

**GRADUATE CATALOG
2004-2005**

Graduate Catalog 2004-2005

This catalog is neither a contract nor an offer of a contract. The information it contains was accurate when it was placed on the Internet. Fees, deadlines, academic requirements, courses, degree programs, academic policies, and other matters described in this catalog may change without notice. Not all courses are offered each academic year, and faculty assignments may change. This catalog is updated annually on July 1. Any changes made prior to the annual update may be found in the Addendum.

California University of Pennsylvania
California University is a member of the Pennsylvania State System of Higher Education
250 University Avenue
California PA 15419-1394
724-938-4187
www.cup.edu

California University of Pennsylvania is an academic community dedicated to the ideals of justice, fairness and equal opportunity for all. In compliance with federal and state laws, the university is committed to providing equal educational and employment opportunities for all persons without regard to race, color, sex, religion, national origin, age, disability, ancestry, sexual orientation, or status as a disabled or Vietnam-era veteran. The university will not tolerate racial, ethnic or sexual discrimination. Sexual harassment is considered by law to be a form of sexual discrimination and is, therefore, unacceptable. Direct equal opportunity and affirmative action inquiries or complaints to the Special Assistant to the President for EEO/University Ombudsperson, Office of Social Equity, South Hall 112, 724-938-4014. Direct inquiries regarding services or facilities accessibility to the ADA/504 Compliance Officer, Office of Student Development and Services, Azorsky 105, 724-938-4076. Direct Title IX inquiries to the Senior Women's Administrator/Title IX Coordinator, Department of Athletics, Hamer Hall 248, 724-938-4351

The Core Values of California University are Integrity, Civility and Responsibility.

CALIFORNIA UNIVERSITY OF PENNSYLVANIA

IDENTITY

California University of Pennsylvania, a comprehensive regional institution of higher education and a member of the Pennsylvania State System of Higher Education, is a diverse caring and scholarly learning community dedicated to excellence in the liberal arts, science and technology, and professional studies that is devoted to building character and careers, broadly defined. The University is inspired by its core values of integrity, civility, and responsibility and is guided by its bill of rights and responsibilities: We have the right to safety and security, we have the responsibility to ensure the safety and security of others; We have the right to be treated with respect, we have the responsibility to treat others with respect; We have the right to expect the best, we have the responsibility to give our best; We have the right to be treated fairly, we have the responsibility to treat others fairly.

MISSION: BUILDING CHARACTER AND CAREERS

To advance its ultimate mission of building the character and careers of students, the University shall focus its efforts on three goals: student achievement and success, institutional excellence, and community service. These interrelated ends will be facilitated by the following means: high quality faculty, students, programs, and facilities. These means, in turn, will be funded through an energetic program of resource acquisition and stewardship.

VISION

Be recognized as the best comprehensive public university in America

What does this mean?

- Offer an exceptional, one-of-a-kind character and career-building experience;
- Focus character-building on the University's three core values and four rights and responsibilities;
- Define career-building broadly to include life-wide (multiple life roles) and life-long (legacy) aspects;
- Recruit and retain a distinguished faculty who challenge and mentor students to attain their fullest potential;
- Recruit and retain a talented, diverse, and highly motivated student body;
- Maintain an administrative staff dedicated to the highest professional standards and service;
- Maintain a learning community known for its academic excellence, intellectual rigor, and civil discourse;
- Instill not just learning but the love of learning;
- Be widely known as a center for thought, inquiry, dialogue, and action in matters of character and leadership;
- Maintain a campus of natural and architectural beauty featuring state-of-the-art facilities and equipment;
- Reflect a special mission in science and technology through programs in science, technology, and applied engineering, as well as through emphasis on technology and information literacy across the curriculum;
- Be widely known for high quality undergraduate and selected masters level graduate programs;
- Foster increasingly higher admissions criteria, academic quality, and scholarly expectations;
- Incorporate continuous improvement into all programs and activities to ensure competitive excellence;
- Prepare students for the world of work or further education from multiple locations through multiple technologies in order to meet the ever changing needs of the Commonwealth and the larger world;
- Sustain a reputation for the University's academic excellence, its daring and entrepreneurial spirit, and the integrity, success, and loyalty of its graduates;
- Instill a culture of philanthropy among students, faculty, staff, and alumni;
- Create an ever-larger community of supporters and an endowment that will perpetuate the work of the University and enable constant innovation and renewal.

LEGACY

Founded in 1852, and now in its second 150 years of service, the University is committed above all to academic excellence and intellectual rigor in the context of personal and institutional integrity, civility, and responsibility.

Adopted by the Council of Trustees of California University of Pennsylvania on June 4, 2003.

Accreditations:

MEMBER of the
American Association of State Colleges and Universities
1307 New York Avenue NW, Fifth Floor, Washington, DC 20005-4701
202-293-7070 Phone 202-296-5819 Fax
www.aascu.edu.org

MEMBER of the
American Association of Colleges of Teacher Education (AACTE)
1307 New York Avenue NW, Suite 300, Washington, DC 20005-4701
202-293-2450 Phone 202-457-8095 Fax
www.aacte.org

ACCREDITED by the
Commission on Higher Education
of the Middle States Association of Colleges and Secondary Schools
3624 Market Street, Philadelphia, PA 19104
215-662-5606 Phone 215-662-5501 Fax
www.msache.org

ACCREDITED in Teacher Education by the
National Council for Accreditation of Teacher Education
2010 Massachusetts Avenue NW, Washington, DC 20036-1023
202-466-7496 Phone 202-296-6620 Fax
www.ncate.org
ncate@ncate.org

ACCREDITED in Athletic Training by the
National Athletic Trainers' Association
2952 Stemmons Freeway, Dallas, TX 75247
800-879-6282 Phone
www.nata.org
ebd@nata.org

ACCREDITED in Communication Disorders by the
American Speech-Language-Hearing Association
10801 Rockville Pike
Rockville, MD 20852
800-498-2071 Toll Free 301-897-5700 Phone 301-571-0457 Fax
www.asha.org

From the President

Graduate education in the United States is an ever-evolving enterprise, and California University of Pennsylvania is on the crest of that evolution. I am proud of our curricular offerings, as well as our diverse modes of delivery. The heart of our School of Graduate Studies and Research is still on the main campus in California; however, each year more programs are offered at our Southpointe Center and the Regional Enterprise Tower and on-line through Keystone University. Technology has allowed this campus to offer programs in creative ways.

At California, we place great emphasis on people and relationships. That concept is clear in the Graduate School. Many of our programs are designed to deliver courses to a cohort of learners. Each cohort, along with our dedicated faculty, form a learning community that makes the most of in-class experiences, as well as co-curricular learning opportunities.

This University provides Master's degrees in a variety of fields and, as you peruse this catalog, you will see the richness of the full graduate curriculum. Whether the program is in an applied field, a rapidly advancing technology field, or a traditional liberal arts field, our faculty members are dedicated to providing graduate students with challenging and cutting edge experiences.

A graduate education must evolve students from being consumers of knowledge to critical evaluators of knowledge to, finally, producers of new knowledge; and each curriculum offered by our Graduate School is designed to develop the skills necessary to have our students progress in this way. I am confident that each graduate will obtain the skills necessary to be an effective lifelong learner and will be prepared to become a leader in his/her chosen field.

I hope you will use this catalog to help you locate a graduate program that will meet your needs and that it will provide an effective set of guideposts. We at the University stand ready to help you obtain your educational goals.

Sincerely,

Angelo Armenti, Jr.

Admissions:**Requesting an application for admission**

You may apply online at our website www.cup.edu, or if you prefer you can download a copy of the application there; you may also email our office at gradschool@cup.edu; or write or telephone the office, if you do not have access to a computer

School of Graduate Studies and Research
California University of Pennsylvania
250 University Avenue
California PA 15419-1394.
Phone 724-938-4187.

Some of the graduate programs described in this catalog lead directly to specialized certification. Other programs may require licensing examinations. Individual program coordinators should be consulted for in depth information regarding certification and licensure.

Application Deadlines

You should apply for admission to the School of Graduate Studies and Research as early as possible. Deadlines for University programs are set only by the graduate school. Please consult the webpage and/or the graduate office (724-938-4187) for the deadline of the semester you wish to attend.

Many programs have rolling admissions (beyond those dates), to be sure your application gets full consideration, it should be complete by the deadline date.

Applicants may pay by credit card when they submit the application online. Hard copy applications should be returned, with the \$25.00 application fee, to the School of Graduate Studies and Research.

At the same time, the granting institution should send official transcripts of all graduate and undergraduate work to the School of Graduate Studies at California University of Pennsylvania, School of Graduate Studies and Research, 250 University Avenue, California, PA 15419. It is not necessary to send a transcript of work done at California University.

For more detailed information about any program you find in this catalog or on our website you may telephone, e-mail, or write to schedule an appointment with either the chairperson or the graduate studies coordinator of the department offering that program or with *the Director of Graduate Recruitment and Admissions*.

Application Process

- 1. Applicants must present official transcripts of all undergraduate work. The Bachelor's degree must be awarded from a college or university that is accredited by the National Commission on Accreditation or the appropriate regional accrediting agency.**
- 2. Applicants for admission to the graduate program in Biology, Communication Disorders and Social Work must take the Graduate Record Examination (GRE). The Graduate Management Admissions Test (GMAT) is required for admission into the Master of Science in Business Administration program.**
- 3. Some departments require additional documents such as recommendations and other supporting material. Please contact the coordinator.**
- 4. In some programs applicants who have less than a 3.0 undergraduate average may seek conditional admission based on the criteria established by each program. Please visit the program website or contact the program coordinator for more information.**

Note:

Admission to a program does not carry with it admission to candidacy for the degree. See the statement on candidacy requirements in the next section of this catalog.

Admission to Certification Programs Beyond the Master's Degree

The university offers certification programs that require additional experience and credits beyond the Master's degree. Those additional experiences develop appropriate competencies in specific areas of specialization. They are in the fields of Administration (for either the Principal k-12 Certificate, Reading Supervision, School Psychology, and Superintendent's Letter of Eligibility). For further information please see the individual graduate program information in this catalog.

Admission Other Than as an Applicant for a Degree

Although most graduate students at California are enrolled in degree programs, there are opportunities to take some graduate programs, either for personal or professional growth or for certification, without becoming an applicant for a university graduate degree.

If you wish to take graduate courses at California University but do not wish to enroll in a formal certification program or a degree, you will nevertheless have to apply for admission to the university (and pay the normal application fee). Your acceptance will be based on the amount and quality of your preparation as determined by the academic department in which you will be taking courses.

Upon admission as a non-degree student, you will be permitted to take six credits. Completion of these courses does not automatically and in itself lead to admission to a degree or certification program. Applicants interested in further exploration must reapply (fee waived).

Graduate students from other universities (sometimes known as "visiting students") may take courses at California University of Pennsylvania and must go through the normal application process. They are responsible for knowing and adhering to the transfer policies of their home institution.

Admission Decisions

An acceptance decision is valid for one academic year (two semesters and one summer term). If a student does not register for classes during that time, the acceptance is no longer valid and the applicant must reapply for admission.

International Students

California University welcomes applications from students from countries other than the United States. All international students who apply for graduate studies must meet the same entrance requirements as all other students. For admission, the following documents must be submitted:

1. A completed application and application fee;
2. In addition to general admission requirements for degree programs, international students for whom English is a second language must submit a certified English translation of all official transcripts from post-secondary schools outside the United States to California University of PA's Graduate School.
3. International students must also arrange to have photocopies of their post-secondary diploma(s) submitted to one of the following organizations for a document-by-document evaluation.*

Josef Silny and Associates, International Education Consultants, P.O. Box 248233, Coral Gables, FL 33124, Phone:305-666-0233, Fax: 305-666-4133, Website: www.jsilny.com

World Education Services, Inc. P.O. Box 745, Old Chelsea Station, New York, NY 10113-0745. Phone: 212-966-6311, Fax: 212-966-6395, Website: www.wes.org

Canadian Applicants: Students holding undergraduate degrees from a Canadian college or university need only submit their official transcripts directly to the Graduate School. If they are similar to the materials

from the United States model, they will be evaluated locally. If not, students will be required to comply with the above international student policy.

4. An official copy of a teaching certificate (if application is being made to certain Master of Education programs);
5. An official copy of the TOEFL score, sent from the Testing Center. Xerox copies are not acceptable. A minimum score of 550 on the paper-based test and 213 on the computer-based test is required for most programs.
6. A statement of financial support; and
7. Any other necessary forms.

Final admission is contingent upon clearance from the education authorities of the home country and from the Immigration and Naturalization Service of the United States.

International students will also require, for purposes of the university's records, a United States Social Security number.

A limited amount of financial aid is available to international students, chiefly in the form of graduate assistantships requiring a certain amount of work at the university; but students must be certain of adequate funds for their academic and living expenses before enrolling.

Acceptance into the University does not imply receipt of a Graduate Assistantship.

International students should contact the Dean of the Graduate School regarding graduate assistantships and the financial aid office regarding other financial options.

All international students must subscribe to the university's medical insurance plan.

Registration

Your acceptance letter from California University will contain information enabling you to access and use Web for Students, the University's on-line student registration system. Graduate students must consult with their academic advisers before scheduling their courses. You may also schedule for the next semester by mail or fax (724) 938-5712

If you have been accepted into a program of graduate studies but have not been recently enrolled at California University please contact the School of Graduate Studies and Research (724-938-4187) or at gradschool@cup.edu to inquire regarding your current status.

All questions concerning payment of tuition and fees should be directed to the Bursar's office (724-938-4431 or www.cup.edu/administration/bursar).

Registration on Campus

Students wishing to register on campus should check www.cup.edu for current times, days and procedures.

Responsibility for Regulations

Responsibility for knowing and complying with all academic rules and regulations, including the requirements for graduation, rests with the individual graduate student. Faculty advisers assist graduate students in planning their academic programs and research requirements, but they are not expected to relieve graduate students of responsibility in other areas.

Campus E-Mail

All students are assigned a campus e-mail address. Please see the web site: www.cup.edu/adminstration/computingservices for the student guide to set up your account. Students are responsible for all official university communications sent to that e-mail address.

IN ADDITION, ANY OTHER COMMUNICATION SENT TO OR FROM ANY OTHER EMAIL ADDRESS WILL NOT BE REGARDED AS VALID OR OFFICIAL.

Planning a Program

As soon as students have been admitted to a graduate program, they will be referred to the appropriate department for academic advising. Graduate students' programs are planned in conference with their advisers, and research advisers are assigned to graduate students by the Program Coordinator.

Each student should consult with his/her adviser throughout the graduate program on a regularly scheduled basis. Programs of studies must be approved by a student's adviser before registration.

Cohorts-Rights and Responsibilities

Several of California University of PA's graduate programs, both traditional and on-line are offered in a Cohort format.

The purpose of creating a cohort model of enrollment is to maximize the size of the enrollment and to better meet the needs of students by providing a clear scope and sequence for the courses. This enrollment model has benefits for students, faculty and the university - it also has responsibilities. Those rights and responsibilities will be spelled out in this document.

The decision on the size of the cohort will be made by the administration at the time the cohort is scheduled to begin. The administration also identifies the beginning time for a cohort and in consultation with the faculty the scope and sequence of the courses.

Once a cohort has begun, we guarantee that courses will be available in a timely manner so that the degree can be completed in the promised time frame. However, the number of courses offered and the specific courses offered in any given semester is at the discretion of the university.

The Administration will promise to provide the instruction opportunities necessary to meet the needs of the cohort. This does not necessarily mean the opportunities will be exclusively in the form of formal classes taught by tenure track faculty. Individualized instruction may be used; adjunct faculty may also be used.

The student must understand that when they become a member of a cohort they are committing to the published scope and sequence of courses. As long as they attend the course when offered they will be able to proceed through the program. If, for whatever reason, a cohort student fails to enroll in a scheduled cohort class (i.e. get out of sequence), they may have to wait a considerable period of time before it is offered again.

Appealing a Grade or Other Academic Decision

University decisions are based on 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 or program coordinator. This contact must be in writing and must be filed with the chairperson or program coordinator 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 or program coordinator shall notify in writing the student and faculty member of his/her receipt of the appeal from the student.

If accord is not reached through the chairperson or program coordinator, the student may then appeal to the Dean of the School of Graduate Studies and Research. 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 or program coordinator. 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.

Style Manuals for Preparation of Papers

Research studies must conform to a format and style that is recognized by the principal scholarly journals in the discipline. Students are expected to obtain and use the style manual, which is suggested by their respective programs. Most programs in the School of Graduate Studies and Research require the use of the most recent edition of the Publication Manual of the American Psychological Association (APA) or the MLA Handbook for Writers of Research Papers. The student has the responsibility to find out which style manual is required by the program. Copies of these manuals and other manuals may be purchased in the bookstore or consulted in the Manderino Library. Guidelines for thesis and projects can be accessed through the website: <http://www.cup.edu/graduate/requirements.jsp>.

Permanent Certification for Teachers

If you hold a Pennsylvania Instructional I teaching certificate, you can use the credits you earn in a graduate program at California University toward the post-baccalaureate requirements for the Instructional II certificate. Some graduate programs lead to specialized initial teaching certification.

Act 48

Persons holding PA certification may also satisfy the requirements of ACT 48 by successfully completing graduate courses. Six- (6) graduate credits satisfy the 180-hour professional development requirements of ACT 48. If you are interested in these programs, you may contact the School of Graduate Studies and Research or the College of Education and Human Services 734-938-4125. For further information see the Pennsylvania Department of Education website www.pde.state.pa.us

An Act 48 form is available to download at the graduate school website. Once you have completed a course for Act 48, fill out the form and send it to the graduate school. The Graduate school will forward the information to the Pennsylvania department of education. PLEASE NOTE: IT MAY TAKE UP TO 90 DAYS FOR THAT INFORMATION TO APPEAR ON THE STATE WEBSITE.

Course Load

A normal full-time graduate student load is normally between nine and twelve credits per semester. Students wishing to take more than twelve credits in a semester must obtain the support of their advisor and permission from the Dean of Graduate Studies.

Candidacy

After admission to a graduate program in order to complete a program of study leading to the Master's degree, the

graduate student must apply for and be admitted to the status of candidacy. It is the individual's responsibility to apply for candidacy in due time and manner. Application for candidacy should be made when a graduate student has completed at least six but no more than twelve credits of graduate study at this university. Students failing to meet this candidacy requirement may be blocked from future registration. Credits completed in excess of twelve may not be accepted for inclusion in a degree program. The Candidacy Application form is available to download on the graduate website (www.cup.edu/graduate) or in the office of the School of Graduate Studies and Research. Candidacy deadline dates are posted on the website each semester.

The applicant for candidacy must demonstrate a 3.0 quality point average (B average) in graduate courses. Approval for admission to candidacy is granted by individual departments or programs, which may have special requirements such as interviews or tests, and by the Dean of Graduate Studies and Research.

For more precise details, the applicant should consult with the department chairperson or Graduate Coordinator. The University reserves the right to deny the applicant's request for admission to candidacy for the master's degree.

Transfer Credit/"Residency" Requirement

In most programs leading to the Master's degree programs at California University of PA vary in the number of credits required. For specific degree requirements, consult with the Program Coordinator or the program website. Of the number of required credits all but six (6) must be taken at California University. Up to six credits transferred from an accredited graduate program may be transferred to California University. Faculty will review proposed transfer credits and recommend acceptance to the Dean of Graduate Studies. Only courses with grades of A or B will be considered; transfer credits are not figured into quality point average.

Withdrawals

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:

- 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.
- If the student withdraws officially during the first twelve 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.
- No student is permitted to withdraw officially from the university during the last three weeks of a semester or summer term.
- 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.
- Students planning on withdrawing from the University should consult with the Financial Aid Office prior to completing the withdrawal process.

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:

- Registration in violation of university regulations (e.g., academic ineligibility to register).
- Failure to comply with academic requirements (e.g. unsatisfactory class attendance, violation of the learning contract for students on academic probation, etc.).
- Failure to pay university tuition and fees by the due date.
- Disciplinary suspension or dismissal for the remainder of an academic term or longer.

- Severe psychological or health problems such that the student cannot be permitted to continue in attendance.
- Other reasons deemed appropriate by the proper administrative officer.

A grade WX is 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. 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 Provost. In certain cases, the student's right to confidentiality may not permit full disclosure of the circumstances.

Cheating and Plagiarism

Truth and intellectual honesty are both the subject matter and the necessary prerequisites for all education. Consequently, students who attempt to improve their grades or class standing by cheating on examinations or plagiarism on papers may be penalized by disciplinary action ranging from verbal reprimand to a failing grade in the course. If the situation appears to merit a more severe penalty, the professor may refer the matter to the graduate dean or the Provost, with a request for more formal disciplinary action by the University's Discipline Committee, which may result in suspension or expulsion from the university.

Grades

The Plus/Minus grading system is used for all graduate courses. Faculty are encouraged to utilize pluses and minuses; however, their use is not required. Please check your course syllabi; for the professors grading system. A quality point average of at least 3.0, equivalent to a B average, is required of all graduate students in all graduate programs.

Plus/Minus Grading System

GRADE QUALITY POINTS

A	4.00
A-	3.67
B+	3.33
B	3.00
B-	2.67
C+	2.33
C	2.00
F	0.00

The quality point average is computed by multiplying the number of semester hours specified for each course by the quality points attained in that course, adding the total of these results, and dividing this total by the total number of semester hours attempted.

The temporary grade of I (for Incomplete) may be assigned by the professor if a student has not completed the work of the course, either because of illness or for other reasons that the professor considers acceptable. (The professor may, however, submit a course grade on the basis of work that has been completed.)

The student must arrange to complete the work necessary to remove the grade of I within one calendar year of receiving it. If it is not removed within that period, the grade of I automatically becomes a grade of I-F, which cannot be removed from the graduate student's transcript unless the course is repeated for credit.

If an Incomplete is on a student's record in the semester or summer session when that student intends to graduate, the I becomes an I-F immediately before graduation-possibly adversely affecting graduation. If a graduate student has enrolled for the Master's Thesis, the Research Paper, or the Research Project, the grade of I will remain on the transcript until the Thesis, Paper, or Project is completed.

The grade of P is awarded in certain courses, to indicate the performance of satisfactory work in situations, such as some kinds of internships, in which it would not be appropriate to assign letter grades. The grade of P carries no quality points, and although the course is credited towards completion of a program or degree, the credits are not used to compute the quality point average.

If satisfactory work is not performed in such a course, the grade of F is awarded, and it is computed into the quality point average. The University does not allow graduate students a "Pass/Fail option" in courses in which letter grades are awarded.

Academic Probation and Dismissal

Graduate students must maintain at least a 3.00 quality point average (QPA) in graduate courses taken in the degree program. A student receiving a QPA below 3.00 will be placed on academic probation. A student on probation is not eligible for GA, RA, or RHA. Students placed on academic probation will be given one semester to raise the quality point average. If the QPA is still below 3.00 after the probationary period, the Dean of the Graduate School, after consultation with the department chairperson and/or program coordinator, may drop the student from the Graduate School. Students receiving a QPA below 2.50 after the probationary period will automatically be dismissed from the Graduate School. Some departments may have additional requirements regarding academic probation and dismissal. Students should consult with their program advisor for specific requirements. Graduate students who have been dismissed and wish to be readmitted to another graduate program must reapply to the School of Graduate Studies and Research.

STUDENTS WHO HAVE BEEN AWARDED A GRADUATE ASSISTANTSHIP WHO'S SEMSTER QPA FALLS BELOW A 3.0 WILL LOSE THEIR ASSISTANTSHIP.

Course Numbering

Courses numbered 499 and below are undergraduate courses. Courses numbered 500 to 599 may be taken for undergraduate or graduate credits and courses number 600, 700, and 800 are graduate level courses.

0-99 Remedial Level

100-199 Freshman Level

200-299 Sophomore Level

300-399 Junior Level

400-499 Senior Level

500-599 Undergraduate/Graduate Level

600-899 Graduate Level

Final Examinations

Final examinations are given the last full week of each Fall and Spring semester. A Final Examination Schedule is prepared and distributed by the University Registrar and indicates the time slots for specific exams. All final examination will be administered throughout the week according to this schedule. Exams will not be given at times other than those specified on the final exam schedule. During the week prior to the final exam week, no examinations will be given in classes, with the exception of lab courses and to graduating seniors (if necessary). All evening and Saturday class finals will be held at the time of their regularly scheduled class.

If a student is scheduled for more than three final exams in one day, he/she may reschedule tests by consulting with the appropriate instructors, department chairperson, or college dean. If a mutually convenient time cannot be agreed upon, the Friday time slot should be used as an alternate test date.

Comprehensive Examinations

Most programs require a comprehensive exam. (Please consult the program website for further information) All graduate students who are candidates for the Master's degree must pass a comprehensive examination. The nature of the examination may vary from department to department, but it commonly has a written component and may have an oral component as well. The purpose of the examination is to evaluate the graduate student's ability to demonstrate the achievement of the objectives and/or competencies prescribed in the student's program.

The comprehensive examinations are administered by the department and are scheduled approximately halfway through the semester or the summer session. **The date for this comprehensive examination is always announced by the department.** Such examinations normally require three hours. Information about departmental examinations should be obtained from the faculty adviser or chairperson.

Applications to register for the Comprehensive Examination can be obtained at the School of Graduate Studies and Research in Dixon Hall.

Period for Completion of Degree

Graduate students must complete all requirements for the Master's degree within six years after the date of initial registration for graduate studies at California University. After six years students may be expected to retake classes or take additional coursework.

Graduation Checkout

The application for Graduation is available on the website www.cup.edu/graduate or in the office of graduate studies. This form must be completed, signed and returned to the Graduate office by the graduation application date published on the website.

Students completing requirements for teaching certification must also complete a "Certification Endorsement" form. This form must be signed by the Program coordinator and by the Dean of Graduate Studies and Research. Graduate students applying for certification must also contact the office of the College of Education and Human Services.

Application for Graduation

By the date published, degree candidates must complete and Application for Graduation form. This form is available on the web at www.cup.edu/graduate and in the office of Graduate Studies and Research. This form will be reviewed by the graduate office to assure that the student has completed all requirements and fulfilled all obligations.

Students seeking teacher certification must complete the Certification Endorsement form available in the College of Education and Human Services Office. Questions regarding teacher Certification should be directed to the College of Education and Human Services.

Conferring Degrees

Degrees are conferred by the university three times each year: May, August and December. Information about Commencement is available on the website.

Cap and Gown Fee

Candidates who have been approved for the Master's degree and who plan to participate in commencement are required to purchase or to rent a Master's cap, gown and hood, to be worn at the Commencement exercises, from the university bookstore in the Student Union bookstore website.

Binding Fee

Three copies of the Master's Thesis, Research Project, or Research Paper must be submitted to the University and bound at the candidate's expense. Arrangements for binding are handled through the School of Graduate Studies and Research. Additional copies for the candidate's own use may be bound, at the same cost per copy.

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 ensure that courteous, timely, and accurate financial aid services are delivered to all students seeking assistance from our office.

Location and Office Hours

The Financial Aid Office is located on the first floor of Dixon Hall. The office hours are 8 am to 4pm 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, general financial aid information may be obtained on our website at www.cup.edu/financial_aid. Specific financial aid and student account information is available 24 hours a day through our secure Web site at <http://sisweb.cup.edu>.

About Financial Aid & How to Apply

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 graduate students 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 four main sources of financial aid. These include the federal government, state government, institution and private entities. The federal government is by the far the largest source of financial aid. The Federal Stafford Loan is the only federal program that graduate students can qualify for at California University.

Eligibility Requirements

In order to be eligible for federal financial aid, 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 web site. The Selective Service Web site is located at: www.sss.gov.

Completing the FAFSA

Each year, you must complete the Free Application for Federal Student Aid (FAFSA) or Renewal FAFSA. 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 prior year 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 FAFSA. You can obtain the FAFSA from a 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), or contact the Financial Aid Office. Please Note: California University does not have an institutional financial aid application.

Online FAFSA

Online FAFSA is a web-based version of the U.S. Department of Education's Free Application for Federal Student Aid (FAFSA). It enables you to apply for student financial aid over the Internet. Students wanting to complete the upcoming year FAFSA via the web can do so **after January 1**.

After transmitting an application over the Internet, you may sign electronically with your PIN (see Personal Identification Number topic listed below), print a paper signature page to sign and mail in, or wait for a signature page to arrive in the mail. Once you submit your application, you'll be taken to a Confirmation Page that shows your confirmation number and estimated Expected Family Contribution (EFC). You'll receive a Student Aid Report (SAR) Information Acknowledgment in the mail about 2 weeks after submitting your online FAFSA. If you provided your e-mail address, you'll receive an e-mail with a link to your SAR on the Web in no more than 5 days.

The Online FAFSA site provides you with numerous electronic options, such as checking on the status of your FAFSA form, requesting a duplicate set of SAR's, tips and shortcuts, and requesting a Personal Identification Number (PIN). The FAFSA on the Web site is located at: www.fafsa.ed.gov. In addition, to the web site a customer service line (1-800-801-0576) is available in order to assist student's access to the same type of information provided at their web site.

Renewal Financial Aid Applicants

As a renewal financial aid applicant, you have two choices in completing your Renewal FAFSA. You can complete the 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 a special code called a Personal Identification Number (PIN). The PIN serves as your identifier to let you access your personal information in various U.S. Department of Education systems. The PIN is similar to the Personal Identification Number that you get from your bank that enables you to access your bank account. Your PIN is confidential and should not be shared with anyone, even if someone else completes your

FAFSA for you. Students can request a PIN by going to www.pin.ed.gov. Your PIN will be e-mailed to you within 1 to 5 days. If you don't provide an e-mail address, your PIN will be mailed to your permanent mailing address within 7 to 10 days. All prior year FAFSA on the web applicants will receive a "PIN" automatically. Your PIN is a valuable electronic tool, which allows you to electronically complete your Renewal FAFSA on the Web, sign your Free Application for Federal Student Aid (FAFSA) or Renewal FAFSA and make electronic corrections. The application process is faster if you use a PIN to sign your online Renewal FAFSA.

Both versions of the Renewal FAFSA contain preprinted information that you reported last year, making it faster and easier for you to complete. Please carefully review and update any preprinted information, which needs to be change for the upcoming school year.

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 you are expected to contribute toward your education. The basic elements included in determining the EFC are:

- 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

The lower your EFC, the more financial need you will have. The lowest EFC possible is zero; the highest is 99,999 or above. The Federal Stafford Loan is the only federal program that graduate students can qualify for at California University of Pennsylvania. Therefore, a graduate student's EFC is used to determine a student's Stafford Loan eligibility according to the following equation.

Cost of Attendance

less: Expected Family Contribution

less: Other Aid Received (grad assistantships, scholarships, etc.)

= Stafford Loan Eligibility

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, 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.

Award Letters

California University typically starts the awarding process for graduate students in late May of each year. **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. Award information may also be accessed on the "Web for Students" website at: <http://sisweb.cup.edu>.

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 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.

Financial Aid Programs

Graduate students at California University can qualify for limited assistance from federal, university, and private aid programs. Listed below are those financial aid programs that are available to assist you in meeting your education expenses at California University.

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.

Interested in finding out who services your student loan and how to contact them?

Well you can. The National Student Loan Clearinghouse (NSLC) has launched a new website called **LoanLocator** which can provide you this valuable student loan information fast. **LoanLocator** is easy-to-use. No password is required. All you need is your Social Security Number and date of birth. This service will provide you with valuable information about who holds your loan and who guaranteed your loan as well as contact information by phone or the web. It is free and is available 24 hours a day, 7 days a week. You can access LoanLocator at our website, www.cup.edu/financial_aid and click on "Links & Resources."

Federal Family Educational Loan Program (FFELP)

In order to apply for any type of FFELP (subsidized and/or unsubsidized 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 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.

Graduate Loan Borrowing Chart

Annual Loan Limit:

Subsidized \$ 8,500

Unsubsidized \$10,000

Total \$18,500 or Cost of Attendance (less EFC and other aid) which ever is less

Lifetime Maximums:

\$138,500 (subsidized and unsubsidized with subsidized limited to \$65,500; includes any loans outstanding from undergraduate study)

Application Process (Master Promissory Note)

Step A: File the electronic or paper version of the **FAFSA** and check "**Yes**" to question "**interested in student loans.**"

Step B The pre-certification step is the most important step in the loan process. During this step the Financial Aid Office will notify you of your maximum Federal Stafford Loan eligibility and type of Stafford Loan (subsidized and/or unsubsidized) based on your financial need and grade level. You will have an opportunity to either decline and/or reduce your Stafford Loan estimate by completing a "**Federal Stafford Loan Adjustment Form**" which is available in the Financial Aid Office (FAO).

Step C The FAO will transmit your Federal Stafford Loan information to AES/PHEAA. If you have never completed a Federal Stafford Promissory Note, you will receive a pre-printed Federal Stafford Loan Master Promissory Note (MPN) Packet from AES/PHEAA. If you completed a MPN last year at either California or another four-year college in Pennsylvania, you will only receive an approval notice (see step E) from AES/PHEAA. **Please Note: The MPN only needs to be completed once every ten years!**

Step D You must complete the borrower section of the MPN (if applicable). Please be sure that all answers are complete and that you sign and date the MPN. Mail the completed MPN to AES/PHEAA.

or

Complete the MPN electronically by logging on to AES/PHEAA's website (www.aessuccess.org), and click on the "Apply for a Stafford Loan" link. With your Department of Education Personal Identification Number (PIN), you can even sign your MPN electronically. If you need a Department of Education PIN, you can apply for one by going to the PIN registration website (www.pin.ed.gov).

Please Note: If you are a non-resident student selecting a lender for the first time, our office strongly encourages you to select one of our preferred lenders listed on the pre-printed Stafford Loan material, which will be mailed to

you by AES/PHEAA. If you are completing your MPN electronically, our list of preferred lenders will appear on the AES/PHEAA website.

Step E Whether completing a pre-printed paper or electronic MPN, AES/PHEAA will send you an "Approval Notice." This notice will indicate the amount of your loan(s), the interest rate and the disbursement dates of your loan(s). If you **are not interested** in a *Federal Stafford Loan*, please ***do not complete*** or ***return this MPN***. ***You will have an additional opportunity at this point to cancel or reduce your Stafford Loan(s) by contacting AES/PHEAA.***

Step F AES/PHEAA will authorize the disbursement of loan proceeds (Electronic Funds Transfer [EFT] or check) at the appropriate time to California University. Finally, **all first-time Stafford Loan borrowers** must complete a loan counseling session before Stafford Loan proceeds can be disbursed to the student. This loan counseling session can be completed via the internet by going to the Financial Aid Office homepage at: www.cup.edu/financial_aid. Scroll down this page until you see "Links and Resources" and select "On-Line Student Loan Entrance Counseling."

Private Education Funding (Alternative Loans)

In addition to the federal loan programs, there are also private sources of educational loans. These are typically private, credit-based loans sponsored by banks and state agencies or private guarantors. Typically, the results of the FAFSA are not used in determining eligibility for these programs. The following are two lending institutions that specialize in low-interest alternative educational loans.

PNC Resource Loan

Application and information regarding this alternative loan can be obtained by contacting the Financial Aid Office or PNC Bank at 1-800-762-1001 or by visiting their website at: www.eduloans.pncbank.com

National City/Terri

Application and information regarding this alternative loan can be obtained by contacting the Financial Aid Office or Terri at 1-800-255-8374 or by visiting their website at: www.teri.org.

Citi Assist

Application and information regarding this loan can be obtained at www.studentloan.com.

Employment:

Graduate Assistantships

Graduate students may find employment opportunities within the University through the Graduate Assistantship Program. This program provides full-time graduate students with opportunities to work in various offices and departments on campus. Students interested in a graduate assistantship should contact the Office of the School of Graduate Studies and Research for an application and additional information.

Scholarships/Fellowships

There are also many other agencies and organizations which provide financial assistance. These include civic clubs, fraternal organizations, religious groups, employers, organizations, unions, etc.

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"

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"

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.

"Other Scholarship Searches"

Other Scholarship Searches (www.finaid.org/scholarships/other.phtml) will take you to other scholarship search engines.

Disbursement of Financial Aid

Crediting Financial Aid to a Student's Account

For initial billing purposes "estimated" Stafford Loan awards do appear on the billing statement in order to assist the student in determining the balance owed, if any, to the University. However, a Federal Stafford Loan MPN is not processed until all requested forms are received and verification is completed. Once the loan has been processed, the lender will send the loan proceeds via check or Electronic Funds Transfer (EFT) to the University. These funds will be applied to the student's account once the student has met all student eligibility criteria, e.g., enrolled at least half-time, enrolled in eligible program.

How Registration Affects Your Financial Aid

Federal regulations and institutional guidelines require students to be registered before any financial aid monies can be disbursed. In addition, 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.

Enrollment Status Number of Credits Registered

Full-Time	9 Credits or More
Three-Quarter-Time	7 to 8 Credits
Half-Time	5 to 6 Credits
Less-Than-Half-Time	Less than 5 Credits

In order to qualify for assistance from the Federal Stafford Loan program students must be enrolled at least half time.

Financial Aid Refunds

Financial aid that exceeds the amount the student owes to the University, e.g., tuition & fees, dorm & dining expenses, will be disbursed to the student in the form of a refund check. This refund can be used to cover non-institutional educational costs such as books & supplies, off-campus housing and transportation expenses. Typically, these refunds will be available starting with the second week of the semester if you have satisfied the eligibility requirements for each award.

Maintaining Financial Aid Eligibility

Financial Planning

Students planning to attend California University of Pennsylvania should be aware that financial aid refunds are 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 semester purchases (books, materials, art supplies, etc.) without depending upon financial aid funds.

Satisfactory Academic Progress Policy

Purpose of Policy

Federal regulations require **all** institutions that administer Title IV student assistance programs to monitor the academic progress toward a degree of those students applying for or receiving assistance from those programs. All California University graduate students applying for Federal Stafford Loans (Subsidized/Unsubsidized) must meet the standards stated in this policy, regardless of whether or not they previously received aid.

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 Graduate Degree:

Enrollment Status	*Number of Eligible Semesters
full-time (9 or more credits)	5 semesters
three-quarter time (7 to 8 credits)	7 semesters
half-time (5 to 6 credits)	9 semesters

* 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 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 (9 or more credits)	8 credits
three-quarter time (7 to 8 credits)	14 credits
half-time (5 or 6 credits)	10 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 requires that all graduate students maintain a **minimum** grade point average of 3.0 in order to achieve "good academic standing".

Students who are academically dismissed are considered **ineligible** for Title IV Federal aid. A student who is academically dismissed and is approved for re-admission to the University will attend without the benefit of Title IV federal aid. A student remains **ineligible** for Title IV federal aid until he/she achieves the minimum 3.0 g.p.a. or successfully files a SAP appeal (see Appeal Procedures contained in this Policy).

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): no withdrawal categories 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.

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 resolve his or her 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.

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. 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 third week of classes in any semester that the student is applying for financial aid. 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.

Refund/Repayment Policy

Refund Policy

Students who officially withdraw from the University or from specific classes during the semester may be eligible for a refund of a portion of the tuition, fees, room and board paid to California University for that semester. Refunds are based on the official date of withdrawal as recorded by the Academic Records Office (for additional information see "Withdrawal from the University" listed in the Academic Policies section of the catalog). Students who do not follow the official withdrawal procedure but who stop attending classes for all of their courses will be considered to have withdrawn at the 50% point of the semester unless attendance is documented after that time.

Return of Title IV Funds Formula

Two formulas exist for determining the amount of the refund: California University's Refund Policy (for additional information see "University Refund Policy" in Billing Section) and the federal "Return of Title IV Aid" formula. The federal formula is applicable to any student receiving federal aid and withdraws from the University during the first 60% of a semester. These students will have their federal financial aid (Federal Stafford and Plus Loans) adjusted based on the percent of the semester completed before the withdrawal. In essence, students will be entitled to retain the same percent of the federal financial aid received as the percent of the semester completed. This percent is calculated by dividing the number of days in the semester (excluding breaks of five days or longer) into the number of days completed prior to the withdrawal (excluding breaks of five days or longer). There will be no adjustment to federal financial aid after the completion of at least 60% of the semester. If any refund remains after the required return of Title IV aid, the refund will be used to repay California University funds, state grant funds, and other private sources and the student in proportion to the amount paid by each non-federal source, as long as there was no unpaid balance due at the time of withdrawal. If there is an unpaid balance, then all aid sources will be repaid before any refund is paid to the student.

Distribution Policy

Once the amount of the federal funds to be returned has been calculated, the funds will be returned to the appropriate program(s) in the following priority order:

Unsubsidized Stafford Loans

Subsidized Stafford Loans

PLUS Loans

Perkins Loans

Pell Grant

Supplemental Educational Opportunity Grant

Repayment of Unearned Financial Aid Assistance

Students who receive a refund of financial aid before withdrawing from the University may owe a repayment of federal financial aid funds received. Students will be notified by the Bursar's Office and will be given 30 days to repay the funds to the University. Students who fail to return the unearned portion of federal financial aid funds given to them will have a "hold" placed on their University records, thereby preventing them from registering for future semesters until repayment is made in full.

Financial Aid Glossary

1040 Form, 1040A Form, 1040EZ 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 his or her aid eligibility and possibly use professional judgment to adjust the figures. In the event of the death of a parent, unemployment, or other unusual circumstances, he or she should file an appeal.

Award Letter: An official letter issued by the Financial Aid Office that lists the financial aid awarded to the student. You are required to either accept or decline the awards you wish to receive, sign the award letter, and

return it to the Financial Aid Office. Award information is also available on the web on our "Web for Student" website at: <http://sisweb.cup.edu>.

Bursar's Office: The Bursar's Office is the University office responsible for the billing and collection of University charges.

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.

Commuter Student: A student who resides at home with his/her parents and commutes to school daily.

