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BACCALAUREATE DEGREE PROGRAMS

1965-1967
CATALOGUE ISSUE
VOLUME 69 NUMBER 1



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Registrar and Director Of Admissions
California State College
California, Pennsylvania

CALIFORNIA STATE COLLEGE

California, Pennsylvania

Calendar for Academic Year 1965-1966

FALL TRIMESTER

Registration and Orientation Activities
Thursday, September 30, 1965
Registration and Orientation Activities
Friday, October 1, 1965
Registration and Orientation Activities
Saturday, October 2, 1965
Classes BeginMonday, October 4, 1965
Thanksgiving Recess Begins (after classes)
Wednesday, November 24, 1965
Thanksgiving Recess Ends (8:00 a.m.) Monday, November 29, 1965
Christmas Recess Begins (after classes)
Saturday, December 18, 1965
Christmas Recess Ends (8:00 a.m.)Monday, January 3, 1966
Winter CommencementSaturday, January 22, 1966
Trimester EndsTuesday, February 1, 1966

SPRING TRIMESTER

Registration and Orientation Activities
Wednesday, February 9, 1966
Registration and Orientation Activities
Thursday, February 10, 1966
Registration and Orientation Activities
Friday, February 11, 1966
Classes BeginMonday, February 14, 1966
Easter Recess Begins (after classes)Thursday, April 7, 1966
Easter Recess Ends (8:00 a.m.)Tuesday, April 12, 1966
Spring CommencementSaturday, May 21, 1966
Trimester EndsTuesday, May 31, 1966
Friday, February 11, 1966 Classes Begin

CATALOGUE ISSUE VOLUME 69 NUMBER 1

THIS COLLEGE IS A MEMBER

OF THE

AMERICAN ASSOCIATION OF COLLEGES

FOR TEACHER EDUCATION

AND IS FULLY ACCREDITED BY

THE MIDDLE STATE ASSOCIATION OF COLLEGES

AND SECONDARY SCHOOLS

AND

THE NATIONAL COUNCIL

FOR THE ACCREDITATION OF TEACHER EDUCATION

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... the greatest shortages are not in money but in people, men and women of highest talents, adequately trained to give leadership to the great undertakings of man. This is true in the private field. It is true in the use of massive public resources. The bottlenecks are people, for investment in mediocrity is sterile, but the pursuit of excellence is richly rewarding both in spiritual and in practical terms . . . [It] is not possible to do very much for people; it is however, possible to help them do things for themselves.

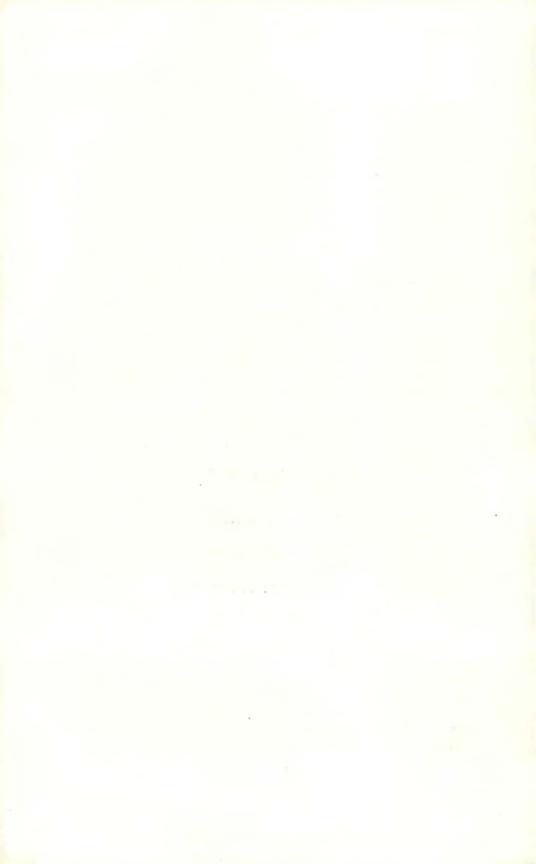
—Dean Rusk at a dinner celebrating the Fiftieth Anniversary of the Rockefeller Foundation, May 1963

I. California Today

THE COLLEGE

OBJECTIVES

THE CAMPUS



The College

The California State College is a state supported institution established and maintained to help provide the schools of Pennsylvania with well trained, competent teachers, as well as to provide a liberal education for those not planning to teach. The program for teachers provides the student with a background in general education that is characteristic of educated men and women everywhere, a thorough training in the selected area of specialization and well designed courses in professional education. In addition, the college offers a variety of co-curricular activities of a social-cultural-academic nature designed to provide the student with the opportunity to develop his potentialities as an individual.

To these ends the Commonwealth of Pennsylvania has provided the buildings, the professional and the non-professional staff through many years of legislative support. The several fees paid by students represent only a portion of the cost of operating the college. Public support is the primary source of the college's funds.

As a result of its financial interest, the Commonwealth has established control of the state colleges through the Department of Public Instruction. Since there are fourteen such institutions the Department and the Board of College Presidents coordinate certain activities common to all state controlled schools. In addition, each school has a Board of Trustees which assists the President in administration. Other supervision and control comes from such state agencies as the State Board of Education, the Auditor General, the Department of Property and Supplies and the General State Authority. Each state college has the support of many vital agencies whose resources may be utilized at any time.

The curricula at California are established in broad outline by the Department of Public Instruction by means of its several councils and study groups. The special curricula are assigned to each college with California being assigned Industrial Arts, Special Education, Elementary, Secondary Education and Liberal Arts. Students may elect to specialize in any of these areas or their subdivisions. Other state colleges offer additional specializations.

In order that additional study opportunities might be made available the college sponsors Summer Tours which make available low cost travel-study trips for interested persons. Another constantly expanding feature of the state college is its in-service program for teachers in the service area. Under the leadership of its several departments, the college sponsors evening programs for college students and experienced teachers wherein exchanges of experiences result in a more effective college program and a stimulated public school program.

The faculty at California represents a geographic cross-section of the United States, a long list of colleges and universities, and many years of graduate training. In addition to instruction and extra-curricular activities, many members of the staff are engaged in writing and research in their field of interest.

Additional information on the faculty, administrative procedures, curriculum and student life are to be found in the appropriate division of the California Bulletin.

The California State College has had a history of continuous growth in stature, size and influence since its early days as an academy. Founded by the public spirited citizens of the borough in 1852 it became a normal school under a state charter and in 1914 was acquired by the Commonwealth of Pennsylvania and thus became a state owned institution.

In 1928, the State Council of Education granted to the college the right to offer a four-year curriculum in elementary and secondary education. In 1929, the school became the State Teachers College and has graduated students with the degree of Bachelor of Science in Education since that time. In 1959, the State Legislature voted to delete the word Teachers from the school's title and, as a result, all of the fourteen state teachers colleges are now state colleges. California is now known as California State College.

The present prospects for future growth are exceptional. The college enrollment in 1964-65 was 3146 and a special program for teachers-in-service attracted more than 220 part-time students.

A program of graduate education, initiated in 1961, leads to the degree of Master of Education and has approximately 350 students currently enrolled. In addition, a series of workshops and conferences provide in-service training and professional stimulation for the college service area consisting of Washington, Fayette, Greene and Somerset Counties.

A Liberal Arts curriculum was approved and classes started in September 1962.

The college is located at California, Pennsylvania; a community of 7,500 persons located on the Monongahela River, 35 miles south of Pittsburgh; 16 miles from Uniontown; 25 miles from Washington, Pennsylvania; and 25 miles from Waynesburg. The college can be most easily reached over U. S. Route 40 which comes within two miles of California at Malden or over Pennsylvania Route 88. From the eastern part of the state Interstate Route 70 connecting with the Pennsylvania Turnpike at New Stanton offers easy access to Route 88 at Speers (near Charleroi).

The community is within easy reach of the lower Monongahela steel and coal producing region and is served by several bus lines. A network of secondary roads provide transportation for a large commuting population.

Objectives of the College

California recognizes that an educated person must have a background of general knowledge, a mastery of his area of specialization, and adequate professional training. The California program of teacher education is designed to provide this training through its competent faculty and a revised curricular and co-curricular program.

To secure these goals the faculty and administrative staff, after long and free discussion, have adopted the following resolution:

The primary purpose for maintaining California State College, is to educate people for the teaching profession. To accomplish this goal we seek:

To provide the opportunity for a general education in those areas necessary to help students become responsible citizens and capable leaders in a democratic society.

To develop their intellectual, social, physical, cultural, spiritual, and aesthetic potentialities.

To prepare students for teaching by requiring a mastery of professional knowledge and skills essential to all teaching and special proficiency in their areas of specialization.

To lead the student to develop a deep and abiding commitment to the concepts, methods, and procedures of a democratic society.

To help the student become a creative person capable of making critical judgments based upon knowledge and reason.

A secondary purpose of the college and faculty is to encourage the teaching profession to gain strength, prestige, and standards through research, faculty professional activities and continued evaluation.

To summarize: In educating a student at California State College, our goal is to help in the development of a person who will be generally educated, professionally oriented, creative, critical, and loyal.

Students come to California to become teachers and in addition to the standards established by the Admissions Committee, should possess a love of learning and a spirit of inquiry that will enable them to formulate questions, seek the solutions to such questions and join with enthusiasm as others seek to achieve similar goals.

TEACHER EDUCATION CURRICULA

The program for the training of teachers at California is not greatly different from any good program of higher education. It incorporates the aims of a broad liberal education, the techniques of professional education and the academic training in depth that is required for success in any field of endeavor.

Instruction at California is planned to help each student to acquire the ability to communicate with others, to understand himself and his relationship to others, to appreciate the meaning of his historic past, to relate himself to the scientific world in which he lives and to develop aesthetically. The general education program is meant to be a quality program which will open the way to an interest in things intellectual which will permit the student to continue to learn from study and experience long after graduation.

Professional education courses are meant to be the means whereby the prospective teacher, through a combination of lecture, discussion, and experience develops the techniques for transmitting the concepts and information he acquires to the student he later teaches. Since individual differences are so great and since learning takes place under a variety of handicaps and/or motiva-

tions, the good teacher is one who knows something of the above and adjusts to them to the mutual advantage of student and pupil.

The academic disciplines or other areas of specialization provide California students with education in depth. It is the ambition of each department to provide training that will serve as a firm foundation for teaching, future study, or additional independent achievement. The completion of a college education does not provide the student with all of the answers but only with the insight by which he continues the search.

Briefly, work at California consists of three inter-related groups of courses: the basic or general education courses, the professional or "education" courses, and the specialized courses. Together they help to equip students with the breadth of knowledge, the power of understanding, and the analytical ability to become able members of the profession and worthy citizens.

ARTS AND SCIENCE AND THE COLLEGE

Living in the 20th Century calls for toleration, understanding, imagination, empathy, breadth of comprehension, self-discipline—the traditional attributes of the liberally educated man. A cultural program designed to foster these qualities will prepare the student both for enriched personal experience and world citizenship. The liberal arts program is designed to develop in students the capacity to understand, to make sound judgments, to communicate effectively; to grow aesthetically and to prepare for intelligent and effective participation in the family, community, national and international order.

