduate and professional schools;
- attend career workshops, job fairs, and special programs;
- learn about alumni who will discuss their careers;
- investigate cooperative education, internships, and service learning opportunities;
- register for undergraduate one-credit CAREER READINESS course;
- register for graduate one-credit CAREER TRANSITION SEMINAR course
- make an appointment for a "mock" interview;
- access "Career Connections" Job Hot Line for full-time, part-time, co-op, internships, and seasonal jobs;
- enroll in disc management;
- information guides for resume writing, interviewing, cover letters, and job search;
- get the most up-to-date information on company recruiting visits;
- sign-up for campus interviews and information sessions; search the "web" for job opportunities.

Please visit our website at **www.cup.edu/career .**

Cooperative Education

Cooperative Education (CO-OP) allows students to be employed—whether in business, industry, government, education or service organizations—in paid positions directly related to their academic majors or career plans. Cooperative Education positions are pre-professional, monitored by faculty members, and coordinated by the university. Students may be employed part or full-time, and may choose to work during the fall, spring and/or summer semester. Undergraduates, as well as graduate students, in all academic majors are encouraged to participate provided they meet the eligibility requirements. It is expected that the student's cooperative education experience(s) will span two semesters or summers while enrolled at California.

CO-OP Eligibility

- Completion of Career Readiness, a 1 credit course.
- Completion of 30 credits (Associate's - 15; Master's -6) Student must have at least a 2.0 overall quality grade point average (3.0 for Master's).
- Agreement to complete 2 co-op experiences (experiences can be completed in the summer) 1 semester for Associate's or Master's.

Three Ways to Fit CO-OP Into an Academic Program:

1. Work part-time while still enrolled full time in classes.
2. Work full time with no classes scheduled for the summer.
3. Work full time or part-time in the summer.

Where Can I Work?

- Students can work either locally or nationwide.
- Last year, CO-OP advertised 747 positions throughout the U.S. and abroad.
- The CO-OP staff also assists students in developing CO-OP sites in any location.

How Does CO-OP Differ from Internships?

- All CO-OP positions are paid – Internship positions can be either paid or unpaid.
- CO-OP is administered through Career Services – Internships are administered through Academic Departments.
- Students do not receive credit for CO-OP experience--All internship experiences are for credit.
- (Students do receive notation on their transcript for their CO-OP experience.)

Cooperative Education positions are advertised on the Job Hotline. Students who enroll in Cooperative Education are eligible to apply for advertised positions. Additional information and appointments with members of the Cooperative Education staff are available in the Career Services Department.

Visiting Student Program

Students at California University may choose to enroll for a time at any of the other 13 institutions in the Pennsylvania State System of Higher Education; and similarly students from those 13 may enroll at California. These institutions are Bloomsburg, Cheyney, Clarion, East Stroudsburg, Edinboro, Indiana, Kutztown, Lock Haven, Mansfield, Millersville, Shippensburg, Slippery Rock, and West Chester Universities of Pennsylvania.

The purposes of this program are to allow students at one institution to participate, for a limited period of time, in courses, programs or experiences not available at their home institution, without loss of institutional residency, eligibility for honors or athletics, or credits toward graduation; and to expand options available to students in such matters as student teaching, clinical experiences, internships, and international exchange programs.

Further information may be obtained from the Office of the Provost. Catalogs of the participating institutions may be consulted in the offices of the college deans, or in Manderino Library.

The procedures and standards for this Visiting Student Program are as follows. (They apply equally to students in any of the 14 SSHE institutions.)

1. The student must have satisfactorily completed at least 27 credits at California, and be in good academic standing.
2. The student must obtain advance approval from California University to complete specified studies at a sibling university under this program. Each university specifies the approval procedure for its own students' participation and for students from SSHE universities.
3. The student must present evidence of approval from California University and evidence of visiting university acceptance at the time of registration at the sibling university.
4. A student may complete up to 18 credits in a single semester and up to 16 credits of summer work as a visiting student.
5. All credits and grades accrued at the sibling university will be accepted in full by California University, and thereafter treated as California University credits and grades.
6. The student registers at, and pays tuition and fees to, the State System university visited. A student wishing to divide a courseload between two institutions during the same term registers and pays appropriate tuition and fees at both universities.

Public Safety

The Department of Public Safety and University Police at California University is a fully recognized law enforcement agency as authorized by 71 P.S. 646, the Administrative Code of 1929 as amended and Title 18 of the Pennsylvania Consolidated Statutes, (Crime and Offenses) and 24 P.S. 20–1006–A(14) 20–2010A (5) of the State System of Higher Education Act.

The department consists of professionally trained individuals capable of responding to requests for assistance in routine and emergency situations. The department, a diverse group of police officers, communications, and secretarial staff, provides continuous 24 hour assistance to the university community.

The staff includes a director, assistant director, two shift supervisors and ten additional commissioned police officers who have received training at the Pennsylvania State Police Academy. Three public safety communications officers and one departmental secretary contribute to the operation of the department. Public safety personnel are certified in CPR, basic first aid procedures, and the emergency medical airborne evacuation policy and procedure for transportation of the seriously ill or critically injured.

Additional services offered to university students, faculty, and staff consist of parking and traffic management, criminal investigations, health, fire, and safety surveys, special event planning, accident investigation, and crime prevention information and presentations.

Pursuant to the Pennsylvania College and University Security Act, and the Federal Crime Awareness and Campus Security Act of 1990, post–secondary institutions, including colleges and universities, must provide information with respect to campus crime statistics and security policies of the institution and prepare, publish and distribute to all applicants, students and employees, annually, information with respect to these areas.

The information is compiled by California University, and made available through the Office of Admissions, the Office of Student Development and Services, and the Office of Public Safety, and on the University website at **www.cup.edu/public_safety/.**

Character Education Institute

The California University Character Education Institute opened in January 1995, in response to a report from the Pennsylvania State System of Higher Education urging the system's universities to give increased attention to values during the 1990s.

Goals of the Institute

The Character Education Institute has two broad goals:

- To serve as a resource to the university's colleges, departments, and student organizations as they contribute to the moral development of California University students.
- To provide an outreach to local school districts and parents as they influence the moral development of their children.

The Character Education Institute also serves to focus attention on the University's core values of integrity, civility and responsibility.

Services

The institute maintains a resource center that contains character education curriculum materials, books, journals, newsletters, audio and videotapes, and a clipping file on special subjects; e.g., values in athletics. These materials are available to university faculty, staff, administrators, and students and to staff and school directors from local school districts.

The director of the Character Education Institute can provide consultant help to members of the university community as they seek to infuse the school's core values into their areas of responsibility. Consultant services are also available to local school districts that want to study formal character education programs. Parenting programs are available to local school districts and other organizations concerned with character development.

The Character Education Institute is located in 409 Keystone Education Center, on Third Street across from Natali Student Center. To obtain additional information about the California University Character Education Institute, please contact:

Director, Character Education Institute
California University of PA
250 University Avenue
California, PA 15419-1394
Telephone: 724-938-4500
Fax: 724-938-4156

University Advancement

The Office of University Advancement develops programs and undertakes activities that promote understanding of, and support for the university's goals. It provides information and services for students, parents of students, alumni, faculty, the business community, regional citizens, the media and donors to the university and the Foundation for California University of Pennsylvania. University Advancement is responsible for alumni relations, public relations, development and public service.

Alumni Relations

The Office of Alumni Relations, located in Old Main under the twin towers, is the liaison between the university and its 37,000 living alumni, who receive copies of *The Cal U Review* (alumni magazine), *The University Viewbook* (the university's annual report), and notices about various special events. The office arranges Move In Day, Alumni Day, and numerous social and cultural programs for alumni both on and off campus. Alumni Relations manages the network of alumni chapters across the nation and works closely with the Alumni Association (see below). In addition, the office of Alumni Relations is home to the Student Ambassadors Program and maintains a toll-free telephone hotline with information changing daily (1-800-4-CAL-NEWS or 724-938-4507 locally).

Public Relations

The Office of Public Relations, located in the former ROTC building, informs the campus community and public at large of the university's activities and news. For example, this department notifies hometown newspapers of student accomplishments. The department also manages university advertising, supervises the university web site, produces numerous publications and acts as the media contact.

University Webmaster

The Office of the Webmaster is charged with developing and maintaining the University website, determining policy regarding web usage, and enhancing the web presence of the Cal community on the whole. As part of the Office of Public Relations, the Webmaster posts news and information of interest to the University.

Foundation for California University of Pennsylvania

The Foundation for California University of Pennsylvania, located on the third floor of South Hall, raises funds from foundations, businesses, alumni, staff, faculty and friends to benefit the university. It undertakes annual fund campaigns, deferred or planned giving programs and capital campaigns. It also administers a fund which loans money to students for travel in the event of family emergency.

Mon Valley Renaissance

Mon Valley Renaissance, located on the first floor of South Hall and various other sites, is the university's unique public service agency which helps foster regional economic development. It helps individuals and businesses through counseling, training, business consulting services and government contracting/export assistance.

Alumni Association

The California University Alumni Association serves California University and its alumni by fostering beneficial relationships among alumni, students and the university. By awarding scholarships, it also encourages outstanding academic and extracurricular achievement by undergraduate and graduate students.

The university's alumni have been organized since 1939. Today, nearly 37,000 graduates and numerous former students are members of the Association. A board comprised of three classes of alumni directors is elected for three-year terms. The board officers work closely with the University's President and the Office of Alumni Relations.

Student Development and Services

Inherent in the university's mission is a commitment to the total development of all students. The Office of Student Development and Services, under the direction of the vice president for Student Development and Services, is administratively responsible for the implementation of this commitment.

The central focus of the program is personalization of the university experience, with concern for not only individual intellectual development but for personal, social, and physical development as well.

For additional information and regulations governing student life and conduct besides what is given below, students should refer to the current edition of The Student Handbook.

Opportunities for work-study jobs, graduate assistantships, internships, and volunteer work assignments are available for qualified students. Check with the various offices or departments to inquire about openings. This can be an opportunity to enhance curriculum studies.

Student Development and Services provides services to students in the following areas:

Academic Honorary Fraternities

Many academic departments at California University feature honorary fraternities for outstanding students. Please see the department description or talk to your advisor about an honorary fraternity in your major.