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

Disbursement: Disbursement is the release of loan funds 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 some 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. Congress bases this on the Federal Methodology need analysis formula dictated.

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

Free Application for Federal Student Aid (FAFSA): The FAFSA is used to apply for all need-based aid.

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 his or her education.

Gift Aid: Gift aid is financial aid that 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 criteria:

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 dependants other than spouse for which you are responsible

Loan: A loan is a type of financial aid that must be repaid with interest to a lending institution of your choice.

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

Scholarship: A scholarship is gift aid that 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 on which the government pays the interest 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.

Unmet Need: Unmet need is the difference between the student's award and the full cost of tuition.

Unsubsidized Loan: An unsubsidized loan is a loan that 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 Work-Study Program 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.

Graduate Programs

Program Title: Athletic Training

Degree: Master of Science

Accreditation: National Athletic Trainers' Association (NATA)

Program Descriptions: The Graduate Athletic Training Education Program is beginning its 14th year and is accredited by the [National Athletic Trainers' Association \(NATA\)](#) as an advanced degree program in athletic training. The student entering this program receives a Master of Science Degree(post-certification) program in Athletic Training and can expect to complete the requirements in one calendar year. Students graduating from the program will now be able to receive national certification as a Performance Enhancement Specialist through the National Academy of Sports Medicine. Students will learn how to use the same Optimum Performance Training Model used by the National Academy of Sports Medicine for training Olympic and Professional athletes. In addition, research design and clinical experiences are an integral component of the program that will enhance the student's overall background. This program is an advanced graduate athletic training education program and the student must have passed the National Athletic Trainers' Board of Certification (NATABOC) or have completed the requirements to take the certification examination. The graduate athletic training intern can expect to complete the academic coursework in one calendar year, which starts in June of each year, with the clinical experience occurring from mid-August to approximately the end of May the following year. Clinical experiences take place at area high schools, Washington & Jefferson College, and California University of Pennsylvania.

Total Number of Credits: 36 Credits

Admission Criteria:

Admission into the Graduate Athletic Training Education Program requires a solid background in the field of athletic training. Guidelines for admission are as follows:

- A baccalaureate degree from an accredited institution.
- A minimum grade point average of 3.00.
- Students who are currently Certified Athletic Trainers will be given strong consideration if they have attained a minimum of a 2.50 QPA.
- CPR certification, which must be provided prior to the first day of classes.
- NATABOC certified or has completed requirements to take the certification examination and sit for the exam at least once prior to the start of August camps.
- A completed application to the Graduate Athletic Training Education Program.
- Resume or curriculum vitae.
- Two references letters, with at least one from your supervising certified athletic trainer or equivalent.
- A completed graduate assistantship application.
- Completion of the application for the School of Graduate Studies and Research, along with the application fee.

Curriculum:

Summer 1 – 1st 5 Weeks

ATE 720 Sports Therapy	4
ATE 800 Methods of Research in the Allied Health Sciences	3

Summer 2 – 2nd 5 Weeks

ATE 700 Gross Anatomy of the Extremities w/Lab	4
--	---

Summer – 10 Weeks

ATE 715 Sports Law	3
--------------------	---

Fall Semester

ATE 725 Pedagogical Issues in Athletic Training	3
ATE 810 Thesis Seminar	3

EDP 600 Statistical Methods	3
PRF 710 Performance Enhancement in Physical Activity	3
Spring Semester	
ATE 745 Contemporary Issues in Athletic Training	3
PRF 750 Performance Enhancement in Program Design	3
RES 849 Master's Thesis	4

Assistantships: Graduate Assistantships are available and will be appointed based on qualifications and experience. Assistantships will include an out of state tuition waiver with a stipend of \$12,518.00. * The graduate student will be responsible for in-state tuition and fees, which varies from year to year. The current in-state tuition for 2005-2006 is \$2,886.00 per semester, with fees totaling an additional \$843.90 per semester.

All graduate students will be responsible for tuition costs and fees during the summer sessions, which is approximately \$4,100.00 for tuition and \$600 for fees. Out-of-state students who are accepted into the program will be awarded a partial graduate assistantship for the summer, which will waive the out-of-state tuition, but will still be responsible for in-state tuition. A minimum of one half of the summer tuition will be required at registration.

*Amount subject to stay the same or increase each year.

Website: www.cup.edu/education/hsss

Program Title: Biological and Environmental Sciences

Degree: Master of Science

Program Description: The Master of Science degree program is intended for graduate students who want intensive training in specialized areas of the life sciences. A student entering this program is expected to have completed extensive coursework in biology, mathematics and the physical sciences. After students have been admitted to the program, they are given the opportunity to select a graduate adviser and a research program to meet their educational and professional needs. Graduate students completing this degree program are prepared to enter biological careers in research, allied health professions, teaching, and to pursue advanced degrees in life, veterinary, environmental and medical sciences.

Full-time students are expected to complete all requirements (course work and research) for their degree within three years. Part-time students should complete all requirements for their degree within six years.

Students requesting extensions to finalize their programs must substantiate reasons for the additional time. All courses taken seven years from the first semester of matriculation will not count towards graduation. Ancillary graduate level courses amounting to as many as six credits in fields closely related to the major program may be substituted for Biology courses, with the approval of the research adviser and the Departmental Graduate Committee.

In addition to a general Master's Degree in Biology, we are offering an opportunity for our students to focus on one of three specific concentrations: environmental science and ecology; cell biology; and fisheries and wildlife sciences. Each concentration will provide coursework within the content area as well as the requirement of a thesis specific to the chosen concentration.

The environmental science and ecology concentration is a broad-based option that permits flexibility within the area of environmental studies. Students can tailor their educational needs to examine terrestrial, aquatic, animal, or plant communities.

The cell biology concentration provides training in cellular, bacterial, and microbial fields. With this concentration, students will have exposure to current techniques and applied applications using modern laboratory equipment.

The fisheries and wildlife sciences concentration provides the core courses required for certification by the American Fisheries Society and the Wildlife Society. In addition the close relationship our department has with the US Fish and Wildlife Service's Partners for Fish and Wildlife Program permits the development of applied Master's research topics with extensive hands-on experiences.

Each of these concentrations and our more general degree option prepare our graduates to enter the work force or pursue additional graduate training.

Total Number of Credits: 36

Admission Criteria: Admission to the Biology Program is based on the quality of an applicant's undergraduate transcript, the successful completion of coursework in the life sciences and the score achieved on the general Graduate Record Exam (see below for additional details).

The student should have the following:

1. A QPA of at least 3.0 on a 4.0 system.
2. Two semesters of organic chemistry with no lower than a C grade for each course. Organic chemistry II may be waived with the approval of the student's adviser.
3. One semester of physics.
4. One mathematics course beyond college algebra (calculus is preferred).
5. A minimum of 24 credits in the life sciences with a grade of C or better.
6. Two letters of recommendation from faculty who can attest to the candidate's academic capabilities and promise for success in graduate school (submitted to the Graduate Committee).

7. Student must write a letter to the Departmental Graduate Committee specifying the following:
- Reason for pursuing a graduate degree in life sciences.
 - Future study/career plans for the life sciences.
 - Which program option the student intends to pursue.
 - Area of research interest.
 - Need of financial assistance (assistantship and/or tuition waiver).
 - Other information the student deems important for Graduate Committee members to learn more about his/her suitability for graduate study.
8. A student must take the Graduate Record Examination (Verbal and Quantitative) and the Advanced Test in Biology prior to admission into the department. Students having a minimum score of 1,000 on the verbal and quantitative sections of the GRE meet minimal requirements for admission into the graduate program.

Curriculum: Credits

Environmental Curricula

BIO 575	Water Pollution Biology	4
BIO 727	Ichthyology	4
BIO 735	Comparative Vertebrate Anatomy	4
BIO 738	Herpetology	4
BIO 740	Ornithology	4
BIO 744	Ethology	4
BIO 757	Plant Systematics	4
BIO 758	Plant Anatomy and Morphogenesis	4
BIO 772	Mammalogy	4
BIO 778	Organic Evolution	4
BIO 790	Wildlife Management Techniques	4
ENS 773	Principles of Wildlife Management	4
ENS 775	Wetlands Ecology	4
ENS 792	Animal Population Dynamics	4

Cellular/Microbial Curricula:

BIO 520	Neurobiology	3
BIO 708	Microbial Ecology and Physiology	4
BIO 710	Immunology	3
BIO 721	Biochemistry I	3
BIO 723	Animal Histology	4
BIO 725	Molecular Biology	4
BIO 726	Human Genetics	3
BIO 746	Parasitology	4
BIO 788	Cell Biology	4

Additional Courses:

BIO 741	Advanced Research Studies	1
BIO 765	Design and Analysis	3
BIO 766	Biometry	4
BIO 795	Seminar in Biology	2
BIO 789	Special Problems	1

Research Courses: Required courses (7 credits)

BIO 800	Methods of Research in Science	3
RES 849	Master's Thesis	4

Practicum/Internships: See the website for research opportunities

Web site: <http://www.cup.edu/graduate/msb/>

Program Title: Business Administration

Degree: Master of Science

Program Description: The demand for skilled managers in the business community today far outweighs the availability of qualified candidates. The scope of business activities has assumed a level of sophistication where the more significant opportunities require skills and abilities that exceed the capabilities possessed by most baccalaureate degree holders.

The Master of Science Degree offered in Business Administration directly addresses the needs of today's progressive business enterprise. This rigorous program is designed for the student desirous of advanced managerial skill development in the areas that significantly affect modern business enterprises.

Successful completion of this curriculum will effectively equip the graduate for a more challenging role in contemporary business enterprises.

The program is particularly appropriate for those currently employed as well as those recent graduates who desire to expand their current level of marketable skills. With many of the courses being offered at appropriate hours for those currently employed, this advanced degree is easily within the reach of most who are willing to devote the time and effort required, on either a full or part-time basis. The program can be completed in 12 months with on campus or at the Southpointe Center.

Total Number of Credits: 36

Admission Criteria: A minimum undergraduate gpa of 3.0 and scores from the GMAT along with a Graduate School application and official transcripts. Students who have undergraduate majors other than business are required to take the five Foundation Courses*.

Curriculum:

I. Foundation Courses (15 Credits)*

ACC 200	Financial Accounting	3
ECO 201	Intro Microeconomics	3
ECO 202	Intro Macroeconomics	3
MAT 225	Business Statistics	3
MKT 300	Principles of Marketing	3

II. Master's Degree Curriculum (36 Credits)

A. Core Curriculum (24 credits)

ACC 711	Managerial Accounting	3
MGT 751	International Business Management	3
FIN 711	Financial Management	3
MKT 711	Marketing Management	3
BUS 771	Quantitative Methods	3
BUS 799	Strategic Management	3
ECO 716	Applied Economic Analysis	3

Select one of the following:

MGT 712	Organizational Behavior	3
MGT 731	Industrial Relations	3
MGT 742	Human Resource Management	3

B. Electives (12 credits)

Choose any four (4) from the following courses:

ACC 721	Financial Accounting	3
ACC 731	Tax Concepts and Planning	3
BUS 741	Business Law	3
BUS 743	Business, Society, and Government	3
ECO 721	Managerial Economics	3
ECO 731	Econometric Methods	3
FIN 531	Bank Management	3
FIN 712	Advanced Financial Management	3
FIN 721	Investment Management	3
FIN 731	Financial Markets & Institutions	3
FIN 751	International Financial Mgt.	3
MGT 711	General Management	3
MGT 712	Organizational Behavior	3
MGT 721	Production Management	3
MGT 731	Industrial Relations	3
MGT 742	Human Resource Management	3
MGT 751	International Business Management	3
MKT 721	Research Methods in Marketing	3
MKT 731	Marketing for Nonprofit Organizations	3
MKT 751	Advertising Management	3
MKT 761	Business Marketing Strategy	3
BUS 795	Seminar	3
BUS 797	Research Studies in Business	3

*Any student who has an undergraduate major in business or economics or has taken the following course with a B or better will be exempt.

Program Title: Business Administration -Advanced Health Care Management (THIS PROGRAM IS CURRENTLY IN MORATORIUM)

Degree: Master of Science

Program Description: This program is designed for aspiring health care management professionals or for those interested in a new career in the health care profession who want to establish or expand their careers in the health care profession by increasing the breadth of roles and challenges in the disparate components of the health care industry. Understanding the nature of change in health care technologies and the global view of the dramatic expansion of the health care industry will enhance the career of individuals in the health care industry or those beginning their careers. This program will prepare individuals to understand the impact of complex illnesses on the global health care network as well as preparing for dramatic changes in staffing, funding, training and education in the advancing health care industry.

The program is comprised of twelve courses that comprise four, three course modules. Each module is worth a total of nine credits. The program is currently being offered as a weekend program with classes meeting Friday evenings and most of the day Saturday in the Pittsburgh Center. The students in this mode of delivery form a cohort that completes the full program over four consecutive semesters or 16 months. There are also flexible delivery options to meet the advanced educational needs of organizations. Please contact the Program Director for more information.

Total Number of Credits: 36

Admission Criteria: Applicants must have a bachelor's degree from a four-year accredited college or university and must submit to the School of Graduate Studies and Research the following items:

- An application for admission to the graduate program;
- A non-refundable \$25 application fee;
- An official transcript from each institution where undergraduate and graduate courses were completed (it is not necessary to submit a transcript from California University of Pennsylvania);
- Arrange a personal interview with the Program Director in lieu of GMAT (Graduate Management Admission Test)

Curriculum: The Master of Science in Business Administration, Emphasis on Advanced Health Care Management program consists of four consecutive semesters, 9 credits each.

1. Decision Support, Technologies and Human Resources 9 crs.

AHC 655 Research Methodology and Budgeting
AHC 611 Decision Support Systems, Finance
AHC 612 Health Care Human Resource Acquisition

2. Telematics, Telemedicine, Research and Budgets 9 crs.

AHC 721 Health Care and Medical Economics
AHC 722 Preventive Health Care
AHC 731 Telemedicine

3. Biotechnology and Economic Implications in Complex Case Management 9 crs.

AHC 671 Quantitative Methods, SAP and Telematics
AHC 711 Biotechnology Implications in Health Care
AHC 701 Technology Acquisition and Management

4. Epidemiology, Preventive Health Care and Legal Issues 9 crs.

AHC 741 Legal Issues in Health Care
AHC 712 Epidemiology
AHC 799 Complex Case Management

Applied Research projects are identified in semester one. Teams select and develop a plan that includes acquisition and implementation that addresses health care issue. The project is approved by an organization of team choice. The paper comes together progressively over the four semesters.

Web site: www.cup.edu/graduate/healthcare/index.html

Program Title: Business Administration- Management of Technologies **(THIS PROGRAM IS CURRENTLY IN MORATORIUM)**

Degree: Master of Science

Program Description: The Master of Science in Business Administration, Emphasis On Management of Technologies program is designed for aspiring middle and upper level managers preparing themselves for dramatic technological change. People who already have an MBA, Ph.D. or other graduate degrees also benefit from this degree's emphasis.

Management of Technologies identifies the relationship of technology to the overall production function. The essence of the program is to balance organizational results using the functional topics in six areas – land, labor, capital, technology, information, and strategy.

Management effectiveness and overall organizational results traditionally have focused on the business administration approach to these six areas. It is the intent of the Management of Technologies program to focus on not just traditional business, but the fabric of technology as it surrounds the six areas, and technology management is to be pursued scientifically. The program provides individuals with technology mastery that is essential in business, government, and non-profit organizations. An understanding of the uses, applications, and processes of management applied to emerging technologies is essential to organizational success.

Total Number of Credits: 36

Admission Criteria: Applicants must have a bachelor's degree from a four-year accredited college or university and must submit to the School of Graduate Studies and Research the following items:

- An application for admission to the graduate program;
- A non-refundable \$25 application fee;
- An official transcript from each institution where undergraduate and graduate courses were completed, showing at least a cumulative 3.0 quality point average based on a 4.0 scale.
- Applicants who do not satisfy the 3.0 academic requirements must take the Miller Analogies Test for conditional admission;
- Interview with Program Director;
- Official scores from the Educational Testing Service GMAT (*Graduate Management Admission Test may be waived*).

Curriculum: The Masters of Science in Business Administration, Emphasis on Management of Technologies program consists of four modules, 9 credits each.

PRT 701 Management Integration of
Emerging Technologies

PRT 702 Invention, Innovation and Technology
Economics in Complex Settings

PRT 703 Policy Development, Acquisition and Project Management of Complex Technologies

PRT 704 Applied Technology Research & Management Decision Making
&

RES 829 Master's Research

Applied Research projects are identified in module one. Teams select and develop a plan that includes acquisition and implementation of an emerging technology. The project is approved by an organization of team choice. The paper comes together progressively over the sixteen month program.

Web site: www.cup.edu/graduate/mot/index.html

Program Title: Communication Disorders

Degree: Master of Science

Accreditation: American Speech-Language Hearing Association

Program Description: The program provides specialized training in all areas of communication disorders and graduates are qualified to provide clinical services to individuals of all ages in a variety of settings including schools, hospitals, government agencies, private practice etc. The University has excellent facilities including a large clinic and a preschool located within the department along with a technologically advanced Communication Science Laboratory.

Applicants without a degree in Communication Disorders will need to complete a small core number of undergraduate courses prior to beginning graduate courses.

A Summer Only cohort program is available for individuals who are employed in the field of Communication Disorders during the school year. This academic program can be completed in five summers. Please contact the department (724-938-4175) for further details on this program.

Total number of credits: A minimum of 42

Admission Criteria: Applicants should hold a baccalaureate degree in communication disorders from an accredited college or university with a minimum QPA of 3.0. Applicants should submit the following: a formal application, a nonrefundable application fee, final official transcripts, GRE scores, three letters of recommendation from undergraduate professors, and from all international students, a TOEFL score and financial information forms in addition to the Graduate School requirements for International Students.

Curriculum:

*CMD 600 Research & Professional Practice	3
*CMD 701 Language Disorders in Adults	3
*CMD 702 Language Disorders in Children	3
CMD 703 Fluency	3
*CMD 705 Voice Disorders	3
*CMD 707 Phonology and Articulation Disorders	3
*CMD 708 Neurology	3
***CMD 711-716 (Internships & Externships)	1-12
**CMD 718 Advanced Audiology for the SLP	3
** CMD Aural Rehab	3
CMD 730 Profound Organic Disorders	3
CMD 731 Early Intervention	3
CMD 732 Counseling the Communication Disabled	3
CMD 733 Organ & Adm in SLP	3
CMD 734 Motor Speech Disorders	3
CMD 764 Instrumentation in Sph-Language Pathology	3
*CMD 765 Dysphagia	3
CMD 766 Traumatic Brain Injury	3
CMD 772 Augmentative & Alternative Communication	3
CMD 773 Communication and Diversity	3
CMD 785 Seminar in SLP	3
**EDP 600 Statistical Methods	3
*RES 819 Research Paper OR	1
RES 829 Research Project OR	2
RES 849 Master's Thesis	4

Total credits for graduation Minimum of 42

- * Required.
- ** Required if not taken by student at undergraduate level.
- *** Only 6 credits may be counted toward the degree.

Practicum/Internships: Students participate in extensive “hands on” clinical experiences both at the in-house clinic and preschool and at over 60 off campus facilities with which the department has contractual relationships.

Program Title: Counselor Education

Degrees: Master of Science – Community Agency Counseling
Master of Education – Elementary School Guidance
Master of Education – Secondary School Guidance

Certifications: Elementary School Guidance
Secondary School Guidance

Program Description: These programs have been developed from recommendations of the accrediting, certification, and licensing bodies for each profession. In order to keep the programs current, minor changes may be made in requirements as needed. The National Board for Certified Counselors (NBCC) recognizes courses taught in the Department for Continuing Education credits. The program prepares students to take the National Counselor Exam (NCE).

Prospective students are advised to read the *Department Handbook* which will describe the philosophy, admissions, and departmental procedures in some detail. You may download it from our website www.cup.edu/graduate/counsel then call the department at 724-938-4123 with questions.

Total number of credits: A minimum of 48

Admission Criteria: To be considered for admission to the Department of Counselor Education applicants must have documentation of either a 3.0 undergraduate grade point average or a score of 45 on the Miller Analogies Test (MAT) (Exceptions to the above may be considered on an individual basis, and are described in the Department Handbook). Applications must be complete before they will be reviewed. The following are required:

1. Copies of all graduate and undergraduate transcripts (official transcripts).
2. Documentation of MAT scores if required.
3. 3 letters of recommendation.
4. A 1,000 word psychobiography.
5. A one-page resume of work and education.

Several steps are required to complete the degree process. After finishing 9-12 credits students must apply for candidacy. The candidacy interview is designed to assess students' academic progress and development as a professional. Once admitted to candidacy status, students will continue coursework and prepare for practicum and internship experiences. Before graduation, students must pass the department comprehensive examination.

Certification requirements are spelled out in the *department handbook*, some of which must be completed by Candidacy.

M.ED. Elementary Guidance/Secondary Guidance with Certification & Certification only programs

CED 700	Principles of Guidance	3
CED 701	Organization & Administration of Counseling	3
CED 702	Counseling Theory	3
CED 724	Experiential Group Process	3
CED 705	Developmental Group Counseling	3
CED 710	Counseling Skills & Techniques	3
CED 786	Seminar in Career Information	3
CED 703	Consulting Theory	3
CED 711	Practicum I	3
CED 787	Integrated Seminar	3
CED 790	Internship	6
CED 720	Cross-Cultural Counseling	3
PSY 713	Psychology of Growth & Development	3
PSY 721	Advanced Tests & Measurements	3
CED 785	Research Seminar in Counseling Education	3

Minimum Credits Required 48

Prerequisites: (Must have a minimum "C" grade and may be taken concurrently with CED courses) 12 graduate or undergraduate credits in psychology, including either Psychology of Learning, Educational Psychology or equivalent; one graduate or undergraduate statistics course; one computer course.

For initial certification students must have: *6 Credits College Math;

*3 Credits English Comp; *3 Credits English/American Literature & pass the Basic Skills Praxis Exams. *May be met by CLEP or DANTE exams. These must be completed before formal acceptance into certification program candidacy.

Secondary Certification or Elementary Certification Only

Students who hold Master's Degrees in other disciplines may decide to seek certification without another Master's Degree. In these cases the department will evaluate their transcripts to see what courses are required.

M.S. Community Agency Counseling

CED 701	Organization & Administration of Counseling Services	3
CED 702	Counseling Theory	3
CED 724	Experiential Group Process	3
CED 705	Developmental Group Counseling	3
CED 710	Counseling Skills & Techniques	3
CED 786	Seminar in Career Information	3
CED 711	Practicum I	3
CED 787	Integrated Seminar	3
CED 790	Counseling Internship	6
CED 789	Community counseling	3
CED 720	Cross-Cultural Counseling	3
CED 717	Diagnosis and Treatment in Mental Health	3
PSY 721	Advanced Tests & Measurements	3
PSY 713	Psychology of Growth & Development	3
CED 785	Research Seminar in Counseling Education	3
Minimum Credits Required		48

Prerequisites: (Must have a minimum "C" (2.0) grade, and may be taken concurrently with CED courses)
 12 graduate or undergraduate credits in psychology
 1 graduate or undergraduate statistics course

NOTE: In order to meet Licensed Professional Counselor requirements 60 graduate credits are required. The following are recommended:

- CED 703 - Consulting Theory
- CED 708 - Substance Abuse and Addiction
- CED 730 - Advanced Counseling Skills and Techniques
- CED 735 - Introduction to Family Therapy
- CED 715 - Advanced Counseling Theories
- Thesis or Research Paper

Practicum/Internships: Practicum and internship are taken near the end of the student's program. Practicum requires 2 days per week on site for a minimum of 150 hours. Students will be supervised by a professional in their area of interest.

Internship experiences require a minimum of 600 hours under the supervision of a professional in the students' area of interest. This will be arranged in consultation with the Internship coordinator.

Website: www.cup.edu/graduate/counsel

Program Title: Earth Science

Degree: Master of Science Degree

Program Description: The Master of Science degree with a major in Earth Science is a program intended for those students who desire more training in specialized areas of earth science or wish to broaden their present science background. A graduate student entering the program should have an undergraduate major in one of the sciences or in mathematics.

Total Number of Credits: 30 - 36

Tracks: Option A, Option B

Differences Between Tracks: **Option A** requires at least 30 credits, including nine credits of required research courses and a minimum of 12 credits in Earth Science, including either two credits for the Research Project or four for the Master's Thesis.

Option B requires at least 36 credits, including nine credits of required research courses and a minimum of 12 credits in Earth Science, but not the Research Project or the Master's Thesis.

Admission Criteria: Applicants should have basic Earth Science courses, but deficiencies can be made up in consultation with the advisor. The advisor is assigned to the graduate student upon admission to the program, and the graduate student works closely with the advisor in designing a program of study.

The graduate student must apply for candidacy for the degree immediately after successfully completing six credits of graduate work. The graduate student must pass a comprehensive examination.

Curriculum: (An asterisk designates a required course.)

I. Earth Science Core:

*EAS 800	Methods of Research in Earth Science	3
*EAS 538	Computer Applications in Water Resources	3
	Any field course, research course or seminar	3

II. Earth Science: Field of Specialization: a minimum of 12 credits from among the following:

EAS 527	Tectonics	3
EAS 541	Advanced Environmental Geology	3
EAS 547	Reservoir Evaluation	3
EAS 550	Regional Climatology	3
EAS 551	Invertebrate Paleontology	3
EAS 563	Coastal Geomorphology	3
EAS 714	Synoptic Climatology	3
EAS 720	Hydrology	3
EAS 740	Sedimentology	3
EAS 741	Stratigraphy	3
EAS 742	Structural Geology	3
EAS 751	Optical Mineralogy	3
EAS 755	Geochemistry	3
EAS 760	Field Problems in Earth Science	3
EAS 762	Field Problems in Hydrology	3
EAS 764	Field Course in Earth Science	VA
EAS 765	Field Course in Geology	VA
EAS 749	Mesoscale Meteorology	3
EAS 771	Field Mapping	3
EAS 780	Readings in Earth Science	3

EAS 781	Research in Earth Science	3
EAS 792	Seminar in Geology	3
EAS 795	Seminar in Atmospheric Science	3
EAS 796	Seminar in Oceanography	3
GEO 520	Physiography of the United States	3
GEO 550	Advanced GIS	3
GEO 737	Geographic Information Systems	3
GEO 751	Geomorphology	3
GEO 752	Climatology	3
GEO 753	Physical Environment	3
GEO 767	Computer Cartography	3
GEO 768	Map & Aerial Photo Interpretation	3
GEO 770	Statistical Cartography	3
GEO 798	Seminar in Geography	3
RES 829	Research Project	2
RES 849	Master's Thesis	4

Program Title: Elementary Education

Degree: Master of Education

Accreditation: National Council for Accreditation of Teacher Education

Certification: The Master's Degree certification track is designed for students who have a baccalaureate degree and desire elementary teacher certification. This program is appropriate for teachers certified in other areas and for persons with an undergraduate degree outside of education.

Program Description: The Master's Degree in Elementary Education is available to students who wish to broaden their knowledge of elementary education. Students who are not certified in Pennsylvania must pass the PRAXIS I and PRAXIS II tests.

It is possible to earn the Master's Degree and elementary certification in the same program.

Candidates for Pennsylvania certification must have completed undergraduate or graduate studies that include 6 credits of college level mathematics and 3 credits each of biology, physical science, environmental sciences, U. S. History, English Composition, English or American literature, economics and instructional technology.

Graduate Elementary Ed courses are offered on campus and at the Southpointe site.

Total Number of Credits: 51+

This number may be less if the candidate has previously completed some education courses.

Admission Criteria: Beginning fall 2004, students must have a 3.0 undergraduate Q.P.A. and must have passed the Praxis I tests.

Curriculum:

Professional Education (21 credits)

PSY 711 Advanced Educational Psychology	3	OR
PSY 712 Advanced Psychology of Learning	3	
ESP 501 Introduction to Exceptionality	3	
EDE 700 Found & History of America Ed	3	
EDE 701 Develop & Organ of the Curriculum	3	
EDE 795 Student Teaching Internship	9*	

II. Professional Specialization (27 credits)

EDE 702 Instructional Strategies	3
EDE 703 Field Experience	3
EDE 708 Teaching Reading	3
EDE 715 Teaching Language Arts	3

EDE 716 Teaching Social Science	3
EDE 718 Teaching Mathematics	3
EDE 731 Expressive Arts	3

EDE 737 Literature & Literacy K-12	3
EDE 740 Teaching Science	3

III. Research (3-5/7 credits)

RES 800 Methods of Research	3
RES 829 Project OR	2
RES 849 Thesis	4

*Students seeking initial certification must pass the PRAXIS I tests prior to admission as of fall 2004.

*Students who are certified teachers in another specialty are **not** required to take EDE 795. The only PRAXIS test required is Elementary Ed Curriculum Instruction and Assessment.

*Students seeking certification only are not required to take RES courses.

Program Title: Exercise Science & Health Promotion- Performance Enhancement & Injury Prevention

Degree: Master of Science

***The Exercise Science & Health Promotion degree is offered on-line only through the Keystone University Network (www.keystone-university.net/) the Pennsylvania State System of Higher Education's on-line university.

Program Description: The MS in Exercise Science and Health Promotion: Performance Enhancement and Injury Prevention is designed for working professionals in the health and fitness industry, including certified athletic trainers, physical therapists, chiropractors, personal trainers, business owners, wellness counselors, military personnel, and other health / fitness careers. The University has worked closely with the National Academy of Sports Medicine (NASM) to develop outstanding course content. The NASM was founded in 1987 by physicians, physical therapists and fitness professionals. Since its inception, the organization has expanded throughout the United States, Asia and Europe and has always focused on the development, refinement and implementation of superior educational programs for fitness, performance and sports medicine professionals.

Program length is 12 consecutive months. Thirty students per class work, learn, and communicate online and function as a group of interactive peers. This virtual community – known as a cohort – creates a lively, dynamic educational experience that enriches the collaborative skills essential in the contemporary health care and fitness workplace.

Total number of credits: 30

Admission criteria: A bachelor's degree from a four year accredited college or university with a minimum QPA of 3.0 (candidates with a QPA in the 2.5-3.0 range will be considered if they submit two professional letters of recommendation); acceptance to the School of Graduate Studies and Research; all applicants must be a fitness, health, or wellness professional OR be certified, licensed or registered in one of the following: Athletic Training, Physical Therapy, Occupational Therapy, Physician Assistant, Nursing, Chiropractic, or other similar healthcare professional; submission of a resume or C.V. listing three references and a phone or e-mail interview with the program coordinator to determine success in a web-based learning environment.

Curriculum:

PRF 700 Orientation to Performance Enhancement & Injury Prevention	3
PRF 705 Industrial, Clinical & Corporate Wellness	3
PRF 710 Performance Enhancement in Physical Activity	3
PRF 715 Business & Entrepreneurship in the Fitness Industry	3
PRF 800 Research in Fitness & Injury Prevention	3
PRF 750 Performance Enhancement Program Design	3
PRF 755 Marketing & Billing in Performance Enhancement	3
PRF 760 Leadership & Professional Development	3
PRF 765 Nutrition for Peak Performance	3
PRF 770 Exercise Physiology: Assessment & Exercise Prescription	3

Website: www.cup.edu/education/hsss/msExerciseScience

Program Title: Geography and Regional Planning

Degree: Master of Arts

Program Description: The degree enables a graduate to pursue a professional career in geography planning as well as to branch out into cognate areas such as government, industry and planning.

Tracks: Option A & Option B

Differences between tracks: Option A requires at least 30 credits, including 6 credits of research courses and a minimum of 15 to 18 credits in Geography, including either two credits for the research project or four for the Masters Thesis. Option B requires 36 credits, including six credits of research courses and a minimum of 18 credits in geography, but not a Research Project or a Master's Thesis.

Total number of credits: 30-36

Curriculum: (An asterisk designates a required course.)

I. Research Courses: 6 credits as follows:

*GEO-EAS Seminar	3
*GEO 800 Methods of Geographic Research	3

II. Geography: Field of Specialization at least 12 credits from the following:

GEO 520 Physiography of the United States	3
GEO 550 Advanced Geographic Systems	3
GEO 711 Demographic Analysis	3
GEO 714 Urban Environment	3
GEO 729 Regional Economic Geography	3
GEO 733 Land Use Analysis	3
GEO 734 Site Selection	3
GEO 735 Marketing Geography	3
GEO 739 Regional Planning	3
GEO 737 Geographic Information Systems	3
GEO 738 Geography and Urban Policy	3
GEO 765 Field Methods	3
GEO 766 Field Problems	3
GEO 768 Map and Aerial Photo Interpretation	3
GEO 769 Computer Cartography	3
GEO 785 Readings in Geography	3
GEO 786 Research in Geography	3
GEO 789 Comprehensive Planning	3
GEO 791 Seminar in Regional Planning	3
GEO 798 Seminar in Geography	3

III. Research (Option A): 8 to 10 credits

+GEO/EAS Seminar	3
*GEO 800 Methods of Geographic Research	3

*One of the following:

RES 829 Research Project	2
or	
RES 849 Master's Thesis	4

IV. Research (Option B): 6 credits

+GEO/EAS Seminar 3

*GEO 800 Methods of Geographic Research 3

V. Cognate Courses: Graduate courses in related, or cognate, areas may be chosen, with the approval of the advisor.

VI. Comprehensive Examination: The Graduate student is required to pass a comprehensive examination.

+Any seminar offered by department.

Program Title: Legal Studies – Law and Public Policy Track

Degree: Master of Science

Program Description:

The ONLINE Master of Science in Legal Studies: Law and Public Policy Track blend the fields of humanities, business, political science and jurisprudence. This internet-based program creates a wide-ranging educational opportunity for both working professionals and serious students seeking graduate education in the analysis and application of law in a myriad of settings. Law and Public Policy allows seasoned practitioners and scholarly graduate students the opportunity to address, analyze and critique the law and its implications from a social, administrative, juridical, operational, philosophical and managerial perspective. Special emphasis will be given to the ethical considerations inherent in all legal decision-making, the constitutional parameters of law and its practice and practical assessments of how law influences the culture, the community and the individual.

Total Number of Credits: 36-37

Admission Criteria:

Admission into the program requires a bachelor's degree from a four-year accredited college or university, a minimum 3.0 undergraduate grade point average, based on a 4.0 scale, an application, fee and all official sealed transcripts from previous under- and post-graduate education. Students with a GPA below a 3.0 may be admitted to the program on a conditional basis upon passing the written departmental exam. In addition, a phone or e-mail interview with the Program Coordinator may be requested to determine potential for success in the web-based learning environment.

Curriculum:

Core Courses: Twelve (12) semester hours

LAW 600	Law and Public Policy	3
LAW 601	Law and Ethics	3
LAW 602	Law, Civil Liberties and the Constitution	3
LAW 603	Law and Legal Method	3

Law and Public Policy Electives: 24 or 25 hours

LAW 605	Law and Police Process	3
LAW606	Law, Punishment and Correction	3
LAW607	Law and Criminal Conduct	3
LAW608	Law and Civil Litigation	3
LAW 609	Law, Culture and Society	3
LAW 610	Law, Justice and the Family	3
LAW 700	Law and the International Community	3
LAW 701	Law and Administrative Agencies	3
LAW 702	Law, Science and Forensic Applications	3
LAW 703	Law and the Environment	3
LAW 704	Law, Business and the Workplace	3
RES 849	Thesis	4
LAW 730	Independent Study in Law and Public Policy	3

Website: <http://www.cup.edu/graduate/legal>

Program Title: Master of Arts Teaching – Secondary Education

Degree: Master of Arts Teaching

Accreditation: National Council for Accreditation of Teacher Education

Program Description: The M.A.T. Program is a two-track program. Track One provides initial certification in the following areas: Biology, Chemistry, Earth Science, Mathematics, and Physics. It is designed for individual with a background in science or math wishing to make a career change into secondary teaching. However, anyone can be admitted regardless of previous degree. Track Two features professional development programs for teachers.

Total Number of Credits: 36 Credits

Tracks: Track I, Track II

Differences Between Tracks: Track I certifies degree-holding individuals as secondary education teachers in the following areas: Biology, Chemistry, Earth Science, Mathematics, and Physics. This program can be completed in as little as 18 months for those people with a bachelor's degree in their intended certificate area. For people who hold a bachelor's degree in a different area, additional semesters will be required.

MAT Track I studies begin in the Spring Semester (Mid-January), but applications are reviewed monthly for acceptance. The typical MAT Track I student needs to complete about 3 undergraduate certification content courses. Requirements may be taken at any college or university. Content courses do not need to be completed prior to beginning the MAT program, but all courses must be completed prior to Student Teaching.

Track II is only for certified teachers wishing to earn a master's degree. Public school teachers can fulfill their required 180 hours of professional development with a number of options and programs designed especially for working professionals. Programs are designed to extend teachers' knowledge and understanding while modeling best practice, i.e., doing education rather than talking about it. Teachers may select what best suits their interests and needs and/or earn a master's degree. The programs are offered electronically, at convenient times, online, over television, as true graduate seminars and with the most modern technology in Pennsylvania.

Internships allow teachers to venture to sites that offer challenge and intellectual stimulation intended to renew and inspire and to keep professionals current and in contact with people at the cutting edge of their disciplines.

Admission Criteria for Track I

A minimum QPA of 3.0.

Completed Cal U Application for Admission to the School of Graduate Studies and Research.

You can download this form at: <http://www.cup.edu/graduate/application.htm>.

Complete set of official transcripts.

Three letters of recommendation.

Current Resume.

Copy of approved Pennsylvania Act 34 (Criminal Record) clearances (photocopy of returned form).

Copy of approved Pennsylvania Act 151 (Child Abuse) clearances (photocopy of returned form).

You can download both clearance forms and instructions at: <http://www.paeducator.net/AppInstr2.htm>.

Copy of Praxis I Exams Student Score Booklet. Praxis I test is required by the Pennsylvania Department of Education. You must take the three sections listed below.

- i. PPST Reading Test #10710
- ii. PPST Writing Test #20720
- iii. PPST Math Test #10730

Consult the Praxis Web Site for current information at <http://www.ets.org/praxis>

Curriculum: Track I

MSE 705	Orientation to Secondary Education	3
MSE 710	Secondary Instructional Strategies I	3
MSE 715	Technology in Education	3
MSE 720	Classroom Management	3
MSE 725	Secondary Field Experience	6
MSE 730	Teaching of Math and Science	3
MSE 761	Student Teaching & School Law	9
ESP 501	Introduction to Exceptionality	3

Select 1 of the courses listed below

PSY 711	Advanced Educational Psychology	3
PSY 712	Advanced Psychology of Learning	3
PSY 713	Psychology of Growth & Development	3

Track I Certification Content Requirements Vary

This is done on an individual basis. Please send in a complete set of transcripts for one free content requirement evaluation. Specify which certification area you are interested in. Send transcripts to:

Dr. Keith Hepner
Dept. of Secondary Education & Admin. Programs
250 University Avenue
California, PA 15419

Transcripts and evaluation are returned in about 10 business days.

Praxis II testing must be passed one semester prior to student teaching.

Admission Criteria for Track II

Completed Cal U Application for Admission to the School of Graduate Studies and Research. You can download this form at: <http://www.cup.edu/graduate/application.htm>

Complete set of official transcripts.

Three letters of recommendation.

Current Resume.

For applicants with a GPA between 2.75 and 2.99 must also take the Graduate Record Exam (GRE). You can read about and register for the General Test at: <http://www.gre.org/generalreg.html>

Copy of a valid Teaching Certificate.

Curriculum: Track II

MSE 605	Current Issues in Sec. Ed.	6
MSE 606	Internship	6
MSE 604	Research in the Sec. Schools	3
MSE 614	Thesis in Sec. Education	3
Focus Credits		18

Focus Area Classes - 18 Credits

Each student in the MAT Track II program, along with his or her advisor, designs a personal "focus" area of study. Recent students have designed their focuses in these areas:

- Psychology (non-certified)
- Child Development
- Curriculum and Instruction
- Counseling (non-certified)
- Principal Program (non-certified)
- Concentrated studies in:
 - History
 - Earth Science

Of course, you can choose to create your own focus.

Practicum/Internships: Such experiences can be scheduled during summers. Internship is a minimum of 90 contact hours. (6crs.)

Web site: www.cup.edu/graduate/mat

Program Title: Mentally/Physically Handicapped Education

Degree: Master of Education

Accreditation: National Council for Accreditation of Teacher Education (NCATE)

Certification: A certification only program is available

Program Description: The master's degree in the area of Mentally/Physically Handicapped consists of three Tracks.

Total Number of Credits: Track A: 36, Track B: 36, Track C: 49

Tracks: Track A –Track A is a program for those who already hold an instructional/teaching certificate in any area but not Pennsylvania certification in special education.

Track B –Track B is designed for those students who already hold certification in Mentally and/or Physically Handicapped or any single-category area of special education.

Track C –Track C is designed for students who have no teaching certificate but who are now working with, or have worked with handicapped children or adults in either a community or an institutional setting. Track C leads to both Pennsylvania certification and a master's degree.

Admission Criteria: All applicants must have an interview with the program coordinator. A 3.0 QPA is generally required for admission but students who do not have a 3.0 can be admitted on a “conditional basis.” Those who do not have a 3.0 can support their application for admission by scoring 35 or better on the Miller Analogies Test

Curriculum: Track A

(An asterisk designates a requirement.)