Accomplishment of these aims is sought by helping the student to:

- (1) foster a continuing intellectual curiosity.
- (2) develop an ability to think accurately on the basis of evidence.
 - (3) strengthen the skills for effective communication.
- (4) appreciate other cultures through competence in their languages.
- (5) increase the awareness of beauty through opportunities for achievement in one or more of the creative arts.
 - (6) develop a satisfactory code of personal behavior.
 - (7) improve and maintain mental and physical health.

- (8) understand man's relationship to the total environment, both physical and cultural—to establish a concept of man's place in the universe and to encourage his emergence as an enlightened social being.
- (9) apply these objectives to a field of specialization through depth of scholarship as well as to the broad fields of human knowledge.

GRADUATE STUDIES

California State College offers work leading to the Master of Education degree with specialization in Elementary Education, Industrial Arts Education, English, Biology, and Social Studies.

The program is available to qualified teachers-in-service and other graduate students who meet the standards approved by the college and the State Board of Higher Education. Graduate work is offered during evenings and on Saturdays during each regular session. Graduate work is also offered during the summer sessions.

Graduate work at California is especially designed for the classroom teacher and includes classroom, laboratory, clinical and research experience that will add breadth and depth to the preparation of the teacher. The program for each person admitted to the graduate school will be planned in cooperation with the adviser, the individual departments, and the graduate council and will be based upon the previous training and experience of the student. The graduate degree is meant to be a meaningful program for the classroom teacher and will be custom made for each individual candidate.

Additional information including a listing of all the equirements will be found in the Bulletin of the Graduate School.

The Campus

Nineteen buildings are arranged in a quadrangle on a campus of 40 acres. The entire campus has been laid out by a landscape architect, with hedges, shade trees, flower plots, and shrubbery. Many uncommon plants and trees are included in the collection, which besides adding beauty to the campus, offers a valuable laboratory for students in the biological sciences. Large scale improvements and additions to the campus plantings have been made recently.

Main Hall, the oldest building on the campus, was first used in 1870. The administrative offices, and a number of class-rooms are located in this building. The Audio Visual Center, is located in this building.

North Hall, built in 1874, serves as a women's dormitory. The Colonial Room and College Infirmary are on the first floor, as well as the offices housing Guidance, Curriculum, Student Teaching, Graduate School and Placement. The ground floor houses the rooms for the commuting women.

South Hall, built in 1876, has been completely remodeled into classrooms and offices. The President's residence occupies the front portion of this building.

Dixon Hall, built in 1907, in addition to serving as a women's dormitory includes the Georgian Dining Room. The ground floor houses the Day Men's Room.

Science Hall, old, which was built in 1892 and remodeled in 1938, is now used for classrooms.

The Noss Laboratory School, built in 1930, is a center for student teaching, including observation and demonstration work. A special Education annex has recently been added.

The Industrial Arts Building, opened for use in 1939, is on the east campus. This building is one of the best planned and most complete of its kind in the country. It provides laboratories, classrooms, offices, storage rooms, and shop facilities for printing, woodwork, painting, machine shop, sheet metal, forging, welding, auto mechanics, electricity, and ceramics.

Herron Hall, facing Third Street, is the women's gymnasium. The first floor includes a classroom, a play room, and locker rooms for men and women; on the second floor are two gymnasiums and four classrooms. The central portion was built in 1930; the classroom wings were added in 1932; and the east wing in 1939. It contains one of the best swimming pools in Western Pennsylvania. The glazed tile pool is illuminated indirectly by disk-shaped chandeliers, as well as by underwater lights. The tank, with a sloping tiled bottom and permanent black swimming lanes, is 75 feet long and 25 feet wide.

Vulcan Hall, immediately behind the main building was built in 1892 as a gymnasium. The upper floor of Vulcan Hall now houses the Student Lounge. The decorations and equipment of modern design were planned and executed largely by the Indus-

trial Arts Department. The room is unique for its use of bright color in the furnishings and decorations. A large mural depicting student life on the campus was designed and painted by a former student. The student-owned Snack Bar occupies a part of the ground floor.

Johnson Hall, located on Hickory Street, near the athletic field, the gymnasium, and the Industrial Arts Building, houses 125 men. It includes an apartment for the Dean of Men, beautiful lounges, recreation and service rooms. The building is fireproof and modern in every respect; the furnishings throughout are entirely new. It was first occupied, September, 1952.

The Robert McCurdy Steele Auditorium, a building named in honor of a former president, is located along Third Street on the eastern edge of the campus and has auditorium facilities for 900 persons. The building was dedicated in October, 1953. There is adequate parking space adjacent to the building.

College Book Store, occupies a structure in the center of the campus near the Snack Bar. Text Books and students supplies are available in this newly renovated building.

The J. Albert Reed Library houses 50,000 volumes in conjunction with study lounge facilities for recreational reading, seminar space, exhibit areas, and a classroom for the teaching of library techniques. An adequate annual budget maintains microfilms and microcard collections; a spoken-word record collection, to which operatic and symphonic albums are being added; and an open-stack periodical room with individual study carrels to encourage concentrated and independent student effort. Five professional librarians interpret the collection to the campus and account for substantial increases in holdings each year, particularly in the field of Slavic studies. Through service and through facilities, the library seeks to anticipate and to satisfy the demands of higher enrollment and of expanded curriculums.

New Science, a new and modern Science Building completed in 1961 now serves the needs of the college. Well-planned chemistry, physics, biological science and elementary school science laboratories serves as the basis for an expanding science program.

Binns Hall, a modern, attractive dormitory for women, pened in the fall of 1963, is located on the northern edge of the campus.

McCloskey Hall, a modern, convenient dormitory for men is adjacent to Johnson Hall and the recreational area.

NEW BUILDINGS. The projected building program is shown on the comprehensive campus map. Present plans call for the completion of all new construction by 1970. Two buildings are currently under construction, the *Industrial Aris Addition* and *Longanecker Hall*, a dormitory accommodating 206 women.

A new Dining Room to seat 1,275 is in final drawing stage. There is also a high-rise seven story dormitory to house 312 men and an additional seven story dormitory for 312 women in prefinal stages.

A classroom building (World Culture Building) with 20 classrooms, 3 lecture rooms and seminar and conference rooms, is being designed for a location on the corner of Third Street at College Avenue.

Construction of these facilities should begin in early spring of 1966.



STUDENT PARKING ELIGIBILITY AND REGISTRATION

1. Freshmen and Sophomores residing in college dormitories are NOT per-

mitted to bring a motor vehicle to college.

2. Only students who have registered their motor vehicles may park on the campus in the areas reserved for students, (Area S). Unregistered cars will be in violation.

3. Motor vehicles shall be defined as any licensed motorized vehicle, including

Hondas, and motorbikes.

4. ALL STUDENTS who are eligible to park a motor vehicle on the campus lots while attending college, MUST REGISTER said vehicle during the regular academic registration period, or in the office of the Dean of Student Affairs and Services, 135 Main Hall.

5. Any student acquiring the use of a motor vehicle after the regular registra-tion period must register it within 72 hours in 135 Main Hall. A change in license plate number must also be reported to the same office within 72 hours.

6. Non-transferable parking decals are issued without charge and must only be placed on the vehicle which was registered. They must only be used by the student to whom they were originally issued.

7. If a student withdraws from college for any reason, the decals issued to the student automatically become void and must be removed from the vehicle.

8. "After hours" parking in any restricted area is a violation.

FACULTY AND STAFF PARKING

Faculty and staff members may be assigned to a parking space on the campus upon filing a request. An effort will be made to provide a parking area as close as possible to the location of the office, within the limitation of space. All parking and traffic regulations as posted and published must be strictly observed.

Faculty and staff members will register their vehicles with the Dean of Administrative Affairs in North Hall 115. Decals will be furnished without cost to be mounted on the front and rear bumper on the driver's side Decals must be displayed. Mutilated or lost decals will be replaced as requested.

PENALTIES

1. All violators will be subject to penalties determined by the Parking Com-

2. A fine of \$2.00 will be made for each violation. In case of persistent violations, the fine may be increased to \$10.00.

3. The privilege to park on campus or to bring a motor vehicle to college may be revoked for the following reasons:

a. Failure to register a motor vehicle.

b. Falsification of information in car registration, or illegal transfer of a bumper decal.

Speeding and/or reckless driving.

d. Students apprehended operating a motor vehicle while under the influence of alcohol.

e. Repeated violations.

EVENING AND PART-TIME STUDENTS

Evening and part-time students are expected to register their vehicles in the office of the Dean of Student Affairs and Services. Evening and part-time students are assigned to the student lot (Area S). The use of the other marked areas will be the cause for a violation.

GRADUATE STUDENTS

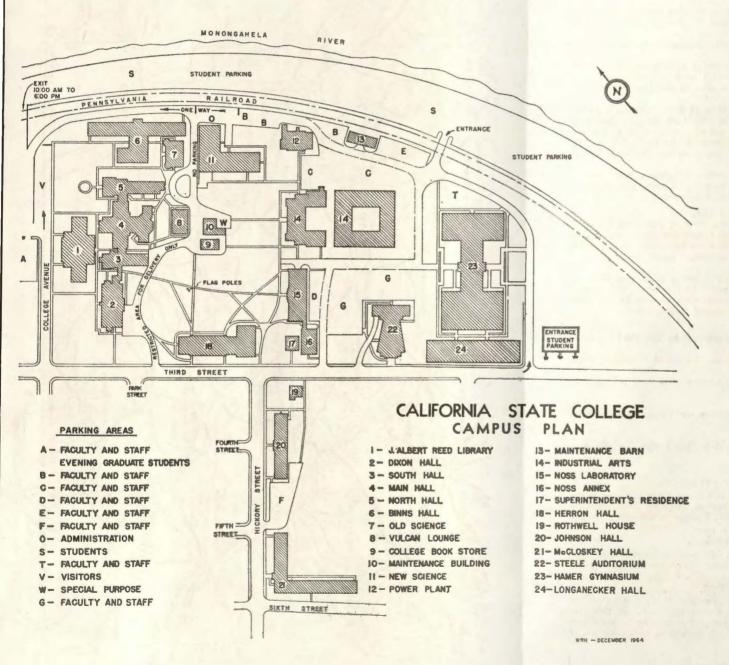
Graduate students may park in Area A after 6:00 p.m. and until 10:00 p.m. or in the student area (Area S). Graduate students will register their cars and receive their decals in the Graduate Office.

VISITORS AND GUESTS

Visitors and guests are expected to park in the special area reserved for them on College Avenue, near Second Street. Guests may park in this area overnight if necessary. Special parking permits for visitors may be secured from any of the Administrative Offices. College students parked in this area are in violation at all times.

SALESMEN

Salesmen have a limited parking area at the rear of Dixon Hall.