Activities

Adult Student Organization
Bookstore
Commuter Center
Dining Service

Drug/Alcohol Program
Health Center
Center
Housing
Judical Affairs
Media/Publications
Residence Hall Programming
Student Government

Summer Camps/Conferencing
Veterans Affairs

Athletics
Campus Ministry
Counseling Center
Disabled Student Services

Greek Life
Herron Rec and Fitness

International Students
Leadership Development
Minority Affairs
Student Association, Inc.
Study Around The World

Women's Center
Wellness/Awareness

CalCard--University ID Card

The CalCard is both a campus identification card and a convenient and safe way to make purchases and use services on campus. The CalCard is available to all California University of Pennsylvania students, faculty, staff and eligible guests.

The CalCard comes ready to use, preprogrammed with basic services, and then enhanced based on your needs. To begin using the dine account, deposit money at the Bursar's Office or at the CalCard Office Monday through Friday, 8 a.m. to 4 p.m., 724-938-4300.

CalCard Services

Manderino Library - The CalCard is the key to checking out materials at Manderino Library. This basic service is included on every CalCard.

Tickets* - Cal U students receive free admission to all home intercollegiate sporting events. Tickets for other events can be purchased using Shop dollars at the Information Center.

Fitness Center* - Cal U students receive unlimited access to the Herron Recreation and Fitness Center. Faculty, staff, alumni, and Southpointe students who have purchased a membership, will use their CalCard to gain admission to the fitness center.

Entertainment* - Cal U students receive free admission to most entertainment events sponsored by the Student Association, Inc. Your CalCard will provide free admission to the Vulcan Theater, Underground Cafe, as well as dozens of other events each semester.

AAA - Part of the basic service of each student CalCard is the AAA - Roadside Assistance Program. Under this program, Cal U students can receive two free limited roadside assistance calls from AAA. To use this feature, simply call the toll free number on the back of your CalCard.

Access - Students who reside in Johnson and Clyde Halls use their CalCard to access these halls.

*Students matriculating at Cal U Southpointe Center must purchase membership or tickets for recreational and entertainment events on campus.

CalCard Accounts

CalCard works like a credit card in that you don't have to carry cash. But it's better than a credit card because you deposit money in your account in advance so you don't have to worry about paying a bill at the end of the month. Finance charges are eliminated.

CalCard works like a checking account in that your accounts are debited each time you make a purchase. But it's better than a checking account because you don't have to carry your checkbook, replace checks, or carry several forms of identification for check approval.

Meal - Everyone enrolled in a meal plan will use the CalCard to pay for their meals. Whether eating at Gallagher Dining Hall, using the meal exchange or cash equivalency options at the Metropolitan Cafe or the Food Court, just give your CalCard to the cashier. Your Meal account is automatically reduced by one meal. Everyone enrolled in a meal plan will automatically receive a Dine account with an amount of $100, $125, or $250 depending on the meal plan purchased.

Dine - Opening a declining balance Dine account is as simple as making a deposit at the Bursar's Office. Your Dine account can be used to pay for food at Gallagher Dining Hall, Herron Patio, the Metropolitan Cafe and Convenience Store, and the Washington Food Court.

Shop - A CalCard Shop account is the master debit account. Just make an initial deposit at the CalCard Office by check or credit card, or by cash at a Value Transfer Station, located in the Natali Student Center or Manderino Library. Your Shop dollars can be used at all food service locations, Cal U Student Bookstore, vending machines, laundry facilities, Manderino Library for photocopies (7¢) and overdue book fines, pool hall, information center for tickets, manuals, stamps and CalCards. Shop dollars carry over from semester to

semester and can be refunded through complete withdrawal from the University.

Along with the various campus services, your CalCard can be used to receive discounts. This offer is good for all University students, faculty and staff. Stop by the Information Center for details or call the CalCard Office at 724-938-4300 or e-mail CalCard@cup.edu. Be sure to check the CalCard website for information at www.cup.edu.

Cal U Student Bookstore

The Cal U Student Bookstore, located on the second level of the Natali Student Center, offers a variety of services for all students, faculty and staff. Students can purchase new or used textbooks for their classes, with used books representing a 25% savings. A textbook reservation service is also available, allowing students to pre-order books before the first week of class. The bookstore also offers on-line service at www.efollett.com.

The Cal U Student Bookstore offers a variety of other items: Cal U clothing and giftware, magazines, newspapers, CDs, greeting cards, and computer software. School supplies, general reading books, and health and beauty aids are also available. We offer free special orders for any book that is not in stock.

Convenient store hours are:

Monday - Thursday 7:45 a.m. - 7 p.m.
Friday 7:45 a.m. - 5 p.m.
Saturday 11 a.m. - 5 p.m.

To place telephone orders or make inquiries, call 724-938-4324 during business hours.

Campus Ministry

Spiritual development is an integral part of the process of education and of human growth. A campus ministry, staffed by professional campus ministers, fosters the development of spiritual and religious student life.

The Campus Ministry of California University of Pennsylvania is located in the Natali Student Center, Room 143. Office hours are from 10 a.m. until 4 p.m. on weekdays while the university is in session. Campus ministers are on call twenty–four hours a day. Some of the services provided are worship, pastoral counseling, spiritual direction, information about local churches, and literature from participating faiths. The Campus Ministry sponsors or co–sponsors a variety of religious or service programs.

Students and their families, faculty and staff of the university are welcome to come to the Campus Ministry office at all times. They may also call the Campus Ministry at 724-938-4573. Campus Ministry cooperates with Student Development and Services and with other university departments for the well–being of the students.

The Catholic chaplains are funded by the Catholic Diocese of Pittsburgh. The Protestant chaplain is funded by the United Campus Ministry Council of California, which also places members of the Coalition for Christian Outreach. Although the chaplains are members of particular denominations, they serve all students, regardless of church affiliation. The chaplains will put students in touch with a priest, minister, cleric or rabbi of their chosen denominations.

The California Times (California Student Newspaper)

The California Times introduces students to the basic newspaper publication process. The newspaper is published on a weekly basis during the fall and spring semester, and four times during the summer. Students learn production skills using the computers available for production and students also learn writing and editing skills.

Clubs and Organizations

A large array of active clubs and student organizations are offered through academic departments and the Student Association, Inc. These groups provide social, educational, community service and leadership opportunities for students. They are advised by student selected members of the faculty and staff. Students are encouraged to initiate and support new groups which reflect interests not represented by existing organizations. A complete list of SAI-funded organizations, their current advisors and phone numbers may be found in the Student Handbook.

Code of Conduct

The responsibility for administering student discipline at the university is vested in the Division of Student Development. Staff in the division investigate cases of misconduct, meet with students to discuss their rights and responsibilities and refer the case to the appropriate hearing body. Conduct rules, disciplinary penalties and complete hearing procedures are contained in the Rules of Conduct and Judicial Procedures handbook.

The university reserves the right, in the interest of all its students, to decline admission, to suspend, or to require the withdrawal of a student from university housing and/or the university after all appropriate university procedures have been followed.

Registration at the university assumes the student's acceptance of responsibility for compliance with all regulations published in the catalog, as well as any rules found in any official publication.

Commuter Center and Services

Commuter students comprise approximately two-thirds of the total student population. The commuter center, located on the first level of the Natali Student Center, offers a host of services and opportunities for involvement to commuter students.

The Commuter Center provides lounging areas, general information, computers, lockers, microwaves, a refrigerator, and cable television. In addition to providing a comfortable place to break away from classes, the Center is also a place for students to make social connections.

The Office of Student Development and Services and the Student Association jointly support commuter students at Cal U. All are encouraged to visit the Commuter Center to view both the Commuter Center and Commuter Council web pages via the Cal U website, www.cup.edu.

Counseling and Psychological Services

The Counseling Center staff provides personal, social, psychological and career choice services to students with problems that interfere with their adjustment and effective educational performance while at the university.

Students having trouble understanding their feelings, maintaining satisfactory social and interpersonal relationships, or coping with academic demands, may benefit from seeing a counselor or psychologist at the Counseling Center.

Students can call the Center at 724-938-4191 for an appointment with a licensed psychologist or counselor. They can make the appointment

themselves or be referred by a professor, fellow student, staff person or management personnel.

Students can talk to a counselor in private with assurance that the discussion will remain confidential.

The professional counselors have extended their services by developing a strong referral system locally on campus and off campus. Referrals can be made to any department or office on campus.

Please call 724-938-4191 or drop in at the Health Center. Office hours: 8 a.m. to 4 p.m. daily, Monday through Friday. Weekend and evening sessions are by appointment

CUTV (California University Television)

CUTV, California University Television, is the university's cable TV station which is owned and operated by the Student Association, Inc. CUTV is seen in over 50,000 homes, 24 hours a day through various cable systems, as well as providing programming to other broadcast systems. The mission of CUTV is to produce and provide programming of regional community interest, while giving students valuable "hands-on" educational experience in many areas. Students can get involved with CUTV in a variety of technical areas including camera work, editing, direction and other production roles, as well as on-air talent positions. These experiences for the Communication Studies major are invaluable to be hired in the field. For the student involved with CUTV as an activity, the technical, team-building and leadership skills acquired translate into any walk of life.

CUTV produces a variety of informational, educational and entertainment programs. Some of these programs include CUTV Newscenter - a weekly news show, Pride and Progress - a news magazine show focusing on Fayette County, a variety of local government meetings, including the Washington County Commissioners, Fright Night Fridays, a skit oriented horror movie show, and Outtakes with Fiore, a show dedicated to previewing and reviewing new movies. CUTV is also heavily involved with University and area high school sports coverage. CUTV produces all of California University's football and basketball coverage. CUTV also produces a weekly coach's show for the sport in season, as well as our popular High School Football Game of the Week. CUTV has also been responsible for producing several Distance Learning courses to the region. These classes on tv provided area viewers the opportunity to gain college credits from the comfort of their homes.

CUTV has been nationally recognized and awarded by several organizations. The National Association of Collegiate Broadcasters (NACB) have awarded CUTV their "Best in the Nation" award for 1998, as well as awards for news, sports and news magazine shows. These awards were judged by CNN, ESPN and A&E. CUTV also received many coveted TELLY awards for our sports and documentary coverage. Any student can become part of the award winning team. Stop by the CUTV studios, located in the Natali Student Center, or contact J.R. Wheeler, Director of CUTV, room 150 of the Natali Student Center, phone: 938-4303 or e-mail: Wheeler@cup.edu.

Dining Services

The goal of University Dining Services is to provide a quality, cost effective, innovative dining program for students living on and off campus. The university encourages student involvement and awareness to help provide quality, nutritious meals at a reasonable cost. Dining locations provide an important environment for student interaction and socialization.