A: Major Area: 33 credits

*ESP 501 Introduction to Exceptionality	3
*ESP 701 Introduction to Behavior Analysis	3
*ESP 739 Field Experience in Special Education	3
*ESP 502 Education of the Severely/Profoundly Handicapped	3
*ESP 503 Diagnostic Testing and Prescriptive Teaching	3
*ESP 504 Methods and Curriculum I For Those w/Learning Problems	3
*ESP 505 Methods and Curriculum II For Those w/Learning Problems	3
*ESP 506 Habilitation Training-Transition	3
*ESP 712 Seminar on Trends and Issues or Approved Elective	3
*ESP 720 Internship	6
(May be taken as two three-credit sessions)	6
*Research: may be satisfied with ESP 800, Seminar in Advanced Behavior Analysis & Research Design or RES 800, Methods of Research.	3

Track B

(An asterisk designates a requirement.)

A: Major Area: 24 credits

*ESP 502 Education of the Severely/Profoundly Handicapped	3
*ESP 503 Diagnostic Testing and Prescriptive Teaching	3
*ESP 504 Methods and Curriculum I For Those with Learning Problems	3
*ESP 505 Methods and Curriculum II For Those with Learning Problems	3
*ESP 506 Habilitation Training-Transition	3
*ESP 720 Internship (May be taken as two three-credit sessions)	6

Nine credits from the following seminars:

ESP 712 Seminar on Trends and Issues	3
ESP 731 Seminar on Assessment	3
ESP 732 Seminar on Special Education Administration and Supervision	3
ESP 734 Seminar on Counseling Parents of Exceptional Children	3
ESP 735 Seminar on Education of the Gifted	3
ESP 737 Seminar on Legislation and Litigation	3

ESP 738 Seminar on Teacher Behavior and Group Dynamics	3
*ESP 739 Field Experience Seminar in Special Education	3

B: Research:

*ESP 800 Seminar in Advanced Behavior Analysis and Research Design or RES 800 Methods of Research	3
--	---

Track C

(An asterisk designates a requirement)

A: Major Area: 36 credits

*ESP 501 Introduction to Exceptionality	3
*ESP 701 Introduction to Behavior Analysis	3
*ESP 739 Field Experience in Special Education	3
*ESP 502 Education of the Severely/Profoundly Handicapped	3
*ESP 503 Diagnostic Testing and Prescriptive Teaching	3
*ESP 504 Methods & Curriculum I For Those w/Learning Problems	3
*ESP 505 Methods & Curriculum II For Those w/Learning Problems	3
*ESP 506 Habilitation Training-Transition	3
*ESP 712 Seminar on Trends and Issues or Approved Elective	3
*ESP 720 Internship/Student Teaching	9

B: Professional Education: 10 credits

EDP 605 Philosophy of Education	3
EDP 606 Gen. History of Education	3
EDP 624 Character Education	3
EDP 663 Computer Assisted Instruction	3
GMA 786 Computer Science for Teachers	3
PSY 702 Psychopathology	3
PSY 711 Adv. Ed. Psychology	3
PSY 712 Adv. Psych. of Learning	3
PSY 713 Psych. - Growth & Develop	3
PSY 720 Neuropsychology	3
PS Y 752 Fund. of School Psychology	3

C: Research:

*ESP 800 Seminar in Advanced Behavior Analysis and Research Design or RES 800 Methods of Research	3
---	---

Note: TRACK C STUDENTS MUST TAKE 9 CREDITS OF ESP- 720 WHICH IS STUDENT TEACHING

Program Title: Multimedia Technology

Degree: Graduate Certificate

Certificate: The Multimedia Technology (MMT) graduate certificate program is fifteen credits and is designed to educate students in integrating multimedia technology into their field of study. The program is appropriate for professionals who have backgrounds in business, communication, graphics, advertising, marketing, education, design and computer science as well as others who wish to learn how to integrate multimedia into their area of expertise.

Program Description: Multimedia is the creation and editing of digital media that will be used for business or entertainment purposes. This media includes digital images, graphics, audio, video, animations, and documents and is used in the creation of web pages, interactive pieces, presentations, electronic storybooks, kiosks, tutorials, and simulations.

As technology becomes more sophisticated and complex, employers across industries and professions are demanding a higher level of computer-related expertise and technical skills from their employees. The expanding integration of Internet and multimedia technologies into businesses and organizations that provide public relations, marketing, sales, education, workforce training and development has increased the demand for a variety of skilled professionals who can develop and support multimedia and web applications such as those identified with Internet and Intranet processes and sites.

Three multimedia laboratories are available for student use – one each at the California campus, Southpointe Center, and RET (Regional Enterprise Towers) in Pittsburgh. Each lab is a state-of-the-art facility equipped with Power Macintosh and Pentium PC computers with multimedia capabilities, scanners, printers, DVD/CD mastering systems and software for interactive and non-interactive presentations, animation, web page creation, image editing, multimedia authoring and illustration. Some of this software includes Adobe's Photoshop®, Acrobat®, and Premiere®, Macromedia's Director®, Final Cut Pro®, Dreamweaver®, Fireworks®, and Freehand®; Microsoft Office®; Sonic Foundry's Sound Forge®, Peak LE®, Newtek Lightwave®, and Quicktime®. The computers are part of the University network allowing access to many resources located on file and web-based servers. The MMT courses are delivered in a traditional class setting and using distance technologies, such as interactive video and the web. The program is available at the California campus, Southpointe Center and the Workforce Development Center in the Regional Enterprise Tower (RET) in downtown Pittsburgh.

Total Number of Credits: 15

Admission Criteria: To be admitted to the Graduate Certificate Program in Multimedia Technology, an applicant must:

1. verify successful completion of a baccalaureate degree;
2. verify an acceptable undergraduate quality point average of 3.0;
3. have computer literacy as evidenced by:
 - appropriate undergraduate and/or graduate course(s), or
 - demonstrated work experience or adequate competency review.

NOTE: Upon successful completion of the program, a California University of PA certificate of completion will be presented. The Multimedia courses can also be used as electives in other graduate programs.

- Acceptance to the School of Graduate Studies and Research.
- A 3.0 minimum undergraduate grade point average based on a 4.0 scale. Official undergraduate transcripts must be submitted to the Graduate School.

MMT Admission Requirements for applicants with a QPA of 2.99 or less

- **To be "considered" for admission into the Multimedia Program all of the following must be completed for review:**
 - Obtain a minimum score of 35 on the Miller Analogies Test (MAT).

- Submit a resume of education and work experience.
- Submit two current letters of recommendation from individuals who know the applicant and can comment on the applicant's intellectual and leadership abilities.
- Submit a typed essay of 300 to 400 words describing your academic interests, objectives and plans for graduate study in the MMT Program.
- Submit a portfolio for review.
- Interview with program coordinator.
- The program coordinator and MMT faculty will determine the final recommendation for admission to the MMT Program

Curriculum: The program consists of five courses (15 credits) and represents a comprehensive and integrative approach. Courses are offered every semester including the summer so the certificate may be completed in one year. The multimedia courses are comprised of lectures and demonstrations with assignments completed outside of class in one of the University Multimedia Laboratories or other suitably equipped facilities. The MMT courses are delivered in a traditional classroom setting and using distance technologies such as interactive video and the web. The program is available at the California and Southpointe campuses as well as the Regional Enterprise Towers (RET) in Pittsburgh.

The program of study consists of the following five courses: (3 credits each)

MMT 701	Multimedia Technologies
MMT 702	Multimedia Systems
MMT 703	Digital Editing
MMT 704	Web Publishing
MMT 705	Interactive Design

Website: <http://www.cup.edu/graduate/mmt/>

Program Title: Multimedia Technology

Degree: Masters of Science

Program Description: This program is appropriate for professionals who have backgrounds in business, communication, graphics, advertising, marketing, education, design and computer science as well as others who wish to learn how to integrate multimedia into their area of expertise, but who also desire additional, related areas of professional expertise.

Total Number of Credits: 36

Admission Requirements

- Acceptance to the School of Graduate Studies and Research.
- A 3.0 QPA minimum undergraduate grade point average based on a 4.0 scale. Official transcripts must be submitted to the Graduate School

MMT Admission Requirements for applicants with a QPA of 2.99 or less

- **To be “considered” for admission into the Multimedia Program all of the following must be completed for review:**
 - Obtain a minimum score of 35 on the Miller Analogies Test (MAT).
 - Submit a resume of education and work experience.
 - Submit two current letters of recommendation from individuals who know the applicant and can comment on the applicant’s intellectual and leadership abilities.
 - Submit a typed essay of 300 to 400 words describing your academic interests, objectives and plans for graduate study in the MMT Program.
 - Submit a portfolio for review.
 - Interview with program coordinator.
- The program coordinator and MMT faculty will determine the final recommendation for admission to the MMT Program

The graduate student must apply for candidacy for the degree after successfully completing six credits, but no more than twelve credits of graduate work. QPAs below 3.0 will be referred to Graduate School policies.

Students will complete a written comprehensive examination to test their knowledge base, ability to synthesize content, capacity for problem solving, and ability to effectively communicate in writing. A minimum score of 80 percent is needed to pass the comprehensive exam.

As technology becomes more sophisticated and complex, employers across industries and professions are demanding a higher level of computer-related expertise and technical skills from their employees. The expanding integration of Internet and multimedia technologies into businesses and organizations that provide public relations, marketing, sales, education, workforce training and development has increased the demand for a variety of skilled professionals who can develop and support multimedia and web applications such as those identified with Internet and Intranet processes and sites.

Three multimedia laboratories are available for student use – one each at the California campus, Southpointe Center, and RET (Regional Enterprise Towers) in Pittsburgh. Each lab is a state-of-the-art facility equipped with Power Macintosh and Pentium PC computers with multimedia capabilities, scanners, printers, DVD/CD mastering systems and software for interactive and non-interactive presentations, animation, web page creation, image editing, multimedia authoring and illustration. Some of this software includes Adobe’s Photoshop[®], Acrobat[®], and Premiere[®]; Macromedia’s Director[®], Final Cut Pro[®], Dreamweaver[®], Fireworks[®], and Freehand[®]; Microsoft Office[®]; Sonic Foundry’s Sound Forge[®], Peak LE[®], Newtek Lightwave[®], and Quicktime[®]. The computers are part of the University network allowing access to many resources located on file and web-based servers. The MMT courses are delivered in a traditional class setting and using distance technologies, such as interactive video and the web. The program is available at the California campus, Southpointe Center and the Workforce Development Center in the Regional Enterprise Tower (RET) in downtown Pittsburgh.

Curriculum: The Masters of Science in Multimedia Technology consists of 36 credits. Approximately half of the program is devoted to developing multimedia skills and assisting students in integrating multimedia into the student’s profession. The other half of the program focuses on developing knowledge and skills in related areas such as research, marketing, communications, and creativity through required courses and from restricted electives.

All five of the MMT certificate courses are included in the Masters. Students who are in or have completed the Graduate Certificate Program in Multimedia Technology can use these courses to fulfill some of the requirements in the Masters Program.

I. Multimedia Technology (18 credits)

MMT701	Multimedia Technology	3
MMT702	Multimedia Systems	3
MMT703	Digital Editing	3
MMT704	Web Publishing	3
MMT705	Interactive Design	3
MMT720	Emerging Tech & Apps in Multimedia	3

II. Integrative Concepts (18 credits)

Required Courses (9 credits)

CMG714	Mass Media and Society	3
EDP656	Computer Oriented Research	3
MMT760	Multimedia Production	3

Restrictive Electives (choose 9 credits minimum)

CMG701	Communication Perspectives and Paradigms	3
CMG716	Professional Video Communication	3
EDP600	Statistics	3
EDP663	Computer Assisted Instruction	3

EDP685	Seminar in Audio Visual Techniques	3
--------	------------------------------------	---

GEE586	Study in Human Creativity	3
MGT751	International Business Management	3
MKT711	Marketing Management	3
MKT751	Advertising Management	3
RES800	Methods of Research	3
RES819	Research Paper	1
RES849	Master's Thesis	4

Other courses by approval of MMT committee

III. Total Credit Hour Requirements		36
-------------------------------------	--	----

Website: www.cup.edu/graduate/mmt

Program Title: Administrative Program for Principals

Degree: Master of Education Degree in School Administration and/or K-12 Principal Certification

Accreditation: National Council for Accreditation of Teacher Education

Certification: Principal Certification

Program Description: The Administration Program for Principals at California University provides graduate students with a unique and challenging opportunity to obtain a Master's degree in education and/or certification as a K-12 school principal. The program is performance-based and utilizes a variety of instructional modes.

Students have the option of completing the Master of Education degree that includes all requirements for certification as a K-12 Principal. If a student already holds a master's degree, he or she may complete certification requirements without completing the entire master's program. This program is designed not only for degree and certification candidates but is available for both teachers and administrators who, as seasoned educators, wish to continue to enhance their teaching and leadership skills. All coursework can be used to complete continuing education requirements under Act 48.

Total Number of Credits: 36

*** The Administrative Principals Program is offered on campus and also on-line through the Keystone University network (www.keystone-university.net/), the Pennsylvania State System of Higher Education's on-line university.

Admission Criteria: This program is open to students with a bachelor's, master's, or doctorate degree. Applicants for admission must submit:

- A completed Application.
- A completed Applicant Data Sheet.
- An official transcript from every institution attended.
- A copy of all current professional certificates held.
- A letter of endorsement from applicant's principal or immediate supervisor.
- A current resume or curriculum vitae.
- A statement of career goals and degree objectives.

Additional Program Requirements:

- Evidence of an earned QPA of 3.0 on a 4.0 scale.* The program is open to students with a bachelor's, master's or doctorate degree. Previous teaching experience is not required.
- After completing an application and submitting all of the above documents, applicants must schedule a pre-admission interview with a +faculty member.

The program coordinator and faculty will determine final recommendation for admission to the Principal Program.

To be considered for admissions, applicants with a QPA of 2.99 or less must also:

- Obtain a minimum score of 35 on the Miller Analogies Test (MAT).
- Submit evidence of successful teaching or professional educational experience within the past five years.
- Submit evidence of leadership activities and professional awards.
- Submit a written essay of 300 to 400 words describing academic interests and objectives, plans for graduate study and career goals.
- Two letters of recommendation from individuals who know the applicant well and can comment on the applicant's intellectual and leadership abilities.

Curriculum: All students (both MED and certification candidates) in the Administration for Principals Program must complete the four core courses (12 credits) listed below:

ADP 626 Instructional Strategies	3cr
ADP 631 School Law and Ethics	3cr
ADP 641 School Community Relations Seminar	3cr
ADP 662 Supervision	3cr

All students (both MED and certification candidates) must complete the four specialization courses (12 credits) listed below:

ADP 621 Curriculum Leadership	3cr
ADP 647 Orientation and Assessment*	3cr
ADP 661 Educational Leadership	3cr
ADP 670 Internship**	3cr

Students seeking a Master of Education Degree with K-12 Principal Certification must complete a minimum of 12 credits selected from the menu listed below:

ADP 612 Supervised Field Project/Child Growth Theory	3cr
ADP 622 Supervised Field Project/ Curriculum	3cr
ADP 622 Supervised Field Project/Curriculum	3cr
ADP 664 Supervised Field Project/Admin Leadership	3cr
ADP 673 Supervised Field Project/ Research & Evaluation	3cr
ADP 671 Elementary Research Project	2cr
ADP 672 Secondary Research Project	2cr
RES 800 Methods of Research Class	3cr
EDP 603 Professional Writing for Educators	3cr

* The Orientation and Assessment Seminar is required of all students at the beginning of their program in order to explain program philosophy and ongoing assessment activities. It provides students with the opportunity to become familiar with the program mission, philosophy, goals, and competencies.

** A full-time internship of six (6) credits may be taken instead during either the fall and/or spring semester.

Practicum/Internships: The Supervised Field Experience is a collaborative endeavor with local school districts and is required of all students.

The experience may be performed during the school year or during the summer, and may be accomplished at one or more sites, but must be outside the student's school district of employment and/or area of residence. The graduate student is assigned to work with a principal practitioner. Each placement is made in cooperation with the faculty of this program, the participating school district, and the student.

Website: <http://www.cup.edu/graduate/app/>

Program Title: Reading Specialist

Degree: Master of Education

Certification: Reading Specialist
Reading Supervisor

Accreditation: National Council for Accreditation of Teacher Education

Program Description: There are four options within the Reading Specialist Program: A Master's degree and Certification with courses only (36 credits); a Master's degree and Certification with Thesis (40 credits); a Master's degree and Certification with Project (38 credits); Reading Specialist Certification only (30 credits). The Reading Supervisor Certificate is open to those who have held certification as a reading Specialist for five years. For further information about the Reading Supervisor program, please contact the department.

Total number of credits: Varies by program.

Admission Criteria: A student must have an undergraduate GPA of 3.0 or a score of 35 on the Miller Analogies Test (MAT). In addition, a copy of your PA teaching certificate must be in your RSP Program file (Elementary Office) before completion of your first semester – regardless of the number of credits that you are taking. Students who fail to meet this requirement will not be approved for RSP candidacy. Students must also gain admittance to the School of Graduate Studies and Research by submitting an application, fee, and official transcripts.

Curriculum:

Reading - Core Requirements

(24 credits required)

These (4) courses must be taken in sequence as listed

RSP 700 Fund. of Literacy – Theory and Instruction	3
*RSP 702 Diag. and Treat. of Reading Problems	3
*RSP 703 Practicum: Diagnostic Case Studies	3
*RSP 704 Practicum: Remedial Case Studies	3
RSP 705 Psychology of Reading	3
RSP 734 Content Area Read in Middle/Sec Schools	3
RSP 706 Adult Literacy	3
EDE 737 Literature and Literacy K-12	3

* **Prerequisites required** ... see catalog or advisor
(RSP 702, RSP 703, RSP 704)

Educational Research - Requirements

(3 credits required)

RES 800 Methods of Research	3
-----------------------------	---

Educational Research Electives (Choose 3 credits)

EDP 600 Statistical Methods	3
EDE 706 Evaluation & Measurement	3
EDP 656 Computer Oriented Research	3

Research with advisor's approval

RES 829 Research Project	2
-or-	
RES 849 Master's Thesis	4

Related Courses - Requirements (6 total credits required, unless certification only)

EDE 701 Development & Organization of Curriculum	3
--	---

Related Courses Electives (Choose 3 credits)

EDE 700 Fds & History of American Education	3
EDE 715 Teaching of Language Arts	3
PSY 711 Advanced Educational Psychology	3
PSY 712 Advanced Psychology of Learning	3
PSY 713 Psychology of Growth and Development	3
PSY 720 Neuropsychology of Learning Disorders	3
EDP 663 Computer Assisted Instruction	3
ESP 501 Introduction To Exceptionality	3

Website: www.cup.edu/graduate/readingspecialist

Program Title: School Psychology

Degree: Master of Science

Certification: Post Master's certificate in School Psychology

Accreditation: National Council for Accreditation of Teacher Education

Program Description: The School Psychology Program offers graduate study leading to a Master of Science degree and/or a post-master's certificate in School Psychology. The Program is built on a respect for human diversity and does not discriminate in its practices or policies based on race, color, national origin, gender, sexual orientation, disability, age or religion, or ethnic background.

Students complete a rigorous course of study to gain the competences needed to provide a wide range of psychological services. Professional skills emphasized include psychological assessment, consultation, counseling, behavioral interventions, and research/evaluation. Practical experiences (approximately 300-350 hours) and an intensive internship experience (minimum 1200 hours) are integral components of the Program. **The University has a School Psychology Clinic on site.**

Total Number of Credits: 31 required for Master's degree with thesis option; 36 credits required for the Master's degree with non-thesis option; **a minimum of 31 credits beyond the Master's degree is required for Certification.**

Admission Criteria: To be considered for admission to the Master of Science Degree program in School Psychology, candidates must submit the following: **(By April 1)**

1. A completed application form to the Graduate School.
2. Official undergraduate and/or graduate transcripts that substantiate a cumulative grade point average of 3.0 and a minimum of 15 credits in psychology with a grade point average of 3.0.
3. Two professional (e.g., professors, employers) letters of recommendation.
4. A 3-5 page autobiographical essay that focuses on the applicant's motivation to become a school psychologist.
5. Miller Analogies Test score.

Admission to the Certification Program

Individuals who have earned a Master's degree in School Psychology or a related area may apply for direct admission to the Certification phase of the School Psychology Program. Applicants to the Certification phase are not required to submit a Miller Analogies Test score; however, all other admission requirements listed for the master's degree program must be met.

Curriculum:

School Psychology Program Master of Science Curriculum

Area I – Psychological and Educational Foundations	
PSY 702 Psychopathology of Childhood	3
PSY 713 Psychology of Growth and Development	3
PSY 712 Advanced Psychology of Learning	3
PSY 741 Theories of Counseling and Psychotherapy	3
PSY 720 Neuropsychology	3
Area II – Psychological Methods and Techniques	
PSY 721 Advanced Tests and Measurements	3
PSY 795 Seminar in Behavior Modification	3
Area III – School Programs and Organization	
PSY 752 Fundamentals of School Psychology	3
Approved Curriculum Course	3
Area IV – Research	
PSY 767 Research Methods in Psychology	3
PSY 766 Psychological Statistics	3

PSY 796	Seminar in Analysis of Research in School Psychology	
	OR	
PSY 849	Thesis Option (See Student Manual)	4

Specialist Certificate Courses (31-37 credits)

Area II –	Psychological Methods and Techniques	
PSY 722	Individual Psychological Evaluation I	3
PSY 723	Individual Psychological Evaluation II	3
PSY 724	Practicum in School Psychology	3
PSY 734	Assessment of Personality and Behavior I	3
PSY 742	Techniques of Counseling and Psychotherapy with Practicum	3
PSY 756	Consultation and Group Processes	3

Area V – Professional School Psychology

PSY 773	Internship in School Psychology	10
PSY 798	Seminar in Professional School Psychology	3

For initial certification students must have:

6 Credits College Math*

3 Credits English Comp*

3 Credits English/American Literature*

*These credits may be graduate or undergraduate credits

Practicum/Internships: The School Psychology Clinic is a training facility for graduate students in the School Psychology Program. Through a variety of practicum and internship experiences in the clinic, students develop their professional skills. The clinic offers a variety of psycho educational services to the university community and the public.

Website: www.cup.edu/graduate/schoolpsy

Program Title: Social Science – Criminal Justice

Degree: Master of Arts

Program Description: The Master of Social Science – Criminal Justice is offered in an accelerated cohort at California University of Pa’s Pittsburgh site at the Regional Enterprise Tower in downtown Pittsburgh. The program is housed in the Department of Professional Studies within the College of Science and Technology. Both academics and practitioners whose pedagogy blends theory with practice instruct in this program. The curricular mission is to prepare learned and erudite justice practitioners who will assume leadership positions in the justice sector and make substantial contributions to the betterment of the legal and justice systems and the community served.

Total Number of Credits: 36-37

Admission Criteria: Admission to the program requires an undergraduate grade-average of at least 3.0 on a 4-point scale, an application, fee, and all official sealed transcripts from previous under-graduate and post-graduate education. Student with a QPA below a 3.0 may be considered for admission and should contact department for additional requirements including essay and interview.

Curriculum:

Core Courses: Fifteen (15) semester hours

LAW 607 Law and Criminal Conduct	3
or	
SOS 717 Analysis of Power Structure	3
CRJ 795 Legal and Justice Research Methods	3
or	
**SOS 800 Social Science Research Techniques	3
or	
PSY 766 Psychological Statistics	3
*EDP 600 Statistical Methods	3
*GEE 537 Computer Science	3
or	
GEO 737 Geographic Information Systems	3
*SOS 716 Social, Economic, and Political Order	3
or	
POS 700 Public Policy	3

OPTION A: Thesis option

Criminal Justice Core: (12) Semester Hours

CRJ 748 Criminal Justice Organization and Management	3
CRJ 747 Financial Investigations	3
CRJ 749 Seminar in Justice Studies	3
CRJ 746 Law and Ethics	3

Criminal Justice Electives: Six (6) semester hours

GEO 711 Demographic Analysis	3
GEO 714 Urban Environment	3
GEO 739 Regional Planning	3
GEO 789 Comprehensive Planning	3
GEO 778 Map and Aerial Photo Interpretation	3
ANT 708 Historic Sites Archeology	3
POS 704 American Political Ideas	3
POS 745 The Legislative Process	3
SWK 815 Criminal/ Juvenile Justice Practice	3
SWK 816 Practice with Children and Youth	3

SWK 821	Drug and Alcohol Abuse	3
BUS 741	Business Law	3
BUS 743	Business, Society, And Government	3
FIN 711	Financial Management	3
LAW 605	Law and Police Process	3
LAW 606	Law, Punishment and Corrections	3
LAW 730	Independent Study in	
LAW 600	Law and Public Policy	3

Thesis Option: Four (4) semester hours

RES 849	Master's Thesis	4
---------	-----------------	---

OPTION B: Non-Thesis Option

Criminal Justice Core: Eighteen (18) semester hours

MGT742	Human Resource Management	3
CRJ 746	Law and Ethics	3
CRJ 747	Financial Investigations	3
CRJ 748	Criminal Justice Organization and Management	3
CRJ 749	Seminar in Justice Studies	3
POS 747	Civil Liberties and Judicial Process	3

Criminal Justice Electives: Six (6) semester hours

GEO 711	Demographic Analysis	3
GEO 714	Urban Environment	3
GEO 739	Regional Planning	3
GEO 789	Comprehensive Planning	3
GEO 778	Map and Aerial Photo Interpretation	3
ANT 708	Historic Sites Archeology	3
POS 704	American Political Ideas	3
POS 745	The Legislative Process	3
SWK 815	Criminal/ Juvenile Justice Practice	3
SWK 816	Practice with Children and Youth	3
SWK 821	Drug and Alcohol Abuse	3
BUS 741	Business Law	3
BUS 743	Business, Society, And Government	3
FIN 711	Financial Management	3
LAW 605	Law and Police Process	3
LAW 606	Law, Punishment and Corrections	3
LAW 730	Independent Study in Law and Public Policy	3

Website: <http://www.cup.edu/graduate/crj>

Program Title: Social Work

Degree: Master of Social Work

Council on Social Work Education (CSWE) Accreditation

Program Description: The MSW Program is keenly committed to developing students' personal and professional growth, for appreciating diversity, using an advanced generalist perspective to make a difference in rural environments, and preparing graduates to be highly competent, effective, and well regarded social work practitioners. Our MSW Program prepares students to respond professionally and creatively to the increasingly complex matrix of rural human needs and strengths in a changing society. It also provides students with a theoretical and professional practice focused curriculum in social work that promotes an understanding and appreciation of cultural diversity and its importance to competent Advanced Generalist Rural practice. Built on a professional advanced generalist curriculum model, the program prepares students to work in direct and indirect practice and leadership capacities to prevent and meet needs that affect people in South Western Pennsylvania, including urban environments, and is designed for students with Bachelors degrees from psychology, social sciences, sociology, liberal arts and other disciplines.

The 60 credit regular MSW Program begins in the Fall term. The full-time two year program requires five semesters (summer included). The part-time regular tract takes three years; students must register for at least six credits in the fall, spring and summer terms; are required to follow the plan for appropriate course sequencing; and must complete degree requirements within six years. The advanced standing program has 44 credits, and designed for BSW graduates from CSWE accredited programs. It takes one and a half years of full-time study (Spring & Fall & Summer). Part-time advanced standing students follow requirements for part-time students and normally finish in seven terms.

Regular Total Number of Credits: 60

Advanced Total Number of Credits: 44

Admission Criteria: Applicants must meet the general requirements for the Graduate School:

1. Complete the both admission applications for the School of Graduate Studies and for the MSW Program.
2. Submit a non-refundable application fee of \$25.
3. Submit three letters of recommendation.
4. Complete personal portfolio materials following the application guide.
5. Have official transcripts sent to the School of Graduate Studies and Research by all colleges and universities attended.
6. Have results sent from general aptitude sections of the Graduate Record Exam, showing verbal, quantitative and analytical scores.*

Regular Program Admission:

1. Have completed 30 credits of upper level liberal arts courses.
2. Have a 3.0 average in the last two years of college work. (Applicants with a strong record of work and/or service who were below a 3.0 may be considered for probationary acceptance and must maintain a "B" average for 12 credits to be fully admitted.)

Advanced Standing Program Admission:

Graduates of CSWE accredited BSW Programs must meet the additional requirements beyond the Regular Program:

1. A social work degree earned within six years of entrance into the MSW Program.
2. An overall GPA of 3.0 and 3.25 in the social work major.
3. Completion of a 400 hour field practicum under MSW supervision.

* The GRE computer exam can be taken within three days of your credit card registration by telephone. The GRE registration number is 1-800-GRE-CALL. The two part GRE code number is: California University of PA - R2647; MSW Program - 005001.

Transfer Credit:

Prior MSW course work and related graduate course work may be submitted for faculty review. Transfer credits must have been completed within six years of entrance into the program, must have a grade of B or better, and must be the equivalent of any courses they replace. No credit is given for life experiences, previous work experiences or non course credit work.

Curriculum:

Curriculum Totals 60 credits for the Regular Program:

REQUIRED COURSES

*SWK 701 Generalist Practice I	3
*SWK 702 Generalist Practice II	3
*SWK 705 HBSE	3
*SWK 707 Human Diversity	3
*SWK 709 Social Welfare Policy & Services	3
*SWK 710 Policy Process & Program Design	3
*SWK 713 Social Work Research Methods	3
*SWK 714 Quantitative Research Methods	3
SWK 730 First Year Practicum	4
SWK 801 Advanced Generalist Practice	3
SWK 803 Assessment of Differential Client Functioning	3
SWK 806 Rural Family & Community Policy	3
SWK 808 Advanced Practice Research	3
SWK 829 Advanced Field Practicum I	5
SWK 830 Advanced Field Practicum II	5
SWK 832 Rural Advanced Generalist Integrative Seminar	1
SWK Advanced Generalist Practice Elective	6
SWK General Elective	3

Curriculum Totals 44 credits for the Advanced Standing Program

REQUIRED COURSES

SWK 710 Policy Implementation & Programs Design	3
SWK 714 Quantitative Research Methods	3
SWK 801 Advanced Generalist Practice	3
SWK 803 Assessment of Differential	3
SWK 806 Rural Family & Community Policy	3
SWK 808 Advanced Practice Research	3
SWK 829 Advanced Field Practicum I	5
SWK 830 Advanced Field Practicum II	5
SWK 832 Rural Advanced Generalist Integrative Seminar	1
SWK Advanced Generalist Practice Electives	12

ADVANCED GENERALIST PRACTICE ELECTIVES Choose at least two (2)

SWK 811 Practice with Aging	3
SWK 812 Practice in Supervision & Admin.	3
SWK 813 Practice in Health Care and Health Planning	3
SWK 814 Practice in MH/MR	3
SWK 815 Juvenile & Adult Justice System Practice	3
SWK 816 Practice with Children & Youth	3

ELECTIVES

SWK 821 Drug and Alcohol Abuse	3
SWK 840 Special Topics	Varied

*May be waived through examination or Advanced Standing.

Practicum/Internships: The program makes extensive use of a wide variety of practicum sites.

Website: www.cup.edu/graduate/msw/

Program Title: The Superintendent Letter of Eligibility Program

Accreditation: National Council for the Accreditation of Teacher Education

Certification: Letter of Eligibility

Program Description: The Superintendent Letter of Eligibility (SLE) program provides an opportunity for a graduate student to obtain certification in the Commonwealth of Pennsylvania as a superintendent, assistant superintendent, supervisor of curriculum and instruction, supervisor of pupil personnel services, and elementary, middle, or secondary principal. This program combines a number of unique features not generally found in most superintendents' certification programs. Modes of instruction utilized in the program include (1) core courses, (2) university seminars, and (3) business/industry/education partnerships. Instructors are drawn from the ranks of practicing school superintendents.

Through a Collaboration Agreement between California University of Pennsylvania and the University of Pittsburgh, students completing their studies for the Letter of Eligibility at Cal U who wish to earn an Ed.D., can transfer up to forty five (45) graduate credits to the University of Pittsburgh, School of Education, Department of Administration and Policy Studies, K-12 Administration Program.

Total Number of Credits: 32

The Superintendent Letter of Eligibility is offered on campus and also on-line through The Keystone University Network (www.keystone-university.net/), the Pennsylvania State System of Higher Education's on-line university.

Admission Criteria: This program is open to students with a minimum of six years of professional certified service in the basic schools, three years of which shall have been in administration or supervision. The three years of administrative or supervision experience must be completed before certification endorsement will be granted.

Applicants for admission must submit:

A completed Application.

A completed Applicant Data Sheet.

An official transcript from every institution attended.

A copy of all current professional certificates held.

A letter of endorsement from the Chief School Administrator in the school district of current employment

A current resume or curriculum vitae.

A statement of career goals and degree objectives.

Additional Program Requirements:

The program is open to students with a master's or doctorate degree.

All applicants must have an earned QPA of 3.0 on a 4.0 scale in all graduate work taken prior to application.

Applicants must possess Pennsylvania State Instructional II Certification (or its equivalent). Pennsylvania State Certification as a principal is recommended but not required.

After completing an application and submitting all of the above documents, applicants must schedule a pre-admission interview with a faculty member.

The program coordinator and faculty will determine final recommendation for admission to the Superintendent Letter of Eligibility Program.

Curriculum: A minimum of thirty-two (32) graduate credits is required for endorsement of the student for this certification. All of these credits must be earned at California University of Pennsylvania.

The program of studies shall consist of the following:

I. Courses Including Field Experience Episode

SLE 701 Administration Theory, Organization & Operation 3

SLE 702 Contract Law, School District Legal Issues 3

SLE 703 School Finance 3

SLE 704	Technology and Facilities Development	3
SLE 705	Curriculum & Instruction, Leadership/Supervision	3
SLE 706	School Community/Public Relations/Marketing	3
SLE 707	Strategic Planning, Policy Analysis, Board Relations	3

I. University Seminars

SLE 711	Seminar - Administration Theory, Organization & Operation	1
SLE 712	Seminar - Contract Law, School District Legal Issues	1
SLE 713	Seminar - School Finance	1
SLE 714	Seminar - Technology and Facilities Development	1
SLE 715	Seminar - Curriculum & Instruction, Leadership/Supervision	1
SLE 716	Seminar - School Community/Public Relations/Marketing	1
SLE 717	Seminar - Strategic Planning, Policy Analysis Board Relations	1

I. Business/Management Partnership (Summers Only)

SLE 731	Business/Industry/Management Partnership I (Profit)	2
SLE 741	Business/Industry/Management Partnership II (Non Profit)	2

All core courses will be taught by experienced superintendents, members of the program's Academy of Superintendents, appointed as adjunct faculty in the College of Education and Human Services.

Students are required to complete a portfolio that can be used in measuring many of the outcomes deemed necessary to analyze desired performance levels. The portfolio review and oral presentation will occur during the student's last semester of coursework.

Website: www.cup.edu/graduate/sle
and www.cup.edu/graduate/sleonline

Program Title: Technology Education

Degree: Master of Education

Accreditation: National Council for Accreditation of Teacher Education

Program Description:

The mission of this degree is to continue training for teachers and leaders in the field of technology education by providing the students with a broad-based understanding of the field and its direction. Students wishing to research a topic in the field may choose to follow the thesis while others may opt for the major project.

Technology education is a vital aspect of education for all students at all levels in Pennsylvania. It promotes the development of technologically literate citizens by studying the broad spectrum of technology. In contrast, educational technology focuses on using computer technology to enhance instruction. This degree is not intended for individuals interested in educational technology.

Goals:

1. Develop standards-based curriculum, instruction, and assessment materials.
2. Evaluate and synthesize literature related to the field of mathematics, science, and technology education.
3. Develop a strategic plan for an educational program.
4. Research, develop, and defend a grant proposal.
5. Evaluate the impacts and consequences of technology nationally and internationally and make informed choices.
6. Design, investigate, implement and evaluate a major culminating research experience.
7. Provide an opportunity for students to obtain Pennsylvania certification in Technology Education with a Master's degree.

Graduate Dean and Program Coordinator

If you have questions about this graduate program, contact Daniel E. Engstrom, Ed.D., Coordinator for Technology Education,

Phone: 724-938-4381; Fax: 724-938-4572;

E-mail: engstrom@cup.edu;

Homepage: www.cup.edu/eberly/teched

Mail to: Coordinator, Technology Education
250 University Avenue
California, PA 15419-1394

Or: Dean of the School of Graduate Studies and Research,
Phone, 724-938-4187; Fax: 724-938-5712.

Admission Criteria: Applicant must submit an application, fee and official transcripts.

- ✓ Minimum undergraduate GPA of 3.0
- ✓ Completed B.S. or B.A. Degree

Note: Candidates with a GPA below 3.0 may be considered by the Technology Education Committee and, if accepted, would be required to maintain a 3.0 GPA for the first nine hours of their program as a probationary measure.

Curriculum: Total number of credits: 33

Professional Focus (15)

TED 701	Issues in Technology Education Curriculum and Instruction	3
TED 702	Assessment in a Constructivist Classroom	3
TED 703	Strategic Management in Education	3
TED 704	Integrating Math, Science, & Technology	3

TED 705	Technology & Sustainable Development	3
Culminating Experience (7)		
RES 800	Research Methods	3
RES 849	Thesis Seminar	4
OR		
TED 850	Major Project in Technology Education	4
Approved Electives (Choose 12 credits)		
TED 500	Teaching Technology in the Elementary School	3
TED 565	Special Problems in Technology Education	3
TED 716	Sustainable Architecture and Systems	3
TED 776	Laboratory Design and Maintenance	3
TED 795	Internship in Technology Education	6
EDP 600	Statistics	3
GEE 586	Study in Human Creativity	3
MMT 701	Multimedia Technology	3
PSY 711	Advanced Educational Psychology	3

*Other courses as approved by advisor

Course Descriptions

ACC -- Accounting

ACC 601. SURVEY IN ACCOUNTING. This course covers the following topics: accounting cycle, accounting for assets, liabilities and owner's equity, partnership accounting and corporate accounting. (3 crs.)

ACC 711. MANAGERIAL ACCOUNTING. The use of accounting data for corporate financial planning and control. Topics include organization for control, profit planning, budgeting, relevant costing, return on investment, and administration of controllership functions in business organizations. (3 crs.)

ACC 721. FINANCIAL ACCOUNTING. Introduction to financial accounting theory, the formulation of accounting principles, and the structure of generally accepted accounting principles. (3 crs.)

ACC 731. TAX PLANNING AND CONCEPTS. This course deals with the broad recognition of the tax effects of business decisions and a practical approach to tax planning for both individuals and corporations. (3 crs.)

AHC -- Advanced Healthcare Management

1st Semester or Module (9 credits) Components:

AHC 655. Research Methodology and Budgeting (3 credits) This course will begin in the first semester or module of the four which constitute the program. Participants will prepare a research paper. The format will follow the American Psychological Association (APA) style manual. Participants will select a project of choice and complete the paper progressively over the four semesters or modules. The paper may be researched and written by one to five participants. Of course, the paper should reflect the work related to the number of participants researching the topic. Papers are presented at or near the end of the final module and other professionals are invited to attend the formal presentation. The paper is graded progressively, that is progress in each module is part of the grading criteria.

AHC 611. Decision Support Systems, Finance (3 credits) This course addresses decision processes in the healthcare community. Some time is spent examining medical team case analysis. No small emphasis is placed on teleconferencing on complex cases owing to their impact on the patient, the family, insurers, and others affected by the outcome. DSS practices and models used in healthcare facilities will be examined and evaluated. Statistics and their uses in the healthcare industry will be related to epidemiology, demographics, age-gender distributions, trends, global comparisons, and to the application of statistical methods in research projects selected by class participants. A review of descriptive statistics and some in-depth coverage of inferential statistics will be provided. Decision-making supported by statistics will be addressed. Most class learning will employ PC-based programs since selecting the preferred statistical method represents the greater challenge in healthcare.

AHC 612. Healthcare Human Resource Acquisition (3 credits) The many dimensions of healthcare spread human resources needs from drivers, groundskeepers, maintenance, janitorial, through the business offices, nursing, MDs, MD specialists, research MDs, other researchers, technicians, clerical, nursing assistants, directors, executives, and board members. The staffing process is on-going, and cumbersome. The transient nature of some professionals sometimes gives the healthcare institutions an aura of transience or disorganization. A changing patient census adds to the complexity model. Finally, demographic and epidemiological trends destabilize this organic profession. Staffing models will be examined. Models incorporating the use of non-nationals in institutions and working with language anomalies, comprehension difficulties and other concerns add to the staffing dilemma. The course will examine models and trends in staffing, retention, recruitment, training, education and benefits. General discussion of staffing for the major epidemics in this region will allow focus in these learning situations. Cases and examples will be covered.

2nd Semester or Module (9 credits) Components:

AHC 721. Health Care and Medical Economics (3 credits) Course addresses the budgeting process, strategic planning for five-seven year plans, grant and project management, Medicare budgets, state health budgets, welfare budget implications, family health budget concerns, national economics and GNP issues and trends affecting healthcare providers, and other accounting, budgeting, and financial planning issues. Peripheral courses will examine complex systems acquisition and financial effects from complex projects in healthcare environments and facilities.

AHC 722. Preventive Healthcare (3 credits) This course will address topics associated with preventive medicine. Cell biology topics will examine disease causes owing to cell aberration, decay, morphology, and related issues. The course will examine the relationship among DNA, amino acids, proteins, and other sub-cellular research and relationship to disease. The contribution of cell DNA, amino acids, proteins, enzymes, peptides and molecular research on glandular health and immuno-responsive hematology will be examined relative to preventive healthcare.

AHC 731. Telemedicine (3 credits) This course will define and describe several terms used under this and related rubrics. These include informatics, telematics, broadband, satellite exchanges, televised specialists meetings, information systems, knowledge based systems, knowledge management, telecommunications, distance learning, DWDM, teleconferencing, wireless, Bluetooth and other radio frequency technologies, cellular, intranets and internets, and web based technologies.