PARKING AREAS:

A Faculty & Staff Corner 2nd Street and College Avenue A(S) Graduate Stu Corner 2nd Street and College Ave. (From 6 p.m. to 10 p.m. only, Mon. through Fri.) O Administration Behind New Science Building B Faculty & Staff New Science and Power House C Faculty & Staff Industrial Arts D Faculty & Staff Noss Building E Faculty & Staff Garage Area F Faculty & Staff Johnson Hall S Students riverside lots T Faculty & Staff Hamer W Special purposes To be assigned Visitors College Ave. at 2nd St. G Faculty & Staff Steele

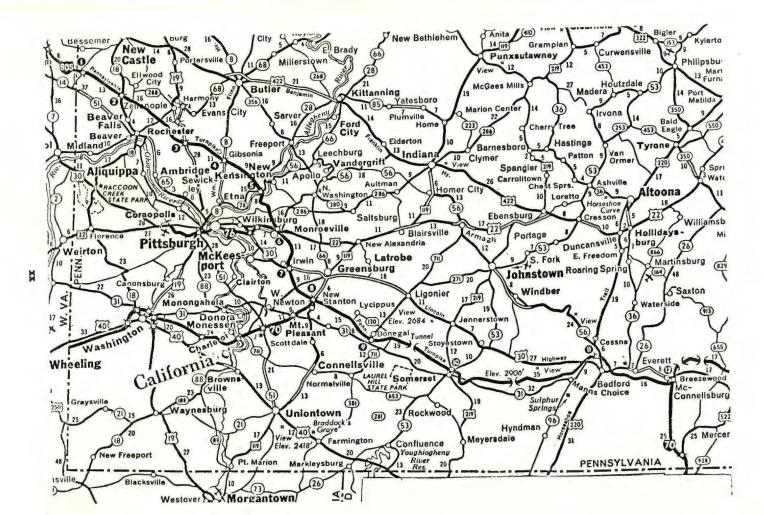
PARKING INFORMATION AND REGISTRATION

STUDENTS

-Dean of Student Affairs and Services
GRADUATE STUDENTS

-Dean of Graduate Studies
FACULTY, STAFF AND OTHERS

-Deon of Administrative Affairs





The Campus

CALIFORNIA STATE COLLEGE



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WORLD CULTURE



MOLOGOVER COL. II. MENS DORMITORY







McCLOSKEY HALL



BINNS DORMITORY



INDUSTRIAL ARTS



STEELE AUDITORIUM



NEW SCIENCE



NOSS LABORATORY SCHOOL



DIXON HALL



JOHNSON HALL



HERRON HALL

II. Student Affairs and Services

STUDENT RESPONSIBILITY

Housing

FINANCIAL AID TO STUDENTS

STUDENT ACTIVITIES

PERSONAL COUNSELING

HEALTH SERVICES

COMMUNITY CHURCHES



STUDENT AFFAIRS AND SERVICES

STUDENT RESPONSIBILITY

A college education today should not be regarded as a luxury or a status symbol for the selected few. Rather, it is a special privilege and a challenge which will require a commitment and concentrated effort if the student is to profit from the experience.

The fulfillment of academic goals according to acceptable standards of scholarship should be the primary responsibility of each student. The college assumes that its students will accept this responsibility willingly with sufficient maturity and self-discipline.

Upon enrollment, a student automatically must assume a clear obligation to abide by all college regulations.

STUDENT CITIZENSHIP AND GENERAL CONDUCT

Student citizenship and conduct on the campus and elsewhere should reflect credit upon the college and its student body.

Any student whose attitude and conduct are incompatible with or antagonistic to the general objectives and regulations of the college cannot be permitted to remain in college. Student behavior that has been judged unsatisfactory by college officials, or an appropriate judicial group, must be corrected or disciplinary action will be taken.

COLLEGE DISCIPLINARY AUTHORITY

The college maintains disciplinary authority over all of its students and reserves the right to suspend or dismiss any student for violation of college regulations or for conduct this is detrimental to the welfare of the student body and of the college.

ADMINISTRATIVE REGULATIONS

1. Use of Alcoholic Beverages: The possession or use of alcoholic beverages on college property, in fraternity or sorority houses, and off-campus living quarters of students is prohibited. Students are reminded that Pennsylvania law prohibits the use or

- possession of alcoholic beverages by those under 21 years of age.
- 2. Card playing and gambling in any form are prohibited on campus.
- 3. College matriculation and identification cards are for personal use only. They are valid only for the term in which the student is enrolled. The falsification of these cards, or the transfer of one to another person, is strictly prohibited. This restriction also applies to library and dining hall cards.
- 4. The possession or use of firearms, firecrackers, or other explosives, on campus or in buildings off-campus under college supervision, is prohibited.
- 5. Students are not permitted to tamper with fire equipment or to set off a fire alarm unless a fire has been detected. Violators of this rule will be subject to suspension from college.
- Any student who contributes in any manner to the unlawful entry to any college building, or who has stolen or destroyed college property, will be subject to suspension from college.
- 7. Students are not permitted to make any purchases in the name of the college without written approval from the appropriate administrative official.
- 8. Every social event sponsored on or off-campus by an approved college organization must be registered at least three days in advance in the office of the Director of Student Activities.
- 9. Main Campus Curfew: The Main Campus, including all buildings bounded by College Avenue, Third Street, and the driveway from Third Street adjacent to Hamer Gymnasium which leads to the student parking lot, is out-of-bounds to male students after 10:30 P.M. Sunday through Thursday, and after 12:00 P.M. on Friday, and 1:00 A.M. on Saturday, except on evenings when approved college functions are scheduled beyond these time limits or when special late permissions have been given.
- 10. College women students may not visit men in their living quarters without college approved chaperones. This rule does not apply to college dormitories where visiting privileges have been scheduled, or whenever an "Open House" has been declared by the college in conjunction with a special college event. This rule also applies to college men who may visit the dormitories for women and the sorority houses only during visiting hours.

STUDENT HOUSING

1. General Housing Policy

College housing policy has been established to provide safe, comfortable housing for students in an atmosphere conducive to serious study, relaxation, sleep, and congenial student relationships under competent, adult supervision.

2. Housing Facilities

Dormitories for Men

At the present time, the college has only two dormitories for men. Johnson Hall, built in 1952, provides comfortable living quarters for 121 men. McCloskey Hall, a completely modern dormitory for 200 men was completed in 1963. New dormitories for men have been approved for construction in the near future.

Dormitories for Women

North, Dixon, and Binns Halls, located on campus, provide safe and comfortable quarters for about 350 women. Binns Hall, a fully-equipped, modern dormitory, was completed in 1963.

The college supervises four dormitories (Fleck, Green Street, Patrice, and Stanton) off-campus for more than 450 women. These privately-owned dormitories, located within walking distance of the campus, are reserved primarily for freshmen and sophomores.

3. Dormitory Accommodations

College dormitory rooms are furnished with single beds, desks, desk lamps, chairs, dressers, and closet space. The college provides pillows, pillow slips, and sheets. Sheets and pillow slips are laundered weekly.

Residents must provide their own blankets, towels, wash cloths, and soap. Residents may furnish their rooms with such optional items as window curtains, bed spreads, and small throw rugs.

4. Dormitory Assignment Procedure

All dormitory assignments are made by the Personnel Deans according to procedure which is designed to utilize fully the limited dormitory facilities of the college.

- A. Dormitory assignments will be made on the basis of:
 - (1) the student's date of acceptance by the college;
 - (2) the date of application for dormitory housing by the student;
 - (3) the date of payment of college fees;
 - (4) eligibility to reside in college dormitories as determined by the college.
- B. In compliance with Commonwealth law, there will be no discrimination in dormitory assignments on the basis of race, religion, or national origin.
- C. The college reserves the right to change, amend, or deviate from its regular assignment procedure as the circumstances warrant.

5. Housing Policy for Women

- A. All non-commuting women (including student teachers) must reside in college supervised dormitories or supervised sorority houses.
- B. All dormitory residents must accept an assignment to the college dining room.
- C. Exceptions to these rules based upon unusual circumstances may be made by the Dean of Women.

6. Housing Policy for Men

- A. All freshmen with the exception of commuters must reside in college dormitories.
- B. After the college dormitories have been filled, unassigned freshmen will be permitted to reside off-campus under college jurisdiction and subject to certain conditions.
- C. All dormitory residents must accept an assignment to the college dining room.

7. Procedure for Obtaining Dormitory Housing

- A. All requests for dormitory housing must be made in the office of the Dean of Men or Dean of Women.
- B. Dormitory Housing Application cards must be filled out. Once this has been done, instructions for the advance payment of fees in order to reserve dormitory rooms will be issued.
- 8. Off-Campus Housing for Men
 Information on off-campus housing for men may be obtained
 in the office of the Dean of Men.

Off-Campus Housing Permits will be issued to those who are eligible to reside off-campus. Housing Agreements, supplied by the college, must be signed by the student and the landlord. The landlord retains one copy, and the student keeps one copy for the protection of both parties.

Students who reside off-campus are under the jurisdiction of the college. They will be required to comply with all college regulations on student conduct and any borough ordinances applicable to them.

College housing policy and regulations are subject to change at any time. Any exception to college policy must be approved in writing by the Dean of Men or Dean of Women. Students who refuse to comply with college housing regulations are subject to disciplinary action.

DORMITORY AND DINING HALL FEES

The housing fee (room and board) for residents of dormitories on campus is \$272.00 per trimester. This fee is payable in advance to the Commonwealth of Pennsylvania.

Students assigned to privately-owned dormitories off-campus will pay their room rent (\$128.00 per trimester) directly to the dormitory manager after they move into the dormitory. Specific instructions are issued to these residents in advance. The dining hall fee (\$144.00 per trimester) is payable in advance to the Commonwealth of Pennsylvania.

Fees will not be accepted from students unless they have followed college instructions.

DINING ROOM POLICY

1. For Dormitory Students

Residents of all college operated or supervised dormitories are required to board in the college dining room.

2. For Non-Dormitory Students Students living off-campus may request assignments to the college dining room. Such assignments are made for one full trimester and may be terminated only for exceptionally urgent reasons. Students in any category who take their meals in the dining room are subject to all dining room regulations.

WITHDRAWALS FROM A DORMITORY AND/OR DINING ROOM

When a student accepts a dormitory assignment, he enters into a contract for one full trimester. Withdrawals from a dormitory and/or dining room during a trimester are permitted only for exceptionally urgent reasons such as: illness, injury, severe financial hardship, or an approved withdrawal from college. (Requests to commute, live in town or in a fraternity house are not considered urgent reasons.)

Credit for the unused portion of the housing and dining room fees will be given only in exceptional cases as listed above, or in case the withdrawing student can be replaced immediately. Requests for credit or refunds must be presented in writing to the Dean of Student Affairs. These requests will be submitted to the College President and the Board of Trustees for final approval. Credit will not be given or refunds made if this procedure is ignored.

DORMITORY REGULATIONS

Specific regulations pertaining to conduct, use of facilities, safety procedures, care of property, and enforcement are issued to all dormitory residents.

Dormitory councils and student proctors, under the supervision of the Personnel Deans, work to enforce dormitory regulations for the welfare of all residents.

A student may be expelled from, or refused admission to college dormitories if his conduct in the dormitory, on campus, or elsewhere, is deemed unsatisfactory.

No refund or credit of the dormitory and dining hall fees will be granted to a student who has been expelled from a dormitory or the dining hall for unsatisfactory conduct.

DORMITORY DAMAGE

Residents jointly are responsible for the condition and care of their rooms, equipment, and furnishings. Charges for damage beyond normal wear and tear will be assessed against occupants jointly, unless personal negligence or responsibility can be proved. Charges for damages to a corridor or other public area will be assessed against all residents of the dormitory. All damage charges must be paid be-

fore the residents receive their grades, credits, transcripts, or clearance to register for the next trimester.

VACATING COLLEGE DORMITORIES

Students are not permitted to remain in dormitories when the college is not in session. Residents will be notified in advance of the official date for the closing of all college dormitories.