Do you want an all-you-can-eat, one-price-at-the-door option? Gallagher Dining Hall offers something for everyone, and even provides take-out. Are you looking for fast food with friends between classes? The staff at Herron Patio and the Washington Food Court aim to please. What about an early morning bagel, gourmet coffee or late night munchie? The Mteropolitan Cafe provides those items, and much more. Need advice on special dietary concerns? The dining service management team provides dietary service for all your needs.

Students living in the residence hall have the opportunity to choose from three meal plans:
Plan A: 19 meal plan with $100 Dine dollars.
Plan B: 14 meal plan with $100 Dine dollars.
Plan C: 125 meal/$250 dine Block Plan.

Commuters may choose from the three meal plans above, or select from the following additional options offered specifically to meet the needs of the busy off-campus resident:
Plan D: 7 meal plan with $100 dine dollars.
Plan E: 125 meal/$125 dine Block Plan
Plan F: Dine dollars only plan, with initial minimum balance of $50 dine dollars.

All students who live in a university residence hall are required to accept assignment to the meal program. The off-campus and commuter plans are for one full semester and may not be terminated. Dine dollars are included in each meal package and are non-refundable. The meal package refund policy for students who withdraw from the university is based on the Refund/Repayment Schedule published by the bursar's office under the refund section of this catalog. A detailed dining service brochure may be obtained from the assistant dean for student services, Natali Student Center, 724-938-4513.

Drug and Alcohol Programs

The drug and alcohol education and prevention program is located in Downey Garofalo Health Center. It provides programs for the university aimed at increasing awareness of alcohol and drug related issues. This program includes consultation, intervention, counseling, education, awareness programs and substance-free activities.

Choices is the assessment and intervention program designed to assist those whose behavior may be harmful to themselves or others because of alcohol or drug use. This program offers an opportunity for students to learn facts and to dispel myths concerning the use of alcohol and other drugs. Through group interaction activities students gain a sense of self and the impact their actions have on them. It is one approach by California University of Pennsylvania to provide a drug free community. For more information call 724-938-4191.

Cheers (Collegians Helping Educate Each Other Regarding Substances) is an educational component of the drug and alcohol program. Awareness, alternatives, peer education and other programs are offered through CHEERS. For more information call 724-938-4191.

Bacchus (Boost Alcohol Consciousness Concerning the Health of University Students) is a national student organization developed under the guidance of advisors from Student Development and Services. Through education and activities designed to increase awareness of changing alcohol issues, Bacchus advocated informed, independent decision making and respect for the choices of others. The Bacchus philosophy is that students can play a uniquely effective role in encouraging their peers to consider, talk honestly about and develop responsible habits and attitudes in their behavior toward

beverage alcohol use or nonuse. BACCHUS operates a weekly coffeehouse "The Underground Cafe" in Herron Patio which showcases the talents of Cal U students and promotes a responsible and healthy lifestyle. For more information check out their web page at www.cup.edu/~bacchus/.

California Campus Community Coalition is a committee represented by both the university and community. It addresses underage and dangerous drinking on campus and in the community.

Southwestern Pennsylvania Drug and Alcohol Consortium is a combined effort by California neighboring universities to provide a forum for discussion of relevant and current issues in drug and alcohol prevention and education as well as sharing of developmental programming ideas. The Consortium offers California and other universities access to a resource library consisting of videos, books, pamphlets and other information related to drug and alcohol use and abuse.

Emerging Leaders

The Emerging Leaders program equips potential student leaders with skills such as public speaking, team building, goal setting, motivation and event planning. Participants are introduced to several styles and theories of leadership. This interactive program invites speakers to host sessions on their area of expertise, while providing experiential exercises so that students may immediately put their new skills into action. This program is limited to 25 first year students and there is a $25 registration fee. For more information contact Edward Eagle at 724-938-4303.

Health Services

The mission of the University Health Services is to provide high quality health care for our students; to direct students to other health care providers when appropriate; to provide emergency care for all members of the university community; to address the specific health needs of those members of the student population with special problems; and to conceive, develop and implement relevant health education programs for the university community.

The Downey–Garofalo Health Center is open 24 hours a day, seven days a week while the university is in session. A staff of full-time registered nurses is on duty at all hours. A qualified physician is on duty Monday through Friday, during specified hours.

Students must submit completed health forms as part of the admissions process. University health services are available to all registered undergraduate and graduate students. Employees, both faculty and staff, conference participants, visiting athletes and other visitors will be given emergency treatment if such an emergency occurs on the university campus. The physician will also refer students to local hospitals in emergencies and for other treatment beyond the capabilities of the University Health Center. (The University Health Center does not assume responsibility of doctor bills, hospital bills or prescription costs accrued by the students for treatment beyond capabilities of the University Health Center. The final decision in hospital selection is the student's.

Housing

The university provides residence hall accommodations for approximately 1300 students in six separate facilities. The residence hall accommodations include a required food service (board) plan.

Women reside in Clyde Hall and Stanley Hall; men reside in Binns Hall, Longanecker Hall and McCloskey Hall. Men and women are accommodated on separate floors in Johnson Hall. Johnson has been designated the Honors Hall (see specialty housing).

Application for Housing

First-time freshman students are required by the university to live in the residence halls for the first two semesters of their college career with the following general exceptions:

1. students commuting from the residence of their parents or legal guardians,
2. married students,
3. students who are 21 years of age or older by the date of registration.

Freshmen and transfers who indicate the need for on–campus housing receive room and board contracts with their acceptance letter. On–campus housing is at a premium and there are a limited number of spaces available. Freshmen are given priority as long as available space exists. Students are encouraged to apply no later than May 1.

Upperclass students interested in on-campus housing should contact the housing office in Johnson Residence Hall.

Mailing address is:

Residential Facilities Office
Johnson Residence Hall - Box 39
250 University Avenue
California University of Pennsylvania
California, PA 15419-1394

Upper-class students are given specific instructions for securing a space in the residence halls for the fall semester. The instructions and the contract are distributed in the halls during the spring semester. An upper-class housing sign-up is conducted in April. The university retains the right to assign all students to certain residence halls, floors and roommates in the best interests of the university.

Room and board contracts are for one academic year, September through May. The contract commits the student to university room and board for both the Fall and Spring semesters. Contracting for an academic year or Spring semester guarantees that housing will be provided in subsequent years, providing the returning student meets the application and deadline instructions at the housing sign-up conducted in April. Phone 724-938-4444

Room Deposit

An advance room deposit of $100* is required with the room and board contract in order to reserve a room for the following academic year. The deposit is held in the student's account and applied toward the spring semester. First–year students who wish to reside in a residence hall will receive a contract with their admissions packet. The contract and card must be signed and returned to the Bursar's Office, 250 University Avenue, California University of Pennsylvania, with the $100 deposit. Upperclass students receive specific instructions on obtaining a room and board contract from the Director of Housing, Residential Facilities Office, Johnson Residence Hall. Schedules are posted for each academic year.

Withdrawal from the contract will result in partial or total forfeiture of the deposit. In addition, the student may be held liable for that semester's room and board charges. The refund policy for students who iwthdraw from the University is based on the Refund/Repayment Schedule published by the bursar's office under the refund section of this catalog.

*Student who experience difficulty paying this advance deposit should contact the housing office.

Damage Charges
Students are held responsible for the cost of damage, breakage, or loss and/or the return of university property.

Residence Life
Each university residence hall is supervised by a staff which is headed by a residence hall director who lives in the residence hall. Residence hall directors are readily available to students who may request direction or assistance. The director, with the assistance of graduate assistants and undergraduate resident assistants, has charge of the residence facility, including programming activities.

Video Monitoring System
Each residence hall is equipped with a video recorder monitor system. All entrance and exit doors, main lobby and computer labs are fitted with video cameras. The system monitors the facility and is helpful in curbing vandalism. Tapes may be viewed by Public Safety to prosecute criminal behavior.

Inter-Residence Hall Council
The council is the representative body of the students residing in and elected from the various residence halls. The students assist in the governance of this organization and participate in a number of the organization's service projects as well as governance issues for the residence halls.

A detailed description of the university's residence life program, residence facilities, and residence hall rules and regulations is included in the Student Handbook.

Specialty Housing
Residence Life offers students the option to live in a wellness community made up of students who share a concern for personal health issues. Although possession or consumption of alcohol and drugs on state property is not permitted, students who abstain from any use of tobacco, alcohol or other chemical substances may request a space in one of these areas. Please check the front of the housing card to make this request and return all information as early as possible to ensure the best chance of your request being honored.

Johnson Hall is designated as the University Honors Program Residence Hall. Incoming freshman must be admitted in the University Honors Program in order to be housed in Johnson Hall. All rooms in Johnson are wired with fiber optic computer hookup, and there is a computer lab on every floor.

Residence Life also offers students the opportunity to live in other designated specialty housing. Those requesting an assignment to a specialty housing area would reside in a community of students who share a common interest in a variety of student organizations such as athletics, band, choir or clubs and organizations. Any group of students interested in living together can follow a simple procedure to secure a location in the residence halls. Please indicate your desire to live in a special housing area on the front of the housing card under the special interest section. All contracts received by the April deadline will be reviewed and those groups and organizations that have shown a desire to live together will be contacted for further details concerning their specific housing needs.

Residence Life Computing Services

Each residence hall on campus has a compliment of computer labs for residence hall students to use. The labs are fully integrated into the university's network. Students have access to any of the network services on campus, including California University's Manderino Library, other State System libraries, students' e-mail and webspace, the Internet and other services. All computers have Microsoft Office Professional, Visual Basic, Internet browsers, and various picture and html editors. Most residence halls have a computer lab on each floor. All labs are open 24 hours a day, 7 days a week during school terms. Each lab con be accessed by using the students' own room key. All University Computer Policies must be followed while working in the labs. The residence hall labs are available for residents and their guests with a valid ID Any rules posted by the residence hall staff must be followed. Each lab has a laser printer for the students to use, but students must supply their own paper.

If you bring your own computer:
All residence hall rooms have two Cat-5 connections for computer hook-up to the California University Network. There is no need to use a modem or contract with an outside Internet provider while on campus. This service is provided at no additional cost, but students must complete an application for service and meet California's Computing Services requirements.

For more information as well as computer equipment requirements you can check out our web site at www.cup.edu/~calhousing/services.htm or call residence life computing services 724-938-4444.

Evening Tutoring Program
In cooperation with the Academic Services Department, an evening tutoring program is available in four of the residence halls. This program is available to all students. A detailed schedule of evening tutor sites and hours is posted throughout the campus each semester.