3rd Semester or Module (9 credits) Components:

AHC 671. Quantitative Methods, SAP and Telematics (3 credits) Selected quantitative methods will be part of the instructional process. For some participants, the exercises assigned will be business-based. These include inventory models, linear programming applications, Queuing Theory (related to triage and healthcare services), census evaluation, specimen trend models, productivity models and other healthcare related quantitative methods. Where possible, computer-based texts, programs and applications will be used to accelerate learning.

AHC 711. Biotechnology Implications in Healthcare (3 credits) This course will address advances in biochemistry, bio-analysis, biology, Cellular biology, protease, proteomics and other protein chemistry and biology, DNA modification and cellular analyses , other biotechnical advances and their implications for health care practitioners and management.

AHC 701. Technology Acquisition and Management (3 credits) Course addresses trends in medical technology devices, medical equipment safety, laboratory technology changes, use of cellular, wireless, and radio in healthcare environments, employing micro electro mechanical devices in vivo, computer based evaluations, use of artificial intelligence, knowledge management departmental set ups, emerging techniques in body and organ scanning, and other technologies.

4th Semester or Module (9 credits) Components:

AHC 741. Legal Issues in Health Care (3 credits) HIPAA, state laws, other federal laws, contracts, torts, criminal code, related constitutional law, emerging legislation at federal and state level, trans state medical practice, outsourcing, contract labor, contract professionals, reference fees and other legal interactions with Department of Health and Human Services, Veterans Administration and National Institutes of Health.

AHC 712. Epidemiology (3 credits) The course offering will overview principles and methods in epidemiology, definitions and examples of infectious diseases epidemiology, nutritional epidemiology, health policy, health risk assessment, case control and meta-analysis techniques in epidemiology.

AHC 799. Complex Case Management (3 credits) This course will identify and define complex cases. The complex case offered as an example will be studied and analyzed from multiple view, e.g., insurers, nursing, physicians in several specialty areas, pharmacology, administration, radiology, therapy, post partum care, family and social viewpoints, legal wishes of the patient, medical ethics, HIPAA and state laws, and other views.

ADP -- Administration Program for Principals

ADP 612. SUPERVISED FIELD PROJECT/CHILD GROWTH THEORY. Problem-solving activities and field experiences planned cooperatively with university and school district personnel are designed in the area of Child Growth Theory. This practice-centered approach requires students to apply their knowledge and demonstrate proficiency in those skills that contribute to effective performance as an administrator. (3 crs.)

ADP 621. CURRICULUM LEADERSHIP. Among the many leadership roles and responsibilities for the principalship, none is more important than educational program development, administration and evaluation. The purpose of this course is to develop the student's understanding of the curriculum development process, the leadership necessary for the process, and the structure needed to provide appropriate staff development. (3 crs.)

ADP 622. SUPERVISED FIELD PROJECT/ CURRICULUM. Problem-solving activities and field experiences planned cooperatively with university and school district personnel are designed in the area of Curriculum Theory. This practice-centered approach requires students to apply their knowledge, and demonstrate proficiency in those skills that contribute to effective performance as an administrator. (3 crs.)

ADP 626. INSTRUCTIONAL STRATEGIES. This course is intended to provide prospective principals with a practical and theoretical framework to aid them in directing teachers toward more effective instruction including Standards-based Instruction; differentiated instructional strategies; brain-based learning; Bloom's Taxonomy of Educational Objectives for the cognitive domain; Gardner's multiple intelligences, adapting curriculum and instruction in the inclusion classrooms; and writing across the curriculum. Students culminate learning activities by designing and implementing models replicating effective instructional strategies that respond to the needs of a variety of learners. (3 crs.)

ADP 631. SCHOOL OF LAW ETHICS. The general purpose of the course is to assist the students to acquire a working and practical knowledge of school law. This course provides students with the primary sources of law to understand the impact of the law on public education. (3 crs.)

ADP 641. SCHOOL COMMUNITY RELATIONS SEMINAR. This course is for educators who hope to become principals or teachers who wish to assume a greater leadership role in the school where they teach. The course will include the information principals and teachers need to understand and maintain school, family and community partnerships. (3 crs.)

ADP 647. ORIENTATION AND ASSESSMENT SEMINAR. The orientation seminar, required for all students in the program, provides an introduction to the theory and practice of educational administration. Included are such topics as ethics and moral leadership, problem analysis, judgment, stress management, time management and oral and written communications. (3 crs.)

ADP 661. EDUCATIONAL LEADERSHIP. This course provides an introduction to the theory and practice of educational administration. The course progresses from an overview of leadership and leadership style to a review of the structures and management systems that can make good educational leadership possible and finally, focuses on leadership skills needed by administrators to be effective leaders in education today. Included are such topics as organizational culture, power in and around schools and the resolution of conflict, motivation and ethics and moral leadership. (3 crs.)

ADP 662. SUPERVISION. The purpose of this course is to develop the student's understanding of the supervision process, the impact it has on leadership and the importance of staff supervision. (3 crs.)

ADP 664. SUPERVISED FIELD PROJECT/ ADMINISTRATION LEADERSHIP. Problem-solving activities and field experiences planned cooperatively with university and school district personnel are designed in the area of Administration Leadership. This practice-centered approach requires students to apply their knowledge and demonstrate proficiency in those skills that contribute to effective performance as an administrator. (3 crs.)

ADP 670. INTERNSHIP. The Internship is designed to be a theory into practice experience where formal course work is applied in a field setting. It provides significant opportunities in the workplace to synthesize and apply the knowledge, and to practice and develop the skills identified in the program standards. (Variable crs.)

ADP 671. ELEMENTARY RESEARCH PROJECT. Students will develop a research project which makes a contribution to the student, either professionally or in an increased mastery of the subject matter. A project may pertain directly to the graduate student's own professional work, or it may be a subject suggested by course work or other pertinent interests. (2 crs.)

ADP 672. SECONDARY RESEARCH PROJECT. Students will develop a research project which makes a contribution to the student, either professionally or in an increased mastery of the subject matter. A project may pertain directly to the graduate student's own professional work, or it may be a subject suggested by course work or other pertinent interests. (2 crs.)

ADP 673. SUPERVISED FIELD PROJECT/RESEARCH AND EVALUATION. Problem-solving activities and field experiences planned cooperatively with university and school district personnel are designed in the area of Research and Evaluation. This practice-centered approach requires students to apply their knowledge, and demonstrate proficiency in those skills that contribute to effective performance as an administrator. (3 crs.)

ATE -- Athletic Training

ATE 700. GROSS ANATOMY OF THE EXTREMITIES. The study of anatomical structures in the extremities of the human body, coupled with laboratory dissection of human cadavers. (4 crs.)

ATE 715. SPORTS LAW. General legal principles and case law. Specific attention is placed upon the impact of law and case law on sport and sports medicine practitioners. (3 crs.)

ATE 720. SPORTS THERAPY. Lecture and laboratory exercises that explain the theoretical and practical implementations of physical therapy modalities in the care of athletic injuries. The use of therapeutic exercise and testing in the rehabilitation of sports injuries comprises an equal portion of this course. (4 crs.)

ATE 725. PEDAGOGICAL STUDIES IN ATHLETIC TRAINING. This seminar course allows the graduate student the opportunity to design and develop presentations based on previous knowledge and experiences in athletic training for the purpose of information delivery in multiple settings. Professor directed peer review and content critique will follow delivery of presentations for guidance prior to integration into classroom and clinical presentations in athletic training education. (3 crs.)

ATE 745. CONTEMPORARY ISSUES IN ATHLETIC TRAINING. Administrative functions, professional relationships, facility design, professional conduct, management problems, record keeping, medical policies and procedures, physical examinations, budgetary considerations, certification and licensing. This course will discuss current trends within the profession of athletic training. In addition, the student will be involved in research in academic areas, concepts and practical ideas in the area of athletic training and sports medicine. (3 crs.)

ATE 755. INSTRUCTION AND ADMINISTRATION IN ATHLETIC TRAINING. This course provides the graduate student with a variety of experiences in teaching and administration. Commonly encountered administrative problems are examined. The students develop lesson plans, make presentations, and sharpen teaching skills. Other experiences include shadowing of faculty and administrators.

ATE 800. RESEARCH METHODS FOR ALLIED HEALTH SCIENCES. The course studies the basic tenets of scientific research as they apply to the allied health fields. Topical discussions include development and limitation of a research problem, research methodology, basic principles of tests and measurements, the review of literature and library utilization, and writing the research document. (3 crs.)

ATE 810. THESIS SEMINAR. This course is designed to assist graduate level students in development of the first three chapters of their thesis. Students will defend their proposals in a mock prospectus meeting. (3 crs.)

BIO -- Biology

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 120, CHE 101 & CHE 102. (4 crs.)

BIO 706. BACTERIOLOGY. The physiology of the cell with emphasis on the relationship of cell structure and function. Includes physical and chemical aspects of cells, the relations of cells to their environment, energy conversion in cells, membrane permeability, photosynthesis, and enzyme action. Prerequisite: CHE 331. (4 crs.)

BIO 708. MICROBIAL ECOLOGY AND PHYSIOLOGY. Detailed analyses of the anabolic and catabolic activities of bacteria, fungi, and algae are studied. The microbiological processes of nitrification, denitrification, chemosynthesis, bacterial and algal photosynthesis, fermentation, and antibiosis are examined, with reference to ecological interactions with man and other organisms. Prerequisites: Microbiology and Organic Chemistry. (4 crs.)

BIO 710. 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 721. BIOCHEMISTRY I. A comprehensive study of the characteristics of proteins, lipids, carbohydrates, and nucleic acids, with special emphasis on enzymes. Other topics include the major metabolic pathways found in organisms and the regulation of these organisms. Prerequisite: Organic Chemistry and/or permission of the instructor. (3 crs.)

BIO 723. ANIMAL HISTOLOGY. The study of cellular differentiations in tissue, tissue identification, and special functions, especially in mammals. Prerequisites: BIO 115 and 120. (4 crs.)

BIO 724. 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 120. (4 crs.)

BIO 725. MOLECULAR BIOLOGY. A comprehensive course in macromolecular structure and function in organisms, with emphasis on proteins and nucleic acids. Topics include bioenergetics, the genetic code, protein synthesis, recombinant DNA technology, and methods of analysis of proteins and nucleic acids. Prerequisite: Organic Chemistry or permission of the instructor. (3 crs.)

BIO 726. 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 120, BIO 125, & BIO 318. Three lecture hours weekly. (3 crs.)

BIO 727. ICHTHYOLOGY. An introduction to the morphology, taxonomy, ecology, and distribution of the major groups of freshwater fishes, with emphasis on the fauna of the Northern United States; field experiences in fishery survey techniques are provided. Prerequisite: BIO 120. (4 crs.)

BIO 735. 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: Prerequisites: BIO 120 & BIO 125. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 738. HERPETOLOGY. A study of the anatomy, physiology, ecology, and taxonomy of the major groups of amphibians and reptiles. Prerequisite: BIO 120. (3 crs.)

BIO 740. ORNITHOLOGY. The study of birds, with major emphasis on field observations and identification of resident and migratory species. Numerous field trips in western Pennsylvania also illustrate ecological, behavioral, and habitat relations and the impact of human beings on bird life. Lectures and some laboratories cover anatomic and physiologic adaptations of the vertebrate structure to the stringent problems of flight and climate. Prerequisite: BIO 120. (4 crs.)

BIO 741. ADVANCED RESEARCH STUDIES. An original research investigation with a qualified research professor in the graduate student's area of biological research interest. (1-1212 crs.)

BIO 744. 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 745. ENTOMOLOGY. Theoretical and field study of the local classes of insects and related species: taxonomy, collecting and mounting, general and specific morphology, metamorphosis and life cycles, economic importance and control measures. Not open to those who have already taken Biology 362. (4 crs.)

BIO 746. PARASITOLOGY. A study of symbiotic relationships in the animal kingdom, with emphasis on invertebrate endoparasites of man, his domestic animals, and common wildlife of the area. Morphology, life cycles, host-parasite relationship, etiology, epidemiology, and treatment and diagnosis are stressed. (4 crs.)

BIO 757. PLANT SYSTEMATICS. A study of relationships among the vascular plants, their classification and methods of identification. Plant families native to western Pennsylvania are studied in detail. Prerequisite: BIO 125 (4 crs.)

BIO 758. PLANT ANATOMY AND MORPHOGENESIS. A detailed study of structural differentiations, especially in the higher plants: the structure of meristems and developmental changes in their derivatives. Prerequisites: BIO 115 and BIO 125 (4 crs.)

BIO 765. DESIGN AND ANALYSIS. The theoretical and applied basis of experimental design, sampling theory and sampling designs, data input and output, statistical analysis and interpretation for studies involving ecological research, environmental pollution monitoring, and environmental impact assessment. The emphasis will be on experimental design, sampling procedures and the application of computer methods for data base, spreadsheet, word processing, and statistical packages. (3 crs.)

BIO 766. BIOMETRY. A study of statistical techniques applied to experimental design and analysis of biological problems in the field and laboratory, with emphasis on multi-variant situations and on insuring validity of results. Prerequisite: College Algebra or Statistics. (3 crs.)

BIO 772. MAMMALOLOGY. Classification, distribution, and natural history of mammals, with emphasis on Eastern North American species. Field studies and preparation of study specimens. Prerequisites: General Zoology, Biotic Communities, or Ecosystems Ecology. Prerequisite: BIO 120. (4 crs.)

BIO 778. ORGANIC EVOLUTION. An intensive study of the impact of evolutionary thought on the various disciplines of biology. Emphasis is on the evolution of life from non-life, organic materials and the genetic basis of life; also on the elemental forces of evolution, the sources of variation, the role of natural selection and genetic drift, and the result of evolution through adaptation. Evolutionary divergence is studied through an understanding of races and species, isolating mechanisms, the origin of species, and evolution above the species level. (3 crs.)

BIO 788. 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, & CHE 331. Three lecture hours and three laboratory hours weekly. (4 crs.)

BIO 789. SPECIAL PROBLEMS. This course will permit graduate faculty to develop a course around a special theme, not dealt with in other courses offered by the department. It is the intent of this course to engage students in discussion and literature review exercises that facilitate an intensive assessment of a specific topic. (1-4 crs.)

BIO 790. 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 120 & BIO 125. (4 crs.)

BIO 795. SEMINAR IN BIOLOGY. Library research, class discussion, and reports by the participants on topics of special interest. Members of the biology staff are also invited to lead some discussions in their major fields of interest. (2 crs.)

BIO 800. METHODS OF RESEARCH IN SCIENCE. Consideration of the fundamentals of research in the natural sciences, with emphasis on the scientific method, technical library use, collection and interpretation of data, and the format of scientific writing for the thesis and for publication. The AIBS Style Manual for publishing in primary scientific journals will be used. (2 crs.)

BUS -- Business

BUS 741. BUSINESS LAW. The legal aspects of contracts and the results of contractual obligations, negotiable instruments, agency, partnerships, corporations, real and personal property and sales. (3 crs.)

BUS 743. BUSINESS, SOCIETY, AND GOVERNMENT. A survey of social control of industry and business; the course covers government regulation, consumerism, and the role of technological change in society. (3 crs.)

BUS 771. QUANTITATIVE METHODS. Introduces mathematical and statistical techniques that have applications in management. (3 crs.)

BUS 795. SEMINAR. Seminar in selected theoretical and empirical literature in a functional area (to be designated) of business. (3 crs.)

BUS 797. RESEARCH STUDIES IN BUSINESS. A special tutorial arrangement between a graduate student and a faculty member that permits guided reading and research in management. The graduate student must submit a proposal to the program coordinator containing an outline and a brief discussion of the planned work and the name of the professor under whom the graduate student wishes to work. The proposal must be approved by the program coordinator and the department chairperson before the graduate student may register for the course. At the end of the term, the supervising professor will submit the graduate student's grade and research paper to the program coordinator. (3 crs.)

BUS 799. STRATEGIC MANAGEMENT. An integrated course dealing with corporate-level strategic planning and policy from the point of view of chief administrative officers and boards of directors. The case study approach is used. (3 crs.)

CED -- Counselor Education

CED 700. PRINCIPALS of GUIDANCE. Overview of the development of guidance in American education, including a review of pupil services teams, K-12 developmental guidance models, principals of developmental guidance, managing guidance services, ethical and legal issues in school guidance, and current issues facing the school counselor.

CED 701. ORGANIZATION AND ADMINISTRATION OF COUNSELING SERVICES. This course is the initial and fundamental one in the programs for school and agency counselors. It examines the rationale, development, scope and nature of counseling services in these aspects: history and current stage of development; systems of organization and administration; implementation of services; professional qualification and preparation; legal and ethical responsibilities; non-standardized assessment; records maintenance; public relations; and future trends. (3 crs.)

CED 702. COUNSELING THEORY. This course deals with theories, objectives, principles, and practices of counseling individuals, including children and the family. These theories are applicable in schools and other human-service institutions. (3 crs.)

CED 703. CONSULTING THEORY. This course is an advanced level course and has theoretical and practical components. In the theoretical component process consultation is highlighted as an applied behavioral science. Emphasis is placed on the levels of environmental quality within an organization. Specific human processes of inclusion, membership, leadership, control, communication and problem-solving are stressed. The practical component deals with initial contact, organizational diagnosis, process intervention, evaluating progress and closure. Prerequisites: CED 701, 702, 710, 714. (3 crs.)

CED 705. DEVELOPMENTAL GROUP COUNSELING. This course includes the meaning, function, types, and principles of the group approach to counseling; the dynamics of group interaction; leadership; role playing; personal development in groups; and the influence of the group processes on individual development. Prerequisite: CED 702 or permission of instructor. (3 crs.)

CED 708. SUBSTANCE ABUSE AND ADDICTION. This course focus is on prevention and rehabilitation in concerning drug and alcohol abuse. Since substance abuse and addiction are present in all sectors of society, it is important for human service professionals to understand the process of addiction and the special problems experienced by those affected individuals and their significant others. (3 crs.)

CED 709. INDEPENDENT STUDY. The graduate student will have an opportunity to do independent study or research in counseling under the guidance of a member of the faculty in Counselor Education. Prerequisite: Permission of the adviser. (Variable crs.)

CED 710. COUNSELING SKILLS AND TECHNIQUES. Graduate students develop counseling skills by learning and practicing therapeutic techniques that facilitate the counseling process. In a laboratory setting, the students practice basic counseling skills such as attending to nonverbal behavior, focusing, reflection of feeling, etc. Students will audiotape and videotape practice sessions. Prerequisites: CED 701,702, 714. (3 crs.)

CED 711. PRACTICUM I. The student implements effective helping skills and techniques using one or more recognized counseling theories. They must see individual clients; and group experiences are recommended. Students spend two full days per week on site, under the supervision of an experienced counselor, receive individual and/or triadic supervision from the site supervisor and the faculty supervisor, and also attend a regularly scheduled seminar. Students must be able to audio or videotape counseling session. Prerequisites: CED 701, 702, 714, 710, candidacy and departmental approval. (3 crs.)

CED 712. PRACTICUM II. A continuation of Practicum I, CED 711. Students are required to spend two full days per week under supervision of a site supervisor. They will meet for a class period with a faculty supervisor to critique tapes, conceptualize client problems, and discuss professional and ethical issues. Prerequisites: all core courses and departmental approval. (3 crs.)

CED 715. ADVANCED COUNSELING THEORY. The initial phase of this course reviews the theories and the role they play in the counseling process. The second phase deals with building around the various theoretical approaches to counseling. Counseling approaches that are considered include: (1) rationale, (2) learning theory, (3) analytic, (4) phenomenological, and (5) existential. The final aspect of the course involves graduate students attempting to incorporate a counseling approach into their own personality and making an attempt to use this approach through role playing. Prerequisite: instructor approval. (3 crs.)

CED 716. ADVANCED CONSULTING THEORY. A continuation of CED 703, in which students function as process consultants in a consulting project. Students draw up a consulting contact with an actual client or client system, collect and analyze data using contemporary consulting techniques, perform an agreed-upon intervention in the client system, and make a final evaluation of the project. Prerequisite: instructor approval. (3 crs.)

CED 717. DIAGNOSIS AND TREATMENT IN MENTAL HEALTH. Students will learn to make accurate child and adult diagnosis according to the DSM IV-TR. Basic psychopathology and treatment strategies will be explored. Limitations inherent in the use of DSM and other diagnostic classifications are discussed. (3 crs.)

CED 720. CROSS-CULTURAL COUNSELING. Students will explore the cognitive, affective, and behavioral considerations of culturally diverse client groups. Accordingly, counseling theories and programmatic approaches relevant to the mental health needs and concerns of these groups will be introduced. This will include an examination of how cultural attributes, strategies, and coping skills can be effectively synthesized into the counseling process. (3 crs.)

CED 724. EXPERIENTIAL GROUP PROCESSES. This course requires that students participate in a personal growth group with other graduate counseling students. The purpose of the group is to have students develop an increased understanding of their thoughts, feelings and behaviors. The department feels that openness to understanding oneself is very important for counselors. In order to maintain confidentiality an adjunct faculty member teaches this course. Grading is pass/fail. (3 crs.)

CED 785. RESEARCH SEMINAR IN COUNSELOR EDUCATION. The purpose of this course is to give the graduate student a comprehensive review of the research and current literature in counselor education. Critical study and evaluation of research findings are emphasized. (3 crs.)

CED 786. SEMINAR IN CAREER INFORMATION. This course reviews the theory and process of giving career information and of counseling in school and agency settings. Topics include: sources of career information; appraisal; classification of careers; career resources; career and vocational education; systems of career guidance; and theories of career development. (3 crs.)

CED 787. INTEGRATED SEMINAR. Intended for students who are near the end of their programs. The purpose is to integrate the materials learned, and to discuss the professional topics and practices of agency and school counselors. This is done by focusing on the counselor as an ethical practitioner. (3 crs.)

CED 789. INTRODUCTION to COMMUNITY COUNSELING. This course is a survey of theoretical and applied information for counselors working in community settings. Course content includes an examination of community counseling as a helpful profession, an overview of the history of community counseling, the practice of community counseling, and the roles and tasks expected of community counselors. Community counseling setting, relationships with other human service professionals, and characteristics of individuals and communities are discussed. The topics of policy, consultation, and advocacy, as well as current issues in community counseling are covered.

CMD -- Communication Disorders

CMD 600. RESEARCH AND PROFESSIONAL PRACTICE IN SPEECH/LANGUAGE PATHOLOGY. This course is designed to teach the graduate student to be both a consumer and producer of research. A research endeavor (research paper, project, or thesis) is a requirement of graduation and is initiated in this class. Practice patterns in the profession (ethical, clinical, and legal aspects) are also addressed. (3 crs.)

CMD 701. LANGUAGE DISORDERS IN ADULTS. The purpose of this course is to prepare the student to provide assessment techniques and therapy to manage the language and speech problems of individuals who have suffered stroke, head-trauma, dementia or other neurological disorders or injuries. (3 crs.)

CMD 702. LANGUAGE DISORDERS IN CHILDREN. The study of language disorders in children is presented. Students learn to analyze and treat disorders involving language content difficulties, language form deficits, and/or pragmatic disabilities. Students obtain and analyze language samples and plan appropriate remediation of language disorders in children. (3 crs.)

CMD 703. FLUENCY DISORDERS. This course summarizes the various generations' theory concerning why people stutter, and what treatment is effective. The student learns to assess the multiple overt and covert symptoms of stuttering, and to plan effective treatment. (3 crs.)

CMD 705. VOICE DISORDERS. This course provides comprehensive academic and clinical training in the etiological factors, description, diagnostic and management of organic voice disorders. The teaching of esophageal speech, the use of the artificial larynx, and the study of tracheo-esophageal practice are covered in detail. (3 crs.)

CMD 707. PHONOLOGY AND ARTICULATION. This course provides the graduate student with traditional views about articulation and phonology disorders, their assessment, and treatment. Current assessment and management procedures will be practiced in and out of the classroom. (3 crs.)

CMD 708. NEUROLOGY. The graduate student becomes familiar with those structures and functions of the central and peripheral nervous systems which appear relevant to the comprehension and production of speech and language. Brain asymmetry in normal and brain-damaged persons, left- and right-hemisphere language abilities in split-brain patients, handedness as it relates to speech and language functioning, gender differences, disruption of language functions after brain injury or disease, the effects of aging and stress on neurological functioning, and neurologic endowment are all discussed. The central theme of this course is brain "governance" over all other body systems. (3 crs.)

CMD 711. APPLIED THERAPEUTIC PROCEDURES IN PRESCHOOL SETTING. The student participates in "hands on" work in the department's preschool where 10 normally-developing and 10 children with speech-language problems are included. Focus is on actual work with children, inclusion theory, and normal and disordered development. (1-3 crs.)

CMD 712. APPLIED THERAPEUTIC PROCEDURES IN OUT-PATIENT SETTING. The student participates in "hands-on" work with clients in the University Speech and Hearing Clinic. Under supervision, the student will provide therapy for one or more clients presenting with one of the following disorders: speech or language, stuttering, voice, delayed development, stroke, or others. (1-3 crs.)

CMD 713. APPLIED DIAGNOSTIC PROCEDURES IN SPEECH PATHOLOGY. The student participates in "hands-on" diagnostic (testing) work as a member of the diagnostic team. Under supervision, the student administers communication-based tests to clients from the community presenting with one or more of a wide variety of communication deficits. (1-3 crs.)

CMD 714. APPLIED AUDIOLOGIC DIAGNOSTIC AND REHABILITATIVE PROCEDURES. The student participates in "hands-on" audiological assessment as a member of the audiological team. Under the supervision of a certified audiologist, the student tests the hearing ability of clients from the community who seek audiological intervention in this clinic. (1-3 crs.)

CMD 715. APPLIED THERAPEUTIC PROCEDURES IN EDUCATIONAL SETTING. Externship in an educational setting. (1-3 crs.)

CMD 716. APPLIED NEUROGENIC PROCEDURES IN HEALTHCARE FACILITIES. Externship in a healthcare setting. (1-3 crs.)

CMD 718. ADVANCED AUDIOLOGY FOR THE SPEECH-LANGUAGE PATHOLOGIST. The purpose of this course is to assist the speech-language pathologist in working with hearing-impaired and deaf patients of all ages. (3 crs.)

CMD 725. AURAL REHABILITATION. The purpose of this course is to identify the problems of the aurally-disabled in society, and to learn to provide instruction to clients so that they appropriately compensate for their hearing losses. (3 crs.)

CMD 730. PROFOUND ORGANIC DISORDERS. This course provides an overview of cleft lip and palate, cerebral palsy, craniofacial disorders, and other organic syndromes in children and adults. Emphasis is placed on the interdisciplinary care of these individuals. (3 crs.)

CMD 731. EARLY INTERVENTION IN SPEECH LANGUAGE PATHOLOGY. This course offers the opportunity for comprehensive study of delayed and/or disordered speech-language ability, deficits of social interaction and development, hearing loss and deafness, and feeding and swallowing difficulties in children from infancy through preschool age. The student will comprehend processes from referral, to assessment, through treatment and transition. (3 crs.)

CMD 732. COUNSELING THE COMMUNICATIVELY DISABLED. This course teaches students to use evidenced-based counseling techniques during their work with clients. They learn to choose and use techniques for specific purposes: to change attitudes, to help clients accept their disorders, to motivate and change client behaviors, and to increase understanding. The graduate student learns to use general counseling techniques through role play and guided client contact. He also investigates the special counseling issues related to the pathologies commonly treated by the SLP. (3 crs.)

CMD 733 ORGANIZATION AND ADMINISTRATION IN SPEECH-LANGUAGE PATHOLOGY. This course summarizes the business, ethical, and legal aspects of providing speech-language pathology services within healthcare facilities, school systems, and private practices. (3 crs.)

CMD 734. MOTOR SPEECH DISORDERS. This course focuses on various dysarthrias, apraxias, and psychogenic disorders that result from nervous system damage or dysfunction. Major content areas include defining and categorizing disorders, examining the speech and language of clients, making differential diagnoses, and developing clinical interventions. (3 crs.)

CMD 749. INDEPENDENT STUDY. This course allows students to investigate appropriate areas of speech pathology or audiology by working within a faculty-student learning partnership in content areas not addressed through CMD coursework. (3 crs.)

CMD 764. INSTRUMENTATION IN SPEECH/LANGUAGE PATHOLOGY. This course is designed to provide the graduate student with a background in the clinical use of instrumentation. Students will learn how instrumentation has been and can be used to measure various parameters of the speech signal and how these measurements can be employed in the assessment and management of individuals with speech-language disorders. Emphasis is on PC-based instrumentation. (3 crs.)

CMD 765. DYSPHAGIA. This course addresses the evaluation and management of children and adults with disordered swallowing secondary to neurologic, structural, and psychogenic abnormalities. The relationship of dysphagia to speech disorders is discussed. (3 crs.)

CMD 766. TRAUMATIC BRAIN INJURY. The purpose of this course is to organize and understand the explosions of information related to the medical, communication and psychosocial aspects of traumatic brain injury (TBI). When possible and practical, practitioners from rehabilitation agencies will supplement the instructor's lectures. (3 crs.)

CMD 772. AUGMENTATIVE AND ALTERNATIVE COMMUNICATION. This course is an in-depth study of: 1) The underlying theory of augmentative and alternative communication systems (AAC) including state-of-the-art and emerging technologies; and 2) methodology for assessing and training individuals with communication disorders to use AAC systems. The various modes of nonvocal communication are presented. These include, but are not limited to, sign and gestural languages, computer-assisted communication, etc. Students learn to assess client need and potential, to select the augmentative or alternative method, to access resources as needed, and to provide intervention. Emphasis is placed on functional strategies for the practicing clinician in AAC. Hands-on experience with various AAC systems is an integral part of this course. (3 crs.)

CMD 773. COMMUNICATION AND DIVERSITY. This course will focus on the difference in speech/language of non-native or non-standard users of English, with attention given to assessing when and what types of intervention are ethically and professionally appropriate. Regarding communication skills, diverse groups may be defined by their gender, culture, ethnicity, social membership, physical or cognitive ability (i.e., disability), sensory capacity (i.e., deafness, blindness), economic status (i.e., access to healthcare),

national origin, or age (i.e., changes in communication structure and function which accompany aging), or other. Verbal and nonverbal congruency (or lack thereof) is addressed in depth. (3 crs.)

CMD 785. SEMINAR IN SPEECH PATHOLOGY. This class occurs in seminar fashion, where each student (or student group) advances his/her knowledge in a specific content area not typically covered in other coursework. The role of the speech-language pathologist as a diagnostician and interventionist in specific pathological topics is addressed. Students are expected to research the pathology, current diagnostic methods, evidenced-based treatment, idiosyncratic counseling needs and foci, disciplinary and interdisciplinary issues, business and continuum of care issues, national trends, etc., and to present this material to classroom peers. (3 crs.)

CMG -- Communication

CMG 701. COMMUNICATION PERSPECTIVES AND PARADIGMS. The intellectual history of the study of human communication from its classical foundations to contemporary perspectives and approaches. Students will explore the development of significant ideas and concepts within the dominant perspectives and paradigms in communication and rhetorical theory. Prerequisite: admission to the Communication Graduate Program or consent of the coordinating committee and instructor. (3 crs.)

CMG 702. RHETORIC AND LINGUISTICS. An introductory course in the underlying assumptions and applications of theories to language and composition, literary studies, cross-disciplinary and cultural studies. Prerequisite: admission to the Communication Graduate Program or consent of the coordinating committee and instructor. (3 crs.)

CMG 703. DRAMATIC THEORY AND CRITICISM. An introduction to dramatic theory and criticism. A seminar with interactive discussion between the students and the instructor. Prerequisite: admission to the Communication Graduate Program or consent of the Coordinating Committee and instructor. (3 crs.)

CMG 704. SEMINAR IN COMMUNICATION. A capstone seminar that develops and explores themes and issues that reflect the interdisciplinary nature of study in the communication field. Prerequisite: admission to the Communication Graduate Program or consent of the Coordinating Committee and instructor. (3 crs.)

CMG 710. SOCIAL SCIENTIFIC RESEARCH IN COMMUNICATION. An introduction to social scientific research and practice in the construction of research that is appropriate to the student's area of interest in communication. Prerequisite: admission to the Communication Graduate Program or consent of the Coordinating Committee and instructor. Dual listed with: COM 481 COMMUNICATION RESEARCH TECHNIQUES. (3 crs.)

CMG 711. COMMUNICATION THEORY. A survey of current theories of human communication this course gives students an opportunity to analyze and evaluate theories and to engage in the development and testing of new theory. Prerequisite: admission to the Communication Graduate Program or consent of the Coordinating Committee and instructor. Dual listed with: COM 490 COMMUNICATION THEORY. (3 crs.)

CMG 712. COMMUNICATION CRITICISM. A study of historical and critical perspectives and methodologies in communication criticism. Analysis of significant texts from a variety of contexts and genres. Prerequisite: admission to the Communication Graduate Program or consent of the Coordinating Committee and instructor. Dual listed with: COM 460 SPEECH CRITICISM. (3 crs.)

CMG 713. PUBLIC RELATIONS CAMPAIGNS. This course seeks to integrate all the skills required of the professional in designing and executing a complete public relations campaign. This is a seminar in which team and group efforts, rather than individual productivity, are emphasized. Prerequisite: admission to the Communication Graduate Program or consent of the Coordinating Committee and instructor. Dual listed with: COM 483 PUBLIC RELATIONS CASES, PROBLEMS, AND CAMPAIGNS. (3 crs.)

CMG 714. MASS MEDIA AND SOCIETY. An examination of the ways current mass media systems enhance and undermine the kinds of communication necessary for an open and democratic society. It provides an advanced orientation to the history, theory and process of mass communication. Particular emphasis is given to the relationships among various media and their audiences, media law and ethics, media and politics, media effects, and emerging trends and their implications for society. Prerequisite: COM 105 or consent of the instructor. Dual listed with: COM 445 RADIO AND TELEVISION IN A FREE SOCIETY. (3 crs.)

CMG 715. INTERNATIONAL BROADCAST SYSTEMS. International broadcasting presents 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 and COM 105. Dual listed with: COM 401 INTERNATIONAL BROADCASTING SYSTEMS. (3 crs.)

CMG 716. PROFESSIONAL VIDEO COMMUNICATION. Professional Video Communication presents to the student the field of business and institutional video. It prepares the student to function as a corporate writer, producer, director, and editor of desktop videos, video press releases, video conferences, training tapes and other business and institutional videos. Prerequisites: COM 100, COM 105 and COM 355. Dual listed with: COM 410 PROFESSIONAL VIDEO COMMUNICATION. (3 crs.)

CMG 721. SEMINAR IN INTERPERSONAL COMMUNICATION. An examination of current theory and research in interpersonal communication from different perspectives with an emphasis on students conducting basic and applied research in a variety of interpersonal arenas such as personal relationships, families, superior/subordinate relationships, etc. Prerequisite: admission to the Communication Graduate Program or consent of the instructor. (3 crs.)

CMG 722. SEMINAR IN ORGANIZATIONAL COMMUNICATION. An examination of current theory and research in organizational communication with an emphasis on key organizational variables such as the influence of internal and external communication networks on organizational activities, and the development and management of organizational culture and climate. Applications to research and interventions in actual organizations will be included in the course. Prerequisite: admission to the Communication Graduate Program or consent of the instructor. (3 crs.)

CMG 770. DIRECTED STUDY IN COMMUNICATION. The student will work with a faculty member on a special project designed to enhance the student's understanding of a topic area not covered in another graduate level course. Prior to registering for directed study credit, the student will develop a learning contract in consultation with the faculty member directing the study. The contract must be approved by the student's advisor and the Coordinating Committee prior to registration for directed study credit. Prerequisites: admission to the Communication Graduate Program and permission of the Coordinating Committee, the student's advisor, and the instructor. (up to 6 credits)

CMG 771. COMMUNICATION INTERNSHIP. The student will complete assigned duties related to his or her interest area in communication and commensurate with graduate level work in an organization under the guidance of a faculty supervisor and on-site supervisor. Prior to registering for internship credit the student will develop a learning contract in consultation with the faculty supervisor and on-site supervisor. The contract must be approved by the Coordinating Committee prior to registration for internship credit. Prerequisites: admission to the Communication Graduate Program and permission of the student's advisor and Coordinating Committee. (up to 6 credits)

CMG 800. INTRODUCTION TO GRADUATE STUDY IN COMMUNICATION. This course provides an introduction to the study of communication and to research methodology and methods from the social sciences and humanities that contribute to understanding communication. The interdisciplinary nature of communication research must be emphasized as the course prepares students for graduate study. The nature of the course as an introductory survey of research in the Communication field does not preclude students completing additional credits in research methods courses within their programs of study. Prerequisite: admission to the Communication Graduate Program or permission of the Coordinating Committee and the instructor. (3 crs.)

CMG 890. RESEARCH PROJECT. The student will conduct an independent study of a significant topic under the guidance of an advisor. The topic may have either a basic or an applied research focus. The final report on the project will be presented as a written document that conforms to the most recent version of the Modern Language Association style or the American Psychological Association style. Prerequisites: admission to the Communication Graduate Program and permission of the Coordinating Committee and the student's advisor. (3 crs.)

CMG 891. THESIS. The student will conduct an independent, original study or application of a significant topic under the guidance of an advisor and committee. The thesis will be presented as a written document that conforms to the most recent version of the American Language Association style or the American Psychological Association style. Prerequisites: admission to the Communication Graduate Program and permission of the Coordinating Committee and the student's advisor. (3 crs.)

CSC -- Computer Science

CSC 502. ADVANCED VISUAL PROGRAMMING. This course uses a visual programming language for Windows and is designed to teach advanced visual programming concepts. Emphasis will be on real-world applications. It assumes students have learned basic Windows skills, database skills, and have knowledge of the introductory course in visual programming. Prerequisites: CSC 150, CSC 201, CSC 202. (3 crs)

CSC 700. COMPUTER OPERATIONS. Designed for the graduate student who wishes to study the theory of the operation of the computer, this course looks at computer operations on the mainframe computer, minicomputer, and microcomputer. Emphasis is placed on the study of the hardware of the computer and its peripheral devices, along with operating systems. Prerequisite: CSC 771. (3 crs.)

CSC 724. COMPUTER GRAPHICS. The utilization and development of graphics software with an emphasis on business and scientific applications. Laboratory sessions utilize the computer via interactive graphics terminals. Prerequisites: CSC 772. (3 crs.)

CSC 734. METHODS IN NUMERICAL ANALYSIS. Seeks to bring about understanding of efficient numerical methods for the solution of algebraic, transcendental, and differential equations. Topics include numerical solution of large systems of linear equations using direct and iterative methods; calculation of eigenvalues, eigenvectors, and inverses of matrices; numerical integration and differential equations; interpolation and curve fitting. Prerequisites: Calculus, knowledge of Discrete Mathematical Structures or CSC 735 and programming experience in one high-level computer language. (3 crs.)

CSC 735. DISCRETE COMPUTATIONAL STRUCTURES. This course provides the requisite context for theoretical computer science. Topics include algebraic structures such as groups, semigroups, fields, and lattices. Application studies in combinatorics, coding theory, finite state machines, modular arithmetic, and graph theory. Prerequisites: linear algebra; programming experience in high-level or in Assembly computer languages. (3 crs.)

CSC 755. COMPUTER LANGUAGE AND DESIGN. An examination of the various facets of language design and their implementations. Topics covered include syntax and semantic definitions, data abstractions, strong typing, control structures, modularization techniques, and issues of program correctness. Prerequisite: CSC 777. (3 crs.)

CSC 756 DATA BASE MANAGEMENT SYSTEMS. Increases understanding of how data resources can be managed to support effectively information systems in organizations. The graduate student is taught the application, logic, structure, and physical implementation of database systems. Prerequisite: CSC 782 with CSC 777 recommended. (3 crs.)

CSC 757. HYPER MEDIA PROGRAMMING CAI. The design, development, and evaluation of instructional software will be discussed in this course. Students will apply learned instructional design theories by using an appropriate software authoring package. Prerequisite: Hands-on experience in at least one computer-related course. (3 crs.)

CSC 771: COMPUTER AND INFORMATION SCIENCE I An introduction to such digital computer concepts as data input, data representation, data processing, data output, flow charts, program logic, and applications. The graduate student learns the elements of a high-level procedural language. Emphasis is on problem solving by means of computer programming using well-structured designs. (3 crs.)

CSC 772: COMPUTER AND INFORMATION SCIENCE II Graduate students are introduced to programming algorithms using an object-oriented programming language. Applications in a variety of areas are addressed. (3 crs.)

CSC 775. SYSTEMS ANALYSIS. An introduction to the study of computer-based management information systems. Topics include the analysis, design, and implementation of management information systems; the operation characteristics of a management information system; the functional parts of a management information system; file structure techniques; data communication characteristics and system implementation models. Prerequisite: CSC 771. (3 crs.)

CSC 777. DATA ORGANIZATIONS. Design, implementation, and analysis of data structures and techniques for information processing, including, character strings, aggregates such as records and files, abstract structures such as stacks, queues, sorting, and storage management. Prerequisites: Knowledge of Discrete Mathematical Structures or CSC 735 and programming experience in one high-level computer language. (3 crs.)

CSC 778. COMPUTER SYSTEMS ARCHITECTURAL STRUCTURES. The course progresses from an introductory overview of computer organizations through a detailed examination of the components and operations of modern computer systems. Prerequisite: assembly programming. (3 crs.)

CSC 781. PROGRAMMING WITH COBOL. The concepts and theory of data processing through the components of structured COBOL programming. Prerequisite: One course in computer science. (3 crs.)

CSC 782. ADVANCED PROGRAMMING WITH COBOL. The structured methodology of program design, development, testing, implementation, and documentation of common business-oriented applications using COBOL. Includes coverage of sequential and random access files and processing techniques and development of programs and systems of programs for batch and interactive environments. Prerequisites: CSC 781. (3 crs.)