COMMUTER HEADQUARTERS

A Snack Bar and limited lounging and recreation space for commuters, are provided in the Vulcan Hall. Limited space for study and some lockers are available for women in the commuter's room in North Hall; for men in Dixon Hall.

Students will be limited to fifteen (15) hours of employment per week, or a maximum of sixty (60) hours per month.

STUDENT LOANS

Loans for students may be obtained from three sources: (1) The Student Loan Fund; (2) The National Defense Education Act Loan Fund; and (3) The Pennsylvania Higher Education Assistance Agency.

- 1. Student Loan Fund
 - A. Only juniors and seniors in good academic standing are eligible to receive financial aid from this fund.
 - B. Requests for loans should be made in writing to Mr. A. J. Hoover, Secretary-Treasurer, Student Loan Fund.
- 2. NDEA Loan Program
 - A. First trimester freshmen and transfer students are not eligible for NDEA loans until they have completed one trimester at California State College.
 - B. Students must earn a B (3.00) average in order to qualify for a loan.
 - C. In accordance with the law, preference will be given to students who major in science, mathematics, and modern foreign languages.
 - D. Applications and additional information can be obtained in the office of the Dean of Student Affairs and Services.

- 3. Pennsylvania Higher Education Assistance Agency (PHEAA)
 - A. To be eligible to apply for this loan, a student must be a legal resident of Pennsylvania and must be accepted or satisfactorily enrolled in college.
 - B. The maximum loan for a full-time student is \$1000 per academic year.
 - C. Application forms may be obtained from a participating lending institution (bank or savings and loan association) in your home community.
 - D. Additional information can be obtained in the office of the Dean of Student Affairs and Services.

STUDENT ACTIVITIES

A well-rounded program of student activities, supervised by faculty sponsors and administered by a Director of Student Activities, provides numerous opportunities for valuable co-curricular experiences. In addition to intra-mural and inter-collegiate athletics, the activity program includes a variety of subject-related, special interest, social and professional organizations.

Students are encouraged to participate actively in the co-curricular areas which meet their special interests and needs.

Social fraternities and sororities, operating under the jurisdiction of their respective governing councils (The Interfraternity Council and the Pan Hellenic Council) with faculty advisors, offer students experience in independent group living and provide additional opportunities to develop traits of leadership and practice in accepting and discharging responsibilities. All fraternities and sororities are subject to college regulations. Such organizations may be denied college recognition for failure to comply with college policy and rules.

THE STUDENT ACTIVITY ASSOCIATION

All regularly enrolled full-time students at California State College carrying ten (10) or more credits are members of the Student Activity Association. As such, they are required to pay an activity fee of \$20.00 per trimester.

The allocation of this fee for student activities is made by the members of Student Congress.

STUDENT CONGRESS

Students are encouraged to take an active part in the affairs of Student Congress. While it is the duty of Student Congress to consider student interests and problems, as well as allocate student activity funds, it is the responsibility of all students to participate in their student government.

The Constitution and By-Laws of Student Congress are published each year in the *Vulcan Handbook* for students.

COUNSELING SERVICES

In addition to the regular academic advisory system under the supervision of the Director of Guidance Services, students who have personal problems may obtain the counseling services of the Personnel Deans. The Dean of Men and the Dean of Women, together with their assistants, are available to assist students who have personal problems and are unable to adjust satisfactorily to college life.

Students who need information about financial aid—scholarships, loans, and student employment—should arrange a conference with the Dean of Student Affairs and Services.

HEALTH SERVICES

PURPOSES OF THE HEALTH SERVICE PROGRAM

In the interests of student welfare, the college maintains an infirmary to provide emergency first aid treatment for its students. The college also requires that all students undergo a physical examination by the college physician.

GENERAL INFIRMARY PROCEDURES

Students who become ill or who have been injured will be taken, if possible, to the College Infirmary.

Students who leave campus because of illness or injury will report to the college nurse for clearance to leave, and again report upon their return to receive permission to re-enter classes and dormitories.

GENERAL INFIRMARY SERVICE

California State College does not collect a Health Service Fee from its students. Therefore, free, unlimited medical service cannot be offered to the student body. However, the college does provide limited infirmary and nursing service for resident students and emergency infirmary service for all students subject to the conditions listed below.

INFIRMARY SERVICE FOR DORMITORY STUDENTS

Limited infirmary service is provided for students who reside in all college owned and college supervised dormitories. Free service is limited to three days, after which a charge of \$1.00 per day is made. Fees for a physician, special nursing care, and the cost of prescription drugs must be paid by the student.

INFIRMARY SERVICE FOR COMMUTERS AND TOWN STUDENTS

Commuting students, students who live in fraternity or sorority houses, or in homes in the community, may receive first aid or emergency treatment in the college infirmary. If patients are unable to leave the infirmary, they will be assessed \$3.00 per day in addition to the cost of their meals. Fees for a physician, special nursing care, and the cost of prescription drugs must be paid by the student.

TEMPORARY OCCUPANCY OF THE INFIRMARY

Student patients, dormitory or non-dormitory, who are unable to return to classes promptly—but in the doctor's judgment can be moved with safety—will be discharged from the infirmary and advised to return to their homes.

DOCTOR'S FEES AND AMBULANCE FEES

The college provides no free medical service by a physician. Fees for office, house, or infirmary calls by any physician must be paid to him

by the patient. If ambulance service is necessary, fees must be paid by the patient to the ambulance service.

HEALTH AND ACCIDENT INSURANCE

Unless parents are sure that their children are fully covered by some type of family insurance plan; they should insure the student against accident and injury while at college. Such coverage will allay parental anxiety and simplify the payment of medical expenses in case of an emergency.

Information on an insurance policy for college students is made available each term.

CHRONIC DISEASES

Students suffering from chronic diseases will be interviewed periodically by the college physician to determine the nature of treatment in progress and examined, if necessary, to determine the status of the disease.

The college may dismiss, or deny admission to, any student whose health would be detrimental to other college students.

COMMUNITY CHURCHES

There are churches of the following denominations in California: Baptist, Christian, Methodist, Nazarene, Presbyterian, Roman Catholic, and Russian Orthodox. A Jewish Synagogue is also located in the Borough. Other religious denominations have churches in nearby communities.

Many of these churches provide activities of special interest to students of their faith.

The college provides an opportunity for students to fill out a religious affiliation card which is sent to the church of the student's choice. Students are not required, however, to complete such a card or to reveal their religious denomination at any time.

Students are encouraged but not required to participate in religious activities of their own choosing.



III. Entrance to California
Admission Procedures
Expenses
Financial Aid and Employment



Admission Procedures

Entrance requirements are established for the purpose of determining, insofar as possible, those persons who are most likely to succeed in college. By doing this, California State College is maintaining its obligation to those students who expect to be graduated from a school whose standards are worthy of respect. Proper admission standards also help indicate to the prospective student his chances for college success.

Admissions standards are constantly being studied by the Admissions Committee composed of members of the faculty and administrative staff and are being raised to satisfy the exacting demands upon college graduates.

Education is an important and exacting job that makes it necessary for the student to possess qualities and abilities of a special type. The college student must be academically sound, must be physically able, and must possess character and personality traits that will enable him to represent the standards deemed desirable by our society. In keeping with these needs, the admissions program at California State College is summarized as follows:

- 1. General scholarship as evidenced by graduation from an approved secondary school or equivalent preparation as determined by the Credentials Evaluation Division of the Pennsylvania Department of Public Instruction.
 - 2. Aptitude and ability to do college work as measured by a reliable test, such as the American Council on Education Psychological Examination, the School and College Ability Test, or College Boards. Students who score in the lower percentiles will not be admitted.
 - Satisfactory character and personality traits as well as proper attitudes and interests as determined by the high school principal, guidance director, or other school official acquainted with the student.
 - 4. Health and physical condition as evidenced by a health examination by the student's family physician reported on the adopted form and approved by the College physician. No student who has, in the opinion of the college, disabilities which would impair his service as a teacher will be admitted.
 - Admission to the college does not guarantee admission to the teacher education program. Please note standards for admission to teacher education on page.

6. For admission to special curricula the college may require the candidate to take an appropriate aptitude test in the special field in order to obtain further evidence of ability to succeed in the student's chosen field.

Requests for the proper forms for admission should be addressed to the Director of Admissions, California State College, California, Pennsylvania. The following information applies to student categories as follows:

NEW APPLICANTS

- 1. File the following forms with the Director of Admissions, California State College, California, Pennsylvania:
- (a) Application and Personnel Record (blue form)

 —BY THE APPLICANT. Your signature is required on this form.
- (b) Medical Record (Yellow form) BY THE PHYSICIAN.
- (c) Record of your secondary school work (white form) BY THE HIGH SCHOOL PRINCIPAL. Your high school record must include a recommendation and your class standing. If you are still attending High School, have your high school principal complete the form up to the present date.
- 2. It will also be necessary to send a deposit of \$10.00. This deposit must be sent along with the blue application form. This is a guarantee of the intention of the student to enter college for the term of trimester designated. It is deposited with the Revenue Department to the credit of the student's contingent fee. Check or Money Order for this amount must be drawn to the Commonwealth of Pennsylvania.
- 3. Arrange to take the Scholastic Aptitude Test Section of the College Boards. Have the scores sent to the Director of Admissions.

TRANSFERS FROM ANOTHER COLLEGE

- 1. File the application forms with the Director of Admissions, California State College, California, Pennsylvania, according to the above directions.
- 2. Send the advance \$10.00 deposit to the Business Manager, according to the above directions.

- 3. Submit an official transcript of the work taken at all other colleges attended, together with a statement of honorable dismissal. This dismissal must be academically clear as well as being clear insofar as character is concerned. This information must be sent directly from the other college to the Director of Admissions, California State College, California, Pennsylvania.
- 4. Send your college board scores to the Director of Admissions.

REVISION

The testing and admissions program shall be reviewed each year by the Admission Committee. Proposed changes will be submitted to the Administrative Council and faculty for approval.

APPLICATION OF THE ADMISSION REQUIREMENTS

1. General Scholarship. The applicant must have been graduated from a four-year high school of accredited standing or an institution judged by the Secondary Education Evaluation Division of the Department of Public Instruction, Harrisburg, Pennsylvania, to be the equivalent.

All applicants must make a satisfactory score on the admission examination.

- Command of English and other evidence of intellectual fitness. Students who demonstrate a lack of competency to carry college work in English Fundamentals or other subjects may be required to take remedial courses without credit.
- 3. Character and Personality. The candidate must be recommended by the high school principal or guidance counselor of his secondary school for trustworthiness, initiative, industry, cleanliness and social adaptability.
- 4. Health. The applicant must possess a clean bill of health, together with evidence of emotional stability, of absence of physical defects which would interfere with his successful performance of the duties of teaching, and of absence of a predisposition toward ill health. He must present a certificate of examination furnished by the College and signed by a physician legally qualified to practice medicine in the Commonwealth of Pennsylvania. This form will be checked by the examining physician at the College.

The student may be required to undergo re-examination.

The applicant may be rejected for:

- (a) Incurable defects or diseases of the heart, lungs, kidneys, digestive system, nervous system, skin, organs of the special senses, and the thyroid gland, and for epilepsy or nervous instability.
 - (b) Defective vision of marked degree.
 - (c) Permanently impaired hearing.
 - (d) Marked speech defects.
 - (e) Unsightly deformities.
 - (f) Marked obesity.