Residence Life Support Services Program (STEP)
The initial objective of the Residence Life Support Services Program is to assist new students with the transition from home to college. The voluntary "Buddy Program" matches a new student with a well-adjusted upper-class resident student in the same residence hall in order to assist in the transition. The upper-class mentor is available to guide, direct, encourage and support the new student throughout the first year. The Residence Life Support Services Center in Stanley Hall is available to assist students in finding university support programs suited for the individual's needs.

Off-campus housing
The primary consideration of off-campus housing is to help the student secure safe, appropriate housing and to educate the student about this endeavor.
The principle goals of the off-campus housing office are:
- to provide a "base of operation" for securing off-campus housing;
- to assist in securing off-campus housing and to promote responsible landlord/tenant/community relations;
- to promote the safety and welfare of all students residing in off-campus housing;
- to ensure that students have useful resource materials at their disposal;
- to provide effective communication between the university, area officials and the community about off-campus housing issues;
- to expand programs to include campus/community/civic service and volunteerism within the off-campus student community; and
- to ensure that the rights of individuals with disabilities are upheld in relation to off-campus living and accommodations.

Our on-going objective is to educate and promote the safety and welfare of all students residing in off-campus housing facilities.

University Off-Campus Housing Disclaimer
The information contained in the off-campus housing list is provided as a service to students. The data collected or transcribed may at times be inaccurate. The university, its employees, or the students are

not responsible for any claims or damages that may be incurred. The Off-Campus Housing and Affairs Office makes no warranty of the conditions, terms, prices or other information contained therein. This information is to be used as a guide to help students locate off-campus housing and is not to be taken as approved or sanctioned off-campus housing. This does not create an enforceable obligation to any party from California University of Pennsylvania, the Pennsylvania State System of Higher Education, or the students of California University.

Intercollegiate Athletics

The university sponsors a comprehensive athletic program for both men and women. The athletic program is regulated by the policies of the athletic council and administered by the director of athletics. It is governed by the Office of Student Development and Services with the vice president as the senior administrative officer.

Thirteen varsity sports are available to students who desire to participate in intercollegiate athletics and who meet the academic standards of the university, the PSAC and the NCAA. Freshman students must apply to the NCAA Clearinghouse to be eligible to compete in intercollegiate athletics during their freshman year. Specific requirements may be obtained from the high school counselor, the university athletic director or the Dean for Enrollment Management and Academic Services.

Academic progress for athletes is monitored and a professional staff of athletic trainers is always available. Many assistant coaches and graduate assistants help to coordinate the varsity sports program.

Thirteen varsity sports are available to students. For men, California offers cross country, baseball, basketball, football, soccer, track; for women California offers basketball, softball, tennis, soccer, volleyball, cross country and track and field.

International Student Office

California University views the presence of international students as having a positive impact on the entire university community. The international students provide cultural diversity and furnish the institution and the surrounding community with an expanded and enlightened perspective.

The mission of the Internal Student Office is to meet the unique needs of the international students enrolled at the University and to provide each one with a sense of "belonging." In addition, the International Student Office strives to provide opportunities for the international student to experience not only the American culture, but other representative cultures as well.

The International Student Office, located in the Health Services building, is open 8 a.m. to 4 p.m.

Intramurals

The Intramural Program is designed to provide students with a flexible, yet structured environment in which to participate. Activities are administered in league format with various divisions servicing men's, women's, open and co-ed recreational teams. Teams and individuals must formally register for activities. The program is open to all current students, faculty and staff. For more information contact Recreational Services, 724-938-5907.

Medical Absences

Students who are unable to attend classes because of illness should contact their professors, explain their absences, and arrange for completion of any work that may have been missed. The Health Center does not issue medical excuses, but will send a written notification to the professors only in the following circumstances, provided the student initiates the request:

(1) If a student consults a health care professional at the Health Center, and the health care professional determines that the student has or had sufficient medical reason not to attend class (or to fulfill other academic obligations), notification will be sent to the student's professors but only if the student makes a request at that time.

(2) If a student has consulted a private physician, who has determined that the student has or had sufficient medical reason not to attend class (or to fulfill other academic obligations), and the physician notifies the Health Center to that effect in writing, notification to this effect will be sent to the student's professors.

(3) If a student is confined for longer treatment or care at the infirmary section of the Health Center, verification of the confinement will be sent to the student's professors. If a student is hospitalized elsewhere or requires extended recovery with bed rest, written notification should be sent from the attending physician to the Health Center, which will notify the student's professors.

Upon notification from the Health Center or any other health care professional, the professor may decide whether to consider the notification as a valid excuse from class or other academic obligations.

A professor may call the nurse supervisor of the Health Center for verification of a student's visit, but a visit can be verified only if a student was actually seen by a health professional.

The delivery of high quality health care is the heart of the Health Center. All areas of the Health Center are under strict rules of confidentiality. Medical information will be released by patient's written consent, by a properly executed subpoena, and to appropriate university offices in an emergency if knowledge of the information is necessary to protect the health and safety of the student and other individuals.

Multicultural Student Programming

The Office of Multicultural Student Programming provides programs and activities which support the ideals of a culturally diverse student population. It serves as an advocate for students from various backgrounds and offers consultation to other members of the university community when planning programs or activities.

The office of Multicultural Student Programming is located in the Center for Student Growth and Development, telephone extension 4056. Hours are 8 a.m. to 4 p.m. Monday through Friday.

Non-Traditional Student Organization

The University has a long-standing tradition of serving our region by providing educational opportunities to non-traditional students. These students may be seeking a degree following a hiatus from schooling; seeking a second degree; seeking career skills enhancement; or taking non-degree or continuing education courses. Many non-traditional students carry family and work responsibilities in addition to being students.

The Office of Student Development and Services advocates better service to non-traditional students across campus and sets an example through services and support for these students. All non-traditional students are encouraged to view the Non-Traditional Student Organization (N.S.O.) web page via the Cal U website at www.cup.edu. The N.S.O. web page provides useful information and

convenient opportunities for networking and meeting other students using the computer or in person.

Recreational Services

The mission of the Department of Recreational Services is to provide recreational facilities, programs, and developmental opportunities for the university community. Recreational Services provides exposure to a variety of activities that contribute to individual physical fitness. The Department also creates opportunities for cooperative and competitive play in the game form. Recreational Services instills in participants a lifelong appreciation for physical activity as well as, enhancing the social, psychological and physiological development of the university community members it serves.

The Department is comprised of seven service areas: extramurals, fitness, informal recreation, instructional programs, intramural sports, outdoor recreation and sports clubs.

Extramural sports programming provides structured tournaments, contest and meets between participants form different institutions. The champions from intramural events are the teams or individuals competing in these programs.

Fitness programming provides opportunities and assistance to participants who wish to be involved in a personal exercise program. This voluntary program is designed to motivate individuals, assess their level of fitness, and influence their decision to maintain a positive fitness lifestyle.

Informal recreation programming provides a self-directed approach to participation. This program area accommodates the desire to participate in sport for fitness and fun, often with no pre-determined goals except that of participation.

Instructional programming provides learning opportunities, knowledge and skill through lessons, clinics and workshops. These programs are designed to enhance participant performance and enjoyment.

Intramural sports programming provides structured contests, meets, tournaments and leagues limiting participation to individual members of the university community.

Outdoor recreation programming provides participants with opportunities to interact and gain experience in a variety of natural settings.

Sport club interaction provides for individuals to organize based on a common interest in a specific sport activity. The basic nature of sport clubs allows members to direct their interest both within and outside the university setting.

Social Fraternities and Sororities

A sorority or fraternity is an organization whose members have chosen to establish a close affirmation and friendship with each other. Membership helps to provide leadership opportunities and career preparation.

There are 20 sororities and fraternities to choose from at California University. Every chapter encourages and expects above average scholarship and participation in various activities which offer valuable experience. Community service is also encouraged.

The decision to join a sorority or fraternity is up to the individual and should not be taken lightly. The Panhellenic and Interfraternity (IFC) councils and the Black Greek Alliance (BGA) suggest that individuals who may be undecided about Greek membership consider participating in Rush before making that decision.

Rush is a series of open houses, informal gatherings, parties and other social events which potential members attend to help them choose membership in a particular fraternity or sorority.

Initiates are expected to pay for initiation and social dues. New member fees are used to purchase manuals, notebooks, materials and new member pins. Initiation fees pay for national dues, subscription to the national magazine, lifetime membership dues and the initiation ceremony. Social dues help to pay for officer budgets and for Rush, special events and social service projects.

California University of Pennsylvania adheres to state, local, and federal guidelines in all hazing matters. The University's position on hazing is consistent with state prohibition on hazing activities. This prohibits all forms of hazing by all members of fraternities and sororities. Any infraction of state, local, or federal guidelines reported to a Greek advisor or to the Office of Student Development and Services will be dealt with accordingly. Cal U has recognized the dignity of every individual and has expressed strong opposition to all forms of hazing.

For more information call the Greek Development Office at 724-938-4303.

Fraternities	Sororities
Acacia	Alpha Kappa Alpha
Alpha Chi Rho	Alpha Sigma Alpha
Alpha Kappa Lambda	Alpha Sigma Tau
Alpha Phi Alpha	Delta Zeta
Delta Chi	Theta Phi Alpha
Delta Sigma Phi	Phi Sigma Sigma
Kappa Alpha Psi	Sigma Kappa
Phi Beta Sigma	Zeta Phi Beta
Phi Kappa Theta	
Phi Kappa Sigma	
Tau Kappa Epsilon (colony)	
Theta Xi	

Student Activities Board (SAB)

Many diverse forms of cultural and contemporary entertainment are offered to our students primarily through the Student Activities Board (SAB.) This organization is composed entirely of full-time students who meet weekly to view and discuss the possibilities of hosting different entertainment and cultural programs for the entire university community. These activities provide a significant opportunity for students to become more involved with their campus as well as to experience the growth and personal development which involvement provides.

The type of programs that SAB sponsors or co-sponsors with other university organizations include: the weekly movies shown in the Vulcan Theatre, the series of events surrounding our Homecoming theme, novelty events such as laser tag and "make your own music video" sets, many popular pay-per-view events and many others. In addition, SAB sponsors and co-sponsors several off-campus trips to Pittsburgh sporting events, performances at the Pittsburgh Public theatre and opportunities to see national and local recording artists in concert venues in the Pittsburgh area.

Participation in these and other groups is strongly encouraged. To find out more about SAB, the types of entertainment and programs they provide, and how you can become a member, call 724-938-4303

or stop by their office located on the third floor of the Natali Student Center.

Student Association, Inc.