CSC 783. ASSEMBLY LANGUAGE. Architecture and instructions, including coding control structures, indexing, indirect addressing, character manipulation, subprograms, and macros. Prerequisites: CSC 771, CSC 772 and CSC 777. (3 crs.)

CSC 796. 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, integration and software maintenance. Prerequisites: CSC 223. (3 crs.)

CRJ -- Criminal Justice

CRJ 746. LAW, ETHICS AND THE AMERICAN LEGAL SYSTEM. This course will consider a variety of legal and law-related artifacts, which either demonstrate important features of American Law or raise questions regarding American law, ethics and legal process. Course participants will consider these questions including: What is law? How does it differ from religion and morality? What are the foundations of law in Western Culture? Why is law especially important in the United States? Can law, ethics and morality be differentiated? How can the American legal system be just? Is there a natural or moral law tradition? Can virtue be found? Can law shape morality or does morality shape law? (3 crs.)

CRJ 747. FINANCIAL INVESTIGATIONS. This course introduces you to current perspectives dominant in the field of financial investigations. Concepts of law and evidence, sources of information, accounting, methods of tracing funds, banking and financial record keeping, and interviewing tactics will all be covered. Primary emphasis will be placed on legal principles and applications of financial investigation techniques, and the pertinent crimes. (3crs.)

CRJ 748. CRIMINAL JUSTICE ORGANIZATION AND MANAGEMENT. The study of command level problems and trends in criminal justice organizations and management. These include the functional concepts of the administrative process as well as the principles of organizing, controlling, planning and leadership relating to criminal justice agencies. (3crs.)

CRJ 749. SEMINAR IN JUSTICE STUDIES. This is a course for advanced graduate students which allows the opportunity for scholarly research in a specific topic relevant to the justice system. The course is a seminar because it offers students the chance to interact in small groups and meet closely with the instructor. A focused, esoteric examination of a specifically approved research topic is the course's chief purpose. Authorship of a large research paper shared with the class and instructor is required. (3crs.)

CRJ 795. LEGAL AND JUSTICE RESEARCH METHODS. A Criminal Justice exploration of the specialized methods and sources of legal and justice research in these areas: publications and resources, case collections, computer-assisted research, constitutional materials, legal history, legal periodicals, legislative history, practice and procedure, and social science materials related to law. Application of legal research strategies will be required. (3crs.) *also see: MGT 742; EDP 600; SOS 716; POS 747; SWK 815; SOS 717; GEE 537.

EAS -- Earth Science

EAS 527. TECTONICS. The nature of the earth's tectonic framework. The following topics are of major concern: the location of tectonic elements; theories of orogenesis, especially plate tectonics, crustal types and provinces; magma and plate boundaries; the nature of convergent, divergent, and strike-slip margins, and the Appalachian orogen. (3 crs.)

EAS 538. COMPUTER APPLICATIONS IN WATER RESOURCES. An upper-level course designed to provide students the opportunity to apply computer and mathematical procedures to the solution of hydrologic problems. Applications from other areas within the earth sciences may be considered. (3 crs.)

EAS 541. ADVANCED ENVIRONMENTAL GEOLOGY. This course deals with the natural environment, particularly geologic factors that may impact upon life or way of life of human beings. 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 instructor permission. (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. 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.)

EAS 713. APPLIED EARTH SCIENCE. Investigation of problems in the earth sciences that cross the disciplinary boundaries of hydrology, meteorology, geology, and climatology. Library research, field investigations, and laboratory work will lead to an extensive research paper. (3 crs.)

EAS 720. HYDROLOGY. A survey course relating to the existence of water on Earth. Topics include the occurrence and movement of water, physical and chemical characteristics of water, and climatologic and geologic consideration of water. (3 crs.)

EAS 725. WEATHER ANALYSIS. The course presumes that the student has a background in elementary principles of meteorology. It is concerned with the measurements and predictions of weather. Students present findings to the class. (3 crs.)

EAS 740. 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 the rocks. To the greatest extent possible, the student works independently through a complete set of problems. (3 crs.)

EAS 741. STRATIGRAPHY. A study of the basic principles governing the interpretation, correlation, classification, and naming of stratified rock units. The stratigraphy of North America is discussed, with special emphasis placed on rocks of the Pennsylvanian System. Problem solving and individual investigations are important elements of the course. (3 crs.)

EAS 742. STRUCTURAL GEOLOGY. This course deals with the origin and analysis of geologic structures including folds, faults, and joints. Brittle and ductile deformation processes are examined in relation to fractures, faults, and folds. Geologic maps and cross-sections are formulated and analyzed. (3 crs.)

EAS 751. OPTICAL MINERALOGY. An in depth examination of the optical behavior of mineral crystals in polarized light with emphasis on identification. The optical theories of Snell and Huygens will be detailed as they relate to the transmission of light through mineral crystals. Microscopic examination of mineral grain mounts and thin sections is emphasized (3 crs.)

EAS 755. GEOCHEMISTRY. The basic chemical principles employed in the solution of some geologic problems are considered. Geologic dating, sedimentary geochemistry, chemical weathering, colloids, and structural aspects of clay minerals and soils are covered. (3 crs.)

EAS 760. FIELD PROBLEMS IN EARTH SCIENCE. This course is devoted to field work and mapping techniques. It also involves visits to field locations of interest to the earth scientist and to governmental and private agencies devoted to several of the earth science disciplines. A major written report and oral presentation are required. (3 crs.)

EAS 762. FIELD PROBLEMS IN HYDROLOGY. Opportunities for the graduate student to do practical work concerning water and water budgets. Graduate students work with problems concerning storage of water, stream measurement, evaporation, infiltration and migration, aquifer testing, tracer studies, mine drainage, and domestic use. (3 crs.)

EAS 764. FIELD COURSE IN EARTH SCIENCE. For the student who wants to learn about his/her environment in situ. The course will include a number of trips to actual sites of meteorologic, geologic, or oceanographic significance where materials and processes can be studied. A journal of site descriptions and a report on a specific site or process will be required. (Variable crs.)

EAS 765. FIELD COURSE IN GEOLOGY. For the earth science student who desires to apply his/her classroom and laboratory experiences at field sites which typify geologic principles. Site selection will reflect different emphases in geology: mineralogy, petrology, paleontology, geomorphology, or hydrology. Field trips to a minimum of ten sites of geologic significance will be supplemented by laboratory exercises; detailed journal entries and a final report that will enable the student to develop analytical skills. (Variable crs.)

EAS 771. FIELD MAPPING. This is a field course designed for the student to learn various mapping procedures and the use of mapping instruments. Problems involve the determination of distance, direction, and evaluation. Plane table surveying and map making in the field are emphasized. (3 crs.)

EAS 780. READINGS IN EARTH SCIENCE. The course deals with selected readings in the student's area of interest in earth science. It is designed to exemplify a sense of earth science problems and to develop abilities of critical appraisal. (3 crs.)

EAS 781. RESEARCH IN EARTH SCIENCE. The organization of research in an area selected by the student with the approval of the instructor. This research is in depth and may be on a micro scale or on a macro scale. (3 crs.)

EAS 792. 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 795. SEMINAR IN ATMOSPHERIC SCIENCE. The latest developments in the field of meteorology and climatology. Students are required to complete a research project and present findings to the class. (3 crs.)

EAS 796. SEMINAR IN OCEANOGRAPHY. Selected topics in geological, biological, physical, and chemical oceanography. Students are required to present a series of eleven short papers and one long paper. Class periods will involve the students in discussions of oceanographic topics presented. (3 crs.)

EAS 800. METHODS OF RESEARCH IN EARTH SCIENCE. Consideration of purpose, scope and procedures of earth science research including problem statement, data collection and data analysis. The course culminates with the development of a problem which demonstrates research ability. (3 crs.)

EAS 829. RESEARCH PROJECT. A written report on a specific topic of investigation, based on knowledge of the subject, research techniques, and accurate presentation of the material. (2 crs.)

EAS 849. MASTER'S THESIS. A written report of exhaustive research into a specific area of investigation, demonstrating thorough knowledge of the background of a subject, the published literature on a subject, and high standards of original research and presentation. (4 crs.)

ECO -- Economics

ECO 601. SURVEY OF ECONOMICS. A one-semester introduction to the principles of economics and their applications to the leading economic problems of society. (3 crs.)

ECO 711. MICROECONOMIC ANALYSIS. Analysis of the theories of consumer behavior, resource allocation, externalities, production and pricing policies of firms. (3 crs.)

ECO 712. MACROECONOMIC ANALYSIS. An analysis of the determination of national income, employment and price levels, with discussion of consumption, investment, inflation, government fiscal and monetary policies, international trade, and their relevance to business and industry. (3 crs.)

ECO 716. APPLIED ECONOMIC ANALYSIS. This course gives students practical skills in the application of economic principles to a variety of problems confronting business and government. The first half of the course reviews certain microeconomic principles which are then applied to real situations in which a private or public official must make a specific decision. This includes a diagnosis of the problem, analysis of the economic choices, and development of a plan of action to help the enterprise or government agency reach a reasonable strategy or decision. The second section reviews macroeconomic principles which are used to gain understanding of the forces determining current business conditions, make macroeconomic forecasts, and evaluate the effects on the economic and business environment of various macroeconomic and regulatory policies. (3 crs.)

ECO 721. MANAGERIAL ECONOMICS. The tools and techniques of economic analysis are used to analyze and solve business and industrial decision-making problems. (3 crs.)

ECO 731. ECONOMETRIC METHODS. An introduction to statistical estimation in mathematically formulated economic relationships, including the discussion of auto correlation, heteroskedasticity, dummy variables, functional forms, and distribution lags. Computer use is emphasized. (3 crs.)

EDE -- Elementary Education

EDE 700. HISTORICAL BACKGROUND OF THE ELEMENTARY SCHOOL. An historical review of elementary education from the distant to the very recent past, designed to develop interplay between past and current educational controversies by contrasting and comparing various personalities and issues. (3 crs.)

EDE 701. DEVELOPMENT AND ORGANIZATION OF THE CURRICULUM. Provides a complete understanding of the history, organizational patterns and resources available for the development of the school curriculum. Special emphasis is given to recent trends in elementary curriculum development. Students receive an introduction to the many facets of curriculum development. Varied opportunities are provided for the students to acquire comprehensive knowledge through papers and readings. (3 crs.)

EDE 702. INSTRUCTIONAL STRATEGIES. Topics in this course include: Research on effective teaching, written behavioral objectives, Bloom's taxonomy of cognition, questioning and discussing behaviors, utilization of thinking skills, integration of subject areas, inductive and deductive teaching, observation and assessment of children, cognitive, psychomotor and affective concerns of children, content presentation skills, conflict resolution, values, and problem solving as classroom management strategies, portfolio development for children and professionals, use of technology for students and teachers and strategies for teaching special learners in the regular classroom. Through class discussions, practice sessions, role-playing, and microteaching, students will learn how to plan for and utilize strategies and effectively teach elementary and early childhood children. (3 crs.)

EDE 703. FIELD EXPERIENCE. This course is designed to provide students with an overview of elementary schools and to prepare them to teach in the schools of the twenty-first century. Observation and participation in field sites is an integral part of the course activities. Current teaching technology and strategies to meet the needs of all children will be researched and observed. (3 crs.)

EDE 706. EVALUATION AND MEASUREMENT IN THE ELEMENTARY SCHOOL. To gauge success in the practice of teaching and to explore the science of learning, educators (and psychologists) need measuring instruments. We look at the construction, calibration, and application of those instruments used to measure achievement, intelligence, and aptitude. We examine the limitations inherent in such instruments, and take note to debunk the most egregious and exaggerated claims of some test publishers. This course presumes no statistical sophistication on the part of the students. (3 crs.)

EDE 708. TEACHING READING. Emphasis is placed on reading trends and various procedures for teaching reading. Through research findings, current literature and discussions, the student will be able to organize, administer, and evaluate a developmental reading program. (2 crs.)

EDE 715. TEACHING LANGUAGE ARTS. Research findings and current classroom practices in the teaching of language arts. Methods of updating past teaching practices are considered and evaluated. (3 crs.)

EDE 716. TEACHING SOCIAL STUDIES. Current problems in teaching social studies, planning programs, methods of teaching, and evaluating materials for use in public schools are discussed. (3 crs.)

EDE 718. TEACHING MATHEMATICS. Understanding the child's perceptions and cognitive development as they relate to mathematics. Activities appropriate to the developmental and academic levels of elementary school children are demonstrated. (2 crs.)

EDE 731. EXPRESSIVE ARTS. This course explores artistic expression in the early childhood, elementary, and middle school classroom. Content focuses on the teaching of art, music, and physical education and the integration of these expressive arts into the elementary and middle school curriculum.

EDE 737. LITERATURE AND LITERACY K-12. This course presents future teachers and in-service teachers with approaches and strategies for using children's and adolescents' literature as a basis for the reading program and as a framework throughout the curriculum. The course uses the constructivist model to accomplish its objectives. (3 crs.)

EDE 740. TEACHING SCIENCE. Representative samples of elementary science curricula. Emphasis is on the inquiry approach to teaching science, which actively involves children with science materials. The implications of psychological studies are included in relation to the elementary science curricula. Teachers engage in actual laboratory activities appropriate for elementary science. (3 crs.)

EDE 795. STUDENT TEACHING INTERNSHIP. The student teaching experience provides the opportunity for the pre-service teacher to engage in pedagogy which embraces the constructivist model. During the course of this assignment, students work in two public school classrooms and attend weekly practicum. Discussions focus on current materials, constructivist teaching strategies and techniques, technology in the classroom, and Pennsylvania school laws relevant to the work of the classroom teacher. In addition to these school-based experiences, the pre-service teacher is encouraged to engage in a series of community and cultural events with the surrounding school community. (3 crs.)

ENS -- Environmental Science

ENS 773. 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 120 & BIO 125. (4 crs.)

ENS 775. WETLANDS ECOLOGY. A coordinated lecture/laboratory approach that emphasizes North American wetlands. 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; wetland delineation; regulatory framework of wetlands protection and conservation; and wetland restoration. Prerequisites: BIO 310 and permission of instructor. (4 crs.)

ENS 792. 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.)

FIN-- Finance

FIN 531. BANK MANAGEMENT. Banking environment and an analysis of operational decisions faced by bank managers in the areas of loans, investments, deposit management, and capital management. (3 crs.)

FIN 711. FINANCIAL MANAGEMENT. An introduction to the role of financial manager in executive decision-making. Topics include valuation models, financial planning, analysis and control, capital budgeting, cost of capital, capital structure, and dividend policy. (3 crs.)

FIN 712. ADVANCED FINANCIAL MANAGEMENT. Topics include capital markets, common stock, debt and preferred stock financing, lease financing, warrants and convertibles, reorganization and bankruptcy, and international business finance. (3 crs.)

FIN 721. INVESTMENT MANAGEMENT. Evaluation of debt and equity security alternatives for the use of investment funds and the theory and techniques basic to control of investment risks and optimization of investment returns. (3 crs.)

FIN 731. INTERNATIONAL FINANCIAL MANAGEMENT. The course provides the conceptual framework within which the key financial decisions of the multinational firm can be analyzed. Topics include Exchange Rates, Foreign Exchange Market, Currency Futures and Options Markets, Foreign Exchange Risk Management, Multinational Working Capital Management, International Banking, and Foreign Investment Analysis. (3 crs.)

GEE -- General Education

GEE 501. CAREER TRANSITION SEMINAR. This course provides knowledge of a practical preparation for the world of work. Students conduct self-assessment for career planning, learn how to research particular jobs, careers, and employer.; 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.)

GEE 520. LANGUAGE AND SOCIETY. The course approaches the traditional goals of the study of language by the methods of modern semantics, i.e., through an understanding of the role of language in human life and through an understanding of the different uses of language. The course also shows that the language of each nation is its most distinctive cultural pattern as well as its strongest unifying force. (2 crs.)

GEE 525. COMMUNITY PROBLEMS OF HEALTH AND SAFETY. The physical, social, and emotional dimensions of the health and safety problems prevalent in our society. These issues are perceived in terms of our lifestyle and concepts of personal and community health. Epidemiology, prevention, treatment, rehabilitation, legislation, education, and the role of community agencies are presented. The purpose is to enable counselors within a school or community setting to help clients deal more effectively with their problems. (3 crs.)

GEE 528. EARLY CHILDHOOD AND THE EXPRESSIVE ARTS. A general experimental course which, first, provides encounters stimulating the students to discover that the arts can be modes of personal expression and communication; second, provides experiences to evoke fluency, flexibility, and originality; and, third, is an integrative experience as a holistic approach to learning involving the cognitive, affective, and psychomotor domains. (3 crs.)

GEE 529. DEATH, DYING, AND IMMORTALITY. The phenomenon of death and dying in the areas of anthropology, psychology, philosophy, education, literature, religion and song. (2 crs.)

GEE 536. ARCHAEOLOGY FIELD SCHOOL. Scientific archaeological field and laboratory techniques. The basic orientation is that of research. It is assumed that students have little or no background in archaeology or anthropology. (Variable crs.)

GEE 537. COMPUTER SCIENCE. This is a general course in computer science for any graduate student. Topics will include the early history and development of computers, simple programming concepts with the emphasis of applications in business, industry and education. Emphasis will be placed on using computers for arithmetic operations, information retrieval, data base development, statistical program packages for research, data communications, e-mail and the internet. This course combines lecture, demonstration and hands-on use of the computer in the labs. The content of this course changes as computer technology changes. This course has no prerequisites and is designed for the student who has either no or little previous computer background. (3 crs.)

GEE 586. STUDY IN HUMAN CREATIVITY. The primary purpose of this course is to formally introduce the student to the study of human creativity as an academic endeavor. It is specifically designed to establish each perso's competence as a creative problem-solving facilitator (a teacher, one who is knowledgeable and skilled at applying creative problem solving methodologies). Individual, managerial and technical types of problem-solving activities will be engaged. Each student will conduct (facilitate) several problem-solving excursions. Each student will study, administer and evaluate several standardized tests that evaluate creative problem-solving skills. Students may evaluate themselves, others or both. This is a learning laboratory, action oriented course, intended to simulate real world creative problem-solving techniques. (3 crs.)

GEO -- Geography

GEO 520. PHYSIOGRAPHY OF THE UNITED STATES. 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.)

GEO 550. ADVANCED GEOGRAPHIC SYSTEMS. This course will include two lecture/discussion hours and one lab hour. In the lecture/discussion part, students will gain a deeper knowledge of geographic information systems. They also will be exposed to extension programs to Arc View including network analysts, spatial analysts, and 3-D analysts. In the lab, students will work on exercises in all three extensions. (3 crs.)

GEO 711. DEMOGRAPHIC ANALYSIS. An analysis of demographic processes, current situations, and consequences of population trends as they relate to urban and rural distributions. (3 crs.)

GEO 714. URBAN ENVIRONMENT. An investigation and analysis of cities in terms of their location, distribution, classification by function and internal morphology. Geographic aspects of urban planning are emphasized. (3 crs.)

GEO 729. REGIONAL ECONOMIC GEOGRAPHY. The study of the overt results of economically oriented behavior as they appear in the landscape. Various frameworks and models are developed and applied to the "core" of economic geography, the subsystem of agriculture, manufacturing, tertiary activities, and transportation. (3 crs.)

GEO 733. LAND USE ANALYSIS. An analysis of the structure of urban and rural areas with particular emphasis on the description, patterns and trends in land use. Methods for defining, representing and evaluating land use are developed. Explanations of land use patterns are incorporated. (3 crs.)

GEO 734. SITE SELECTION. The effects of physical features and spatial economic organization upon the selection of locations for industrial and commercial activities. Attention is given both to regional position and to local site. (3 crs.)

GEO 735. MARKETING GEOGRAPHY. The distributive trades of retailing and related wholesaling and service activities. Spatial patterns of consumer catchment areas and the business centers within which they are located will be emphasized. (3 crs.)

GEO 737. 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 738. GEOGRAPHY AND PUBLIC POLICY. This course will present a practical overview of the theory and techniques used in the policy process. Students will be instructed in the complex process followed in the development, implementation, and management of the policy agenda. Policy will be studied as it pertains to land use, the environment, service delivery, budgeting, social and economic problems, and politics. (3 crs.)

GEO 739. REGIONAL PLANNING. A systematic development of regionalism as a geographic concept emphasizing the regional concept as it evolved from area studies to regional science particularly as it applies to planning. (3 crs.)

GEO 765. FIELD METHODS. Study of techniques used in making geographic observations in the field. Emphasis is on the study of natural and cultural landscape features at selected localities. (3 crs.)

GEO 766. FIELD PROBLEMS. Application of field methods to the landscape. Micro studies are conducted. (3 crs.)

GEO 764. REMOTE SENSING: MAP AND AERIAL PHOTO INTERPRETATION. The use of maps and aerial photographs as sources of quantitative and qualitative information and the interpretation of the natural and cultural landscapes through identification and measurements. (3 crs.)

GEO 769. COMPUTER CARTOGRAPHY. This laboratory course is designed to further the student's cartographic skills through the preparation of a cartographic project. (3 crs.)

GEO 785. READINGS IN GEOGRAPHY. Selected readings in the student's area of interest in geography, designed to exemplify a sense of geographic problem and to develop abilities of critical appraisal. (3 crs.)

GEO 786. RESEARCH IN GEOGRAPHY. The organization of research in an area selected by the student with the approval of the instructor. This research is in-depth and may be on a micro scale or on a macro scale. (3 crs.)

GEO 789. COMPREHENSIVE PLANNING. Provides students with insights and experiences in applying academic skills to the planning functions of local government. A background in the many factors affecting planning decisions is provided. Emphasis is directed to proposing recommended courses of action to real and hypothetical community problems. (3 crs.)

GEO 791. SEMINAR IN REGIONAL PLANNING. In depth analysis of topics of current interest: primarily research and oral presentation of selected topics. (3 crs.)

GEO 798. SEMINAR IN GEOGRAPHY. Review of the field of geography culminating with an oral presentation of written research in the student's area of interest. (3 crs.)

GEO 800. METHODS OF RESEARCH IN GEOGRAPHY. Consideration of purpose, scope and procedures of geographic research including problem statement, data collection and data analysis. The course culminates with the development of a problem which demonstrates research ability. (3 crs.)

GEO 829. RESEARCH PROJECT. A written report on a specific topic of investigation, based on knowledge of the subject, research techniques, and accurate presentation of the material. (2 crs.)

GEO 849. MASTER'S THESIS. A written report of research into a specific area of investigation, demonstrating thorough knowledge of the background of the subject, the published literature on the subject, and high standards of original research and presentation. (4 crs.)

HPE -- Health and Physical Education

HPE 500. EMERGENCY MEDICAL TECHNICIAN (EMT). Prepares students to become certified as Emergency Medical Technicians. Emphasis is placed on 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.)

IMT -- Industrial Management

IMT 707. INDUSTRIAL SAFETY. An overview of occupational accident prevention programs, covering the techniques of measurement, associated costs, accident sources, and problems of selective corrective actions. (3 crs.)

IMT 709. TIME AND MOTIONS STUDY. An introduction to methods engineering in industry, surveying the methods designed to improve performance of both individuals and groups through motion analysis and principles of motion economy. (3 crs.)

IMT 765. OPERATIONS RESEARCH. An examination of quantitative methods of decision-making in production, marketing, and finance. Topics include inventory, assignment, transportation, and linear programming problems. Deterministic, stochastic, and games theory models are utilized. (3 crs.)

IMT 790. MANAGEMENT INTERNSHIP. This program involves integration of classroom studies with professional work experience. At the 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.)

LAW -- Legal Studies

LAW 600. LAW AND PUBLIC POLICY. The cornerstone course of the graduate degree comprises this program of study. Exactly how law plays out in a multitude of settings, from political and legal institutions, to schools and educational entities, to business and free enterprise forms, in social structures and cultural institutions should be a perpetual concern for the policymaker. How the law impacts individuals also receives some needed attention and course participants will weigh and gauge the effects of proposed and implemented legislation in a wide array of contexts including: police and the citizenry, correctional institutions and the incarcerated, government benefit plans and targeted recipients, entitlement programs and the public treasury, tax policy and the incentive based model, charitable giving and the law's role in fostering giving, to name a few. Measuring impacts and effect on individuals and institutions stands in the forefront of course delivery.

LAW 601. LAW AND ETHICS. An inquiry into the interplay of law, morality, ethical reasoning and Western Legal tradition. The course exposes the tradition and foundations of the American legal system with special emphasis on its jurisprudential foundations. Questions of right, justice, equity, law as moral command and order, natural law reasoning and the dignity of the human person are central to the instruction. The course delivers a critical look at how our legal and justice institutions have come about and provides a method for dealing and delving into perennial legal and moral problems that plague cultures. Course also delivers an overview of the major legal theories about the nature of law and its place in the political system. Among the issues considered is the origin of law, its relationship with divine law, obligations of obedience and disobedience, and the relationship between political sovereignty and law.

LAW 602. LAW, CIVIL LIBERTIES AND THE CONSTITUTION. The place of the Constitution and Supreme Court in American policy, using both empirical and case materials is the primary content of this course. Focus also includes the structure and powers of national government, with special emphasis on the Supreme Court as a policy-making institution. Civil liberties and corresponding constitutional protections will be examined in depth including a close up of the Bill of Rights and Civil War Amendments. Issues of jurisdiction, search and seizure, police powers, free speech, privacy and its penumbras, state action, eminent domain, states rights, and other constitutional issues will be fully analyzed. Even more attention will be given to questions involving discrimination whether based on race, disability or gender.

LAW 603. LAW AND LEGAL METHOD. A review of the American legal system, including the courts and the legislatures, role and functions of its personnel, form and substance of law from a procedural and substantive perspective, and primary and secondary sources of the law. Students will be exposed to federalism, the function of law making, and dispute resolution in the judicial system. The course also surveys the processes of the judicial, legislative, and executive branches and the role of administrative agencies. Another facet of the course is dedicated to the mastery of legal method and the research tools essential to that success including: judicial reports, including federal and state court reports and citation forms; case finding aids, including federal, state and Supreme Court digests and encyclopedias; citators such as Shepard's Citations; digests; annotated law reports; legal periodicals, including periodical indexes and research procedure; the nature, function and characteristics of treatises; research procedures; state and federal administrative law; federal, state and local court rules; miscellaneous research aids and non-legal research aids. The student will also be exposed to the various types of law including crimes, civil actions, contract and business actions as well as other typologies of law. Course participants will have ample opportunity to hone and develop critical legal skills by argument, advocacy, interpretation and preparation of legal documents.

LAW 605. LAW AND POLICE PROCESS. A comprehensive examination of the role of police as gatekeepers in the justice system with particular attention given to their role, function and responsibilities inside the legal system commences the course analysis. How police and law enforcement carry out their duties in a free society will be the subject of debate and advocacy as will the perennial issues surrounding police behavior - police misconduct, police abuse of discretion and police alienation from communities. An equally important aspect of the course will relate to the legal issues that surround police practice on a day-to-day basis. Police search and seizure, confessions and witness cooperation, identification and investigative field practices, and the law of arrest and detention will be assessed from a professional, statutory and constitutional perspective. Attention will be given to the efficacy of judicially ordered remedies in the conduct of police and whether other methods of intervention may generate better results. A comprehensive view of litigation tactics and strategies in police misconduct cases from initial investigation to appeals, receive significant coverage.

LAW 606. LAW, PUNISHMENT AND CORRECTIONS. Concepts related to correctional law and its applications are the central theme of the course. Aside from the usual review of correctional law issues, relating to prison modalities and regimen, discipline and due process, constitutional protections during incarceration, with special analysis of 8th and 14th Amendment claims, the course expends considerable time on the role of function of institutional processes and operations in the correctional sphere - allowing an even handed discussion of the rights and responsibilities of both the correctional officers and supervisory personnel and the inmates within their custody. Further treatment includes emerging questions in the prison environment including AIDS in the facility, free expression and political speech, the right to vote, family and conjugal visitation, matters involving parole and furlough as well the theory of rehabilitation, both medical and mental in prison operations. Lastly, the course evaluates the diverse schools of thought in the matter of punishment including its legitimacy and its condemnation and addresses the more controversial questions in prison practice and therapeutic activity as punishment.

LAW 607. LAW AND CRIMINAL CONDUCT. A comprehensive analysis of the law of crimes from a historical, philosophical, moral and statutory perspective is the chief end of the course. Topics include criminal responsibility, criminal liability, and criminal defenses. Students will be adept at understanding the roots of criminal conduct and just as capable in the analysis of criminal legislation. Aside from dissecting the fundamental elements of each crime, the participant will become learned in more than simple definition and delineation of crimes, but able to pose and advocate defense tactics as well. How constitutional and social issues interplay with criminal proscription will be central to course delivery. The course will include a study of criminal litigation process and procedure with a particular emphasis on appeal strategy.

LAW 608. LAW AND CIVIL LITIGATION. A comprehensive review of civil action and remedies that are part and parcel of the American legal system is the central focus of this course. Civil actions in the law of torts and contracts, and in the arena of administrative process, impact the justice system in varied ways. From litigation to court docketing, to enforcement and fines, as well as other legal responses, civil litigation consumes the resources of the justice model. In the law of torts and damages, the civil system provides intentional causes of action, from assault to defamation, from invasion of privacy to false imprisonment, to injured parties. Negligence delivers remedies to those injured by a lack of due caution and expected behavior from the reasonable person. Covered too will be the principles of strict, product and vicarious liability in particular relationships such as employer/employee, parent/child or product manufacturer and consumer. Methods and issues of damage awards will be fully critiqued as well as the current debate over reform in the law of torts, workers compensation and other no-fault claim processes.

LAW 609. LAW, CULTURE AND SOCIETY. An interdisciplinary survey of the functions of law in society is the prime end of this course. Course not only analyzes law and legal theory, and legal and social institutions, but also evaluates the interplay and interdependence between law and the social order it resides within. The study delivers special emphasis on issues of justice, fairness, and equality. The relationship between law and the legal system and political/economic institutions and ideologies is continually emphasized. Law and the legal systems are viewed from a critical perspective, including the relationship between the law and the

individual as to matters of inequality, race, class, and gender. Issues relating to art, free expression, religion and its practice, media, censorship, concepts of pornography and obscenity, sexual activity, association and political action will also be analyzed.

LAW 610. LAW, JUSTICE AND THE FAMILY. A survey of the law of domestic relations from a statutory and common law perspective is the course's chief aim. Special emphasis will be given to the diverse controversies inherent in the law of the family including annulment, divorce, separation, and other temporary and permanent dissolution agreements. In addition, course coverage weighs and evaluates the controversies and practical difficulties inherent in the division of property, custodial and equitable dissolution awards, and the judicial oversight of parent-child relationship. Other topical concerns are visitation, adoption, proof of paternity, questions of incorrigibility and delinquency, adoption, and the diverse forms of litigation tactics so often witnessed in the law of domestic relations. Contemporary dilemmas related to the family will be thoroughly scrutinized and include gay and lesbian adoption, same-sex marriage, the rights of grandparents, state's right to intrude in family life in matters of medical care and worship, and other controversial claims.

LAW 700. LAW AND THE INTERNATIONAL COMMUNITY. Course examines the major legal systems of the modern world, commencing with the West, moving to the East and some emerging third world republics. In the era of globalization, knowledge of the legal traditions and legal systems of the world's major powers is essential. The course scrutinizes and critiques legal systems as systems, with distinctive components, internal relations and functionalities and includes a review of their respective history, culture, and structure. The purpose of the course is to compare the rules of law in the different legal systems in an effort to discern the general principles of law, and gain insight and understanding into the emerging globalization of legal principles and ideas. Serious assessment will also be provided relative to human rights questions, definitions of "political prisoner" and the principles defined by treaty and agreement as to the protection of individuals in a global context.

LAW 701. LAW AND ADMINISTRATIVE AGENCIES. Course exposes participants to administrative law theory and the practical aspects of administrative law practice, both within and outside the administrative agency. Coverage equips the student with the necessary skills to understand, apply, and research relevant statutory and regulatory provisions at the federal and state level; to read, interpret and draft proposed rules and regulations; to become familiar with the process known as the administrative law hearing, the concept of administrative discretion and corresponding remedies. Preliminary drafts of documents, briefs, and opinions relative to the appellate stage of an administrative law proceeding will also be covered.

LAW 702. LAW, SCIENCE AND FORENSIC APPLICATIONS. An interdisciplinary course covering law, criminal justice and technology in the evidentiary arena. Coverage in the course provides a broad-based assessment of expert witnesses, microanalysis, pathological evidence, admissibility and investigatory practice, ballistics, fingerprints, VASCAR/radar, and photographic techniques. Contrasted with criminalistics, subject matter of this course is primarily evidentiary. More particularly, the course will delve into the rules of evidence that guide the admissibility of forensic evidence in a court of law. Examination includes: threshold tests for reliability and admissibility; qualification of witnesses competent to testify; scientific rigor required for admission; and case law determinations on the use and abuse of scientific evidence.

LAW 703. LAW AND THE ENVIRONMENT. Surveys the major Federal statutes and regulatory schemes relating to environmental quality and analyzes and compares the contrasting approaches to regulation that have been used in judicial settings. Focuses on the interaction of law and policy and considers the role of Congress, the regulatory agencies, and the courts in defining and implementing environmental mandates. Focused attention is given to air quality and its regulation, water and pollutants, the control and dissemination of toxic substances, management of hazardous materials and the debate around the government's role as protector of the environment.

LAW 704. LAW, BUSINESS AND THE WORKPLACE. Course content includes the various business entities and the steps necessary for creation and operation, from initial and amended articles of incorporation, state filing requirements, stock certificates and securities, stock ledgers and books, resolutions, dividends and stock splits, employment agreements, as well as introducing other business forms from partnerships to limited liability corporations. In the employment sector, coverage will examine constitutional and statutory protection related to employee rights from benefits and pensions to discrimination remedies. Collective bargaining and other labor questions will be keenly assessed as well as emerging workplace questions involving maternity and family leave, wages and compensation, COBRA, free expression and religious rights and novel forms of disability claims.

LAW 730. INDEPENDENT STUDY IN LAW AND PUBLIC POLICY. An independent opportunity for mature and scholarly graduate students to build on and further develop research, writing and analytical thinking skills by authoring a serious work of scholarship. Student is required to use advanced research and writing skills in the resolution of a current substantive or procedural legal problem. Student works directly under the guidance of a graduate faculty member and prepares, executes and submits for departmental review, the proposed course of study.

MGT -- Management

MGT 711. GENERAL MANAGEMENT. An analysis of modern complex organizations, with emphasis on those areas of individual and group behavior that are directly relevant to all levels of management. (3 crs.)

MGT 712. ORGANIZATIONAL BEHAVIOR. Focuses on the behavioral science concepts and research findings directed toward the understanding and explanation of human behavior within organizations. Topics covered include individual processes, group processes, organizational processes, work setting and change processes. (3 crs.)

MGT 721. PRODUCTION MANAGEMENT. Problems, techniques, and other topics associated with the management of production in industry. Topics include forecasting, inventory control, scheduling, sequencing, and design of production facilities. (3 crs.)

MGT 731. INDUSTRIAL RELATIONS. A survey of the legislation regulating employer-employee relations in the United States today and an examination of the relationships between workers and their managers. Special emphasis is given to collective bargaining, wage and hour requirements, equal opportunity regulations, and conflict resolution. (3 crs.)

MGT 742. HUMAN RESOURCE MANAGEMENT. Theory and practice of personnel management and analysis of personnel problems for managers. Topics include human resource planning, selection, training and development, performance appraisal, compensation administration and equal employment opportunity. (3 crs.)

MGT 751. INTERNATIONAL BUSINESS MANAGEMENT. The problems and policies of international business enterprise at the management level. Cases in comparative management are utilized. Includes strategies of the firm in international business, structure of the firm in international business, the international environment, restraints on international competition, multinational enterprises, and national institutions. (3 crs.)

PRT -- Management of Technologies

PRT 701. MANAGEMENT INTEGRATION OF EMERGING TECHNOLOGIES. In this module (course), students address selected issues facing managers of organizations, the management of highly technical personnel in private and public sectors, and how to approach issues growing out of dramatic technological change. Students gain an understanding of the relationships among research, development, the service sector, and manufacturing in technical organizations. The coursework continues by examining the major social, economic, legal, and ethical issues associated with implementing technology. The second part of the module considers interpersonal communication, group processes, management skills, leadership, team management, and organizational skills. The third part of the module addresses the conceptual background and analytical tools necessary for using budgeting and financial systems to control costs. The fourth part of the module addresses the nature of strategic management and various methodologies involved in technological planning. It also examines the uses and applications of some ten technologies impacting management in the present decade. (9 credits)

Components:

Organizational Behavior and Leadership. Organizational behavior issues in technological settings; groups, dyads, teams in technological environments; team construction, matrix management, multiple roles in multiple projects; team and group dynamics; organizational culture and technology; forming, storming, norming, performing, adjourning; rapid team decision making and consensus; kanban, banzai and team support; conflict and anger in teams; desert survival game and team decision making; matrix management use of FIRO-B for employee selection, Myers-Briggs type exercise. Examinations of psychoses and neuroses to identify potential employee explosive confrontations.

Electronic Finance. Case presentation, teams will prepare a financial case. A complex case will be assigned. The case will address financial accounting and tax considerations for an emerging technology or global expansion. As part of the requirements, problems will be based on tax, accounting, global transactions, and financial management issues addressed in the module. Off the shelf (OTS) and custom financial packages uses and degradation over time; tax ethics in global firms; consolidated financial statements and deconstruction; financial statements analysis; complex future planning (two decades and more); technology effects on long-term plans; research sources for long-range (two decades or more) planning; dollar based financial statements vs. alternatives; minority holdings; inflation accounting; deflation write downs; privatization opportunities; crossed stock holdings; ownership of bank stock, other bank relationships; bank offerings and other shelf offerings; broker relations, using stock options as compensation supplements and motivation. Bluetooth technology, wireless, DWDM, broadband, and satellite technology examined.

Technology Theory and Application. Team evaluation of a selected technology. Participants will evaluate a current technology with potential for application. Considerations will address the current stage of development, how this technology will bear on other technologies, the range of organizational applications for this technology, possible users/markets, estimates of market size, and how your organization should best prepare to exploit this technology. Applied technology as a discipline; teams evaluate technology management issues and theories and changes necessary for effective management in organizations; organization changes arising from technology implementation; dramatic organization changes from technology changes; "All Technology" organizations and human resource management issues; technology effects on countries in general; technology effects on industry trends; technology effects on selected industries; how some technologies evolve from lab to user; cases in technology evolution. Website construction and development.

Research Methodology. Participants will be exposed to knowledge about the holdings of various libraries. They will research and discuss access to selected corporate libraries and their holdings; Internet citations and downloads will be initialized and incorporated into verbal and written case reports, papers and exercises; Instruction in the use of interviews and a primary research methodology will be provided and participants will incorporate this process as applicable; Instruction will be provided on how research papers can be presented, published and utilized in different organizational settings and the standards for this program; Government sources, foreign Bibliotheca, research and trade journals and web sites will be identified, evaluated, and utilized.

PRT 702. INVENTION, INNOVATION AND TECHNOLOGY ECONOMICS IN COMPLEX SETTINGS. This module (course) addresses economic issues facing managers in their critical units of technology-based organizations. Understanding the measurement of a country's economic flow and evaluating the industry and the firm within that industry are essential to successful economic planning. How engineering economics for high tech products can be applied in conventional and unique manners to provide high short-term profits or normal longer-term profits is studied and applied to products of choice. Management of R&D and quality issues is incorporated into a progressively developing research effort. (9 credits)

Components:

Economic Forecasting. Participants will learn to measure Gross National Product (GNP) using incomes, expenditures and value added methods. Evaluate Consumption, Investment, Government, Exports-Imports, and (CIGE) effects on wealth and technology development. Evaluate technology effects on any country's GNP and measures of Consumer Price Index (CPI). Evaluate effects of centralization of wealth on technology FORD, LINCOLN ELECTRIC, and other cases. Energy examples are provided. Anticipate effects of employment/unemployment policies on GNP, education levels, and crime. Identify GDP changes due to technology. Evaluate centralization of wealth effects on a country's exploitation of technology. Identify and evaluate economic trends affecting workforce education. Identify, describe, and evaluate free enterprise in stage one movement to capitalism. Laser technology examined. GPS, GIS, and artificial intelligence are discussed.

Quantitative Methods. Participants will compare, understand, and selectively evaluate: Telemedicine including Telematics to understand future trends in health delivery; Transportation including Global Positioning System (GPS) and vision Technologies and their impact on control and safety; Automated warehouses, Just In Time (JIT), security, pilferage and processes required for their effective utilization. Electronic commerce, electronic catalogs, electronic banks, Electronic Data Interchange (EDI) (FEDI), web, email, HTML and other markup languages, firewalls, invasion alerts, security breeches, cost of electronic security, training and procedures, global access, and role of government; Machine Vision in production settings, cost of applications, effectiveness, personnel training and safety issues. Quantify management problems using electronic software in statistics, linear programming, queuing theory, and economic order quantity.

Complex Systems Management. Participants will discuss and evaluate a complex organization in context of the general systems model. Participants will understand and apply chaos, homeostasis, equilibrium, entropy, order, rejection, and boundary concepts to complex systems, natural and man made. Integrating assignment; Identification of team progress on major research assignment and reports from teams on concerns and challenges. Plans for utilization of learning technologies characterizing modules to date in organizational settings. Discussion and reflection on mid program evaluations. The subject matter will be presented as a combination of lecture, class discussions, and case analyses. Participants working in teams demonstrate creativity, innovation and/or invention by researching, creating, and developing something new. The effort can terminate with a product or a proposal reflecting progress toward product creation.