Students with remedial defects may be accepted on condition that immediate treatment be undertaken for the removal of these defects.

SPEECH DEFECTS

The speech status of entering students will be noted on their admission forms as clear or deficient.

Entering students with speech deficiencies will be reported to the Dean of Academic Affairs for assignment to Speech Clinic for remedial work. The Speech Clinic will make periodic reports concerning the student's progress to the office of the Dean of Academic Affairs.

ADMISSION OF OUT-OF-STATE AND FOREIGN STUDENTS

Out-of-state and foreign students may be admitted to the College when their admission and instruction does not interfere with the admission and instruction of students resident in the Commonwealth. In the cases of foreign students, admission will depend upon acceptable clearance from the education authorities of the countries concerned and the Department of State of the United States.

TEACHERS IN SERVICE

Teachers in service need file only a single admission form for approval for part-time work.

POST-GRADUATES

Applicants who are graduates from other colleges and desire to attend California State College full time for certification purposes

must file the three basic forms and a transcript from the other colleges attended. No admission test is needed; however, a personal interview with the faculty is required.

SUMMER SCHOOL

Summer school admission will be approved for:

- Regularly enrolled full and part-time students in good standing.
- 2. Teachers in service who file the appropriate admission form.
- Temporary transfer students from other colleges who have approval of their Dean of Instruction to pursue courses at California State College.
- 4. Entering freshmen who have been officially approved by the Admission Committee.

PART-TIME COLLEGE STUDY

The California State College has been approved to offer a Parttime College Study program for the academically gifted and able Seniors (12th grade) and Juniors (11th grade). Secondary school students carrying full academic programs will be eligible under the conditions outlined:

Selection of High School Participants

The selection of the secondary student will require the recommendation of the High School Principal based upon the following characteristics:

- A. A superior achievement based upon the high school record to date.
- B. A high degree of motivation and interest of the student.
- C. An above average mental ability as evidenced by psychological tests administered by a certified Public School Psychologist or Psychological Examiner. An I. Q. of 120 is considered minimal.

D. Parental consent.

Students enrolled in the Senior (12th grade) or Junior (11th grade) and carrying a full academic load would be eligible for recommendation.

Procedure for Applying for Admission

Special application forms for these courses will be prepared by the college and may be secured from your high school principal.

Credits

Credits earned are regular college credits and may be transferred to other colleges subject to the usual requirements of grades. The student will be subject to all regular academic regulations of this college.

Fees

A contingent fee of \$12.50 per credit hour will be collected on Registration Day. The Summer Session will require an additional activity fee of \$.50 each week of attendance. A minimum of 15 secondary school students will be necessary for each class. A limited number of college students may be admitted to each class.

ADVANCED PLACEMENT

High schools that have the proper facilities may find it possible to offer their superior students work at a level higher than the normal curriculum and equivalent to freshman course work at college. The college considers this an admissable approach to meeting the intellectual needs of the student and is prepared to grant advanced placement credit—i.e., college credit — to students who have taken such advanced work in high school, provided that they demonstrate through success in formal examinations their knowledge in the subject concerned. The most convenient method of examination is offered through the Advanced Placement Program of the College Entrance Examination Board. Students granted advanced placement thus will be afforded the opportunity to accelerate or enrich their undergraduate programs of study.

PLACEMENT SERVICE

As part of its public service, the college maintains a placement office. Its purpose is to aid students and graduates in obtaining desirable positions as teachers and to assist school officials in locating well-qualified teachers who fit the requirements of vacancies in the schools of the service area of the college.

All students are required to enroll with the placement office when they complete their student teaching. Although this service does not guarantee positions, records filed by the registrants open opportunities that might not otherwise be available. Inquiry concerning charges for credentials should be made to the placement office.

Expenses

FEES, DEPOSITS, AND REPAYMENTS

The uniform schedule of fees, deposits and repayments established for the State Colleges is subject to change when authorized by the Boards of Trustees of the State Colleges and approved by the Superintendent of Public Instruction.

ENROLLMENT FEE

This fee covers registration, keeping of the students records and the library, student welfare, health services, (other than extra nurses and quarantine) and laboratory fees.

The Enrollment Fee must be paid in full on registration day.

ROOM AND BOARD FEES

Full-time students\$272 per Trimester (Room \$128; Board \$144) Part-time students\$17.00 per week (Room \$8; Board \$9)

This fee covers room and board. No reduction in the rates will be made for the absence of a student who goes home for several days at one time.

Transient lodging fee is \$1.00 per night per person.

Transient meals can be purchased from the College Catering system.

Fees for Room and Board or Board only, may be paid quarterly. The first payment of \$136.00 for Room and Board or \$72.00 for Board only must be paid upon completion of registration. The balance will be due on or before the end of the first eight weeks of the trimester.

ACTIVITY FEE

Checks or money orders must be written in the exact amount of your payment.

Make checks or money orders payable as follows:
Enrollment Fee, Room and Board or Board only:
To Commonwealth of Pennsylvania
Activity Fee: To Student Activities Fund

REGISTRATION AND BILLING OF FEES

At announced times preceding the beginning of each new trimester or session, the college holds scheduling and registration sessions. All students planning to attend classes during the upcoming trimester are expected to plan a schedule with an adviser's assistance and to complete the registration forms. Students are billed for fees which are due as soon as registration is completed and are expected to pay on or before the announced date.

LATE REGISTRATION FEE

Each student who enrolls after the date officially set for registration, will be charged an additional enrollment fee of \$1.00 per day until he is in regular attendance, provided that the total amount of the late fee shall not exceed \$5.00.

FEES FOR OUT-OF-STATE STUDENTS

Full-time students whose legal residence is outside of the Common-wealth of Pennsylvania shall be charged at the rate of \$20.00 each trimester credit hour.

If an out-of-state student is enrolled in a special curriculum, he shall pay the special curriculum fee in addition to the regular \$20.00 per trimester credit hour as stated in the preceding paragraph.

The basic fee for Part-time or Summer Session outof-state student, is \$20.00 per trimester credit hour with a minimum basic fee of \$60.00.

DAMAGE FEE

Students shall be responsible for damage, breakage, or loss, and the return of college property.

TRANSCRIPT FEE

The first official transcript of record is issued without cost. A fee of \$1.00 is charged for each subsequent transcript.

INFIRMARY FEE

A boarding student who is ill is entitled to three days of infirmary service without charge. After that time the charge is \$1.00 per day.

Commuting students admitted to the Infirmary are charged \$3.00 per day from the time of admission. This covers board and nursing service.

In no case does the infirmary fee include special nursing care or medical service.

DEGREE FEE

A fee of \$5.00 must be paid by each candidate for a degree. No student is considered to have met the requirements for graduation until this fee has been paid. This fee is payable upon notification from the Registrar, that the student is cleared for graduation.

DELINQUENT ACCOUNTS

All fees are payable in advance. No student may be enrolled or graduated, or receive trimester grade reports or a transcript of his record until all previous charges have been paid.

A late fee of \$1.00 per day will be charged provided that the total amount of the late fee shall not exceed \$5.00.

REFUNDS

Refunds will not be made to a student who has been dismissed temporarily or indefinitely suspended, or who has voluntarily withdrawn from the college. Repayment of any part of the advance registration deposit will not be made for any cause whatsoever.

Refund will be made for personal illness when this is certified by an attending physician or for other reasons approved by the Board of Trustees, to the amount of the housing and enrollment fees paid by the student for the part of the trimester which he does not spend in the college.

Letters requesting refunds should be addressed to the President of the college.

To withdraw from classes, Dormitory or the Dining Room, the student MUST first contact the proper officials of the college.

The officials to be contacted are as follows:

- (A) Classes Director of Admissions
- (B) Dormitory or Dining Room Dean of Student

Affairs.

Any other method of withdrawal cannot be approved and charges for Room and Board will remain intact.

PAYMENT OF BILLS

Enrollment fees, room and board and special fees must be paid at the Business Office. Upon payment, an official Revenue Receipt will be given to the student. Payment by check, bank draft, Express or Post Office money order made payable to the Commonwealth of Pennsylvania in the exact amount you are to pay, is preferred.

The Student Activity Fee must be paid on registration day at the Office of the Accountant for The Student Activities Fund. Upon payment, an official Activities Receipt will be given to the student. Payment by check, bank draft, Express or Post Office money order made payable to the Student Activities Fund in the exact amount of the fee you are to pay, is preferred.

Book Store business is conducted on a cash basis. Payment by check, bank draft, Express or Post Office money order made payable to the College Book Store, is preferred.

MATRICULATION CARDS

Upon completing registration, students are given matriculation cards which entitle them to admission to the classes for which they have

registered. These cards must be carried at all times and presented when requested.

COST OF BOOKS

The estimated cost of textbooks is \$50.00 to \$65.00 a trimester for students in the Elementary and Secondary Curriculums. Students in the Industrial Arts curriculum may expect to spend \$90.00 for the trimester in which they take Introductory Mechanical Drawing, and \$65.00 each succeeding trimester. Students may purchase books, materials and other supplies through the College Book Store on a cash basis.

*SUMMARY OF FULL TIME TRIMESTER FEES FOR DORMITORY STUDENTS

ELEMENTARY OR SECONDARY	SPECIAL EDUCATION		
Enrollment Fee\$125.00	Enrollment Fee\$135.00		
Room and Board 272.00	Room and Board 272.00		
Activity Fee 20.00	Activity Fee 20.00		
INDUSTRIAL ARTS	ARTS AND SCIENCES		
Enrollment Fee\$143.00	Enrollment Fee\$150.00		
Room and Board 272.00	Room and Board 272.00		
Activity Fee 20.00	Activity Fee 20.00		

FOR COMMUTING STUDENTS

SPECIAL EDUCATION		
Enrollment Fee\$135.00		
Activity Fee 20.00		
ARTS AND SCIENCE		
Enrollment Fee\$150.00		
Activity Fee 20.00		

^{*} Fees are subject to change at any time.

FOR COMMUTING OR TOWN STUDENTS DINING ROOM ONLY

ELEMENTARY OR SECONDARY	SPECIAL EDUCATION Enrollment Fee\$135.00		
Enrollment Fee\$125.00			
Dining Room Only 144.00	Dining Room Only 144.00		
Activity Fee 20.00	Activity Fee 20.00		
INDUSTRIAL ARTS	ARTS AND SCIENCES		
Enrollment Fee\$143.00	Enrollment Fee\$150.00		
Dining Room Only 144.00	Dining Room Only 144.00		
Activity Fee 20.00	Activity Fee 20.00		

SUMMARY OF PART-TIME STUDENT CURRICULUM FEE

Elementary and Secondary — \$12.50 per trimester credit hour. Special Education — \$12.50 per trimester credit hour plus \$5.00 per session.

Industrial Arts — \$12.50 per trimester credit hour plus \$1.00 per week.

Arts and Science — \$15.00 per trimester credit hour.

The minimum charge for a Part-time student is \$37.50 plus special fees.

Financial Aid and Employment

STUDENT LOAN AND FINANCIAL ASSISTANCE

The low cost to the student of an education at California State College is made possible only because the Commonwealth of Pennsylvania supports the education of its teachers. The Commonwealth in fact subsidizes every student because the actual total cost per student for a quality educational program ranks with the average for similar colleges. The student pays only about one-third the cost.