The Student Association, Inc. (SAI) is a non-profit corporation financed in part by the Student Association Fee, which is paid each term by every student. The executive serves as the liaison between SAI and the university.

Programs provided by the Student Association, Inc., are determined by the student congress and by the Student Association, Inc., board of directors. Student Association fees are budgeted, appropriated, disbursed and accounted for by SAI with the concurrence of the president of the university.

SAI coordinates the co-curricular activities provided by the university, including homecoming, Roadman University Park, concerts, plays, musical productions, movies, outdoor recreation, the Herron Recreation and Fitness Center, intramural sports, dances, picnics, California University Television (CUTV), WVCS Radio, and other special events. Intercollegiate athletics are partially funded by SAI. In addition, SAI coordinates the activities of student clubs and organizations. The student handbook provides a complete listing of active student clubs and organizations.

Publications coordinated by SAI include a student handbook, an organizational handbook, *The California Times* (the student newspaper), *Monocal* (the yearbook), and a number of brochures and pamphlets.

SAI is responsible for the development and maintenance of the George H. Roadman University Park, a 104-acre area located one mile from campus on Route 88 South. Facilities include tennis courts, baseball, football, soccer, softball, rugby, and intramural fields; picnic areas and Adamson Stadium.

Student Congress

Student congress is the official student governing body. It represents and serves the entire student population. It provides for a student forum, establishes channels for the communication of students' concerns to the proper administrative and faculty personnel, implements programs and activities that enrich campus life, and creates opportunities for students to exercise and develop leadership skills. For more information contact Edward Eagle at 724-938-4303.

Student Judicial System

The Dean of Student Development is responsible for administration of the judicial system and the conduct regulations. This office conducts pre-hearing interviews with students charged with a violation of the conduct regulations which may take place on or off campus, takes administrative disciplinary action in certain cases, conducts student/faculty judicial board hearings, maintains all university disciplinary records and serves as a resource to faculty, staff and students for disciplinary matters.

For additional information and regulations governing student life and conduct, students should refer to the current edition of the student handbook and the Rules of Conduct and Judicial Procedures handbook.

Student Service Access Center

Located on the first level of the Natali Student Center, the access center houses a Macintosh Computer Lab, the Community Service Information Outlet, and Study Around the World program resources.

The computer lab permits student access to a number of computers provided for personal use. The lab is open seven days a week (including evening hours) and remains open twenty-four hours a day during "finals" week. The Student Association, Inc., supports and maintains the computer lab.

Services For Students With Disabilities

Students with disabilities are provided an equal opportunity to participate in student services and activities conducted by the university. No qualified student is, on the basis of disability, excluded from participation in, denied the benefits of, or otherwise subjected to discrimination under any academic, research, occupational training, housing, health, insurance, counseling, financial aid, physical education, athletics, recreation, transportation, other extracurricular, or other post–secondary program or activity offered or sponsored by this university. Students with disabilities must provide official documentation of disabilities.

University programs and facilities are accessible to students with disabilities, and special needs of students are recognized. The Office of Services for Students with Disabilities, Room 114, Clyde Hall, provides individualized assistance to those in need. Information on disabled students services may be obtained through the coordinator of Services for Students with Disabilities, 724-938-4012.

Students in need of attendant services should contact the coordinator at the earliest practicable date.

Parking for Students with Disabilities

Numerous parking spaces have been reserved for the exclusive use of persons with disabilities who have mobility or other physical problems. These spaces are reserved for such use at all times.

Persons with disabilities who require special parking privileges must apply for a special temporary/permanent parking permit at the Office of Public Safety. Persons with disabilities desiring a permanent privilege must apply to the state Department of Transportation. Applications are available at the Office of Public Safety.

Study Around the World Program

The Study Around the World program (SAW)administers both domestic and international student exchange opportunities. Each participant selects an exchange that will enrich their academic, cultural, social, and recreational background in consultation with the SAW program coordinator and their academic advisor. Students return from their exchanges with new perspectives on their education and lives.

A successful candidate for exchange has a willingness to undertake exposure to unfamiliar environments. Through exchange exposure, the participant becomes more independent as a learner, reflecting the self-reliance and self-confidence gained as a result of having taken a decisive role in planning his/her future and carrying through with those plans.

The SAW program is essentially divided into two categories of opportunities for students: domestic exchanges through the National Student Exchange consortium, and international through a multitude of program offerings. For further information, contact the SAW coordinator at 724-938-4439 or visit the SAW website at www.cup.edu.

National Student Exchange

The NSE is most popular with California University students as it combines the ease of academic applicability to programs at California University with financial affordability. A student may study at the

NSE member institution of their choice for up to a full academic year, undertaking courses approved for application to their degree program at California through approval of their academic advisor. In most cases, the student has the choice to pay either California University tuition or in-state tuition at the host institution.

Basic familiarity with surroundings can also be viewed as advantageous by the student as all NSE member institutions are located in either the United States or U.S. territories. The number of NSE consortium member institutions grows each year. The following schools are currently members of NSE:
Alabama A & M University; Alabama State University; University of Alabama; University of Alaska, Anchorage; University of Alaska, Fairbanks; University of Alaska, Southeast; Northern Arizona University; University of Arizona; California Polytechnic State University, San Luis Obispo; California State Polytechnic University, Pomona; California State University, Bakersfield; California State University, Chico; California State University, Domingue Hills; California State University, Fresno; California State University, Hayward; California State University, Los Angeles; California State University, Northridge; California State University, San Bernardino; Humbolt State University; San Jose State; Sonoma State University; Fort Lewis College; Mesa State College; University of Northern Colorado; University of Southern Colorado; Western State College of Colorado; Eastern Connecticut State University; University of Connecticut; University of Delaware; Florida International University; University of Central Florida; University of West Florida; University of Georgia; University of Guam; University of Hawaii at Hilo; University of Hawaii at Manoa; Howard University; Boise State University; Idaho State University; University of Idaho; Illinois State University; Northeastern Illinois University; Indiana University; Purdue University, Fort Wayne; Iowa State University; University of Northern Iowa; Fort Hays State University; Witchita State University; Morehead State University; Murray State University; Grambling State University; University of Louisville; Louisiana State University; Southern University; University of New Orleans; University of Maine; University of Maine at Farmington; University of Maine at Fort Kent; University of Southern Maine; Bowie State University; St. Mary's College of Maryland; Towson State University; University of Maryland at College Park; Bridgewater State College; University of Massachusetts at Amherst; University of Massachusetts at Boston; Westfield State College; Michigan Technological University; Mankato State University; Moorehead State University; University of Minnesota, Twin Cities; Mississippi State University; Southwest Missouri State University; University of Missouri-St. Louis; Montana State University-Bozeman; University of Montana; University of Nebraska at Kearney; University of Nevada, Las Vegas; University of Nevada, Reno; Keene State College; University of New Hampshire; Rutgers College, Rutgers University; The College of New Jersey; William Paterson College of New Jersey; Eastern New Mexico University; New Mexico State University; University of New Mexico; Binghamton University; Hunter College of the City University of New York; SUNY College at Buffalo; SUNY at Plattsburgh; SUNY College at Potsdam; SUNY Center at Stony Brook; East Carolina University; North Carolina Central University; North Carolina State University; University of North Carolina at Wilmington; Western Carolina University; Bowling Green State University; Cleveland State University; East Central University; Oklahoma State University; Eastern Oregon State College; Oregon State University; Portland State University; Southern Oregon State College; University of Oregon; California University of Pennsylvania; East Stroudsburg University of Pennsylvania; Indiana University of Pennsylvania; West Chester University of Pennsylvania; Inter American University of Puerto Rico, San German; Universidad del Sagrado, Corazon; University of Puerto Rico, Bayamon; University of Puerto Rico, Cayey; University of Puerto Rico, Humacao; University of Puerto Rico, Mayague; University of Puerto Rico, Rio Piedras; Rhode Island College; University of Rhode Island; College of Charleston; South Carolina State University; University of South Carolina; Winthrop University; Northern State University; South Dakota State University; University of South Dakota;
Tennessee State University; University of Memphis; University of Tennessee at Chattanooga; Southwest Texas State University; University of North Texas; University of Texas at El Paso; University of Texas at San Antonio; University of the Virgin Islands; University of Utah; Utah State University; Johnson State College; Virginia Commonwealth University; Virginia State University; Virginia Tech; Central Washington University; University of Washington; Washington State University; Western Washington University; Marshall University; West Virginia University; University of Wisconsin, Eau Claire; University of Wisconsin, Green Bay; University of Wisconsin, Plstteville; University of Wisconsin, River Falls; University of Wisconsin, Whitewater; University of Wyoming; Simon Fraser University; Universite de Sherbrooke.

University Conference Services

California University offers a variety of summer camps and conference programs. In addition to youth camps, University Conference Services can assist in the planning of family reunions, corporate retreats, academic camps, sports camps and leadership enrichment. For more information or to inquire about University Conference Services, call 724-938-4444 or check our website at univconfsrv@cup.edu.

Veterans Affairs

The Office of Veterans Affairs, located in Johnson Hall, is open from 8 a.m. to 4 p.m., Monday through Friday. Evening hours may be arranged by appointment. The phone number for the office is 724-938- 4076.

All matters pertaining to veterans and those entitled to veterans' benefits are handled in this office. The staff also processes all VA forms and enrollment certifications for eligible students.

All Veterans, Reservists, National Guard personnel, and eligible dependents applying for entrance to the university should contact the Office of Veterans Affairs at an early date so that necessary VA paperwork can be processed to assure timely payments of educational benefits. Veterans are also advised to take advantage of the university's program to award college credits for military service schools.

The on–campus Veterans Club sponsors the Colonel Arthur L. Bakewell Veterans' Scholarship Fund. Three $1,000 scholarships are currently awarded.

Women's Center

The Women's Center in Clyde Hall is a service provided primarily for female students of the university. However, males as well as community residents are welcome to participate in the activities of the Center.

The goals of the Women's Center are to supplement the academic education of the students and to prepare them to deal with barriers in life.

Activities are designed to help female students grow and develop an understanding of how women can impact the future. Through special programs and individual counseling, the Center highlights options available to women. In addition, the Center provides programs to help students find creative ways to solve problems and manage the ever-changing roles of women.

The Center recognizes the needs of women and serves as a conduit to see that the needs are addressed. The services provided are advocacy, counseling, information, interest assessment, referrals, support groups, workshops, special events and activities.