PRT 703. POLICY DEVELOPMENT ACQUISITION AND PROJECT MANAGEMENT OF COMPLEX TECHNOLOGIES. This module (course) integrates complex project management, complex systems design and integration and advanced systems acquisition management. Students learn to organize and control projects, build teams, define projects, structure activities, and measure technical effectiveness with efficiency. Principles and techniques used in designing and developing systems are integrated and evaluated to achieve cost-effectiveness and improve performance. Systems acquisition topics to be addressed and evaluated include competitive factors, rights to data, make or buy decisions, source selection, milestones; standardization, warranties and guarantees. Several technologies are addressed in this module. Complexity theory and applications are presented. (9 credits)

Components:

Project Management. A theoretical but complex project will be discussed and examined in class and will be used as the project case study throughout the seminar. Teams will be established and each team will be expected to create a complete project plan. Individuals will be expected to participate equally in the preparation of his/her team's project plan, including the requirement for a 15-minute oral presentation. Each presentation will discuss a portion of that plan. Telemedicine, telematics, reference to epidemiology, and medical technologies are covered in this module.

Complex Systems Acquisition. Teams will accomplish an exercise in systems acquisition and integration to include the design and development of a prototype item in accordance with the requirements of a statement of work and systems specification, which will be provided. Although the performance of the final product is important, the acquisition process and project management approach applied to the systems design process is of primary interest. Appropriate design review for the project will be conducted, and documentation will be prepared to guide the design and development of the system with a prepared briefing due. The teams will make

oral presentations of the case study problem. Automatic production, automated warehouses, motor vehicle, aircraft technologies, and composite materials are discussed.

Artificial Intelligence Applications. Artificial Intelligence (AI) Expert systems may focus on medicine and personnel selection; case-based expert systems; General Systems Theory (GST) applied to complex organizations and systems; Group Decision Support Systems (GDSS); Information warehouses and their access; Knowledge Based Systems (KBS); Telemedicine and Division Wide Data Multiplexing (DWDM) are presented. The subject matter will be presented as a combination of lecture, web access, class discussions, technology demonstrations and case analyses. An expert system shell is downloaded and student teams create a small expert system and/or decision support system. Contemporary management and strategic planning issues are addressed. Examination of several technology theories in biotechnology with exercises, applications, and cases are part of this session.

PRT 704. APPLIED TECHNOLOGY RESEARCH AND MANAGEMENT DECISION MAKING. This module (course) presents ethics and contradictions in management ethics; tools, theories, applications and evaluations in research methodology; innovation and engineering developments in technology; patent, copyright, trademark, and human resource law and legal issues in human resources, presentations of research findings; and discussions and evaluations of specific technology applications. (7 credits)

Components:

Legal Environment of Business. Legal issues of importance to technology centered managers; the USA legal process; definitions of criminal law, torts, corporate law, and administrative law; examples of legal traps, white-collar crime, and extradition variability; Foreign law examples discussed to include religious law, examples in Israel and Muslim countries (The Koran), Italian and English maritime law, Napoleonic law and others; Human resource law, and National Labor Relations Act; Administrative law especially SEC (Securities law), Federal Aviation Authority (FAA), Federal Communications Commission (FCC), Federal Drug Administration (FDA), and others.

Business Government Law. The copyright law and how it is applied; trademarks and the registration process; intellectual property law; patent law and patent processes; patent processes effected through South Korea and other countries.

Research Methodology (2 credits). Themes include Innovation processes and engineering developments in technology management. Examples of innovation processes, uses of creativity; development of innovation in organizational culture; innovation processes in high technology organizations; evaluation of innovation processes are included. The subject matter will be presented as a combination of lecture, class discussions, and case analyses.

MKT -- Marketing

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 (3crs.)

MKT 711. MARKETING MANAGEMENT. Description and analysis of the nature, strategies, and techniques in marketing management. (3 crs.)

MKT 721. RESEARCH METHODS IN MARKETING. Examines the process of acquiring, classifying and interpreting primary and secondary marketing data required for intelligent marketing decisions. (3 crs.)

MKT 731. MARKETING FOR NON-PROFIT ORGANIZATIONS. A marketing course designed for MBA students that differentiates between for-profit and not-for-profit organizations, investigates the competitive environment facing non-profits (e.g., hospitals, churches, charities, colleges, and performing arts groups,) 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 751. ADVERTISING MANAGEMENT. A detailed analysis of the components of the advertising mix, reviewing the components in order to determine selection techniques for appropriate media vehicles for various business advertising demands. The graduate student will analyze and develop a media presentation as a member of an advertising team which will be presented at the end of the term. This process includes basic research, campaign development and media selection. (3 crs.)

MKT 761. BUSINESS MARKETING STRATEGY. This course focuses on the expanded contemporary marketing strategies that are essential for businesses to survive in today's competitive global marketplace. Emphasis will be placed on case studies, group presentations, and class interaction to equip the graduate student with a level of understanding to effectively function with a greater comprehension of business marketing while serving in business management. Prerequisite: MKT 301 (3 crs.)

MSE -- Master of Arts Teaching

MSE 600. THE AMERICAN SECONDARY SCHOOL. A foundational course for prospective teachers designed to study the educational policy process at all levels, from local school districts to state and federal governments. Students will examine a number

of timely and interesting developments in contemporary education. Students will be introduced to instructional design and the designing of lesson plans and unit plans. There is a total of 18 hours (3 school days) of teacher observations required for this class. (6 crs.)

MSE 601. COMING OF AGE IN AMERICA. A developmental study of the adolescent experience including popular culture, social and psychological development, the formation of values and morality, the family, and the peer group. There is a total of 18 hours (3 school days) of teacher observations required for this class. Prerequisite: MSE 600 and MSE 602. (6 crs.)

MSE 602. INSTRUCTIONAL TECHNOLOGY IN SECONDARY SCHOOLS. Computer literacy is a prerequisite for this class. This is essentially a laboratory-style experience making extensive use of information technology, multi-media applications and studies in the effects of media in a classroom setting. Students will add the various instructional technologies, such as audio-visual, print-based, process and computer-based products/methodologies into their unit plans. Prerequisite: MSE 600. (6crs.)

MSE 603. PEDAGOGICAL STUDIES - SECONDARY EDUCATION. This is the final and most extensive clinical experience. Students are assigned to a supervising teacher at one of our clinical sites. The student spends full time in classroom teaching for a semester of 15 weeks. A university supervisor observes periodically and a weekly practicum brings student teachers together to discuss common problems. (12 crs.)

MSE 604. RESEARCH in Secondary Education. This course teaches the student the basics of setting up a research project involving curricula issues. Consideration is given to the use of published research literature, ERIC, and other relevant literature. Students will learn the fundamentals of research statistics and analysis. This course assists the student in writing a thesis proposal. (3 crs.)

MSE 605. CURRENT ISSUES IN SECONDARY EDUCATION. An intensive seminar to bring secondary teachers up-to-date with current standards, trends and best practice, including new technologies, materials and methods. 6crs.

MSE 606. INTERNSHIP. The internship experience requires a minimum of 90 hours under the supervision of a sponsor/sponsoring organization. Students will intern in an area that relates either to their content area specialization, child development or to their thesis content area. Valid and current PA Teacher clearances required. (6 crs.)

MSE 614. Master's Thesis in Secondary Education. The thesis will usually be empirical in nature and involve the manipulation of independent variables, use of statistical methods or experimental design. The American Psychological Association Style Manual will be required for this thesis. The thesis requires at least three members, one of which is required to be from outside the Master of Arts Teaching faculty. Prerequisite: MSE 604. (3 crs.)

MMT -- Multimedia Technology

MMT 701. MULTIMEDIA TECHNOLOGY. Introduces the student to the software components and terminology of multimedia technology as a basis for subsequent courses. Multimedia computer systems, storage devices, printers, sound and video digitizing and playback, digital cameras, scanners, LCD and projection panels, graphic file formats, animation and digital video, computer networks and the Internet, hypertext markup language and distance learning are investigated. The focus is the application of these topics to the student's professional field of study. (3 crs.)

MMT 702. MULTIMEDIA SYSTEMS. Focuses on the application of graphic design and the integration of multimedia components. The organization of visual elements such as type, color, texture, contrast, perspective, balance and unity will play an important part in the development of both interactive and non-interactive presentations. Emphasis will be placed on the process of blending the components using various hardware platforms and software tools. For a final project, the student will create and master a CD-ROM based multimedia presentation as the basis of a personal digital portfolio. Prerequisites: MMT 701 (3 crs.)

MMT 703. DIGITAL EDITING. Presents techniques of achieving strong components in: audio, imaging and video, generation/acquisition, enhancement, storage and retrieval of these components in the digital realm are major topics. Through a series of laboratory and collaborative site activities, the student will gain experience using hardware and software tools to achieve effective digital editing of audio/video clips and images. Prerequisites: MMT 701, MMT 702 (3 crs.)

MMT 704. WEB PUBLISHING. The course delves into the intricacies of publishing on the web and what makes a proficient webmaster by examining areas such as client-server computing network operation, intranets and the Internet, advanced HTML and server-based support. End-user interaction using web page elements such as animations sounds and videos emphasized. Java/JavaScript, Active-X and Afterburner are highlighted. A collaborative site will be used as a real world examination of its mode of operation, performance and maintenance of that published web site. Prerequisites: MMT 701, MMT 702. (3 crs.)

MMT 705. INTERACTIVE DESIGN. Besides having relevant and organized content, an effective presentation must engage its audience. Such presentations include storybooks, simulations, tutorials, demos and kiosks. Techniques employing multimedia driven scripting and object-oriented tools to achieve user interaction are centric to this course. This course and corresponding laboratory

activities will assist students in applying multimedia tools to their field of study. Students design and create multimedia rich pieces which integrate text, graphics, video, photographs, audio, animations and interactive elements, and then are exported in appropriate formats for delivery via CD or the web. Prerequisites: MMT 701, MMT 702, MMT 703. (3 crs.)

MMT 720. EMERGING TECHNOLOGY AND APPLICATIONS IN MULTIMEDIA. The technology and applications associated with multimedia are rapidly changing. This course will provide the student with skills and knowledge on emerging multimedia topics not currently incorporated into the curriculum. This is a repeatable course in which a student can receive credit each time the course is taken and completed satisfactorily. Prerequisites: Varies depending on the specific offering/topic. (3 crs.)

MMT 760. MULTIMEDIA PRODUCTION. This course will involve the student in a collaborative multimedia project that is designed, developed, and evaluated by a team of students. All of the multimedia concepts and elements presented in previous courses will be analyzed by the team to produce a well designed, large scale, multimedia-based production designed, developed, and evaluated by a student team and in collaboration with professionals. Prerequisites: MMT 701, MMT 702, MMT 703, MMT 704, MMT 705. (3 crs.)

GMA -- Mathematics

GMA 701. REAL VARIABLE ANALYSIS I. The course begins with elementary set theory, relations, functions and cardinality. It continues with the natural numbers, the completeness axiom of the reals, topology of the reals, and compactness with an introduction into metric spaces. A rigorous development of sequences in the reals follows including Cauchy sequences and subsequences followed by theorems relative to continuous functions, uniform continuity and continuity in metric spaces. These properties of a real variable are the beginning essential tools of mathematical analysis. Prerequisite: A strong background in Calculus. (3 crs.)

GMA 702. REAL VARIABLE ANALYSIS II. A continuation of GMA 701 studying the properties of real variables which are the essential tools of mathematical analysis with a rigorous development of the theory of differentiation, integration, and infinite series. Sequences and series of functions are covered from the point wise and uniform convergence aspects. Prerequisite: GMA 701. (3 crs.)

GMA 716. DIFFERENTIAL EQUATIONS. An in-depth and thorough study of ordinary differential equations with emphasis on applications and some proofs. Topics include first order differential equations, second order linear equations, higher order linear equations, numerical methods and Laplace transforms. (3 crs.)

GMA 725. THEORY OF NUMBERS. A theory of those classical results most related to the teaching of mathematics: integers, unique factorizations, Diophantine equations, congruencies, Fermat's and Wilson's theorems, divisibility, perfect numbers, Euler's Theorem and function, decimals, Pythagorean triangles, infinite descent and Fermat's conjecture, magic squares, calendar problems. (3 crs.)

GMA 741. LINEAR ALGEBRA. This course furthers the graduate student's competency in linear algebra to topics above the level encountered in the undergraduate curriculum. Topics are chosen from among eigenvalues and eigenvectors, diagonalization, Shur's theorem, the Cayley-Hamilton theorem, Jordan canonical form, quadratic forms, linear programming, graph theory, and game theory. Prerequisite: An undergraduate course in linear algebra or permission of the instructor. (3 crs.)

GMA 743. PROJECTIVE GEOMETRY. A modern introduction to n -spaces, emphasizing the interrelationships between projective geometry, finite-dimensional linear algebra, and algebraic structures. Prerequisite: an undergraduate course in linear algebra. (3 crs.)

GMA 751. ABSTRACT ALGEBRA. The basic algebraic systems that comprise modern abstract algebra, to the level of competency where proofs can be recognized and invented. Algebraic systems investigated usually include groups, rings, integral domains, and fields. Prerequisite: an undergraduate course in abstract algebra or the permission of the instructor. (3 crs.)

GMA 755. TOPOLOGY. Preliminaries (sets, relations, cardinality, etc.), topologies, separation axioms, coverings, compactness, connectedness, continuity, homomorphism, convergence, metric spaces. Prerequisite: A strong background in Calculus. (3 crs.)

GMA 761. MATHEMATICAL STATISTICS I. The basic concepts of both discrete and continuous probability theory. Random variables are studied that occur frequently in probability applications and statistical inference. Sampling distributions are emphasized and developed, using moment generating function techniques. At the end of the course the graduate student will know about many of the important probability and distribution theory results that form the basis for commonly used statistical inference procedures. Upon completion the graduate student will be prepared to take the following course: GMA 762. Prerequisite: undergraduate calculus sequence and linear algebra. (3 crs.)

GMA 762. MATHEMATICAL STATISTICS II. The fundamental concepts and methods of mathematical statistical inference. The graduate student will learn about both classical and modern statistical techniques and the areas of estimation theory, tests of hypothesis, regression, and distribution free methods. Topics such as maximum likelihood methods, Neyman-Pearson Lemma, likelihood ratio tests, and unbiased minimum variance estimators are covered. Prerequisite: GMA 761 Mathematical Statistics I or an equivalent course. (3 crs.)

GMA 785. HISTORY OF MATHEMATICS. An historical summary of the development of mathematics. Emphasis will be on relating mathematics to the development of world culture and its relationship with all aspects of our culture. The lives and discoveries of many mathematicians will be discussed. Methods of incorporating the history of mathematics into high school mathematics courses will be a major focus of the course. (3 crs).

GMA 786. COMPUTER SCIENCE FOR TEACHERS. This course is for the secondary-school mathematics teacher who is interested in an introduction to the elementary concepts of computer programming, the early history and development of computers, and the uses of the computer in the school and society. Emphasis is placed on writing computer programs related to topics in secondary school mathematics. (2 crs.)

PRF -- Performance Enhancement and Injury Prevention

PRF 700. Orientation to Performance Enhancement and Injury Prevention. This course is designed to introduce basic information regarding the Performance Enhancement and Injury Prevention Program. Discussion will include performance enhancement and injury prevention models in sport and work environments. The course will also introduce the student to various types and styles of learning via web-based technologies, and will orient the student to web based methods of learning.

PRF 705. Industrial, Clinical, and Corporate Wellness. This course is designed to develop knowledge and awareness of the major issues in the field of worksite health promotion and clinical care. The focus of the course is on planning, administering, and evaluating wellness and fitness programs based in clinical, industrial, and corporate environments. The cost of unhealthy life style choices for the individual and employer and their relationship to the workplace will be explored. Topics include, the "Wellness Revolution", the "Industrial Athlete Model", benchmark programs, and outcomes assessment strategies.

PRF 710. Performance Enhancement in Physical Activity. This course offers a comprehensive discussion of functional anatomy, functional biomechanics, and motor learning as it related to functional rehabilitation and athletic reconditioning. The student will be introduced to integrated, functional rehabilitation techniques including core stabilization, neuromuscular stabilization, reactive neuromuscular stabilization, integrated flexibility, integrated strength, speed training, foot training, and vision training. The student will also be taught a comprehensive kinetic chain assessment to determine myokinematic, arthrokinematic, and neuromuscular deficits. After completing this course and Performance Enhancement Program Design, students will be eligible to sit for the National Academy of Sports Medicine Examination for Performance Enhancement Specialist certification.

PRF 715. Business and Entrepreneurship in the Fitness Industry. This course offers a comprehensive discussion of the practical aspects of starting and running a business in performance enhancement and fitness. The course focuses on launching new ventures, as well as business and management practices for individuals who are already in business but who want to learn how to improve their operations. Specific topics include: management theory, financial management, personnel management, record keeping, risk management and technology issues.

PRF 800. Research in Fitness and Injury Prevention. This course is designed to immerse the student in fitness & injury prevention research, focusing on current clinical outcomes research, psychology and physical activity research, and performance enhancement research. Topics include, research in resistance training, core stabilization, and aquatic therapy. Fitness and injury prevention research is discussed related to special populations, such as athletes at opposite ends of the age spectrum.

PRF 750. Performance Enhancement Program Design. This course requires the student to integrate knowledge learned from the course Performance Enhancement with professional experience and prior learning in fitness and rehabilitation. Students will work in teams to prepare a performance enhancement program proposal including program elements, rationale, innovative design, and supporting research. Each week, cohort members will professionally analyze and critique new proposals, resulting in high-level discussion and exchange. After completing this course and Performance Enhancement in Physical Activity, students will be eligible to sit for the National Academy of Sports Medicine (NASM) Examination for NASM Performance Enhancement Specialist certification.

PRF 755. Marketing and Billing in Performance Enhancement. This course is organized as a "how-to" approach to marketing performance enhancement and athletic training services. The course also covers current trends in health care and fitness reimbursement as well as future directions for reimbursement. Models of successful athletic training reimbursement are discussed. Topics include networking, generating leads, presentation skills, writing proposals, creating press releases, filing claims, appealing denials, and approaching payers. Reimbursement in all practice settings is explored.

PRF 760. Leadership and Professional Development. This course is intended to prepare students for the leadership decisions and actions that are inherent in performance enhancement management and fitness practice. Professional and personal growth will be discussed. Principles and applications of leadership will be explored, including persuasiveness, leading and directing teams, leading within organizations, and leadership opportunities in shaping fitness policy. Techniques for managing change and empowering others are included in this course. Topics related to effective leadership are issues of power, motivation, delegation, team building, persuasion and negotiation, and total quality improvement.

PRF 765. Nutrition for Peak Performance. An in-depth examination of contemporary issues such as performance enhancement dietary supplements, dietary lipids and heart disease, dietary fiber and health, influence of lifestyle factors on nutrition. Controversies in nutrition, ergogenic aides, and cultural aspects of food are also discussed. Energy and nutrient needs for activity with emphasis on particular physical and athletic activities; common myths and fallacies concerning diet and athletic performance; and appropriate dietary approaches for specific activities and active people.

PRF 770. Exercise Physiology: Assessment and Exercise Prescription. This course offers a comprehensive discussion of the knowledge, skills, and abilities needed for American College of Sports Medicine certifications and current clinical practices in sports medicine. Emphasis will be placed on the value and application of exercise testing and prescription in persons with and without chronic disease. Special topics to be addressed include, exercise prescription in children, the elderly, pulmonary patients, cardiac patients, and pregnant women.

POS -- Political Science

POS 700. PUBLIC POLICY. A study of the concepts, frameworks, models and methods of policy making and analysis (American with international comparisons) at the national, state, and local government level. Graduate students learn to structure policy problems, analyze the assumptions of stake holders and policy makers and evaluate the impact of public policies. (3 crs.)

POS 704. AMERICAN POLITICAL IDEAS. Advanced political theory: the major political ideas and controversies that are associated with the development of American political thought. (3 crs.)

POS 705. HISTORY OF POLITICAL THEORY. A study of early and modern political theories, their development and application as controlling factors in the growth of western civilization and American democracy. (3 crs.)

POS 711. 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. (3 crs.)

POS 728. POLITICS OF UNDERDEVELOPED NATIONS. A comparative study of emerging political systems and their attempts to achieve modernity. (3 crs.)

POS 740. AMERICAN DEFENSE POLICY. An analysis of the forces influencing decision-making in the quest for American national security. (3 crs.)

POS 745. THE LEGISLATIVE PROCESS. An analysis of policy determination in the American legislative system. (3 crs.)

POS 746. AMERICAN CHIEF EXECUTIVES. The role of the presidency in policy determination in both domestic and foreign affairs. (3 crs.)

POS 747. CIVIL LIBERTIES AND JUDICIAL PROCESS. The Supreme Court as the principal guardian of libertarian principles. (3 crs.)

POS 779. INDEPENDENT STUDIES IN POLITICAL SCIENCE. The graduate student has this opportunity to do independent study or research in political science, under the direction of a member of the political science faculty. The nature of the research study and the assigned credit hours are determined individually. (variable credits)

EDP--Professional Education

EDP 600. STATISTICAL METHODS. This course introduces the student to statistical concepts and techniques that are essential for valid and reliable educational research. Emphasis is placed upon understanding the logic of various statistical inference procedures, their correct use and proper interpretation. Numerous descriptive and inferential statistical methods are covered including: box plots, stem and leaf displays, scatter diagrams, single sample t test, independent samples t test, related samples t test, Wilcoxon signed rank test, Mann Whitney U test, confidence intervals, correlations, multiple regression, one-way and two-way analysis of variance, analysis of variance for repeated measures designs, analysis of covariance and multivariate analysis of variance. At the conclusion of the course, the student is expected to be able to describe and critique the statistical methods used in published research studies and correctly apply the appropriate statistical methods in his or her own research. The SPSS statistical package is extensively referenced throughout the course. (3 crs)

EDP 605. PHILOSOPHY OF EDUCATION. An introduction to the discipline of philosophy and the significant contribution that this discipline makes to education. Major schools of traditional and contemporary philosophy are examined, with particular emphasis on the influence these philosophies have had on educational theory and practice over the years. (2 crs.)

EDP 606. GENERAL HISTORY OF EDUCATION. The course is designed to develop an historical awareness, appreciation, and understanding of the people and of the major cultural and educational events that have shaped education in Western culture. The significance and relevance of these people and events for contemporary American culture are stressed. (2 crs.)

EDP 608. COMPARATIVE EDUCATION. This course centers on the province of Quebec. Students are introduced to basic rules of educational comparison followed by readings aimed at investigating the traditions, social organization, and political and economic conditions that have determined the development of Quebec. Source reading is brought into special perspective by a one-week program of school visitations in Quebec where students can observe classes and interview educational personnel. (3 crs.)

EDP 610. EDUCATIONAL SOCIOLOGY. The role of the school in child socialization, intergroup education, the integration of school and community, group processes and the teacher, teacher problems in human relations, and educating for leadership. (2 crs.)

EDP 611. HISTORY OF AMERICAN EDUCATION. The course is designed to develop an historical awareness, understanding, and appreciation of major cultural and educational events and of individuals that have shaped American education from 1620 to the present. The significance and relevance of these events and individuals for contemporary American education are stressed. (2crs.)

EDP 615. TEACHER AWARENESS. A practical approach to the solution of daily problems arising from action and interaction with students, other faculty members, administrators, school board members, parents, and the community. The course is experience-oriented and focuses on student rights, duties and responsibilities and the legal rights of teachers; evaluations; classroom procedures; and lesson planning. (3 crs.)

EDP 619. STUDENT TEACHING SUPERVISION. For teachers who are acting as cooperating teachers and for those interested in serving in this capacity in the future. A prerequisite for admission to this workshop is three years' teaching experience. The course provides an opportunity to strengthen, clarify, re-think, and revitalize one's approach to student-teaching supervision. (Variable crs.)

EDP 620. CURRICULUM AND METHODS OF TEACHING BIOLOGY IN THE HIGH SCHOOL. The BSCS courses of study and how and why they were developed, along with a critical analysis of each of the three versions in light of various school backgrounds. Laboratory projects will be pursued that can serve as source material in a teacher's classroom. Two hours of lecture and two hours of laboratory. Prerequisite: Certification to teach biology. (2 crs.)

EDP 624. CHARACTER EDUCATION. This course will examine how schools contribute to the moral development of children. Specifically, students will be introduced to the approaches to character education that have been used in the nation's schools. Particular attention will be paid to developing a comprehensive approach to moral development that integrates earlier strategies. This integrative approach holds that character education must be a way of life for a school, not just a program. That is, all aspects of a school's life contribute to moral development. (3 crs.)

EDP 656. COMPUTER-ORIENTED RESEARCH. This course teaches necessary computer skills to master (1) the techniques of research, methods of scholarly investigation, and search tips/strategies using library facilities, on-line library data bases, commercial data bases, and the Internet, (2) writing the research report as a publishable paper, (3) publishing the research report as series of web pages on the Internet, and (4) developing and giving an oral presentation of the research results to the university community. This primarily hands-on course will review computer system concepts, will introduce the student to all facets of computer-oriented research search strategies (on-line CUP library searching, searching using on-line databases, searching using commercial databases, searching the Internet, evaluating Web resources, and evaluating search engines), will develop the student's proficiency in writing the publishable research paper, will develop a student's proficiency in web page design and publishing, and will develop a student's proficiency in developing and giving an oral presentation. (3 crs)

EDP 663. COMPUTER-ASSISTED INSTRUCTION. The development of computer applications in education provides a significant new resource in teacher education. This course is designed to include both theory and practice. This course serves to acquaint the learners with computers and their uses as instructional tools. Laboratory assignments are designed to provide generalizable and transferable competencies. No previous computer related knowledge is assumed. (3 crs.)

EDP 685. SEMINAR IN AUDIO-VISUAL TECHNIQUES. This course is designed to bring together the recent research on teacher behavior with the theories and research of social psychology and group dynamics. It aims to give the student some understanding of group processes and some personal experience helpful in developing a repertoire of ideas and behaviors that will be pertinent in supervision and in the classroom. (2 crs.)

EDP 760. SEMINAR IN THE TEACHING OF MATHEMATICS. A mathematics methods course in the M. Ed. program designed for secondary school teachers who want to develop or broaden their teaching skills and knowledge of a particular content area in the secondary mathematics curriculum. The content area will be one of the following: algebra, geometry, (AP) calculus, trigonometry, probability and statistics, applied mathematics, or integrated mathematics. Relative to the particular chosen content area of mathematics, students in the class will study current innovative teaching approaches; review current textbooks, software, and curricula; develop lessons and activities; integrate the NCTM standards in instruction; discuss different methods of problem solutions; and analyze and develop assessment measures. (3 crs.)

EDP--Professional Education

EDP 600. STATISTICAL METHODS. This course introduces the student to statistical concepts and techniques that are essential for valid and reliable educational research. Emphasis is placed upon understanding the logic of various statistical inference procedures, their correct use and proper interpretation. Numerous descriptive and inferential statistical methods are covered including: box plots, stem and leaf displays, scatter diagrams, single sample t test, independent samples t test, related samples t test, Wilcoxon signed rank test, Mann Whitney U test, confidence intervals, correlations, multiple regression, one-way and two-way analysis of variance, analysis of variance for repeated measures designs, analysis of covariance and multivariate analysis of variance. At the conclusion of the course, the student is expected to be able to describe and critique the statistical methods used in published research studies and correctly apply the appropriate statistical methods in his or her own research. The SPSS statistical package is extensively referenced throughout the course. (3 crs)

EDP 605. PHILOSOPHY OF EDUCATION. An introduction to the discipline of philosophy and the significant contribution that this discipline makes to education. Major schools of traditional and contemporary philosophy are examined, with particular emphasis on the influence these philosophies have had on educational theory and practice over the years. (2 crs.)

EDP 606. GENERAL HISTORY OF EDUCATION. The course is designed to develop an historical awareness, appreciation, and understanding of the people and of the major cultural and educational events that have shaped education in Western culture. The significance and relevance of these people and events for contemporary American culture are stressed. (2 crs.)

EDP 608. COMPARATIVE EDUCATION. This course centers on the province of Quebec. Students are introduced to basic rules of educational comparison followed by readings aimed at investigating the traditions, social organization, and political and economic conditions that have determined the development of Quebec. Source reading is brought into special perspective by a one-week program of school visitations in Quebec where students can observe classes and interview educational personnel. (3 crs.)

EDP 610. EDUCATIONAL SOCIOLOGY. The role of the school in child socialization, intergroup education, the integration of school and community, group processes and the teacher, teacher problems in human relations, and educating for leadership. (2 crs.)

EDP 611. HISTORY OF AMERICAN EDUCATION. The course is designed to develop an historical awareness, understanding, and appreciation of major cultural and educational events and of individuals that have shaped American education from 1620 to the present. The significance and relevance of these events and individuals for contemporary American education are stressed. (2crs.)

EDP 615. TEACHER AWARENESS. A practical approach to the solution of daily problems arising from action and interaction with students, other faculty members, administrators, school board members, parents, and the community. The course is experience-oriented and focuses on student rights, duties and responsibilities and the legal rights of teachers; evaluations; classroom procedures; and lesson planning. (3 crs.)

EDP 619. STUDENT TEACHING SUPERVISION. For teachers who are acting as cooperating teachers and for those interested in serving in this capacity in the future. A prerequisite for admission to this workshop is three years' teaching experience. The course provides an opportunity to strengthen, clarify, re-think, and revitalize one's approach to student-teaching supervision. (Variable crs.)

EDP 620. CURRICULUM AND METHODS OF TEACHING BIOLOGY IN THE HIGH SCHOOL. The BSCS courses of study and how and why they were developed, along with a critical analysis of each of the three versions in light of various school backgrounds. Laboratory projects will be pursued that can serve as source material in a teacher's classroom. Two hours of lecture and two hours of laboratory. Prerequisite: Certification to teach biology. (2 crs.)

EDP 624. CHARACTER EDUCATION. This course will examine how schools contribute to the moral development of children. Specifically, students will be introduced to the approaches to character education that have been used in the nation's schools. Particular attention will be paid to developing a comprehensive approach to moral development that integrates earlier strategies. This integrative approach holds that character education must be a way of life for a school, not just a program. That is, all aspects of a school's life contribute to moral development. (3 crs.)

EDP 656. COMPUTER-ORIENTED RESEARCH. This course teaches necessary computer skills to master (1) the techniques of research, methods of scholarly investigation, and search tips/strategies using library facilities, on-line library data bases, commercial data bases, and the Internet, (2) writing the research report as a publishable paper, (3) publishing the research report as series of web pages on the Internet, and (4) developing and giving an oral presentation of the research results to the university community. This primarily hands-on course will review computer system concepts, will introduce the student to all facets of computer-oriented research search strategies (on-line CUP library searching, searching using on-line databases, searching using commercial databases, searching the Internet, evaluating Web resources, and evaluating search engines), will develop the student's proficiency in writing the publishable research paper, will develop a student's proficiency in web page design and publishing, and will develop a student's proficiency in developing and giving an oral presentation. (3 crs)

EDP 663. COMPUTER-ASSISTED INSTRUCTION. The development of computer applications in education provides a significant new resource in teacher education. This course is designed to include both theory and practice. This course serves to

acquaint the learners with computers and their uses as instructional tools. Laboratory assignments are designed to provide generalizable and transferable competencies. No previous computer related knowledge is assumed. (3 crs.)

EDP 685. SEMINAR IN AUDIO-VISUAL TECHNIQUES. This course is designed to bring together the recent research on teacher behavior with the theories and research of social psychology and group dynamics. It aims to give the student some understanding of group processes and some personal experience helpful in developing a repertoire of ideas and behaviors that will be pertinent in supervision and in the classroom. (2 crs.)

EDP 760. SEMINAR IN THE TEACHING OF MATHEMATICS. A mathematics methods course in the M. Ed. program designed for secondary school teachers who want to develop or broaden their teaching skills and knowledge of a particular content area in the secondary mathematics curriculum. The content area will be one of the following: algebra, geometry, (AP) calculus, trigonometry, probability and statistics, applied mathematics, or integrated mathematics. Relative to the particular chosen content area of mathematics, students in the class will study current innovative teaching approaches; review current textbooks, software, and curricula; develop lessons and activities; integrate the NCTM standards in instruction; discuss different methods of problem solutions; and analyze and develop assessment measures. (3 crs.)

PSY -- Psychology

PSY 702. Psychopathology of Childhood. Intensive study of the cognitive, emotional and behavioral disorders in children and adolescent. Emphasis is on etiology, early recognition and approaches to treatment or intervention in schools.

PSY 712. Advanced Psychology of Learning. This course examines the diverse, intricate process of learning. Behavioral and cognitive views of learning are emphasized with special attention being given to the educational implications of learning theory. (3 crs.)

PSY 713. Psychology of Growth and Development. This course explores how people grow and develop from infancy through old age. Physical growth patterns, along with emotional, intellectual, and social development are emphasized. Maturation, learning, and their interrelationships are also examined in terms of their implications of developmental variables for the home, school, and community. (3 crs.)

PSY 720. Neuropsychology. This course examines the biological basis of behavior. The central nervous system, in particular the brain, is studied in-depth. This course also presents the neuropsychological approach to the identification and education of children with learning disorders. (3 crs.)

PSY 721. Advanced Tests and Measurements. This course is designed to provide the graduate student with an understanding of the use of tests for diagnostic studies of children, adolescents, and adults in a diverse society. It explores the ways in which tests are constructed, evaluated, administered, and interpreted. In addition, the course provides a survey of some representative tests of achievement, aptitude, personality, intelligence, and occupational interests. Students also receive practice in administering, scoring and interpreting such tests through a practicum involving an evaluation of themselves and at least one other person. (3 crs.)

PSY 722. Individual Psychological Evaluation I with Practicum. Emphasizes theory and competence in the administration, scoring, and interpretation of the Stanford-Binet Intelligence Scale V, and the Bender Visual Motor Gestalt Test. Extensive supervised practice in the administration, scoring, and interpretation of these tests with subjects aged 2 to adult. Theory and experience with other infant and child measures of intelligence such as the Bayley II and the K-ABC are included. Ethnic and cultural diversity in assessment are included. Psychological report writing and generation of educational interventions are stressed. (3 crs.)

PSY 723. Individual Psychological Evaluation II with Practicum. This course emphasizes the theoretical underpinnings of intellectual assessment and the development of competence in the administration, scoring, and interpretation of the Wechsler Scales: WISC- IV, WPPSI-III, and WAIS-III. Attention is directed toward the use of these scales in measuring intellectual levels, and identifying cognitive strengths and weaknesses. Practical experiences are required and the student must demonstrate competency in the administration, scoring, and interpretation of each scale. Psychological report writing is also addressed. (3 crs.)

PSY 724. Practicum in School Psychology. This course is a practicum in psychoeducational assessment and intervention planning in which students develop competence in the administration, scoring, and interpretation of individually administered achievement tests, with an emphasis on diagnostic testing and comprehensive report writing. Under faculty supervision, students conduct comprehensive evaluations of children, including gathering background information, test administration, report writing, and consultation with clients in the process of problem solving in the educational setting. Ethical considerations, as well as the particular problems encountered when working with a diverse population, are included. (3 crs.)

PSY 734. Assessment of Personality and Behavior I. An introduction to the assessment of personality and behavior. Experience is given to the student in the administration, scoring, and interpretation of the more widely used personality assessment measures. Particular attention is given to assessment techniques used in planning for remediation and treatment. (3 crs.)

PSY 741. Theories of Counseling and Psychotherapy. This course is designed to introduce students to the most common therapeutic approaches in use today (e.g., Person-centered, Cognitive, Behavioral, Family Systems and Reality Therapy). Lectures, classroom demonstrations and role-playing are utilized to illustrate these various orientations. Attention is paid to implementation of counseling that is respectful of ethical boundaries/issues as well as cultural factors which may be involved in the therapeutic process. Student participation is required. A position paper describing the student's own orientation is required. (3 crs.)

PSY 742. Techniques of Counseling and Psychotherapy with Practicum. This course is intended to provide both a didactic and an actual experience in counseling. Graduate students familiarize themselves with the phases, procedures, and goals of counseling and therapy through assigned readings, audiotapes, and group discussion of case presentations. This will include consideration of ethical boundaries/issues and cultural factors that are germane to the therapeutic process. Graduate students will be assigned or are asked to recruit five volunteer subjects for purposes of role-play activity utilizing counseling technique. Clients from the University's Counseling Center and the School Psychology Clinic will also be assigned as they become available. Those graduate students currently working in a school district may select cases from that setting; cases are to be approved by the instructor. Supervision of all cases is provided both in-group sessions and on an individual basis. Graduate students are seen outside of regularly scheduled group sessions for individual supervision. (3 crs.)

PSY 752. Fundamentals of School Psychology. This course is an introduction to the profession of school psychology. Topics examined revolve around the roles and functions of school psychologists. A partial list of the topics examined includes: school systems, the law and school psychology, and professional ethics. Field experiences in educational settings are required for students enrolled in the school psychology program. (3crs.)

PSY 756. Consultation and Group Processes with Practicum. This course is intended to familiarize the student with a variety of group methods and techniques utilized by the school psychologist in a diverse society. This is accomplished in part through assigned reading and group discussion. The student is also required to observe and then act as a group leader in an ongoing group activity. The student tapes group counseling sessions for the purposes of evaluation and supervision. This course also explores the variety of consultative techniques that may arise in a school system. (3 crs.)

PSY 766. Psychological Statistics. This course is designed to give students the basic information they need to interpret the statistics that are used most frequently in research and application in psychology. The focus is on understanding and interpreting basic descriptive and inferential statistics including univariate and multivariate analyses. In addition, it will cover the strengths and limitations of applied statistical techniques in application and research. The course is designed to prepare students for graduate courses in testing, research methods, and research interpretation as well as to provide them with the statistical skills required to solve problems in an educational setting. (3 crs.)

PSY 767. Research Methods in Psychology. This course is designed to give students the necessary background in psychological research design that they need to understand, interpret and evaluate proposed and published research in the behavioral sciences. The focus is on acquiring the skills to critically evaluate a research report, analyze and interpret data, and to write a research paper. This course is designed to provide the background for students desiring to conduct a masters level research thesis. (3 crs.)

PSY 773. Internship in School Psychology. The internship requires a minimum of 1200 hours of practical work experience under direct supervision of a qualified psychologist. A minimum of 800 hours must be completed in a realistic educational setting (i.e., public school system). The remaining 400 hours may be in a related setting (e.g., clinic, hospital, etc.). The intern is expected to demonstrate all of the competencies of the practicing school psychologist.

PSY 795. Seminar in Behavior Modification with Practicum. This course provides the student with the knowledge and skills needed to design, implement, and evaluate behavioral interventions. Interventions applicable to school settings are emphasized and students are required to develop and implement an applied behavior analysis program (3crs.)

PSY 796. Seminar in the Analysis of Research in School Psychology. This course consists of an examination of current research in School Psychology. Critical study and evaluation of empirical research findings applicable to selected topics from current editions of Best Practices in School Psychology are undertaken. The student develops skills in using current data bases to access empirically based research reports, as well as the abilities to critically analyze and synthesize the content of these reports as it relates to situations and issues faced by the practitioner school psychologist. Students develop an understanding of the importance of using empirical data in making sound educational decisions. (3 crs.)

PSY 798. Seminar in Professional School Psychology. Concepts fundamental to the practice of school psychology are discussed and evaluated in this course. A range of topics are discussed including the roles and functions of school psychologists, legal and ethical issues, the organization and operation of school systems, student diversity, and community resources. As this course is taken in conjunction with the Internship in School Psychology, discussions tend to be dynamic and framed within the context of actual experiences encountered by interns. (3 crs.)

RES -- Research

RES 800. METHODS IN RESEARCH. This course explores the design and analysis of experimental and quasi-experimental research. It explores both quantitative and qualitative techniques. In addition to being able to design and conduct basic research; an outcome of this course is to develop effective consumers of the research literature (3 crs.)

RES 819. RESEARCH PAPER. (1 cr.)

RES 829. RESEARCH PROJECT. A study or presentation on some topic in Special Education. The Research Project is more in depth than a Research Paper but less thorough than a Master's Thesis. Approval of only the graduate student's advisor is needed. The Publication Manual of the American Psychological Association is to be used. Emphasis is on etiology, early recognition and approaches to treatment or intervention in the schools. (3 crs.)

RES 849. MASTER'S THESIS. The thesis will usually be inferential in nature and involve some intervention and manipulation of some independent variables, employing a statistical analysis or experimental design. The Publication Manual of the American Psychological Association is to be used. The thesis requires a committee with at least one professor from outside the Special Education Department. (4 crs.)

RSP -- Reading Specialist

RSP 700. FOUNDATIONS OF LITERACY THEORY AND INSTRUCTION. The acquisition of multiple literacy strategies, discussion and presentation of these strategies, and research implications to match theory with practice are the foci of this course. Additionally, because of the need for technological literacy, the use of technology is also required. The goal of this course is to prepare students for the role of the reading specialist in the inclusion model. (3 crs.)

RSP 702. DIAGNOSIS AND TREATMENT OF READING PROBLEMS. The purpose of the course is to provide graduate students with the skills needed for diagnosing and remediating reading difficulties of students in grades K-12, within a transactional, constructivist framework. Factors related to reading disability and principles of student-centered and process-oriented forms of assessment will be taught. Prerequisite: RSP 700. (3 crs.)

RSP 703. PRACTICUM: DIAGNOSTIC CASE STUDIES. The purpose of this course is to provide practical experience with determining, in a holistic manner, a child's reading needs, and making suggestions for individualized instruction for those needs in a case study format. Prerequisite: RSP 700 & RSP 702. (3 crs.)

RSP 704. PRACTICUM: REMEDIAL CASE STUDIES. This course must be taken the semester immediately following the completion of RSP 703. The student applies knowledge of materials and methods gained in prerequisite classes to plan and implement a program of instructional intervention for a remedial reader. The course contains a seminar component in which the student utilizes modeling and communication skills to discuss and demonstrate plans for reading instruction with other students as well as with the practicing teacher. Prerequisites: RSP 700, RSP 702 & RSP 703. (3 crs.)