While students are encouraged to have sufficient resources upon admission to complete the first year there are limited funds available to help those able persons who find the cost too great. The college participates with the National Defense Student Loan program. In addition many persons vitally interested in teacher edu-

cation have contributed to the college a Loan Fund program which makes possible either short term or long term loans to needy students.

All loans are made to cover educational expenses only.

NATIONAL DEFENSE STUDENT LOAN PROGRAM

The National Defense Student Loan Program was authorized by the National Defense Education Act of 1958. This program makes loans available to students under certain conditions, with specific scholarship provisions for student borrowers who later enter public elementary and secondary teaching.

The college has the major responsibility for administering the provisions of the Act. Applications to participate in the program must be submitted to the President's Office. Eligibility to participate in the program is based on the following qualifications:

- 1. A student must be in full time attendance at the college (full time attendance is construed as a minimum of 12 trimester hours of credit).
- 2. Academic proficiency of a 3.0 or B quality point average or superior elective in one of the areas of mathematics, science or modern foreign language.
- 3. Needy students as evidenced by the certification by responsible persons.
- 4. Information on this loan may be obtained thru the Office of the College President. Inquiries should be made well in advance of the registration date.

STATE SCHOLARSHIPS

Holders of State Scholarships may attend California State College and use the Scholarship award toward meeting their expenses. The Senatorial Scholarships do not apply to state colleges.

STUDENT LOAN FUNDS

A small loan fund was established by the Class of 1927 for the purpose of giving financial assistance to worthy students. From time to time various groups of individuals have contributed money until the fund amounts at present to approximately \$20,000.

Donors of amounts of \$1,000 or more are as follows:

Lee Smith - Estate

Miss Clara Smith

Class of 1938

P. W. Morgan - Estate

Donors of \$100 or more are as follows:

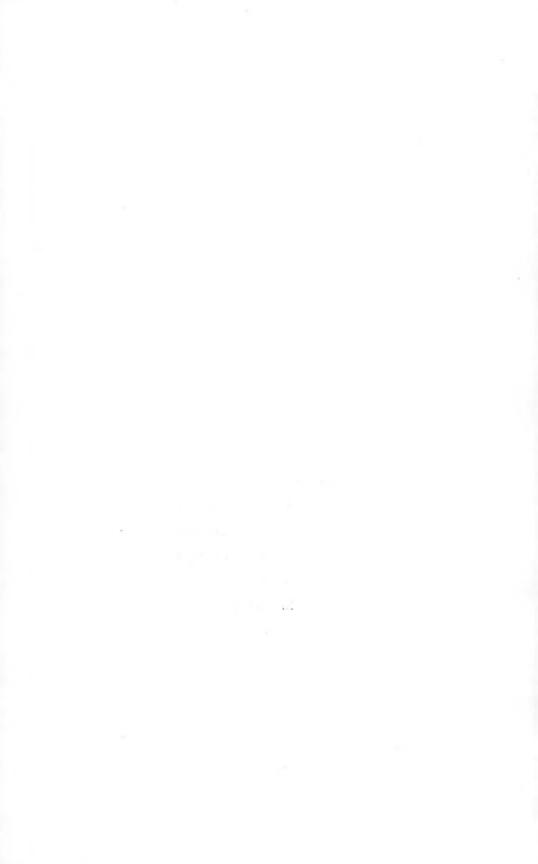
Class of 1926 J. B. Smith Alumni Chapter Class of 1927 Mary Graham Noss Fund Fayette Co. S. S.—1927 California Coterie Club Class of 1928 Class of 1941 Class of 1929 Class of 1944 Monocal — 1930 Dauna Lyn Bowlen Class of 1932 George Kunkelman Monocal - 1934 Alumni Association — 1960 Class of 1934 Ira Laughlin Teggart — Estate Naomi E. Birch - Estate Class of 1935 Class of 1936

P. J. Mollenauer H. R. Humphries

These funds are held in trust by a Board of Directors made up of two alumni and three faculty members. The following are officers: Mr. Paul N. Walker, Chairman; Mrs. Irene Stevens Edwards, Dr. Michael Duda, Dr. George Roadman, and Mr. Aaron J. Hoover, secretary-treasurer. All contributions should be sent to one of these persons. Arrangements for a loan should be made with the secretary-treasurer. Dr. Merrill G. Campbell replaces Mr. Paul N. Walker, December 1965.

The committee, in granting loans, takes into consideration scholarship, personal worthiness, and professional attitude.

IV. Teacher Education Division
GENERAL INFORMATION
GENERAL CURRICULUM PATTERN
OF TEACHER EDUCATION
SPECIFIC CURRICULUM
REQUIREMENTS
COURSES OFFERED



TEACHER EDUCATION

California offers men and women preparing for the profession of teaching several curricula leading to the degree of Bachelor of Science in Education.

ADMISSION TO TEACHER EDUCATION

Following admission to the Advanced Standing Program, an undergraduate must apply for formal acceptance in the Teacher Education program. This requires the following:

- 1. The candidate files a formal application with the Dean, Division of Teacher Education and a brief statement covering reasons for choosing education as his profession.
- 2. If the applicant has a cumulative quality point average of less than 2.1 in his major field or area of specialization, a brief statement covering the student's academic capabilities and a recommendation from the appropriate academic adviser is required. (Note: the 2.1 minimum will be raised in 1966-1967 to 2.2, and in 1967-1968 to 2.3)
- 3. Every student, prior to formal admission to Teacher Education, must have a satisfactory interview with a member of the Committee on Admission to Teacher Education.
- 4. A review of the candidate's Professional Laboratory Experience program is a regular part of the program in admission to Teacher Education.

PROFESSIONAL LABORATORY EXPERIENCES

To supplement the classroom preparation of teachers, a program of experiences in teacher-related activities is provided and becomes a part of the college record of each student. With the cooperation of the faculty members who teach Professional Education courses, each student maintains a record of all campus or off-campus activities in church or community, business or industry, or recreation or camp work. Each record is then examined from time to time as a basis for the evaluation of student growth. Laboratory experience records are filed with the Director of Academic Guidance and are available to prospective employers through the Placement Office.

Many organizations provide co-curricular opportunities in the general area of athletics, dramatics, forensics, journalism, student government, music and recreation. A complete list of such organizations is available in the student handbook and a student is guided to his area of special interest through the orientation program. Student activities are considered an adjunct to the academic program and not a substitute for it.

Transfer students will be expected to report voluntarily to the chairman of the Professional Laboratory Experiences Committee and complete the necessary forms.

THE PROFESSIONAL TRIMESTER

The Professional Trimester is an experimental program designed by the staff of the Department of Elementary Education. It consists of a block of seven methods courses in elementary education scheduled during the same session and includes:

Teaching of Reading Teaching of Language Arts		cr.
		cr.
Arithmetic Content and Method	3	cr.
Teaching Content Subjects	3	cr.
Teaching Art	2	CT.
Teaching Music	2	cr.
Teaching Health and Physical Education	2	cr.

and scheduled observations at the Noss Laboratory School. The Professional Trimester is carried immediately prior to the student teaching program, and is arranged through conference with the Head of the Department of Elementary Education. Goals of this program are:

- 1. To group methods courses into more meaningful units
- 2. To help identify the prospective teacher as a pre-professional elementary educator
- 3. To provide opportunity for team teaching of elementary methods courses.

NOSS LABORATORY SCHOOL

The Noss Laboratory School is located in the middle of the campus and has an enrollment of approximately two hundred children from kindergarten through grade six. It is here that college students have the opportunity to observe master teachers creating a fine learning environment for children and student teachers and to participate in laboratory experiences prior to student teaching.

The Childrens' Book Collection is housed in the Noss Library, and the program provided by the librarian for the children is outstanding. The students of the college also are privileged to make use of this collection.

The objectives for the educational program are in agreement with the National Education Association's Project Report, Schools for the 60's, which states . . . "that essential objectives of education must be premised on the recognition that education is a process of changing behavior and that a changing society requires the capacity for self-teaching and self-adaptation." A very serious attempt is made to enable children to learn to approach new problems, to learn how to acquire new knowledge, to use rational processes, to acquire competence in basic skills, and to develop the ability to express themselves through creative activity.

Every child is important and is given the opportunity to find a self-dignity through his contributions to the school program, regardless of his ability.

More emphasis is being placed upon the importance of independent study, and the more capable students in the intermediate grades will spend a portion of their time in small group or independent pursuits.

STUDENT TEACHING

Student teaching is conducted under the supervision of the Director of Student Teaching, whose office is located in South Hall 310. Students who are candidates for degrees are required to earn twelve trimester hours of credit in student teaching. For regular students this assignment covers the entire trimester of sixteen weeks. The work is carried on in the campus Laboratory School and in selected public schools located in the service area of the college.

Students must make application for student teaching by filling out a form obtainable through the office of the Director of Student Teaching. Registration for student teaching will be held during the March group guidance meeting.

Before a student may be assigned to this vital part of the teacher-education curriculum, he must (a) hold a certificate of advanced standing; (b) have a minimum quality point average of at least 2.0 for all courses in which grades other than P are given; (c) have a minimum quality point average of 2.0 in his area of specialization; (d) be approved as having satisfactorily completed the required preparatory work.

Students will not be assigned to student teaching until they have completed at least one trimester's work in the college. Graduates of other colleges must meet the residence requirement before being assigned to student teaching.

STUDENT TEACHING FOR EXPERIENCED TEACHERS

Teachers with three or more years' experience in teaching who become candidates for degrees and who hold certificates below the level of the Provisional College certificate may, at the discretion of the college, complete the unfulfilled student teaching requirements for degrees in any of the following ways:

- 1. Earn in actual student teaching the number of hours required.
- 2. Perform under the direction of this institution an assignment associated with their professional work which carries not less than one or more than six trimester hours of credit in a single trimester. The number of credits will be determined by the quality and amount of work done in the special assignment. In such cases the candidates must be regularly registered in the institution and may not earn more than a total of six hours of credit in a single trimester for all courses pursued.
- 3. In individual cases, pursue, to the limit of three trimester hours, courses approved by the college. The rest of the credit shall be earned in one of the ways designated above, or by a combination of them.

No credit toward graduation is granted for teaching experience.

Teachers-in-service who have not fulfilled the student teaching requirement of twelve credits and who are interested in completing it, must consult the Dean of Academic Affairs.

CERTIFICATION OF TEACHERS PROVISIONAL COLLEGE CERTIFICATION

Students who receive the Bachelor of Science Degree in Education after completing a Teacher preparation curriculum at this college will be granted a Provisional College Certificate, which is issued by the Department of Public Instruction. The certificate, for which application must be made, must be issued before graduates may teach in the public schools of Pennsylvania.

This certificate, not to be confused with the diploma issued at graduation, is valid for three years of teaching. It indicates the subject or subjects and the field in which the holder is permitted to teach, and may become permanent when the holder meets the requirements established by the State Board of Education.

The Dean of Academic Affairs or the Dean of Teacher Education will confer with persons who wish to have a Provisional College Certificate extended to include industrial arts, speech correction, the teaching of mentally retarded classes or any of the academic areas.

PERMANENT COLLEGE CERTIFICATE

A Provisional College Certificate may be made permanent after three years of successful teaching experience, rated at "middle" or better, in the appropriate field in the public schools of the Commonwealth of Pennsylvania, and the satisfactory completion of at least twelve trimester hours of additional preparation of collegiate grade, completed subsequent to the conferring of the baccalaureate degree. Twenty-four hours are required for students graduating after October 1, 1963.