Opportunities are available for students to serve on the Advisory Board of Directors, serve on special events committees, share ideas for programs and participate in the Mentoring Program. The Women's Center, 114 Clyde Hall, is open Monday through Friday from 8: a.m. to 4 p.m. Its phone number is 724-938-5857.

WVCS (California Radio Station)

Owned and operated by the Student Association, Inc. (SAI), California University's radio station, WVCS, is a 24 hour a day, 3300 watt FM station with a coverage radius of 40 miles. WVCS typical audience member is in the 15-35 age bracket, residing in the five county region (Washington, Fayette, Greene, Westmoreland and Allegheny), with listeners in parts of Maryland and West Virginia.

WVCS, founded in the early 70's with a mission of broadcasting to the regional audience, features news, sports, public service information and the best in popular musical entertainment from a variety of genres. WVCS accomplishes this mission with student broadcasters, while providing an important educational opportunity, through "hands-on" experience. Since WVCS is owned by SAI, students involved with the station don't have to be Communication Studies majors. Students need only to have the desire to become involved. Students who have this interest go through a designed training program that familiarizes the student with the equipment, FCC rules and regulations, broadcasting skills and production. Students who successfully complete the training program are able to become on-air DJ's or news reporters. WVCS has an upscale, Top 40 format, with a variety of specialty shows covering all forms of music from country to alternative. WVCS is a comfortable place to work and learn and many life long friendships have started at Power 92. All this experience makes the student extremely marketable in the field. For those involved just as an activity, the various skills translate into other majors. Besides, being a radio personality is just plain fun! Students can take a personal tour and talk in further detail about the exciting opportunities available at WVCS. Questions may be directed to 724-938-4303 or by e-mail: flores@cup.edu or wheeler@cup.edu.

Office of Social Equity

The office of Social Equity supports the university goal of creating and maintaining a learning environment in which the rights of all are respected. This office encourages the entire university to become personally involved in enriching the campus through support of enhanced diversity and pluralism. The office of Social Equity reaffirms the university commitment to equity and diversity through the promotion of understanding, tolerance and respect for others.

Services
The office of Social Equity helps to resolve concerns and complaints regarding harassment, discrimination, and disability. As Ombudsperson, the director serves as an advocate for persons from diverse backgrounds, offering consultation and support in equity and diversity issues. The social equity office strives to help individuals explore their attitudes and behavior regarding equity issues and is available to anyone who needs information, assistance, or has a concern about justice, fairness and equal opportunity.

Services are provided in the following areas:
Equal Opportunity
Sexual Harassment
Other forms of Harassment
Discrimination
Disability

This area offers access to a resource library consisting of videos, books, pamphlets and other information related to equity and diversity issues.

Social Equity Complaints
The responsibility for investigating complaints is vested in the office of Social Equity under the direction of the Special Assistant to the President. All members of the University community have the right to seek advice and information from the Special Assistant to the President, who will maintain such consultation in confidence. Complete information regarding policies, procedures, informal and formal complaints are available in the Policy Statement and Compliance Procedures on Equal Employment Opportunity and Social Equity.

Sexual Harassment Education Sessions
At the beginning of each semester, Sexual Harassment Education Sessions are presented to entering students. The required orientation sessions are designed to review the California University Policy on Sexual Harassment, discuss issues regarding sexual harassment, inform students who to contact if they should experience sexual harassment, and assure students of their right to seek help and advice without fear of reprisal.

Location and Hours
The office of Social Equity is located in South Hall, Room 112. Office hours are from 8AM to 5PM, Monday through Friday, and evenings and weekends by appointment. Anyone desiring services or information is encouraged to stop at the office or call 724-938-4014.

Policies

I. Equal Opportunity
Please see our statement on page 2 of the catalog. A copy of the policy is available from the office of social equity.

II. Sexual Harassment
Sexual harassment is reprehensible conduct that will not be tolerated at California University. The university is committed to providing a harassment-free atmosphere for all members of the university community. The university is committed to the human rights and dignity of all individuals, therefore, it is the policy of the university to prevent and eliminate sexual harassment within the university community. In addition, it is the policy of the university that any practice or behavior that constitutes sexual harassment is unacceptable and will not be tolerated. The office of Social Equity has an established process to investigate and address any complaints of sexual harassment. A complete copy of the policy and complaint procedure may be obtained from the office of Social Equity.

III. ADA/504
In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA), California University seeks to provide students with disabilities support services and other reasonable and effective accommodations to ensure equal access to university programs and activities.

To arrange accommodations, students should work with the appropriate service provider office. The decision regarding appropriateness of the requested accommodation rests with the service provider office and will be based on the student's documentation on file with the service provider.

California University has three offices on campus responsible for providing services to students with disabilities. Detailed information regarding these offices can be found in the services section of this catalog.

CARE Project Office, 724-938-5781
The CARE Project Office provides services for students with learning disabilities.

Office of Services for Students with Disabilities, 724-983-4012
The Office of Services for Students with Disabilities provides services to students with all other disability classifications.

ADA Compliance Office, 724-983-4076
The ADA Compliance Office helps to ensure compliance with Section 504 of the Handicapped Act and Americans with Disabilities Act and provides the first avenue for resolution of student problems and concerns.

The office of Social Equity has an established process to investigate and address any complaints of discrimination on the basis of a disability. A complete copy of the complaint procedure may be obtained from the office of Social Equity.

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Student Development and Services

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John Dering, director of food service, Aramark
Paul Fazio, assistant dean of student services
Karen Fetsko-Hjerpe, associate athletic director/senior women's administrator
Paul Flores, associate athletic director, director of Vulcan sports network
Albertha Graham, director of women's center, coordinator of disabled services
Liz Gruber, counselor, drug & alcohol specialist
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Charlene McVay, executive secretary to the vice president
Wayne Miller, director of athletic development/off-campus housing coordinator
Barry Niccolai, dean for student services/executive director, Student Association, Inc.
Richard Olshefski, director of business operations, Student Association, Inc.
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Celeste Roskevitch, nursing supervisor
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David Smith, director of sports information
Norma Snyder, nurse educator
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Nancy J. Tait, dean/international student adviser
Shawn Urbine, assistant dean of residential facilities/conferences
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Jay R. Wheeler, assistant dean for student services/media
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Charles Williamson, assistant dean for student growth and development

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Index

This revised Index replaces the one bound into the 1999-00 catalog.

Academic Calendar

Fall Semester 1999

August 30-31	Orientation & Registration
September 1	Classes Begin
September 6	Labor Day (no classes)
October 12	Last Day to Drop a Course or Withdraw from the University without Academic or Financial Aid Penalty
November 23	Last Day to Drop a Course or Withdraw from the University
November 24-28	Thanksgiving Break (no classes)
December 18	Semester Ends
December 20	Grades Due From Faculty

Fall Semester 2000

August 28-29	Orientation & Registration
August 30	Classes Begin
September 4	Labor Day (no classes)
October 10	Last Day to Drop a Course or Withdraw from the University without Academic or Financial Aid Penalty
November 21	Last Day to Drop a Course or Withdraw from the University
Nov. 22-Nov. 25	Thanksgiving Break (no classes)
December 16	Semester Ends
December 18	Grades Due From Faculty

Spring Semester 2000

January 17-18	Orientation & Registration
January 19	Classes Begin
February 29	Last Day to Drop a Course or Withdraw from the University without Academic or Financial Aid Penalty
March 13-18	Spring Break (no classes)
April 21-22	Easter Break (no classes)
April 20	Last Day to Drop a Course or Withdraw from the University
May 13	Semester Ends
May 13	Commencement
May 15	Grades Due from Faculty

Spring Semester 2001

January 15-16	Orientation & Registration
January 17	Classes Begin
February 27	Last Day to Drop a Course or Withdraw from the University without Academic or Financial Aid Penalty
March 12-17	Spring Break (no classes)
April 13-14	Easter Break (no classes)
April 20	Last Day to Drop a Course or Withdraw from the University
May 12	Semester Ends
May 12	Commencement
May 14	Grades Due from Faculty

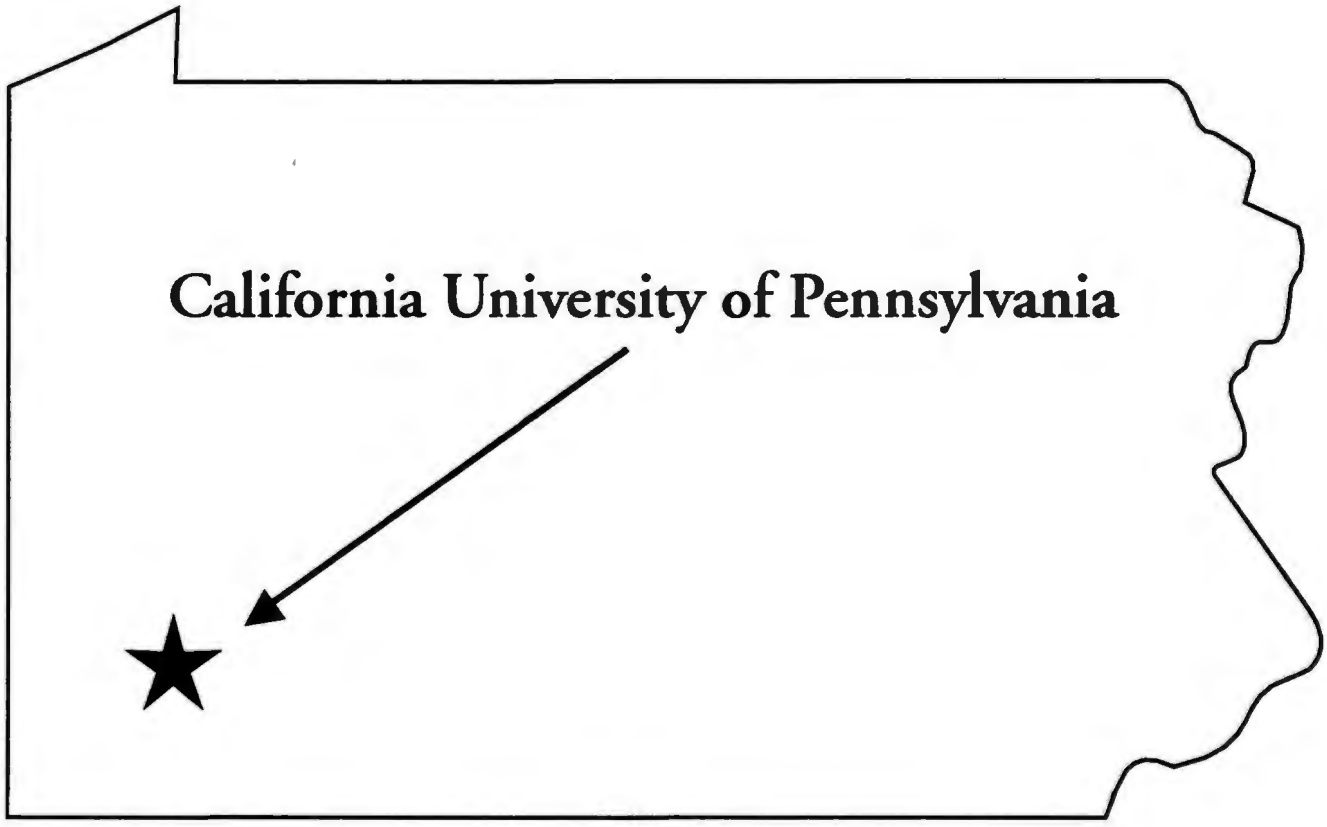
Summer Sessions 2000

May 15	May Session Classes Begin
May 29	Memorial Day (no classes)
June 5	First Five Week/Ten Week Summer Sessions Begin
July 4	Independence Day (no classes)
July 8	First Five Week Session Ends
July 10	Second Five Week Session Begins
August 12	Second Five Week/Ten Week Sessions End