RSP 705. PSYCHOLOGY OF READING. This course is designed to provide students with knowledge of reading theory as it relates to the psychology of learning. (3 crs.)

RSP 706. ADULT LITERACY. This course will expose the students to the point of view that the adult learner is a complex individual and has diverse needs, most of which have some bearing on any reading difficulties. Theories of the causes of adult illiteracy will be presented and diagnostic and remedial techniques will be given. (3 crs.)

RSP 731. SUPERVISION AND ADMINISTRATION OF A READING PROGRAM. This course emphasizes the investigation of the challenges of implementing a district-wide reading program, through the use of research, individual projects, conferences and interviews with various reading staff members and school administrators, and the evaluation of reading programs and materials. Emphasis is placed on the implementation of change in a reading program, reflecting new roles of the reading specialist and reading supervisor. (2 crs.)

RSP 732. READING CURRICULUM AND INSTRUCTIONAL MATERIALS. This course focuses on the introduction, selection and evaluation of the reading curriculum and instructional materials in grades K-12. The developmental sequence of materials throughout the curriculum, the implementation of those materials, and their possible strengths and weaknesses are explored. (2 crs.)

RSP 733. READING INTERNSHIP. The student is provided with a supervision practicum in clinical and school experiences in a reading program. (4 crs.)

RSP 734. CONTENT AREA READING IN MIDDLE AND SECONDARY SCHOOLS. This course is designed to investigate the problems inherent to reading to learn in the content areas at the secondary level. Theory-based, practical strategies for content area reading instruction are studied. To help students construct meaning the strategies examined range from developing frames of reference during pre-reading to constructing and using reading guides and vocabulary activities. The process of writing to learn and studying

along with relevant, meaning based strategies are also explored. Professional growth and improved reading instruction through planned and informal staff development programs are discussed. (3 crs.)

RSU -- Reading Supervisor

RSU 680. IMPROVEMENT OF INSTRUCTION THROUGH SUPERVISION. This seminar is intended to prepare participants for performing the supervisory function in schools. The purpose is to increase competency in a practical sense by finding ways to help reading specialists and teachers ask questions about their present and future methods of instruction. In structure, the seminar deals with theory, research, practice, and evolving concepts that have realistic implications for supervision in the school environment. (2 crs.)

SLE -- Superintendent Letter of Eligibility

SLE 701. ADMINISTRATION THEORY, ORGANIZATION AND OPERATION. This course offers the participant opportunities to gain competencies in and an understanding of the applications of administrative theory relating to the operations of a school district. Through inquiry into the subject of administrative theory, candidates will gain critical and creative attitudes toward humanistic and scientific principles of public school organization and administration. Along with required course activities, each participant will be able to complete a field experience involving leadership or organizational theory and practice. (3 crs.)

SLE 702. CONTRACT LAW: SCHOOL DISTRICT LEGAL ISSUES. This course is designed to familiarize aspiring superintendents with the legal bases for the administration of public schools. In this course emphasis will be placed on Pennsylvania School Law. Course activities will include lectures, class discussions, student research, oral and written reports, examinations and a related field episode. (3 crs.)

SLE 703. SCHOOL FINANCE. The purpose of this course is to familiarize the future school district superintendent with the political and legal aspects of school finance. Students will analyze local, state and federal revenue and expenditure plans as they relate to the school district educational plan. The course includes a field episode individually designed for study and experience in school finance. (3 crs.)

SLE 704. TECHNOLOGY AND FACILITIES DEVELOPMENT. This course will offer the participant an opportunity to learn and demonstrate competencies in planning, developing and managing technology and facilities in Pennsylvania school districts. Through classroom activities and on-site visitations, the participant will deal with challenges that are faced by school superintendents. The course includes a related field experience. (3 crs.)

SLE 705. CURRICULUM AND INSTRUCTION, LEADERSHIP/ SUPERVISION. This course offers the participant opportunities to gain an understanding of and skills related to the district level administration of curriculum and instruction, leadership, and supervision. The core emphasis is on current practice in the field, state level requirements, and national trends that are shifting theory and practice in their regard. The required field experience is deeply woven into the course content. (3 crs.)

SLE 706. SCHOOL COMMUNITY PUBLIC RELATIONS/ MARKETING. This course will offer the participant an opportunity to become acquainted with the day-to-day operation of public relations in a school district. Through hands-on activities, creation of public relations documents, interviewing, and dealing with various publics, participants will become aware of the role of public relations as it relates to the superintendent of schools. (3 crs.)

SLE 707. STRATEGIC PLANNING, POLICY ANALYSIS, BOARD RELATIONS. Major concepts and ideas of strategic leadership through strategic planning, policy making, school board relations, and interpersonal relations will be explored in this course through traditional and experimental methods. The course includes a related field experience (3 crs.)

SLE 711. UNIVERSITY SEMINAR: ADMINISTRATION THEORY, ORGANIZATION AND OPERATION. This course is designed to expand and enhance course objectives covered in Administration Theory, Organization and Operation (SLE 701). (1 cr.)

SLE 712. UNIVERSITY SEMINAR: CONTRACT LAW, SCHOOL DISTRICT LEGAL ISSUES. This seminar is designed to expand and enhance course activities covered in Contract Law: School District Legal Issues (SLE 702). (1 cr.)

SLE 713. UNIVERSITY SEMINAR: SCHOOL FINANCE. This seminar is designed to expand and enhance course activities covered in School Finance (SLE 703). (1 cr.)

SLE 714. UNIVERSITY SEMINAR: TECHNOLOGY AND FACILITIES DEVELOPMENT. This seminar is designed to expand and enhance course activities covered in Technology and Facilities Development (SLE 704). (1 cr.)

SLE 715. UNIVERSITY SEMINAR: CURRICULUM AND INSTRUCTION, LEADERSHIP/SUPERVISION. This seminar is designed to expand and enhance course activities covered in Curriculum and Instruction, Leadership/Supervision (SLE 705). (1 cr.)

SLE 716. UNIVERSITY SEMINAR: SCHOOL COMMUNITY PUBLIC RELATIONS/MARKETING. This seminar is designed to expand and enhance course activities covered in School Community Public Relations/Marketing (SLE 706). (1 cr.)

SLE 717. UNIVERSITY SEMINAR: STRATEGIC PLANNING, POLICY ANALYSIS, BOARD RELATIONS. This seminar is designed to expand and enhance course activities covered in Strategic Planning, Policy Analysis, board Relations (SLE 707). (1 cr.)

SLE 731. BUSINESS/INDUSTRY/MANAGEMENT PARTNERSHIP I This course will offer students the opportunity to interact with business leaders from the for-profit sector. Students will discover what practitioners and theorists say about applying leadership attributes from the corporate world to the school arena. (Profit) (2 crs.)

SLE 741. BUSINESS/INDUSTRY/MANAGEMENT PARTNERSHIP II This course will offer students the opportunity to interact with leaders from the non-profit sector and to explore the leadership role of the superintendent through the lens of the business and general leadership literature. (Non Profit) (2 crs.)

SOS -- Social Science

SOS 717. ANALYSIS OF POWER STRUCTURE. An appraisal of the nature, composition, structure, and function of groups along with sociological theory concerning group functioning, with particular emphasis on decision-making at various levels of government, labor, military and business. (3 crs.)

SOS 800. SEMINAR IN SOCIAL SCIENCE RESEARCH TECHNIQUES. The techniques involved in both research and writing in the social sciences, including the selection of a topic, acquaintance with research materials, organization of materials, and monograph writing. An overview of contemporary social science is also undertaken. (3 crs.)

SWK -- Social Work

SWK 701. GENERALIST PRACTICE I. Foundation framework for generalist social work practice including the problem solving process, social work values/ethics, and social work roles as they apply to varying size client systems. Develops specific intervention skills, such as interviewing, assessment, contracting, goal setting and evaluation for diverse client systems with the emphasis on rural and small communities. (3 crs.)

SWK 702. GENERALIST PRACTICE II. Continues foundation for generalist social work practice and builds on SWK 701, with a focus on the community/rural content of practice. Explores basic intervention/advocacy, management and evaluation. Provides examples from a variety of practice areas, including practice with populations throughout the lifespan. (3 crs.) Prerequisite: Social Work 701

SWK 705. HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT. This course provided the foundation for working with individuals, families, groups, and communities. Basic concepts of human development throughout the life cycle are presented within the person-in-environment perspective. The framework is multidimensional considering the impact of ability, age, aging, class, exploitation, ethnicity, gender, oppression, political belief system, race, religion, sexual orientation, and the social environment on human behavior and development. Examples from social work practice integrating micro, mezzo, and macro assessment and intervention strategies are taken from local, national, and international rural and small communities. (3 crs.) Prerequisite: Program Admission or MSW Program Director Approval

SWK 707. HUMAN DIVERSITY. This course provides foundation knowledge about human diversity and an understanding of the emphasis of the social work profession on culturally competent social work practice. Students develop skills to identify strengths, bicultural adaptation, patterns of oppression, and both change and continuity during the aging process, with particular emphasis on rural and small town communities. The course assists students in understanding the impact of oppression on human growth and development and social functioning for the integration of micro, mezzo, and macro level interventions to promote or enhance social justice. (3crs.) Prerequisite: Program Admission or MSW Program Director Approval

SWK 709. SOCIAL WELFARE POLICY AND SERVICES. Examination of the history and value base of the social work profession and U.S. social policy with a framework for policy analysis. Special emphasis on the impact of these policies, and related services on small towns, rural communities, the aging and diverse populations. (3 crs.)

SWK 710. POLICY PROCESS AND PROGRAM DESIGN. Examination of the policy process from social problem to legislation/adoption to actual program development. Focus on development of federal policies, state policy and legislation and accessing policy impact. Skills developed include policy analysis for creating, developing and changing programs. Special attention is placed on state policies that effect small and rural communities. (3crs.) Prerequisite: SWK 709 or Advanced Standing

SWK 713. SOCIAL WORK RESEARCH METHODOLOGY. Examines the logic of scientific inquiry, the social research process, application of research to social work practice, problem conceptualization, measurement options, research design and beginning level analysis of data. (3crs.)

SWK 714. QUANTITATIVE RESEARCH METHODS. Use of descriptive and inferential statistics in analyzing research data. Understanding quantitative and qualitative methodologies. Development of skills for understanding and conducting research, with emphasis on research related to social work practices and programs serving small towns, rural communities and diverse populations. (3crs.) Prerequisite: SWK 713 or Advanced Standing

SWK 730. FIRST YEAR PRACTICUM. MSW supervised placement in a social agency that provides opportunities for generalist social work practice with individuals, families, and groups of all ages from rural and small communities, including advocacy skills to enhance social justice. The minimum hours requires in a field agency is 240. (4crs.) Prerequisite: SWK 701, SWK 705

SWK 801. ADVANCED GENERALIST PRACTICE. Builds on the generalist practice skills, knowledge and values taught in Generalist Practice I and II. Integrates the use of advanced individual, family, group and organizational skills within the agency and community settings that serve diverse rural and small town client systems. Addresses practice concerns such as: acquiring sanction for work, assessing needed resources, supervision, certification, and evaluation of practice. (3 crs.) Prerequisite: SWK 702, SWK 705, or Advanced standing

SWK 803. ASSESSMENT OF DIFFERENTIAL CLIENT FUNCTIONING. Students in this course learn how to work with clients and client systems to help them identify needs and assess problems as well as strengths. A number of different assessment methods are explored with particular emphasis on those appropriate for diverse populations across the lifespan from local, national, and international rural and small communities. (3 crs.) Prerequisite: Program Admission, SWK 705 and SWK 707, or Director Approval

SWK 806. RURAL FAMILY AND COMMUNITY POLICY. Explores the design, function and impact of community and family policies. Historical development of specific policies and the effects of policy on rural family and community institutions and organizations. Skills in analyzing and synthesizing policy are applied to rural situations and change strategies. (3 crs.) Prerequisite: SWK 705, 709, 710 and 713 or Advanced Standing Admission to MSW Program

SWK 808. ADVANCED PRACTICE RESEARCH. Advanced use of research to evaluate social work practices and programs, particularly those serving small towns, rural communities, aging and diverse populations. Includes single system design and program evaluation. Skills developed for assessing and adding to the knowledge base of social work practice. (3 crs.) Prerequisite: SWK 714

SWK 811. PRACTICE WITH AGING. Integration of knowledge about aging, rural aging, services for the aging, and the principles of social work and practice with various diverse populations in rural environments. (3 crs.) Prerequisite: SWK 701, SWK 702 or Permission of the MSW Program Director

SWK 812. PRACTICE IN SUPERVISION AND ADMINISTRATION. Supervision, management, and control in human service organizations. Theoretical and functional models to assist staff to grow and function competently as professionals. Understanding the elements of programming, budgeting, staffing, communications, and control within the organization. Identifying formal and informal systems, the impact of human diversity, and how all of this functions in the rural setting. (3 crs.) Prerequisite: SWK 701, SWK 702 or Permission of the MSW Program Director

SWK 813. HEALTH CARE PRACTICE. Examines the logic of scientific inquiry, the social research process, application of research to social work practice, problem conceptualization, measurement options, research design and beginning level analysis of data. (3 crs.) Prerequisite: SWK 701, SWK 702 or Permission of the MSW Program Director

SWK 814. PRACTICE IN MH/MR. Overview of MH/MR policies and services; issues of rehabilitation, advocacy and case management; and treatment approaches (crisis behavioral and chemical) are related to social work roles and values in the context of community needs. (3 crs.) Prerequisite: SWK 701, SWK 702 or Permission of the MSW Program Director

SWK 815. CRIMINAL AND JUVENILE JUSTICE PRACTICE. Overview of the juvenile and adult criminal justice in urban and rural communities places emphasis on the development of an understanding of the ever-changing philosophies that under gird the criminal justice systems. In addition, the focus of the course will include an examination of the relationship between human diversity and aging in the criminal justice system. (3 crs.) Prerequisite: SWK 701, SWK 702 or Permission of the MSW Program Director

SWK 816. PRACTICE WITH CHILDREN AND YOUTH. Examines the major problems, legal and clinical issues encountered when working with children. Special concern for victimized and at risk children in rural settings. (3 crs.) Prerequisite: SWK 701, SWK 702 or Permission of the MSW Program Director

SWK 821. DRUG AND ALCOHOL ABUSE. This course provides students with a substantive knowledge base and critical skills for planning to work in the addictions fields as well as for those who will encounter chemical dependency problems in their work with a different age groups in the variety of arenas in which they practice. (3 crs.) Prerequisite: 2nd year standing or Program Director Permission

SWK 829. ADVANCED FIELD PRACTICUM I. First semester advanced MSW supervised placement in social agency setting for three days per week requiring advanced generalist practice with varying size and aging client systems, working in rural and small town communities. Students in the Regular Program are required to complete a minimum of 330 hours and Advanced Standing students are required to complete a minimum of 360 hours. (5 crs.) Prerequisite: Second-Year Standing, SWK 730

SWK 830. ADVANCED FIELD PRACTICUM II. Second of a two-semester Advanced MSW supervised placement in social agency setting for three days a week providing opportunity for advanced generalist practice with varying size and age client systems for working in rural environments. Students in the Regular Program are required to complete a minimum of 330 hours and Advanced Standing students are required to complete a minimum of 360 hours. (5 crs.) Prerequisite: Second-Year Standing, SWK730

SWK 832. RURAL ADVANCED GENERALIST INTEGRATIVE SEMINAR. Integration of advanced generalist social work theory and practice within the context of professionalism, social work ethics, and ethical dilemmas common to rural and small communities. (1cr.) Prerequisite: Concurrent with SWK 830

SWK 840. SPECIAL TOPICS. Study of selected topics of significance or current importance and interest to the social work profession. Prerequisites: Instructor permission. (Variable crs.)

ESP -- Special Education

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 teaches/prepares students to work with children and/or adults who possess severely or profoundly handicapping 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: (1) a behavioral diagnosis of communication strengths and weaknesses, (2) the development and implementation of intervention strategies for various populations of exceptional children, (3) the selection and/or development of appropriate materials for instruction, and (4) 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: (1) a behavioral diagnosis of arithmetic strengths and weaknesses, (2) the development and implementation of intervention strategies for various populations of exceptional children, (3) the selection and/or development of appropriate materials for instruction, and (4) the procedures and techniques for continuous evaluation for the instructional process. (Variable crs.)

ESP 506. HABILITATION TRAINING/TRANSITION. 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.)

ESP 701. INTRODUCTION TO BEHAVIOR ANALYSIS. The basic learning principles of operant and classical conditioning, with the application of these principles with handicapped individuals. (3 crs.)

ESP 712. SEMINAR ON CONTEMPORARY TRENDS AND ISSUES IN SPECIAL EDUCATION. Recent developments in all areas of special education. Sample topics are inclusion, block scheduling, interactive teaming, alternative assessment, deinstitutionalization and curriculum issues. (3 crs.)

ESP 720. SPECIAL EDUCATION TEACHING PRACTICUM/INTERNSHIP. Required of all graduate students. Educational work with handicapped children or adults in a variety of settings, including special public school classes and classes in residential treatment centers, special schools, and hospitals. Opportunities for case conferences, learning seminars, and teaching critiques are offered, as well as numerous field experiences to observe successful programs. (3-9 crs.)

ESP 732. SEMINAR IN SPECIAL EDUCATION ADMINISTRATION AND SUPERVISION. For supervisors and administrators, those seeking alternatives in education, and teachers who wish to communicate effectively with supervisors and administrators. Sample topics may include such matters as the role and function of supervisors and administrators, budgeting and financial issues, measures of teacher effectiveness, accountability, and legal standards. (3 crs.)

ESP 734. SEMINAR IN COUNSELING PARENTS OF EXCEPTIONAL CHILDREN. Designed to improve the skills of professionals related to their interaction with parents of exceptional children, this course provides an opportunity to learn the special needs of parents, techniques of communication, processes by which change can be implemented, legal rights and implications and resources. Participants are encouraged to assume the role of a parental consultant. (3 crs.)

ESP 735. SEMINAR IN EDUCATING THE GIFTED. Presentation by class members of selected topics related to the gifted. State standards and guidelines for programs are discussed, as well as materials for use in classes for the gifted. Students observe classes for the gifted and talented. (3 crs.)

ESP 737. SEMINAR ON LEGISLATION AND LITIGATION. Laws and court cases, both federal and local that have precipitated the initiation of programs for the exceptional child and with parents' efforts to receive legal support for opportunities for their children to receive an appropriate education. (3 crs.)

ESP 738. SEMINAR ON TEACHER BEHAVIOR AND GROUP DYNAMICS. An advanced course in methodology and applications, in which the graduate student is given the opportunity to refine many of the skills and behaviors acquired in previous courses in Special Education, especially as related to the skills and methods that contribute to effective classroom instruction and management. (3 crs.)

ESP 739. FIELD EXPERIENCE SEMINAR IN SPECIAL EDUCATION. A means for graduate students to obtain needed experiences with various groups of handicapped children, in such settings as an institution, a sheltered workshop, an activity center, a summer camp, a community MH/MR facility, or by doing a specific piece of research with a particular population of students. Specific requirements for individual graduate students are developed by those students and the supervising professor. (3 crs.)

ESP 800. SEMINAR IN ADVANCED BEHAVIOR ANALYSIS AND RESEARCH DESIGN. This is the required research course in special education. The course covers the field of research design and methodology in intrasubject experimentation. Required of all students in the masters degree program. (3 crs.)

TED -- Technology Education

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. (3 crs.)

TED 565. SPECIAL PROBLEMS IN TECHNOLOGY EDUCATION. Original investigations in the field of technology education. The nature of the problem will determine the credit-hour load. The student will provide evidence of the ability to conduct independent study and gain credit by reporting the findings effectively. (1-3 crs.)

TED 701. Issues in Technology Education Curriculum and Instruction. The focus of this course is two-fold. First, students will use state and national standards to develop a technology education curriculum by using various curriculum design processes. The second phase of the class is designed to improve the students' ability to use appropriate standards-based instructional methods. These include cooperative learning, problem-based learning, discovery learning, constructivism, reflection, meta-cognition, and others those students research and demonstrate to the class. (3 crs.)

TED 702. Assessment in a Constructivist Classroom. Assessment is the key to understanding student learning. In this course students analyze a variety of assessment techniques that are both authentic and traditional in nature. Topics such as formative and summative assessment, portfolios, rubrics, test development and analysis, interviews, simulations, and observations will be discussed. The second phase of the course examines how research techniques can be incorporated into the assessment process to gain a more robust understanding of student achievement. (3 crs.)

TED 703. Strategic Management in Education. This course will enable the student to systematically analyze the enrollments, student performance, and current status of a program in light of environmental resources, constraints and pressures. From this

systematic analysis, an overall strategic plan can be developed to guide the goals, objectives and priorities for program development and future success. These skills can be used in many contexts, but will most aid the technology education teacher in positioning, improving, and growing their programs. Finally, students will research, develop, and defend a grant proposal that will enhance their program. (3 crs.)

TED 704. Integrating Math, Science, and Technology. This course is focused on integrating the content of mathematics, science, and technology education for the purposes of teaching in middle and high schools. Curriculum issues and planning related to integrating mathematics, science, and technology according to state and national standards are discussed and practiced. Finally, students will have an opportunity to develop instructional units and carry them out in an activity-based laboratory. (3 crs.)

TED 705. Technology and Sustainable Development. Consideration of international systems and issues in technology and of technology assessment methodologies will help students meet new state and national standards. Technology content and activities can be developed with a broadened international focus and an emphasis on the economic, ecological, and social costs and benefits of technological systems. Activities based on ways in which different people meet basic needs for water, food, structures, medical care, and clothing will be stresses. (3 crs.)

TED 716. SUSTAINABLE ARCHITECTURE & SYSTEMS This course covers a variety of natural and sustainable construction materials and systems, some revivals of ancient materials and practices, some new and innovative, as the natural building movement gains both momentum and prominence in the construction and architectural arena. Integrated topics such as water conservation systems and energy conservation and alternative generation sources are also included. Two lecture hours and three lab hours per week.

TED 776. LAB DESIGN & MAINTENANCE. This is an advanced placement course designed to further prepare students who are about to begin teaching in a technology-based laboratory or who are already teaching in one. The course will have three main focuses. It will examine the requirements of a technology-based laboratory and contrast it with the needs of an industrial arts-based facility. Secondly, it will look at the safety requirements of such a facility and its associated activities. Finally, the course will present information on routine laboratory maintenance, maintenance systems, troubleshooting and machine repair. This course consists of three hours of lecture/laboratory per week for 15 weeks.

University Services

The Louis L. Manderino Library

The Louis L. Manderino Library offers a collection of over 400,000 volumes, 800,000 microforms, 60,000 audiovisual materials, 50,000 US Government Documents, and more than 800 serial subscriptions.

PILOT: The Library Catalog

Computerized information retrieval has made library research faster, more thorough, and more efficient. PILOT, the library's online public access catalog, is a user-friendly resource that can be used to quickly locate books, audiovisual materials, or government documents in the library's collection; with the ability to print, download, or e-mail the retrieved information. PILOT uses a Web interface and is accessible from any computer connected to the World Wide Web. All of the university libraries in the State System of Higher Education use the same system, so users at California University may search any of the other State System university libraries.

PALCI Virtual Union Catalog

The ability to search the vast amount of material contained in other library catalogs took a major step forward in 2000 through the implementation of the PALCI Virtual Union Catalog. This service allows patrons from over thirty Pennsylvania universities and colleges (including Carnegie Mellon University, Penn State University, University of Pittsburgh, and the University of Pennsylvania) to search all of these libraries at once, and to initiate their own interlibrary loans online.

Electronic Resources

Library patrons have access to more than 10,000 full-text periodical titles through the library's collection of online databases. Several thousand more periodical titles may be searched online for citations and abstracts. Users may view the table of contents from over 20,000 periodicals using the Ingenta Uncover and EBSCO Online resources. To supplement the research potential of students, trained librarians will, on request, conduct mediated online searching of the extensive resources found in other databases. Many of the library's electronic resources are accessible both on- and off-campus. The Louis L. Manderino Library currently* provides access to the following electronic resources:

EBSCO, Book Review Digest, Britannica Online, Current Biography, Facts.com, Lexis-Nexis Academic Universe, Lexis-Nexis Statistical Universe, Oxford English Dictionary, Annual Stockholder Reports, EconLit, Federal Tax Coordinator Library, Sports Business Resource Network, ERIC, Education Full Text, CINAHL, SPORT Discus, America: History and Life, Art Abstracts, CIOS: Communication Institute for Online Scholarship, Historical Abstracts, MagillOnLiterature, MLA International Bibliography, Philosopher's Index, Access Science, Applied Science and Technology Abstracts, Biological Abstracts, Georef, Criminal Justice Abstracts, Mental Measurements Yearbook, PAIS International, PsycINFO, Social Work Abstracts, Sociological Abstracts

[* This list reflects major resources as of Spring 2003. Given the dynamic nature of electronic resources, changes may occur. For a current list, or for more information about specific resources, please visit the library's Web site: <http://www.library.cup.edu>.]

Reference Services

The library is committed to providing students the assistance they need in order to use our resources effectively. Reference librarians, who are experts in the finding information, are available in the library, by telephone, or through e-mail. Help in using the electronic resources is also available online.

Interlibrary Loan

When research uncovers needed materials that are not available in our library, patrons may place a request for them through the Interlibrary Loan office. Typically journal articles arrive electronically within several days. Books usually require a week to ten days. The library does not charge any fees for journal articles retrieved through Interlibrary Loan, and only very rarely for very unusual books.

Other Services

The library offers users a number of other services, including: a large reference collection, 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, a media services center with equipment and audiovisual materials, and lamination and binding services. In addition, the Louis L. Manderino Library is an official Federal Government Documents Depository and regularly receives large numbers of government documents, such as census data, reports, maps, and the *Congressional Record*.

Technology on Campus

Computing Services Center

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 provides resources to meet the administrative needs of the university.

Computer Accounts

Students who register for classes automatically have a VMS and Windows 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 GigE local area network. The network provides GigE connectivity to every floor on the campus and each floor has switched Ethernet to every office, classroom, lab and residence hall room. Southpointe Center and RET (Regional Enterprise Tower) are connected via a high-speed ATM WAN which extends all computer resources to both remote sites. The network also provides the capability for distance learning programs. The university is connected to the State COPA (Commonwealth of PA) Network and Internet2. This statewide network includes the Commonwealth of PA and 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 personal computer systems and printers in laboratories and classrooms, and 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 VMS system prompt. The labs are closed during holidays and session breaks.

Distance Education via Interactive TV (ITV)

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 and RET. 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.

[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 computers for student use; only some of the facilities are listed here. Additional campus computer laboratories are located in and operated by various departments on campus including: Applied Engineering and Technology, Business and Economics, Mathematics and Computer Science, Earth Science, and English (Word Processing Laboratory). 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 computer laboratory. The Southpointe Center provides laboratories 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, and are available for use in the Math Lab and on overnight sign-out basis. Nationally renowned authors claim that half of all college students are math anxious, and that many math anxious students exhibit physiological symptoms, such as headaches or stomach aches. Students with these symptoms only in math environments should discuss the situation with a Math Lab tutor or with the Math Lab Director.

Reading Clinic

The Reading Clinic offers free one-hour tutoring sessions to all students. The Clinic is staffed by a faculty member and a graduate assistant who teach techniques to improve reading comprehension and vocabulary. Help is also available in identifying main ideas, making inferences, drawing conclusions, understanding concepts and facts, test-taking skills and building vocabulary. In addition, education majors can work in sessions to prepare them for the PRAXIS exam. Students can 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 a.m. to 4 p.m., Monday through Friday.

Writing Center

The Writing Center provides free writing assistance to Cal U students--undergraduate and graduate--in all academic majors and programs. Trained writing consultants work one-on-one with students who wish to improve their writing process, including getting started, developing a first draft, revising and editing. While writing consultants don't copyedit or proofread student papers, they will work closely with students as they learn strategies (including editing and proofreading) for improving their own writing through revision. The

Writing Center also offers a writing resource library, informative handouts about writing, and a Writers Hotline at (724) 938-4336 for quick questions about writing. Located in 110 Noss, the Writing Center is open Monday through Friday. Hours vary. Walk-ins are welcome, but appointments are encouraged. For more information or to make an appointment, call (724) 938-4336.

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.

Students are encouraged to visit Career Services to:

- visit our website at www.cup.edu/careers;
- schedule a session on the computerized guidance system, eDISCOVER;
- one-on-one career guidance;
- investigate cooperative education, internship, and service learning opportunities;
- search the “web” for job opportunities.
- check out the new computer resources lab dedicated to career development and job search;
- 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;
- register for undergraduate one-credit Career Readiness course;
- make an appointment for a “mock” interview;
- 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, and learn what services are available; and
- register and search full time part-time, co-op, internship, seasonal, and volunteer positions on College Central/PASystem website- www.collegecentral.com/cup.

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 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 one-credit course,
- completion of 30 credits (Associate’s - 15; Master’s - 6),
- student must have at least a 2.0 overall 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.

- CO-OP advertises on average over 550 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 Career Connections/Pasystem website. Students who enroll in CO-OP 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 Eberly Science and Technology Center.

Visiting Student Program

Students at California University may choose to enroll for a period of 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 the Visiting Student Program apply equally to students at any of the State System institutions and are as follows:

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 other State System 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 course load 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 officers, and secretarial staff, provides continuous 24 hour assistance to the university community.

The staff includes a director, assistant director, two shift supervisors and eleven additional commissioned police officers who have received training at the Pennsylvania State Police Academy. Two 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 annually provide to all applicants, students and employees, information with respect to campus crime statistics and the security policies of the institution.

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 Web site 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 State System's universities to give increased attention to values during the 1990s.

Goals of the Institute

The Character Education Institute has three broad goals:

- To serve as a resource to the University's colleges, departments, and student organizations as they contribute to the character development of California University students,
- To help prepare education majors for their unavoidable role as character educators,
- To assist, when possible, with outreach assistance to local school districts and organizations 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 Character Education Institute provides resources to members of the University community as they give increased attention to moral reflection and dialogue. These resources include guest presentations to classes, conferences with students doing character education projects and research, and consultations with faculty about strategies for integrating the university's values into specific courses. The Institute also offers an undergraduate course (Schools and Values) and a graduate course (Character Education).

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:

Character Education Institute

California University of PA
250 University Avenue
California, PA 15419-1394
Telephone: 724-938-4500
Fax: 724-938-4156
www.cup.edu/education/charactered

University Advancement

The Office of University Advancement was established in 1992 to provide a full range of internal and external services to California University of Pennsylvania. It endeavors to enhance relationships with all alumni and friends, the general public, prospective students, foundations, businesses, policy makers and others who have the ability to assist California University and its students. It conducts all fundraising efforts of the University including an annual fund campaign and phonathon, scholarship enhancement programs, capital campaigns, and planned giving programs including bequests and many types of trusts. Advancement also provides liaison with the Foundation for California University of Pennsylvania and the California University Alumni Association. The office of the Vice President for University Advancement is located in Room 114 of Old Main. Phone: 724-938-5938; fax: 724-938-5880.

Alumni Relations

The Office of Alumni Relations, located on the first floor of the new Michael and Julia Kara Alumni House, is the liaison between the university and its more than 40,000 living alumni. All alumni with mail able addresses receive *The Cal U Review* (alumni magazine) and notices about various special events. The office coordinates Move-In Day, Homecoming, 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 Ambassador Program and maintains a toll-free telephone hotline with information changing daily (1-800-4-CAL-NEWS or 724-938-4507 locally). Phone: 724-938-4418; fax, 724-938-4327; e-mail, alumni@cup.edu.

Alumni Association

The California University Alumni Association serves California University and its alumni by fostering beneficial relationships among alumni, students, the university, and the wider community. The university's alumni have been officially organized since 1939. Today, nearly 40,000 graduates and numerous former students are members of the Association. A board comprises four classes of alumni directors, elected for four-year terms. The board officers work closely with the university's President, Office of University Advancement, and the office of Alumni Relations. Phone. 724-938-4418; fax, 724-938-4327; e-mail, alumni@cup.edu.

Foundation for California University of Pennsylvania

The Foundation for California University of Pennsylvania, with offices on the second floor of the Michael and Julia Kara Alumni House, receives funds from foundations, businesses, alumni, staff, faculty and friends to benefit the university and its programs. The Foundation administers endowment funds that provide support for student scholarships and other university activities. Phone, 724-938-4329 or fax, 724-938-4480.

Marketing

The Office of Marketing identifies opportunities to promote the university. In conjunction with consultants and members of various university constituencies, the office defines, plans and executes marketing campaigns, and produces supporting materials that satisfy stated goals for a variety of areas, such as enrollment management. The office collects and analyzes data, evaluates results, and communicates its findings to the appropriate constituency. The Marketing Department publishes the university's alumni magazine, *The Cal U Review*. The office is also responsible for the California University Web site, www.cup.edu. Phone, 724-938-4195; fax, 724-938-5932 e-mail, baxter@cup.edu.

Mon Valley Renaissance

The Mon Valley Renaissance, located on the first floor of South Hall, is the university's unique public service agency dedicated to regional economic development. Its mission is to foster and support job creation and job retention in southwestern Pennsylvania. It helps individuals and businesses through counseling, training, consulting, and government contracting/export assistance and has been in existence since 1984. Phone, 724-938-5885; fax, 724-938-5888; e-mail, brna@cup.edu.

Public Affairs

The Office of Public Affairs serves as the university's liaison with the media and the public, gathering information from the California University community and distributing it regularly to print and electronic outlets. The director of Public Affairs often serves as the University spokesperson. The Public Affairs Office is responsible for producing *The California Journal*, the University's official weekly publication. Phone, 724-938-4195; fax, 724-938-1500; or e-mail, mccoy@cup.edu.

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 also other aspects of personal growth. In order to foster this holistic development of students, the division designed and implemented student learning outcomes. It is Student Development and Services' objective to enable students to achieve the seven learning domains listed below through a variety of programs and services.

Values, Moral and Ethics

Self-Awareness/Intrapersonal Development

Interpersonal/Social Development

Leadership and Citizenship

Preparation for Lifelong Learning

Purpose/Vocational Competence

Physical Development

For additional information and regulations governing student life and conduct besides that presented here, 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.

CalCard—University Identification Card

The CalCard is both a campus identification card and a convenient, 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, pre-programmed with basic services, and then enhanced based on your needs.

CalCard services include the following:

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 per academic year. To use this feature, simply call the toll free number on the back of your CalCard. For more details, stop by the Information Desk for an AAA brochure.

Transit- Just present your valid student CalCard and you can ride any of the Mid Mon Valley Transit Authority bus routes free of charge. To obtain copies of schedules and information, contact the Mid Mon Valley Transit Authority at 724-489-0880 or on the web at www.mmvta.com. Schedules are also available at the Natali Student Center.

Manderino Library - The CalCard is used to check out materials and access the library's PILOT system.

Tickets* - Cal U students receive free admission to all home, regular-season intercollegiate sporting events.

Fitness Center* - Cal U students receive unlimited access to the Herron Recreation and Fitness Center.

Entertainment* - Cal U students receive free admission to most entertainment events sponsored by the Student Association, Inc.

Access - Students who reside on campus use their CalCard to access their residence halls. Students residing at Jefferson at California use their CalCard to access the clubhouse and the fitness center.

*Students who are not matriculating at the main campus must purchase membership or tickets for recreational and entertainment events on campus.

CalCard Accounts - work like a debit account; you deposit funds in advance and your account is debited each time you make a purchase.

Meals - Everyone enrolled in a meal plan will use the CalCard to pay for his or her meals. Everyone enrolled in a meal plan will automatically receive a Dine Account.

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 all food service locations.

Shop - The CalCard shop account is the master debit account for on-campus use. Your Shop Dollars can be used to make purchases at all food service locations, Cal U Student Bookstore, vending machines, laundry facilities, Manderino Library for photocopies and overdue book fines, pool hall, Information Center for tickets, manuals, stamps, CalCards, and at the Hamer Hall concession stand. Shop dollars are carried over from semester to semester.

Banking Services/Financial Services - On-campus financial services are offered to students, faculty, and staff through the Pennsylvania State Employees Credit Union (PSECU) in conjunction with the CalCard. Students can elect to have their CalCard activated for use as an ATM / debit card associated with their PSECU account. The PSECU electronic banking facility is located on the lower level of the Natali Student Center. PSECU has ATMs located at the Natali Student Center and at the Jefferson at California apartments.

On-Line Card Office

On-line CalCard services are available at <https://web4.onlinecardoffice.com/calpenn/index.phtml>. You can make shop dollar deposits, view your account balances and transaction history, and suspend activity on your CalCard by using the On-Line Card Office.

Lost Cards

Report lost CalCards to: The CalCard Office during regular business hours and to Public Safety after regular business hours. Those who have selected to the option to have financial services provided by PSECU in conjunction with their CalCard also need to contact PSECU at 800-799-4337 if their CalCard is lost or stolen.

Additional Information

For additional information, stop by the Information Center in the Natali Student Center, call the CalCard Office at 724-938-4300, or email calcard@cup.edu. Be sure to check the CalCard website for information at <http://sai.cup.edu/calcard>.

Cal U Student Bookstore

The Cal U Student Bookstore, located on the first level of the Natali Student Center, offers varied services to all students, faculty and staff, including a textbook reservation service that allows students to pre-order books before the first week of class. The bookstore also offers on-line service at www.calupa.bkstr.com. The Cal U Student Bookstore offers a variety of other items including Cal U clothing and giftware, magazines, newspapers, CDs, greeting cards, and computer software.

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. (724-938-4573). The Campus Ministry of California University of Pennsylvania is located in the Natali Student Center, room 143. Office hours are 10 a.m. until 4 p.m. on weekdays while the university is in session. Campus ministers are on call 24 hours.

The California Times (California Student Newspaper)

The California Times is the university's student newspaper, owned and operated by the Student Association, Inc. The purpose of The Times is to support the educational mission of California University and the State System of Higher Education by providing educational opportunities in publishing, utilizing students in leadership, production and reporting roles. These "hands-on" roles will give students measurable educational experiences in technical areas such as desktop publishing, graphics, ad sales, layout and photography, as well as newspaper reporting. For further information call 724-938-4303 or e-mail wheeler@cup.edu.

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. A complete list of SAI-funded organizations, their current advisors and phone numbers may be found in *The Student Handbook*.

Commuter Center and Services

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, including lounging areas, general information, computers, lockers, microwaves, a refrigerator, and cable television. Visit both the Commuter Center and Commuter Council web pages at <http://sai.cup.edu/commuter/>

Counseling and Psychological Services

The Counseling Center faculty provides personal, social and psychological services to university students with problems that interfere with their adjustment to campus life or effective educational performance as well as services for personal development. Services are confidential in accordance with federal confidentiality rules and state law. Crisis intervention is available to students who have a situational problem that becomes overwhelming or a personal problem that has grown to crisis proportions. Students need to make an appointment themselves. After hours and weekend services are facilitated through the Health Services (724-938-4232).

To make an appointment for counseling or a one-time psychological consultation session, students can call the Center during office hours, 8 a.m. to 4 p.m. daily, Monday through Friday. Evening sessions are available by appointment only (724-938-4056).

CUTV (California University Television)

California University Television (CUTV), the University's cable television station, is owned and operated by the Student Association, Incorporated, and is seen in over 80,000 homes, 24 hours a day on the Charter Communications, Armstrong and AT&T cable systems. CUTV produces a variety of informational, educational, and entertainment programs, including Newscenter, High School Game of the Week, university athletic events, and distance learning courses. The mission of CUTV is to produce and provide programming of regional community interest, while providing valuable "hands-on" educational experience for interested students. This applied learning supports the mission and goals of California University, as well as the priorities and imperatives of the State System of Higher Education. Students can develop skills in television technology through experience in a variety of technical areas including camera work, editing, direction and other production roles, as well as on-air talent positions.

CUTV has been recognized by many national organizations, including the National Association of Collegiate Broadcasters (NACB) award as "Best in the Nation" for its news and sports, as well as station of the year, 1997-98. These awards were judged by representatives from CNN, ESPN and A&E. The station has also received multiple TELLY awards for its sports, news and documentary coverage, as well as awards from the Society of Professional Journalists, Communicator, Videography and Axiem organizations.

The offices and studios of CUTV are located in the Natali Student Center. For more information contact J.R. Wheeler, Assistant Dean of Student Services, room 150 of the Natali Student Center - phone: 724-938-4303 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. Students living in the residence hall, as well as commuters, may choose from a variety of meal plans.

All students who live in a university residence hall must participate in the meal program. 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 university drug and alcohol education and prevention program is located in the Counseling Center at the Downey Garofalo Health Center. It provides educational 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 consists of two individual sessions and eight hours of education. It is one part of the University's effort 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 the local chapter of a national student organization. BACCHUS advocates informed, independent decision-making and respect for the choices of others. 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, which is a committee comprised of both the university and community, addresses underage and dangerous drinking on campus and in the community. For information, call 724-938-4191.

Southwestern Pennsylvania Drug and Alcohol Consortium is a combined effort by California and neighboring universities to provide a forum for discussion of relevant and current issues in drug and alcohol prevention and education, as well to share developmental programming ideas.

Student Health Services

Downey–Garofalo Student Health Center

The goal of the Student Health Services Department is to provide high quality health care to 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. Students must submit completed health forms as part of the admissions process.

The Downey–Garofalo Student Health Center is open 24 hours, 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 and a Certified Registered Nurse Practitioner are on duty Monday through Friday during specified hours. The physician may refer students to local hospitals in emergencies and for treatment beyond the capabilities of the Student Health Center. The Health Center does not assume responsibility for doctor bills, hospital bills or prescription costs accrued by the students for treatment beyond capabilities of the Health Center. The final decision in hospital selection is the student's.