Holders of Provisional College Certificates issued after September 1, 1935, will be required to present evidence of having completed an approved course in visual and sensory techniques before the certificates may be converted into permanent form. The regulation is not retroactive. Persons who received Provisional College Certificates prior to September 1, 1935, will have them made permanent on the basis of the requirements in effect when they were issued.

THE GENERAL CURRICULUM PATTERN OF THE TEACHER EDUCATION PROGRAM

The several Teacher Education curriculums of the college have been developed jointly by the Curriculum Committee and the Faculty. The curricula have received the approval of the Administrative Council, the Faculty, the Board of State College Presidents, and the Superintendent of Public Instruction. The approved curriculum pattern includes the following:

A. GENERAL EDUCATION (Courses required of all students in all curriculums)

Humanities Language and Literature Communication Developmental Reading Literature Introduction to Art Introduction to Music Philosophy

World Culture Survey of History of United States and Pennsylvania American Government

..... 16 credits Fundamentals of Mathematics

Man and His Biological World Man and His Physical World World Geography

Human Development and Growth General Psychology

Developmental Psychology I (Elementary and Special Education) Developmental Psychology II (Secondary and Industrial Arts) Health Physical Education

B. PROFESSIONAL EDUCATION

These courses are specifically designed to prepare for the teaching profession. The culminating experience is the student teaching which extends for the entire trimester under the guidance of master teachers. Specific professional courses will differ with the different curricula.

C. SPECIALIZATION

The student will elect one of the curricula offered at the College in which he will specialize in his field of particular interest. General Education courses are not counted in the area of specialization toward graduation requirements.

DENTAL HYGIENIST

This two-year program designed to supplement previous training in the respective field allows the student to earn the credits necessary to complete all the requirements for the baccalaureate degree, and make him (her) eligible for full certification to work in the public schools.

ELEMENTARY CURRICULUM

Teaching in the Elementary school including selection of an academic specialization area from the following:

A. Single Subjects
English
History
Geography
Mathematics
Modern Language
French
German
Spanish

B. Broad Fields
English-Speech
Science
Social Studies
C. Areas of Interes

C. Areas of Interest in Lieu of an Academic Major
Art for Elementary Teachers
Industrial Arts for Elementary
Teachers
Music for Elementary Teachers
Physical Education for Elementary Teachers

INDUSTRIAL ARTS CURRICULUM

Teaching Industrial Arts in the Junior and/or Senior high school.

PUBLIC SCHOOL NURSING

This two-year program designed to supplement previous training in the respective field allows the student to earn the credits necessary to complete all the requirements for the baccalaureate degree, and make him (her) eligible for full certification to work in the public schools.

SECONDARY CURRICULUM

Teaching the following academic subjects in the Junior and/or Senior high school.

AREAS OF SPECIALIZATION

Comprehensive Specialization
English-Speech
History and Government
Modern Language
Physics and Math
Social Studies
Speech-English

Subject Specialization
Biological Science
Chemistry
Earth Science
English
French
Geography
German

History Mathematics Physics Spanish Speech

SPECIAL EDUCATION CURRICULUM

Program A. Teaching the Mentally Retarded in the Elementary Grades Program B. Teaching Speech and Hearing

D. FREE ELECTIVES

The students may elect as free electives any course offered at the College for which he satisfies the prerequisites. The number of free elective hours will vary with the curriculum and area of specialization,

C. Programs for Teacher Certification

Highway Safety and Driver Education

Effective September 1, 1951, a student who holds or will hold a valid certificate to teach will be issued an additional temporary standard certificate to teach Highway Safety Education if the student has completed twelve semester hours in courses in Driver Education and Training. The temporary standard certificate so issued will become permanent after two years of successful experience in the field and the completion of three trimester hours in General Safety Education.

The American Automobile Association has approved the Highway Safety

Education courses offered at this college.

DEGREE PROGRAM FOR DENTAL HYGIENISTS

The degree of Bachelor of Science in Education will be conferred upon dental hygien-ists meeting the following requirements:

1. The possession of a valid license to practice dental hygiene in the Commonwealth of Pennsylvania issued by the State Dental Council and Examining Board and the or remayivania issued by the State Dental Council and Examining Board and the Department of Public Instruction.

"The Professional education requirement for dental hygiene is the satisfactory completion of an approved dental hygienist course of instruction of two years of not less than thirty-two weeks and not less than thirty hours each week or its equivalent in and graduation from a dental hygiene school approved by the State Dental Council and Examining Board." 2. The satisfactory completion in addition thereto of 64 semester hours of professional

and general education courses distributed as follows:	O1	prote	BBIUIMI
A. Education	Sem	ester	Hours
(1) Professional Orientation		3	30-mmi = 42
(2) General Psychology		3	
(3) Educational Psychology		3	
(4) Audio-Visual Education		2	
Total	••••		11
(1) Communication I		5	
or English Comp I		-	
and Speech I			
Communication II		5	
or English Comp II		•	
and Speech II			
(2) Fine Arts		4	
a, Intro to Art		~	
b. Intro to Music			
(3) Geography		6	
a. World Geography			
b. Geography of U. S. and Pa.	(3)		
(4) World Culture I		5	
or Hist of Civ I			
and Lit I			
World Culture II		5	
or Hist of Civ II		7	
and Lit II			
(5) Social Studies		11	
a. American Government			
b. Economics			
c. History of U.S. and Pa	(3)		
d. Sociology	(3)		
Total			41
C. Electives			12
Crand Total	2000000		64

number of semester hours so credited.

In the case of dental bygienists who had less than two years of specialised training on the basis of which they were licensed to practice dental hygiene, proportional credit will be given. Such persons must pursue additional general education courses in college to make

up the deficiency.

Electives may be chosen with the approval of the Dean of Academic Affairs from any field or curriculum offered at the college in which the student is enrolled.

The curriculum is effective as of January 23, 1951.

THE ELEMENTARY CURRICULUM

I.	GENERAL EDUCATION	61	credits
II.	PROFESSIONAL EDUCATION	22	credits
	Student Teaching	-0	
	Professional Practicum and School Law 2 cr.		
	Educational Psychology 3 cr.		
	Foundations of Education 3 cr.		
	Audio-Visual Education 2 cr.		
III.	SPECIALIZATION FOR ELEMENTARY	47	credits
	A. Content Subjects required in addition to		•••
	General Education	12	credits
	Geography of U.S. and Pa 3 cr.		
	Art for Elementary Grades 2 cr.		
	Fundamentals of Music 2 cr.		
	Laboratory Science for Teachers 3 cr.	-	
	Children's Literature I 2 cr.		
	B. Methods Courses required in Elementary		
	Education	17	credits
	These courses are methods and do not count toward	-	
	the major specialization but may be counted in		
	Areas of Interest.		
	Teaching of Reading 3 cr.		
	Arithmetic Content and Method 3 cr.		
	Teaching of Language Arts 2 cr.		
	Teaching of Content Subjects 3 cr.		
	Teaching of Art in Elementary Grades 2 cr.		
	Teaching of Music in Elementary Grades 2 cr.		
	Health and Physical Education for the		
	Elementary Grades 2 cr.		
	C. Academic Majors in Elementary Curriculum	18	credits
	at first registration)		
	1. Single Subjects		
	a. English		
	b. French		
	c. Geography		
	d. German		
	e. History		
	f. Spanish		
	2. Broad Fields		
	a. English-Speech		
	b. Science		
	c. Social Studies		
	3. Areas of Interest		
	a. Industrial Arts for Elementary Teachers		
	b. Art for Elementary Teachers		
	c. Music for Elementary Teachers		
	d. Health and Physical Education for Elementary Teachers		
	d. Meanth and Injanear Education for Elementary Teachers		
TOT	AL Credits required for graduation from Elementary Curriculum	130	Credits

SUGGESTED PROGRAM FOR THE ELEMENTARY CURRICULUM

(For administrative reasons the sequence of courses is subject to change.)

FIRST TRIMESTER — 18 Credits Communication 1	SECOND TRIMESTER — 17 Credits Communication II
THIRD TRIMESTER - 17 Credits World Culture I	FOURTH TRIMESTER — 17 Credits World Culture II 3 cr. World Literature II 2 cr. Fund. of Music 2 cr. Geography of U.S. and Pa 3 cr. Educational Psychology 3 cr. PhysicsI Education II 1 cr. Third Course in Major cr.
FIFTH TRIMESTER — 15 Credits **Hist. of US and Pa. Survey 3 cr. Art for Elementary Grades 2 cr. Lab. Science for Elem. Grades 3 cr. Developmental Psychology I 3 cr. Fourth Course in Major 3 cr. Phys. Ed. III I er.	SIXTH TRIMESTER — 16 Credits American Government 3 cr. Philosophy 3 cr. Children's Literature 2 cr. Andio-Visual Education 2 cr. Fifth Course in Major 3 cr. Sixth Course in Major 3 cr.
SEVENTH TRIMESTER — 17 Credits ***(Professional Trimester) Teaching of Reading 3 cr. Teaching of Language Arts 2 cr. Arith. Content & Method 3 cr. Teaching Content Subjects 3 cr. Teaching Art in Elem Grades 2 cr. Teaching Music in Elem Grades 2 cr. Health & Phys. Ed. for Elem Grades 2 cr.	EIGHTH TRIMESTER — 14 Credits Student Teaching

*Not to be taken by students with a mathematics major.

**Students using social studies or history as a field of specialization, take History of United States and Pennsylvania I, instead of History of United States and Pennsylvania Survey.

***Sixth and seventh trimesters may be scheduled in reverse order.

SUMMARY OF REQUIREMENTS FOR AN ACADEMIC SPECIALIZATION IN ELEMENTARY EDUCATION

All specialization areas requires a minimum of 18 credits.

ENGLISH

The student will elect 18 credits from the courses listed under English in the college catalog.