Summer Sessions 2001

May 14	May Session Classes Begin
May 28	Memorial Day (no classes)
June 3	First Five Week/Ten Week Summer Sessions Begin
July 4	Independence Day (no classes)
July 6	First Five Week Session Ends
July 8	Second Five Week Session Begins
August 10	Second Five Week/Ten Week Sessions End

Pennsylvania



Directions to California

From Harrisburg, Philadelphia
PA Turnpike West to New Stanton, Exit #8
Interstate 70 West to Exit 15A (Toll Road 43)

From Scranton
Interstate 81 South to PA Turnpike
PA Turnpike West to New Stanton, Exit #8
Interstate 70 West to Exit 15A (Toll Road 43)

From Erie, Pittsburgh
Interstate 79 South to Interstate 70 Exit
Interstate 70 East to Exit 15A (Toll Road 43)

From Pittsburgh
PA 51 South to Interstate 70 West to Exit 15A (Toll Road 43)

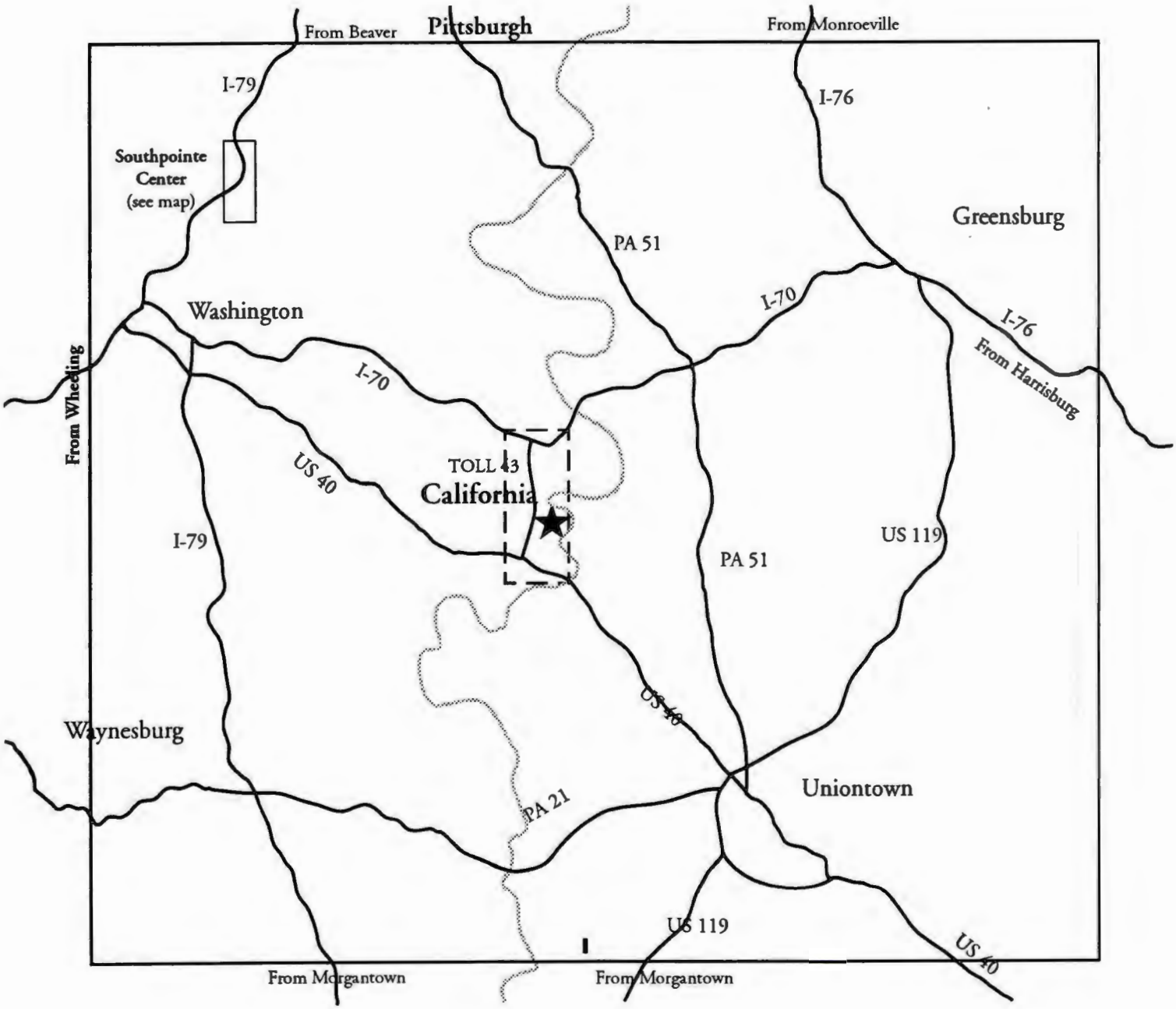
From Baltimore MD, Washington DC
Interstate 70 West to PA Turnpike West to
New Stanton, Exit #8
Interstate 70 West to Exit 15A (Toll Road 43)

From Ohio, Wheeling WV
Interstate 70 East to Exit 15A (Toll Road 43)

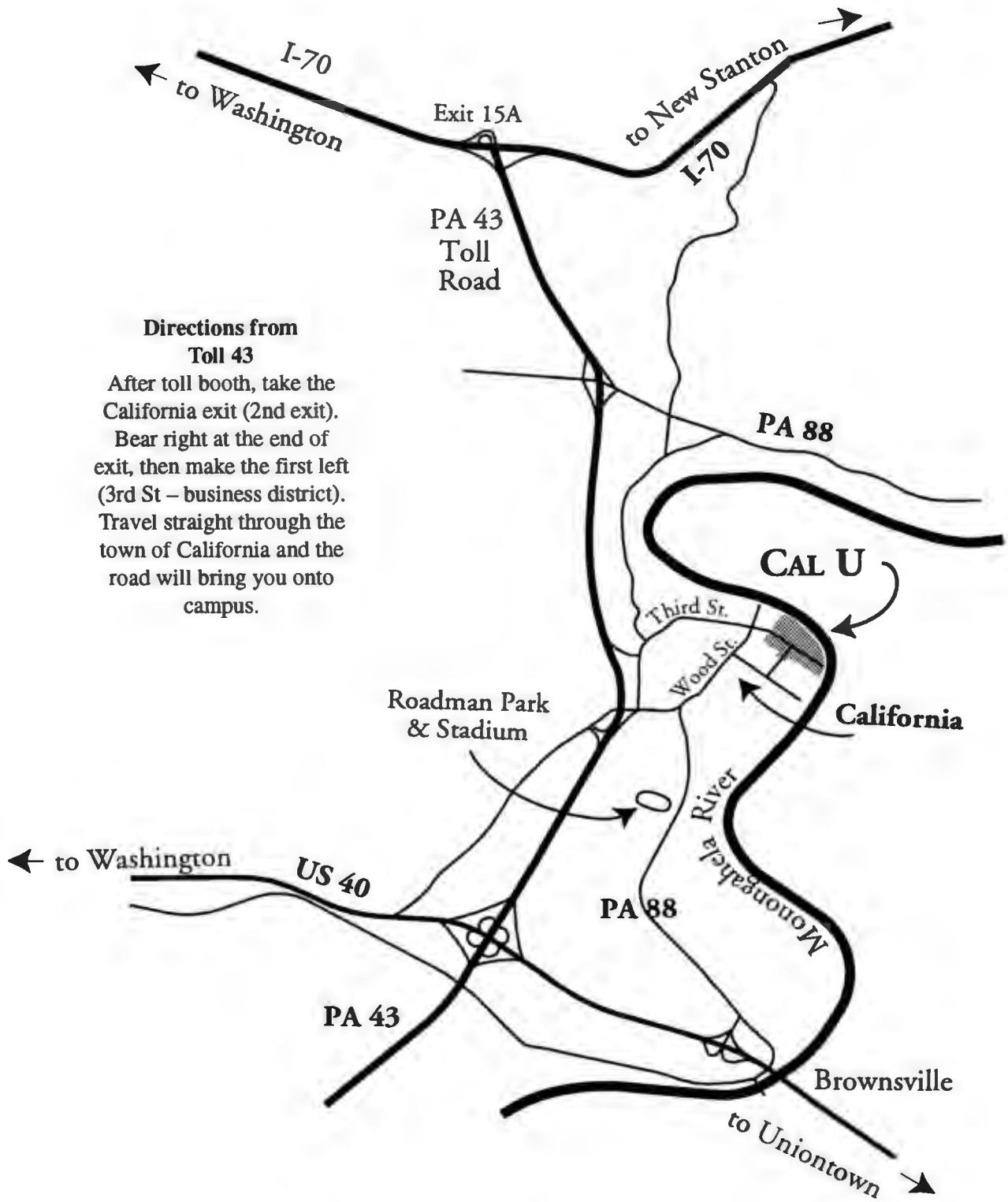
From Charleston, Morgantown WV
Interstate 79 North to Interstate 70 East to
Exit 15A (Toll Road 43)

From Uniontown
Route 40 West to Toll Road 43 North exit. Take the California exit. At end of ramp go straight through business district. Follow road straight to campus.