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 Student Health Center does not issue medical excuses, but will send a written notification to the professors in the following circumstances (provided the student initiates the request):

- 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.
- If a student has consulted a private physician, who has determined that the student has or had sufficient medical reason not to attend class.
- If a student is confined for longer treatment or care at the infirmary section of the Student Health Center or requires extended recovery with bed rest.
- Upon notification from the Student 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.

Health Education Awareness Resource Team (H.E.A.R.T.)

H.E.A.R.T. is a group of students trained to promote health and wellness and to provide opportunities for the campus community to learn about healthy lifestyles through programs, events, workshops, and individual consultations. H.E.A.R.T. can present programs on weight loss/management, nutrition, physical fitness, eating disorders, AIDS and other sexually transmitted diseases and stress management

Pennsylvania Students Working Against Tobacco (PA-SWAT)

PA-SWAT students are a part of a state-wide initiative to implement smoking cessation programs and to work towards a tobacco free campus. The committee is made up of a facilitator, a student executive board member and student committee members. If interested in participating with this group, please call Fran Fayish at 724-938-5922.

Nurse Educator Groups

Epilepsy Alert - a support and awareness organization designed for people with seizure disorders, their families and friends.

Chit-Chat - offers friendship and emotional support for people with diabetes. The group meets at least once a month during the fall and spring semesters.

Anonymous HIV Testing - for information contact the Nurse Educator through confidential voice mail at 724-938-4270.

Housing

The university currently provides on-campus residence hall accommodations for approximately 700 students. Residence hall accommodations include a required food service (board) plan.

Housing Availability and Contract

Housing on campus is not guaranteed for everyone. A majority of on-campus spaces are reserved for incoming first year students, who are assigned on a first-come, first-served basis. A percentage of spaces available are set aside for upperclassmen and a lottery is held to determine who can contract for on-campus housing. First year students not selected in the lottery must fulfill the remainder of their four-semester residency requirement at Jefferson@California, as **university policy states that all first-time freshmen who continue enrollment are required by the university to reside in university housing (either on-campus halls or Jefferson@California) for the first four semesters of their college career. The housing contract is binding and includes both the fall and spring semesters of an academic year. Students contracting for on-campus housing must also contract for food service.**

Each student accepted into the residence halls is assigned a space. However, this space remains the property of the university and regulations apply for its use. The university retains the right to assign all students to certain residence halls, floors and roommates in the best interests of the university. The student may request a room and a roommate(s) and the university will attempt to honor this request, but will not be obligated to do so. The university will not guarantee any student a given room, roommate or residence hall based on class rank, previous occupancy or any other criteria. For further details see *The Student Handbook* or phone 724-938-4444.

Residence hall and food service contracts are for one academic year, September through May. The contract commits the student to university room charges for both the fall and spring semesters, and for separately contracting for food service for each semester. An advance deposit and application fee of \$235* is required with the room and board contracts in order to reserve a room for the following academic year. Withdrawal from the contract will result in partial or total forfeiture of the deposit. Contracting for on-campus housing this academic year does not obligate the university to offer on-campus housing in future semesters.

Residence Life

Each residence hall is supervised by a staff which is headed by an on-site director. The residence hall director, with the help of graduate and undergraduate community assistants, is responsible for ensuring a comfortable, productive and safe living and learning experience.

Community Safety

A state-of-the-art fire suppression and smoke detection system ensures prompt response to fire emergencies. A digital video camera system is used at lobbies, exit doors, and computer lab areas. Recordings may be reviewed by Residence Life staff or Public Safety for investigation of alleged Code of Conduct or legal violations, and may be used as evidence.

Inter-Residence Hall Council

This elected body represents the interests of students who live in the residence halls. The Council provides a forum for residential life issues and co-sponsors various service projects. 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 opportunity to live in a community made up of those who share interests or concerns for similar issues. We currently offer Wellness, Quiet and Honors Program specialty housing.

The Housing and Residence Life Office encourages groups of students interested in creating other specialty housing around common interests to contact us. Special interest housing is limited and requires a separate contract and screening process. Although we will do our best to serve you, we cannot guarantee requested accommodations.

**Wellness* For students who are personally opposed to the use of alcohol, tobacco and drugs, and who do not choose to live with those who use them. Residents share a concern for healthy living. (The possession or use of alcohol or illegal drugs is strictly prohibited on all university property, while the residence halls are completely non-smoking.)

**Quiet* Quiet areas extend typical residence hall quiet hours for students who require or prefer a quieter atmosphere. Floor residents vote to implement a limited daily number of relaxed courtesy quiet hours on a semester basis.

**The Honors Program* The Honors Program provides an opportunity for an enhanced educational experience. Students admitted into the Honors Program can request to live together in Residence Hall A, which includes the Honors Program office, a resource/study room, computer lab and classroom for Honors students. This environment allows you to explore and participate in scholarly, professional, and artistic experiences outside the classroom. Honors students also live on co-ed wings, while those in other areas and halls are single-sex.

Tech Support

California University provides a computer lab with a printer in each residence hall for residents' use. The labs are fully integrated into the university's network, including Manderino Library, other State System libraries, students' email and web space, the Internet, and other services. All labs are available 24 hours a day during the school term and are accessed by using your room key. Each lab has a laser printer, but you must supply your own paper.

If you bring your own computer, all residence hall rooms provide Cat-6 network connections at no additional cost. There is no need to use a modem or contract with an outside Internet provider. You need an Ethernet cable and an installed and operable 10BaseT Ethernet card. The university does not provide or install the Ethernet card or cable. You must complete an application for service and meet certain requirements, including having updated virus protection software on your computer. You may only connect your computer to your assigned port in your suite. For more information, visit <http://sai.cup.edu/calhousing/services.htm>. or call Residence Life Tech Support at 724-938-4444.

Off-Campus Housing

The Office of Off-Campus Housing works with students, landlords and borough officials to educate and promote the safety and welfare of all students residing in off-campus facilities. The office also assists students in their search for off-campus housing by providing an off-campus housing list and various resource materials such as the "Student Educational Guidebook for Off-Campus Living." For more information call 724-938-4303 or visit our website at <http://sai.cup.edu/housing/och>.

[Disclaimer: The information contained in the off-campus list is provided as a service to students. The data collected or transcribed may at times be inaccurate. The university, its employees or students are not responsible for any claims or damages that may be incurred. The Office of Off-Campus Housing and Affairs makes no warranty on 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.]

Jefferson at California

Jefferson at California opened its doors to university students in the fall of 2001. This state-of-the-art apartment community provides residents with numerous amenities, and various personal development opportunities. Each apartment is furnished and consists of four private bedrooms, four private bathrooms, a kitchen, and living room. Also, every apartment is equipped with local telephone service, basic cable

television, and Ethernet connections. The kitchens have GE appliances; a stove/oven, a microwave, a garbage disposal, a refrigerator, and a dishwasher. There is also a washer and dryer in every apartment. All of these amenities are included in the monthly rent. The community also provides a clubhouse with additional amenities, these include a university operated convenience store, a fitness center, a computer lab, study rooms, and a game room. Jefferson at California also offers opportunities to grow and develop personally. There are six Community Assistants that live within the property and they develop both social and educational opportunities for the residents.

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.

Sixteen 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. For men, California offers baseball, basketball, cross country, football, soccer, and indoor and outdoor track and field; for women California offers basketball, cross country, softball, soccer, tennis, indoor and outdoor track and field, swimming, and volleyball. 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 admissions office.

Academic progress for athletes is monitored and a professional staff of athletic trainers is always available. All student athletes are encouraged to participate in the athletic CHAMPS/Lifeskills leadership development program at some time during their athletic careers. The program combines student athletes from all sports to discuss values, communication, career services, resume writing, manners, etiquette and diversity.

International Student Office

California University welcomes international students because they have a positive impact on the entire university community. International students from 20 countries currently provide cultural diversity and furnish the institution and the surrounding community with an expanded and enlightened perspective. The mission of the International 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 Downey-Garofalo Student Health Services building, is open 8 a.m. to 4 p.m. Monday through Friday. (724-938-4056)

Intramurals

The intramural program is designed to provide students with a flexible, yet structured environment in which to participate in sports. Activities are administered in league format with various divisions servicing men's, women's, and 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.

Judicial Affairs

The Statement of Student Rights and Responsibilities: Student Code of Conduct outlines the behavioral standards the university expects all students to abide by in order to create a positive community. The Office of Judicial Affairs and designated hearing officers in Residence Life and Greek Affairs are responsible for resolving any alleged violations of these behavioral standards through the process described in the *Statement*, which is included in *The Student Handbook* and at <http://sai.cup.edu/handbook>. These behavioral expectations are based on the university's core values of integrity, civility and responsibility. The university reserves the right to impose sanctions such as declining readmission, suspension, or requiring the withdrawal from university housing and/or the university after all appropriate university judicial procedures have been followed for actions deemed to be disruptive of the university community.

Registration at the university assumes the student's acceptance of responsibility for compliance with all regulations published in this catalog, as well as rules found in official publications or officially announced to the university community.

Judicial System (Student)

The University Judicial Officer and Coordinator of Judicial Affairs are 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 behavioral problems.

For additional information and regulations governing student life and conduct, students should refer to the current edition of *The Student Handbook Student Rights and Responsibilities: Student Code of Conduct*.

Multicultural Affairs Student Programming

The Office of Multicultural Student Programming, located in the Jennie Carter House, 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 number is 724-938-5758, and office hours are 8 a.m. to 4 p.m. Monday through Friday.

Multi-Media Access Center

Located on the first level of the Natali Student Center, the Access Center houses a Macintosh computer which permits student access to a number of computers for personal use. The lab is open Monday through Friday, 9 a.m. to 9 p.m., and is open extended hours during "final" week.

The P.E.A.C.E. Project

The P.E.A.C.E. Project (Prevention, Education, Advocacy for Change and Empowerment) raises awareness and educates the campus and community on sexual assault, stalking, and relationship violence. In addition, P.E.A.C.E. offers survivors and their loved ones advocacy, counseling, and support on their journey to healing. The project is funded by a grant from the United States Department of Justice through the Violence against Women Act.

The P.E.A.C.E. Project is located in 116 Clyde Hall. Members of the campus and the larger community are welcome to stop by, call 724-938-5707, or e-mail peace@cup.edu for more information. SSART (Student Sexual Assault Response Team) 24-hour Crisis Hotline 724-938-HEAL (4325).

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. Seven service areas fall within the department: extra murals, fitness, informal recreation, instructional programs, intramural sports, outdoor recreation and sports clubs.

Social Fraternities and Sororities

A sorority or a 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 eight sororities and seven fraternities to choose from at California University. Every chapter encourages and expects above average scholarship and participation in various activities that offer valuable experience. Community service is also encouraged. For additional information, see *The Student Handbook* or contact the Greek Development Office at 724-938-4303.

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. The type of programs that SAB sponsors include the weekly movies shown in the Vulcan Theatre, the series of events surrounding our Homecoming theme, novelty events such as laser tag and 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.

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 the office located on the third level 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.

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, *The California Times* (the student newspaper), *Monocal* (the yearbook), and 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.

SAI is responsible for the development and maintenance of the George H. Roadman University Park, a 98-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 724-938-4303.

Student Leadership Development

The Student Leadership Development Department fosters ethical leadership development and encourages involvement in leadership opportunities to enhance a student's capacities for dealing effectively with complex problems, real life leadership situations, and cross-cultural issues. This comprehensive program is designed to promote an understanding of leadership theory and research, skills and competencies which support leadership effectiveness, a more fully developed code of personal ethics, and an enhanced sense of lifelong commitment to social responsibility and citizenship. There are specific programs developed for first- and second-year students from traditionally underserved groups, athletes, and residence hall students. In addition, the Emerging Leaders Program equips potential student leaders with skills including public speaking, team building, goal setting, and event planning. For more information call 724-938-4303 ext. 277.

Office for Students with Disabilities

California University of Pennsylvania welcomes otherwise qualified students with disabilities. The University recognizes its responsibility to these students and is committed to providing reasonable accommodations to insure equal access and full participation as guided by Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA). Requests for accommodation should be submitted directly to the Office for Students with Disabilities (OSD). Students requesting accommodations must provide documentation to OSD to substantiate the request.

Students with disabilities follow the same admission procedures and standards as required by California University of PA's Admissions office for all students. Questions regarding admission procedures and acceptance status should be directed to the Admissions Office 724-938-4404. Questions regarding accommodations for students with disabilities and required documentation should be directed to the Office for Students with Disabilities 724-938-5781.

Accommodations for Students with Disabilities

Accommodations for students with disabilities are approved through the Office for Students with Disabilities (OSD). It is the responsibility of the student to adhere to OSD procedures for self-identifying, providing documentation and requesting reasonable accommodations in a timely manner. Students must meet the academic/technical standards of the classes/programs for which they are applying and/or in which they are enrolled. In those instances where class/program requirements simulate responsibilities of in-service personnel, students must meet the essential functions of the job. For accommodation assistance, contact the Office for Students with Disabilities by phone: 724-938-5781 or visit the OSD web site: <http://sai.cup.edu/osd>.

Parking spaces for persons with disabilities are marked as such on campus. These spaces are solely for the use of persons who have the required permit displayed. Persons who wish to request a temporary disabled parking permit (6 weeks or less) must apply through and submit documentation to the Office of Public Safety 724-938-4299. Parking permits for persons with disabilities beyond those of a temporary status require application to the PA Department of Transportation; the applications are available at the Office of Public Safety.

Study Around the World Program

The Study Around the World (SAW) Program 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. A successful candidate for exchange has a willingness to undertake exposure to unfamiliar environments.

The SAW program is essentially divided into two categories of opportunities for students: domestic exchanges through the National Student Exchange consortium, and international exchanges through a multitude of program offerings. For further information, contact the SAW coordinator at 724-938-4553.

National Student Exchange (NSE)

Using the National Student Exchange (NSE) Program, students can exchange to NSE member campuses in other states without having to pay the high cost for out-of-state tuition. Since its establishment, NSE has grown to 177 member campuses in 49 states, the District of Columbia, and three U.S. territories. 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. Students have the choice to pay either California University tuition/fees or in-state tuition/fees at the institution they exchange to. For further information, contact the SAW coordinator at 724-938-4553 and log-on to the NSE website at www.nse.org.

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 <http://sai.cup.edu/univconfsrv/>.

Veterans Affairs

The Office of Veterans Affairs, located in Clyde Hall, is open from 8 a.m. to 4 p.m., Monday through Friday. Evening hours may be arranged by appointment. The phone number 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.

Web Site Development

The Student Web team consists of student employees and volunteers who are responsible for developing and maintaining all the sites within student life. They are available to help clubs and organizations, dining services, athletics, student activities and all areas of Student Development and Services to design and post their sites. They also maintain the online CALendar, <http://sai.cup.edu/saicalendar>, which lists activities on campus. Explore the vast offerings for Cal U students, beginning with the Student Life homepage located at <http://sai.cup.edu>.

Women's Center

The Women's Center, located in Suite 175 of the Natali Student Center, is a service provided primarily for female students of the university but all students are welcome to participate in activities of the Center. The Center seeks to provide a central focus for meeting the needs of women and students. The Women's Center has five primary objectives: Advocacy, Empowerment, Educational Programming, Collaboration with Existing Groups and Leadership. The Women's Center, open Monday through Friday, from 8am – 4pm, serves as a gathering place, a resource center, and a meeting space for independent campus organizations. The Women's Center is. Phone 724-938-5857. For further information or visit our Web site at <http://sai.cup.edu/womenscenter>.

WVCS (California Radio Station)

Owned and operated by the Student Association, Incorporated (SAI), 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 15-45 age bracket, residing in the five county region (Washington, Fayette, Greene, Westmoreland and Allegheny), with secondary listeners in parts of Maryland and West Virginia. WVCS, has a mission of providing students with "hands-on" radio experience, while broadcasting to regional audience news, sports, public service information and the best in popular musical entertainment - from a variety of genres. Students who successfully complete a training program are able to become on-air DJ's. If you have any questions concerning WVCS or California University in general, please don't hesitate to call. You may contact J.R. Wheeler at 724-938-4303 or by e-mail: wheeler@cup.edu.

Faculty

(Date of permanent appointment to California University of Pennsylvania.)

Holiday Eve Adair. (1998) Associate Professor, Psychology. B.A., University of Akron; M.A., University of Akron; Ph.D., University of Akron

Aref M. Al-Khattar. (2002) Associate Professor, Criminal Justice. B.A., University of Jordan; M.A., Indiana University of Pennsylvania; Ph.D. Indiana University of Pennsylvania

David G. Argent. (2000) Assistant Professor, Biological and Environmental Sciences. B.S., Indiana University of Pennsylvania; M.S., Virginia Polytechnic Institute; Ph.D., Penn State

Dencil K. Backus. (1983) Assistant Professor & Chair, Communication Studies. A.B., Glenville State College; M.A., West Virginia University

Rollin M. Barber. (1976) Professor & Chair, Social Science. B.S., Ohio State University; M.S., Ohio State University; Ph.D., Ohio State University

Sylvia J. Barksdale. (1999) Associate Professor, Social Work and Gerontology. B.A., University of Pittsburgh, M.S.W., University of Pittsburgh, Ph.D., University of Pittsburgh

Bruce D. Barnhart. (1986) Professor, Health Science and Sport Studies. B.S., California University of Pennsylvania; M.Ed., California University of Pennsylvania; ATC, Ed.D., West Virginia University

Peter J. Belch. (1968) Professor & Coordinator of the Graduate Program, Special Education. B.S., California University of Pennsylvania; M.A., West Virginia University; Ed.D., West Virginia University

Ralph J. Belsterling. (2001) Assistant Professor, Communication Disorders. B.S. California State college: M. Ed. California State College: M.S. Clarion University of Pennsylvania: Au. D. University of Florida

William B. Biddington. (1977) Professor & Chair, Health Science and Sport Studies. B.S., West Virginia University; M.S., West Virginia University; ATC; Ed. D., West Virginia University

Lee Roy Black. (2001) Associate Professor & Chair, Justice Studies. Director, Criminal Justice Program. B.S. Roosevelt University of Chicago, Chicago, Illinois; Fellow, Ohio State University; Ph.D., Union Graduate School, Cincinnati, Ohio.

William F. Bloesel. (1976) Associate Professor, Business and Economics. B.S., Pennsylvania State University; M.B.A., University of Pittsburgh; C.P.A.

David F. Boehm. (1989) Professor, Biological and Environmental Sciences. B.S., West Liberty State College; M.S., West Virginia University; Ph.D., West Virginia University

Jane Bonari. (2000). Instructor, Elementary Education and Early Childhood. B.S. California University of Pennsylvania; M.Ed., California University of Pennsylvania

Barbara H. Bonfanti. (1994) Professor & Chair, Communication Disorders. B.S., Indiana University of Pennsylvania; M.S., St. Francis College of Illinois; M.Ed., California University of Pennsylvania; Ph.D., University of Pittsburgh

Kaddour Boukaabar. (1997) Associate Professor, Mathematics and Computer Science. B.S., University of Wahran, Algeria; M.S., Florida Institute of Technology; Ph.D., Bowling Green State University

Mark E. Bronakowski. (1984) Professor, Applied Engineering and Technology. Coordinator of Distance Education. B.S., California University of Pennsylvania; M.Ed., California University of Pennsylvania; Ed.D., West Virginia University

Burrell A. Brown. (1989) Professor & Chair, Business and Economics. B.S., California University of Pennsylvania; MBA., University of Pittsburgh; J.D., University of Pittsburgh

Gloria Cataldo Brusoski. (1997) Professor & Chair, Counselor Education and Services. B.A., Duquesne University; M.Ed., Gannon University; Ph.D., University of Pittsburgh

Thomas P. Buckelew. (1969) Professor, Biological and Environmental Sciences. B.S., Muhlenberg College; M.S., University of South Carolina; Ph.D., University of South Carolina

David N. Campbell. (1988) Professor, Educational Studies. B. Ed., Southeastern Louisiana University; M.S., University of Illinois; Ph.D., University of Illinois

Dorothy M. Campbell. (1973) Professor & Assistant Chair, Elementary and Early Childhood Education. B.S., Indiana University of Pennsylvania; M.S., Bucknell University; Ph.D., University of Pittsburgh

Nancy Carlino (2000). Assistant Professor, Communication Disorders. B.S. Duquesne University; M.A., University of Pittsburgh

James O. Carter. (1990) Assistant Professor, Communication Studies. B.A., Marshall University; M.A., Ohio University

Richard Cavasina. (1992) Professor, Psychology. B.S., Duquesne University; M.S., Duquesne University; Ph.D., West Virginia University

John R. Cencich. (2002). Professor, Justice Studies. B.S., St. Paul's College. Post-Baccalaureate Certificate in Justice Studies, Virginia Commonwealth University; M.S., Criminal Justice, Virginia Commonwealth University; LL.M., Kent Law School, University of Kent at Canterbury, England

M. Arshad Chawdhry. (1976) Professor, Business and Economics. B.S., University of Agriculture (Pakistan); M.S., University of Agriculture (Pakistan); M.A., University of Maryland; M.S., University of Illinois; Ph.D., University of Illinois

Margaret Christopher. (1995) Associate Professor, Social Work and Gerontology. B.A., Mount St. Mary College; M.S.W., University of Pittsburgh; M.Ph., University of Pittsburgh; Ph.D., University of Pittsburgh

Pamela B. Cignetti (1990) Professor, Elementary and Early Childhood Education. B.S., California University of Pennsylvania; M.Ed., Duquesne University; Ed.D., University of Pittsburgh

Debra M. Clingerman. (1984) Associate Professor, Business and Economics. B.A., California University of Pennsylvania; M.B.A., West Virginia University

Renee Colbert. (2003) Instructor, Justice Studies. B.M.E., Oklahoma State University; J.D., Law, University of Oklahoma

Ismail Cole. (1988) Professor, Business and Economics. B.A., Harvard College; M.A., Tufts University; Ph.D., University of Pittsburgh

Donald J. Conte. (1968) Associate Professor, Earth Sciences. B.S., California University of Pennsylvania; M.A., Indiana University of Pennsylvania; M.S., California University of Pennsylvania

Joni L. Cramer-Roh. (1991) Associate Professor, Health Science and Sport Studies. B.S., West Virginia University; M.A., University of North Carolina at Chapel Hill; ATC; Ed.D., West Virginia University

Rick Allen Cumings. (1992) Associate Professor, Communication Studies. B.A., University of Illinois; B.A., Moody Bible Institute; M.A., Marquette University; Ph.D., Pennsylvania State University

Kimberly S. DeHainaut. (2002) Instructor, Secondary Education. B.S.El.Ed., Indiana University of Pennsylvania; M.Ed. (Reading Specialist), Indiana University of Pennsylvania; ABD in the Ph.D. program, University of Pittsburgh

Mark DeHainaut. (2002) Associate Professor, Business and Economics Department. B.S., Indian University of Pennsylvania; M.B.A., Indiana University of Pennsylvania; Ed.D., University of Pittsburgh

Elwin Dickerson. (1989) Professor, Elementary and Early Childhood Education. B.S., California University of Pennsylvania; M.Ed., California University of Pennsylvania; Ed.D., West Virginia University

Robert F. Dickie. (1966) Professor, Special Education. B.S., Bridgewater State College; M.A., Michigan State University; Ed.D., Michigan State University

Gail S. Ditkoff. (1986) Professor, Psychology. B.A., State University of New York at Binghamton; M.S., Ed. S., State University of New York of Albany; Ph.D., State University of New York at Albany; NY and PA certified school psychologist, licensed psychologist

Deborah A. Farrer (2000). Assistant Professor, B.A., Elementary & Early Childhood Education; B.S. California University of Pennsylvania.; M.A. West Virginia University; Ed.D. West Virginia University

Ronald G. Dreucci, Ed.D, West Virginia University, Electronics and Transportation

Marc S. Federico. (1999) Daniel E. Engstrom (2001) Assistant Professor, Health Science Applied Engineering and Sport Studies. Technology. B.S., University of Pittsburgh; MPT, Slippery Rock Millersville University of Pennsylvania; PTM.S., Bowling Green State University; Ed.D., Duquesne University

Sylvia L. Foil. (1990) Associate Professor, Communication Studies. Director of Television Studio. B.S.S., Northwestern University; M.A., Northwestern University; Ph.D., Northwestern University

Nicholas S. Ford. (1992) Professor, Mathematics and Computer Science. B.S., Michigan State University; M.S., West Virginia University; Ph.D., Michigan State University

Swarndeeep Gill. (2002) Assistant Professor, Earth Sciences. B.S., University of Alberta; M.S. University of Oklahoma; Ph. D. University of Wyoming

Lizbeth A. Gillette. (1986) Professor, Educational Studies. B.S., Carnegie Mellon University; M.Ed., University of Pittsburgh; M.Pub.Mgmt., Carnegie Mellon University; Ed.D., University of Pittsburgh

Elizabeth A. Gruber. (1988) B.S. Bowling Green State University.; M.S. Youngstown State University

Judith I. Hall. (1984) Associate Professor, Mathematics and Computer Science. B.S., University of Pennsylvania; M.S., University of Pittsburgh

Wilburn Hayden, Jr. (1998) Associate Professor & Director of MSW Program, Social Work and Gerontology. B.A., St. Andrews College; M.S.W., University of North Carolina; Ph.D., University of Toronto

Joseph C. Heim. (1990) Associate Professor, History and Political Science. B.A., University of Pittsburgh; M.A., University of Pittsburgh; M. Phil., Cambridge University; Ph.D., University of Pittsburgh; Certificate, International Finance, Wharton Graduate School of Business, University of Pennsylvania

Keith D. Hepner. (1995) Associate Professor and Chair, Educational Studies. B.S., California University of Pennsylvania; M.Ed., California University of Pennsylvania; Ed.D., University of Pittsburgh

Barbara Hess. (1990) Associate Professor, Mathematics and Computer Science. B.S., Clarion University of Pennsylvania; M.Ed., Indiana University of Pennsylvania

Rebecca Hess. (2001) Assistant Professor, Health Science and Sport Studies. B.S., West Virginia University; M.S., West Virginia University; Ph.D., University of Pittsburgh.

Glenn Hider. (1999) Associate Professor, Applied Engineering and Technology. A.S., State University of New York; B.S., State University College Oswego; M.S., Eastern Illinois University; Ed.D., West Virginia University

Karla A. Hoffman. (1990) Associate Professor, Mathematics and Computer Science. B.S., Towson State University; M.Ed., University of Massachusetts; CAGS, University of Massachusetts

Larry D. Horath. (1990) Professor, Applied Engineering and Technology. B.S., Eastern Illinois University; M.S., Eastern Illinois University; Ph.D., Texas A&M University

Henry A. Huffman. (1995) Associate Professor, Educational Studies. B.S., California University of Pennsylvania, M.Ed., University of Pittsburgh, Ed.D., University of Pittsburgh

Susan A. Jasko. (1998) Assistant Professor, Communication Studies. Director of Communication Lab/Research Center. B.A., William Patterson College; M.A., Ohio State University; Ph.D., Ohio State University

Kirk R. John. (1990) Professor, Psychology. Director of School Psychology Clinic. B.A., California University of Pennsylvania; M.Ed., Indiana University of Pennsylvania; Ed.D., Indiana University of Pennsylvania; NCSP; Pennsylvania Certified School Psychologist; Pennsylvania Licensed Psychologist

David T. Jones. (1985) Associate Professor, Business and Economics. B.S., Waynesburg College; M.S., West Virginia University; C.P.A.

Elizabeth Jones. (1992) Associate Professor, Social Science. B.A., American University; M.A., American University; Ph.D. American University

Sharon, Juli. (2003). Instructor and Field Coordinator, Social Work and Gerontology, B.S. California University; M.S.W., University of Pittsburgh

MacDonald N. Kalé. (1985) Associate Professor, Communication Studies. B.A., Governors State University; M.A., Governors State University; M.A., University of Illinois, Chicago; Ph.D., Indiana University, Bloomington

John R. Kallis. (1985) Professor, Applied Engineering and Technology. B.S., California University of Pennsylvania; M.Ed., California University of Pennsylvania; Ed.D., University of Pittsburgh

Robert H. Kane, Jr. (1988) Professor, Health Science and Sport Studies. B.S., University of Connecticut; M.S., University of Southern Maine; P.T.; ATC; Ed.D., West Virginia University

Chad M. Kauffman. (2001) Assistant Professor, Earth Sciences. B.S., Salisbury State University; M.S., University of Nebraska-Lincoln; Ph.D., University of Nebraska-Lincoln.

Nedra Kearney-Vakvlik (2002) Associate Professor. Elementary & Early Childhood. B.S. Indiana University of Pennsylvania; M.Ed. Indiana University of Pennsylvania; Ph.D. University of Pittsburgh

William G. Kimmel. (1976) Professor, Biological and Environmental Sciences. B.A., Wilkes College; M.S., Pennsylvania State University; Ph.D., Pennsylvania State University

René L. Kruse. (1989) Professor, Applied Engineering and Technology. B.S., Peru State College; M.S., Texas A&M University; Ph.D., Texas A&M University

Stanley A. Komacek. (1987) Professor & Chair, Applied Engineering and Technology. B.S., California University of Pennsylvania; M.Ed., Miami University; Ed.D., West Virginia University

Kevin A. Koury. (1999) Associate Professor, Special Education. B.S., West Virginia Wesleyan College; M.A., West Virginia University; Ed.D., West Virginia University

Paul L. Lancaster. (1969) Associate Professor & Chair, Special Education. B.S., California University of Pennsylvania; M.Ed., California University of Pennsylvania

Regis Lazor. (1972) Associate Professor, Special Education. B.S., California University of Pennsylvania; M.Ed., University of Delaware

Karen L. LeMasters. (1986) Professor, Business and Economics. B.S., West Virginia University; M.B.A., West Virginia University; Ph.D., University of Pittsburgh

Sam P. Lonich. (1989) Associate Professor & Chair, Psychology. B.S., California University of Pennsylvania; M.S., California University of Pennsylvania; Pennsylvania Certified School Psychologist, Licensed Psychologist

J. Kevin Lordon (2003) Assistant Professor, Educational Studies. B.S., Edinboro University of Pennsylvania, M.Ed., Duquesne University; Ed.D University of Pittsburgh

Sean C. Madden. (1989) Professor & Chair, History and Political Science. B.A., Xavier University; M.A., University of Notre Dame; D.A., Carnegie Mellon University

Nickolas Martin. (2000) Assistant Professor, Psychology. B.S., University of Pittsburgh; M.S.W., University of Pittsburgh; M.S., California University of Pennsylvania; Ed.D., Indiana University of Pennsylvania

Elizabeth Mason. (1987) Professor, Psychology. Supervisor of School Psychology Clinic. B.S., Indiana University of Pennsylvania; M.Ed., Indiana University of Pennsylvania; Ph.D., Ball State University; NCSP; Pennsylvania Certified School Psychologist; Licensed Psychologist

Barry E. McGlumphy. (2002) Associate Professor, Health Science and Sport Studies. B.S., Lock Haven University of Pennsylvania; M.S., University of Arizona; ATC.

Drew McGukin. (1990) Associate Professor, Communication Studies. B.A., Freed-Hardeman College; S.C.T., Murray State University; Ph.D. University of Nebraska

Beverly J. Melenzyer. (1991) Professor, Elementary and Early Childhood Education. B.S., California University of Pennsylvania; M.Ed., California University of Pennsylvania; Ed.D., Indiana University of Pennsylvania

Edward Mendola. (1989) Associate Professor, Business and Economics. M.S., Waynesburg College; M.S., Robert Morris College; C.P.A.

Ronald L. Michael. (1969) Professor, Justice Studies. B.S., Jamestown College; M.A., University of North Dakota; Ed.D., Ball State University

John E. Michaels (1999) Associate Professor, Business and Economics. B.S., American University; M.B.A., American University; D.B.A., George Washington University; Director and Chair, Department of Professional Studies;

Patricia Milford. (1989) Associate Professor, Communication Studies. B.A., George Mason University; M.A., Eastern Michigan University; Ph.D., Pennsylvania State University

C. Allan Miller. (1976) Professor, Biological and Environmental Sciences. B.S., Buena Vista College; M.A., Mankato State College; Ph.D., North Dakota State University

William J. Miller. (2002) Instructor, Justice Studies. B.S., Pennsylvania State University; J.D., Duquesne University School of Law

Susan J. Mongell. (1990) Associate Professor, Business and Economics. B.A., Seton Hill College; M.A., University of Pittsburgh; Ph.D., University of Pittsburgh

Lawrence L. Moses. (1969) Professor & Chair, Earth Sciences. B.S., Edinboro University of Pennsylvania; M.Ed., Pennsylvania State University; Ph.D., University of Pittsburgh

Thomas R. Mueller. (1999) Assistant Professor, Earth Sciences. B.S., Towson State University; M.A., University of Connecticut; Ph.D., University of Illinois

Diane H. Nettles. (1989) Professor, Elementary and Early Childhood Education. B.A., University of South Florida; M.A., University of South Florida; Ph.D., University of South Florida

Charles P. Nemeth. (2000) Professor & Director, Graduate criminal Justice and Legal Studies, B.A., University of Delaware; J.D., University of Baltimore Law; M.S., Niagara University; LL.M. George Washington University; Ph.D., Duquesne University; Director, Institute of Law & Public Policy.

George D. Novak. (1959) Associate Professor, Mathematics and Computer Science. B.S., California University of Pennsylvania; M.Litt., University of Pittsburgh

Mark L. Nowak. (1985) Professor, Applied Engineering and Technology. B.S., University of Wisconsin, Stout; M.S., Texas A&M University; Ed.D., Texas A&M University; C.P.R.

Young J. Park. (1977) Professor, Business and Economics. B.P.A., Korea University; M.A., Temple University; Ph.D., Temple University

John Patrick (2002) Assistant Professor, Counselor Education and Services, B.A. Bloomsburg University of Pennsylvania, M.S. University of Scranton, D. Ed. Pennsylvania State University.

Brian K. Paulson. (1989) Professor & Chair, Biological and Environmental Science. B.A., Gustavus Adolphus College; M.S., Michigan Technological University; Ph.D., University of Oklahoma

Gwendolyn D. Perry-Burney. (2001). Assistant Professor, Social Work and Gerontology, B.S.W. & M.S.W., Temple University; Ph.D., University of Pittsburgh

Alton N. Powe. (1973) Professor, Academic Development Services. B.A., Slippery Rock University of Pennsylvania; M.Ed., California University of Pennsylvania; Ph.D., University of Pittsburgh

Anthony S. Pyzdrowski. (1990) Professor, Mathematics and Computer Science. A.S., Pennsylvania State University; B.S., West Virginia University; M.S., West Virginia University; Ph.D., West Virginia University; E.I.T.

Rebecca A. Regeth. (2001) Assistant Professor, Psychology. B.A., Western Washington University; M.S., Western Washington University; Ph.D., University of New Hampshire

Clyde A. Roberts. (1992) Professor, Business and Economics. B.S., Marshall University; M.B.A., Marshall University; D.D.A., University of Kentucky

Joseph G. Schickel. (1988) Assistant Professor, Applied Engineering and Technology. B.S., California University of Pennsylvania; M. Ed., Clemson University

Richard D. Scott. (1971) Professor, Psychology. B.A., Pennsylvania State University; M.S., University of Massachusetts; Ph.D., University of Tennessee

Mary Seman. (1998) Associate Professor, Special Education. B.S., California University of Pennsylvania; M.Ed., University of Vermont; Ed.D., West Virginia University

Louise E. Serafin. (1991) Professor, Business and Economics. B.S., California University of Pennsylvania; E.M.B.A., University of Pittsburgh; Ph.D., University of Pittsburgh

Caryl Sheffield. (1991) Professor and Chair, Elementary and Early Childhood Education. B.S., California University of Pennsylvania; M.Ed., Slippery Rock University; Ph.D., University of Pittsburgh

John W. Shimkanin. (1990) Professor, Elementary and Early Childhood Education. B.S., Moravian College; M.S., Clarion University of Pennsylvania; Ph.D., Penn State University

Sylvia E. Sholar. (1995) Associate Professor, Communication Studies. B.A., Georgia Southern University; M.A., University of Georgia; Ph.D., Temple University

Nancy A. Skocik. (1990) Associate Professor, Mathematics and Computer Science. B.S., California University of Pennsylvania; M.Ed., California University of Pennsylvania; Ed.D., West Virginia University

Robert Skwarecki (2000). Assistant Professor, Communication Disorders. B.S., Duquesne University; M.S., University of Pittsburgh; Ph.D., University of Pittsburgh

Rosalie Smiley. (1999) Associate Professor, Social Work and Gerontology. M.S.W., University of Pittsburgh; M.P.H., University of Pittsburgh; Ph.D, University of Pittsburgh

Gregory A. Spicer. (1998) Assistant Professor, Communication Studies. B.S., Clarion University of Pennsylvania; M.S., Southern Illinois University

Margaret A. Spratt. (1988) Associate Professor, History and Political Science. B.A., Transylvania University; M.A., Duke University; Ph.D., University of Kentucky

Michael C. Steinagel. (1998) Assistant Professor, Health Science and Sport Studies. B.S., Duquesne University; M.Ed., University of Virginia

Jeffrey S. Sumey. (1990) Assistant Professor, Applied Engineering and Technology. B.S., California University of Pennsylvania; M.S., West Virginia University

Dennis C. Sweeney. (1991) Professor, Psychology. B.S., University of North Carolina; M.A., Bowling Green State University; Ph.D., Bowling Green State University

Emily M. Sweitzer (2001) Assistant Professor of Psychology. B.A. California University of Pennsylvania, M.S. California University of Pennsylvania, Ed.D. West Virginia University.; NCSP, certified school psychologist PA/WV, certified K-12 Public School Administrator.

Marc A. Sylvester. (1973) Professor, Biological and Environmental Sciences. B.A., Washington and Jefferson College; M.S., West Virginia University; Ph.D., West Virginia University

James E. Syphers. (1991) Professor of Emeritus, Social Work and Gerontology. B.A., University of New Hampshire; M.S.W., University of Pittsburgh; Ph.D., Walden University

P. Ronald Tarullo. (1978) Professor, Business and Economics. B.A., Marietta College; M.A., University of Pittsburgh; Ph.D., University of Pittsburgh

Lakshmi Tata. (2002) Assistant Professor, Social Work and Gerontology. B.A. , Fergusson College; M.S.W. , University of Poona

Linda Toth. (2000) Professor, Psychology. B.S., California University of Pennsylvania; M.S., Duquesne University; Ed.D., West Virginia University; PA licensed psychologist.

Laura Ann Tuennerman-Kaplan (2000). Assistant Professor, History and Political Science. B.A., The College of Wooster, M.A., University of Delaware; Ph.D., University of Minnesota

Pamela C. Twiss. (1999), Associate Professor, Social Work and Gerontology. B.A., Point Park College; M.S.W., University of Pittsburgh; Ph.D., University of Pittsburgh

John R. Vargo. (1970) Associate Professor, Elementary and Early Childhood Education. B.S., California University of Pennsylvania; M.A., West Virginia University

Jacqueline A. Walsh. (1998) Assistant Professor, Counselor Education and Services. B.S., California University of Pennsylvania; M.S., California University of Pennsylvania; Ph.D., Kent State University

Carole A. Waterhouse. (1986) Professor, English. B.A., University of Pittsburgh; M.F.A., University of Pittsburgh; Ph.D., Ohio University

Thomas Dean Wickham. (2000) Assistant Professor, Earth Sciences. B.S., Slippery Rock University; M.S., West Virginia University, Ph.D., Pennsylvania State University

Paul D. Williams. (1986) Professor, Mathematics and Computer Science. Director of Math Lab. B.S., California University of Pennsylvania; M.S., Clarkson University; Ed.D., University of Pittsburgh

Beverly G. Willison. (1980) Professor, Social Work and Gerontology. B.A., Duquesne University; M.S.W., University of Pittsburgh; Ed.D., West Virginia University; N.C.C., L.S.W., A.C.S.W.

James Wood. (1987) Professor, History and Political Science. B.A., Colorado State University; M.A., Arizona State University; Ph.D., Arizona State University

Peter H. Wright. (2000) Associate Professor, Applied Engineering and Technology. B.A., Yale University; M.A., West Virginia University; Ed.D., West Virginia University

Richard M. Wyman. (1992) Professor, Elementary and Early Childhood Education. B.A., Franklin and Marshall College; M.Ed., Tufts University; Ed.D., University of Washington

Mohamed Yamba. (1989) Assistant Professor, History and Political Science. B.A., University of Ghana; M.A.I.A., Ohio University; M.A., Ohio University; Ph.D., University of Pittsburgh

Roy Yarbrough (1999) Associate Professor, Health Science and Sport Studies. B.S., Greenville College; M.S. Eastern Illinois University; Ed.D., University of North Carolina at Greensboro

George Yochum. (1988) Associate Professor, Communication Studies. B.A., University of Pittsburgh; M.A., University of Pittsburgh; Ph.D., University of Pittsburgh

Thad E. Yorks (2002) Assistant Professor, Biological and Environmental Sciences, B.S., Pennsylvania State University, M.S., Frostburg State University, Ph.D., State University of New York - College of Environmental Science and Forestry

John R. Young. (1990) Associate Professor, Educational Studies. B.A., Lincoln University; M.Lit., University of Pittsburgh; Ph.D., University of Pittsburgh

Joseph Zisk. (2000) Assistant Professor, Educational Studies. B.S., California University of Pennsylvania; M.Ed. California University of Pennsylvania; M.S., Drexel University; Ed.D., Temple University.

Edwin M. Zuchelkowski. (1985) Professor, Biological and Environmental Sciences. B.S., California University of Pennsylvania; Ph.D., West Virginia University