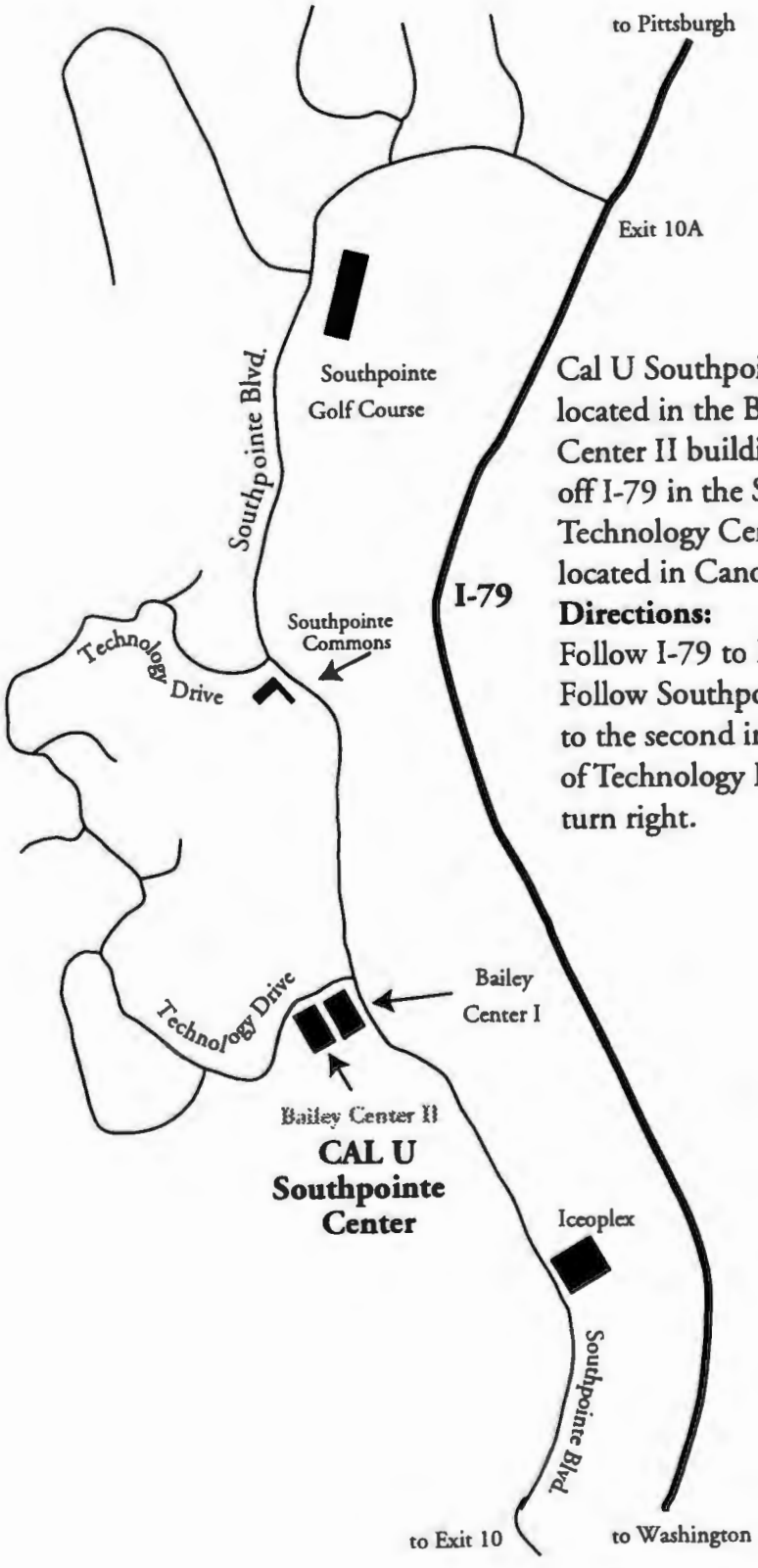
Southwestern Pennsylvania



California Area



Cal U Southpointe Center

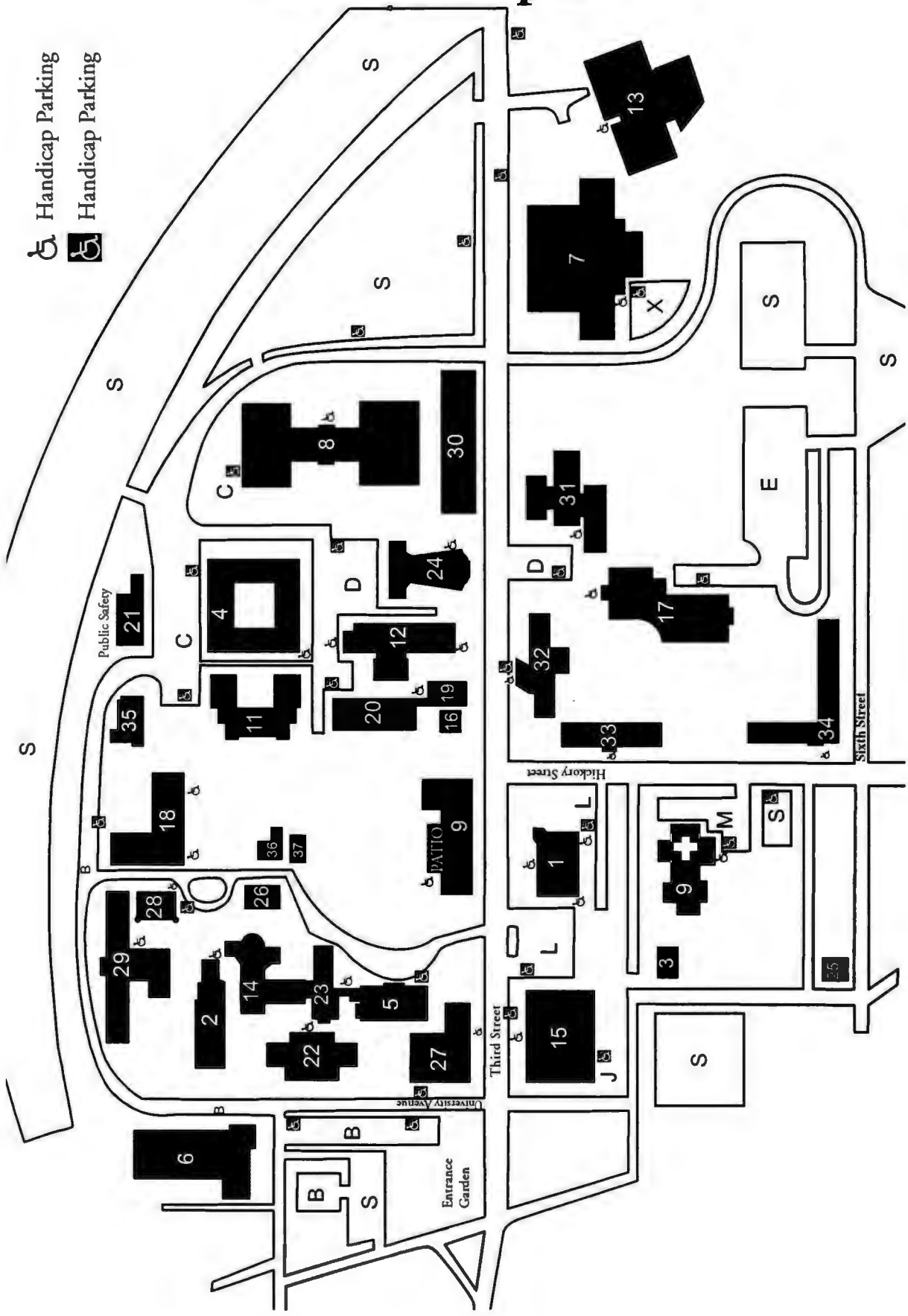


Cal U Southpointe Center, located in the Bailey Center II building, is just off I-79 in the Southpointe Technology Center, located in Canonsburg.

Directions:

Follow I-79 to Exit 10A. Follow Southpointe Blvd. to the second intersection of Technology Drive and turn right.

Cal U Campus


Handicap Parking
Handicap Parking
Public Safety
Entrance Garden
University Avenue
Third Street
Hickory Street
Sixth Street
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BUILDING DIRECTORY

1. Azorsky Administration Building
2. *Frich* Biological Science Bldg. (BSC)
3. Carter - Black Culture Center
4. Coover Hall (COO)
5. Dixon Hall (DIX)
6. Eberly Science & Technology Center (EST)
7. Gallagher Dining Hall
8. Hamer Hall (HAM)
9. *Downey-Garofalo* Health Services Bldg.
   Student Growth and Development Center
10. Herron Fitness Center (HER)
11. Industrial Arts Building (IAR)
12. Keystone Education (EDU)
13. *Morgan* Learning and Research Center (LRC)
14. Main Hall (MAI)
15. Manderino Library (LML)
16. Military Science Building
17. Natali Student Center
18. New Science Building (NSC)
19. Noss Annex
20. Noss Hall (NOS)
21. Public Safety
22. Reed Arts Center
23. South Hall
24. Steele Auditorium
25. Student Development Annex
26. Vulcan Hall
27. *Duda* World Culture Building (WCU)
28. Watkins Academic Building (WAC)

RESIDENCE HALLS

29. Binns Hall (Men's Dorm)
30. Longanecker Hall (Men's Dorm)
31. Stanley Hall (Women's Dorm)
32. Clyde Hall (Women's Dorm)
33. Johnson Hall (Cal Hall Honor's Dorm)
34. McCloskey Hall (Men's Dorm)

OTHER BUILDINGS

35. Maintenance Building
36. Maintenance Building
37. Maintenance Building

PARKING AREAS

B - Faculty and Staff
C - Faculty and Staff
D - Faculty and Staff
E - Faculty and Staff
J - Faculty and Staff
L - Faculty and Staff
M - Faculty and Staff
S - Student
X - Faculty and Staff

Notes

California University of Pennsylvania

Undergraduate Catalog 1999-2000

Social Security Number: _____

Last Name: _____ First Name: _____ MI: ___

Please circle one: Ms. Miss Mrs. Mr.

Address: _____

City: _____ State: _____ Zip Code: _____

Telephone: ( ) _____

Starting Year: _____ Please Circle One: Fall Spring Summer

High School: _____ High School Graduation Date: ____

If applicable, list college/university last attended and degree earned: _____

_____

Intended Major: _____

Please circle prospective level of entry:

Freshperson Transfer Certification Visiting Student

Activity/Athletic Interest: _____

California University of Pennsylvania

Undergraduate Catalog 1999-2000

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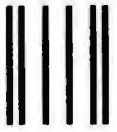

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