FRENCH		
Required Courses	Credits	hours
Intermediate French 1	3	
Intermediate French II		
(Students in French will be expected to pass a proficiency examination	in the	French
Language since all further courses will be offered in French.)		
French Culture and Civilization I		
French Culture and Civilization II		
French Literature I	3	
French Literature II	3	

GEOGRAPHY

Economic Geography	2001	
Economic Geography	3	credits
Elective Courses I. One Regional Course from:		
1. One regional Course from:	я	
R Congraphy of Asia	3	credits
C. Geography of Africa Apstralia	3	credits
D Congraphy of II S S	3	credits
A. Geography of Europe B. Geography of Asia C. Geography of Africa-Australia D. Geography of U.S.S.R. E. Geography of Pennsylvania F. Geography of Latin America F. Geography of Latin America	3	credits
F. Geography of Latin America	3	credita
II. One course in the Physical aspects of Geography	0	CIOUIII
A. Geology	4	credita
B. Meteorology	R	credita
B. Meteorology C. Climatology	3	credita
D. Physical Geography	3	credits
E. Oceanography	3	credita
F. Astronomy	3	credita
III One segme in the Cultural seconds of Consumba		
A. Conservation of Natural Resources B. Commercial and Industrial Geography C. World Problems (Political Geography) D. Geographical Influences in American History F. Support Field Tries	3	credite
B. Commercial and Industrial Geography	3	credita
C. World Problems (Political Geography)	3	credits
D. Geographical Influences in American History	3	credits
E. Summer Field Trips	3	credits
IV. One course in Geographic Techniques (this is NOT methods of teaching)		
A. Cartography	3	credits
B. Seminar in Geography	3	credita
C. Field Methods in Geography	3	credits
A. Cartography B. Seminar in Geography C. Field Methods in Geography V. Elective Geography Course	3	credits
GERMAN		
Required Courses Intermediate German I Students in German will be expected to pass a proficiency examination in th Language since all further courses will be offered only in German. German Culture and Civilization I German Culture and Civilization II	its	hours
Intermediate Cerman I	3	
Intermediate German II	3	C
Students in German will be expected to pass a proticionary examination in the	0	German
Language since all further courses win be offered only in German.		
Comman Culture and Challender II	9	
Comman Culture and Civilization in	3	
German Literature I		
German Librarute II,	9	
HISTORY		
Required Courses *History of United States and Pennsylvania I	18	credits
*History of United States and Pennsylvania I		0100111
History of United States and Pennsylvania II	3	credita
Contemporary United States History	3	credita
History of Europe to 1815	3	credits
History of Europe since 1815	3	credits
Contemporary United States History History of Europe to 1815 History of Europe ince 1815 Twentieth Century World History	3	credits
Elective Courses	3	credite
Elective Courses * Taken in lien of Survey of History of United States and Pennsylvania.		
AND THE PROPERTY OF THE PROPER		
MATHEMATICS		
Required	lit	hours
College Algebra	3	
College Trigonometry	3	
*Analytic Geometry and Calculus I	3	
Analytic Geometry and Calculus II	3	
College Trigonometry *Analytic Geometry and Calculus I Analytic Geometry and Calculus II Geometry II	3	
Math Insights	3	
Math insights will be taken in lieu of Fundamentals of Mathematics and counted	85	general
education and in the area of specialization.		
*If College Board scores indicate outstanding ability (625) the student may elec with analytic geometry and complete credita in mathematics electives beyond the	2	to start
with analytic geometry and complete credits in mathematics electives beyond thou	80	courses
listed above.		
SPANISH		
Required Courses Cred	ite.	hours
Advanced Spanish I	3	
Advanced Spanish II	3	
Intermediate Spanish Advanced Spanish I Advanced Spanish II Students in Spanish Will be expected to pass a proficiency test in Spanish Last fore continuing since all further courses are offered in Spanish. History of Spain and Hispanic America Culture and Civilization of Spain and Hispanic America	180	age be-
fore continuing since all further courses are offered in Spanish.	-	
History of Spain and Hispanic America	8	
Culture and Civilization of Spain and Hispanic America	3	
Literature of Spain	3	

COMPREHENSIVE FIELDS

All area specialization requires a minimum of 18 credits.

ENGLISH-SPEECH I. Speech Courses Phonetics Oral Interpretation Oral Interpretation (Upon proper advisement any speech course may be taken) II. English Courses Philology and Grammar Advanced Composition OR Creative Writing An elective course — either field SCIENCE FOR ELEMENTARY TEACHERS Credits hours SCIENCE FOR ELEMENTARY TEACHERS Meteorology Me	The same of the sa	
Phonetics Oral Interpretation (Upon proper advisement any speech course may be taken) 3 Voice and Diction (Upon proper advisement any speech course may be taken) 3 II. English Courses Philology and Grammar Advanced Composition OR OR Creative Writing An elective course — either field 3 SCIENCE FOR ELEMENTARY TEACHERS Meteorology Physical Geology Descriptive Astronomy Field Botany Field Botany Field Botany Field Botany Field World during first and second semesters. Students electing this area should schedule Man and His Biological World and Man and His Physical World during first and second semesters. Science for Elementary Teachers Science for Elementary Credes is included in required content subjects and in the science major, the student with a major in science will have three (3) free elective credits. SOCIAL STUDIES Required Courses Required Courses History of United States and Pennsylvania I will replace Survey of United States and Pennsylvania History and will be counted in general education. History of United States and Pennsylvania I will replace Survey of United States and Pennsylvania History and Will be counted in general education. History of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania		Credita hours
Voice and Diction (Upon proper advisement any speech course may be taken) 3 II. English Courses Philology and Grammar Advanced Composition OR Greative Writing SCIENCE FOR ELEMENTARY TEACHERS SCIENCE FOR ELEMENTARY TEACHERS Meteorology Physical Geology 4 Descriptive Astronomy Field Botany Field Botany Field Botany Field Botany Field Coolegy Laboratory Science for Elementary Teachers Students electing this area should echedule Man and His Biological World and Man and His Physical World during first and second somesters. Students electing this area should echedule Man and His Biological World and Man and His Physical World during first and second somesters. SOCIAL STUDIES Required Courses History of United States and Pennsylvania I will replace Survey of United States and Pennsylvania History and will be counted in general education. History of United States and Pennsylvania I will replace Survey of United States and Pennsylvania History and will be counted in general education. History of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylvania I will replace Survey of United States and Pennsylva	Phonetics	3
II. English Courses	Voice and Diction	
Philology and Grammar Advanced Composition OR Creative Writing An elective course — either field SCIENCE FOR ELEMENTARY TEACHERS Meteorology Physical Geology 4 Descriptive Astronomy Field Batary Fleid Batary Fle		3
Creative Writing	Philology and Grammar	3
Meteorology	Creative Writing	3
Meteorology	SCIENCE FOR ELEMENTARY TEACHERS	
Physical Geology 4 Descriptive Astronomy 3 Field Botany 3 Field Zoology 3 *Laboratory Science for Elementary Teachers 3 Students electing this area should schedule Man and His Biological World and Man and His Physical World during first and second semesters. *Because Laboratory Science for Elementary Grades is included in required content subjects and in the science major, the student with a major in science will have three (3) free elective credits. *SOCIAL STUDIES Required Courses 9 credits History of United States and Pennsylvania I will replace Survey of United States and Pennsylvania History and will be counted in general education. History of United States and Pennsylvania II 3 Principles of Economics 3 Principles of Economics 3 Principles of Economics 3 Elective Courses 9 credits **Group I — Elect one (I) course from the following: United Nations 3 State and Local Government 3 Comparative Government 3 International Relations 3 World Politics 3 **Group III — Elect one (1) course from the following: History of Far East 3 History of Far East 3 History of Latin America 3 **Group III — Elect three credits from the following: History of Latin America 3 **Group III — Elect three credits from the following: History of Latin America 3 **ART FOR ELEMENTARY TEACHERS **Art for Elementary Grades 2 Creatis for Elementary Grades 3 Art Education Workshop 3 Drawing and Painting 3 Creative Art Activities 3 **Teaching of Art in the Elementary Grades 3 Art Education Workshop 3 Drawing and Painting 3 Creative Art Activities 3		
Because Laboratory Science for Elementary Grades is included in required content subjects and in the science major, the student with a major in science will have three (3) free elective credits. **SOCIAL STUDIES Required Courses	Physical Geology	4
SOCIAL STUDIES	Students electing this area should schedule Man and His Biological V and His Physical World during first and second semesters.	Forld and Man
Required Courses	subjects and in the science major, the student with a major in science will	equired content have three (3)
Required Courses	SOCIAL STUDIES	
History of United States and Pennsylvania I will replace Survey of United States and Pennsylvania History and will be counted in general education. History of United States and Pennsylvania I		
Group I — Elect one (I) course from the following: United Nations	Pennsylvania History and will be counted in general education. History of United States and Pennsylvania I will replace Survey of United States and Pennsylvania II.	ited States and
United Nations State and Local Government Comparative Government State and Local Government Comparative Government State and Local Government Comparative Government State and Local Policy State and Local Policy	Principles of Economics Principles of Sociology Elective Courses	3 9 credits
Comparative Government	Group I - Elect one (I) course from the following:	
Comparative Government	State and Local Government	3
World Politics	Comparative Government	3
History of Far East	International Relations	
History of Far East	Group II - Elect one (1) course from the following:	
History of Latin America 3	History of For Fast	3
Group III — Elect three credits from the following: History	History of Near East	
Political Science 3 Sociology 3 AREAS OF INTEREST All areas of interest require 18 credits. ART FOR ELEMENTARY TEACHERS Art for Elementary Grades 2 Teaching of Art in the Elementary Grades 2 Crafts for Elementary Grades 3 Art Education Workshop 3 Drawing and Painting 3 Creative Art Activities 3	History of Latin America	3
Political Science 3 Sociology 3 AREAS OF INTEREST All areas of interest require 18 credits. ART FOR ELEMENTARY TEACHERS Art for Elementary Grades 2 Teaching of Art in the Elementary Grades 2 Crafts for Elementary Grades 3 Art Education Workshop 3 Drawing and Painting 3 Creative Art Activities 3	Group III - Elect three credits from the following:	
Political Science 3 Sociology 3 AREAS OF INTEREST All areas of interest require 18 credits. ART FOR ELEMENTARY TEACHERS Art for Elementary Grades 2 Teaching of Art in the Elementary Grades 2 Crafts for Elementary Grades 3 Art Education Workshop 3 Drawing and Painting 3 Creative Art Activities 3	History	3
AREAS OF INTEREST All areas of interest require 18 credits. ART FOR ELEMENTARY TEACHERS Art for Elementary Grades 2 Teaching of Art in the Elementary Grades 2 Crafts for Elementary Grades 3 Art Education Workshop 3 Drawing and Painting 3 Creative Art Activities 3	Economics	3
All areas of interest require 18 credits. ART FOR ELEMENTARY TEACHERS Art for Elementary Grades 2 Teaching of Art in the Elementary Grades 2 Crafts for Elementary Grades 3 Art Education Workshop 3 Drawing and Painting 3 Creative Art Activities 3		
ART FOR ELEMENTARY TEACHERS Art for Elementary Grades 2 Teaching of Art in the Elementary Grades 2 Crafts for Elementary Grades 3 Art Education Workshop 3 Drawing and Painting 3 Creative Art Activities 3	AREAS OF INTEREST	
Art for Elementary Grades 2 Teaching of Art in the Elementary Grades 2 Grafts for Elementary Grades 3 Art Education Workshop 3 Drawing and Painting 3 Creative Art Activities 3	All areas of interest require 18 credits.	
Teaching of Art in the Elementary Grades 2 Grafts for Elementary Grades 3 Art Education Workshop 3 Drawing and Painting 3 Creative Art Activities 3	ART FOR ELEMENTARY TEACHERS	
Teaching of Art in the Elementary Grades 2 Grafts for Elementary Grades 3 Art Education Workshop 3 Drawing and Painting 3 Creative Art Activities 3	Art for Elementary Grades	2
Crafts for Elementary Grades 3 Art Education Workshop 3 Drawing and Painting 3 Creative Art Activities 3	Teaching of Art in the Elementary Grades	2
Drawing and Painting 3 Creative Art Activities 3 Research in Art Education 2	Crafts for Elementary Grades	3
Creative Art Activities	Drawing and Painting	3
	Creative Art Activities	3 2

INDUSTRIAL ARTS FOR ELEMENTARY TEACHERS

Required: Blackboard Sketching	Credits hours
& Blueprint Reading Creative Design The Use of Common Hand Tools Elective:	2
Ceramics Leather Work Plastics Graphic Arts for Elementary Teachers Photography The Airbrush and Model Construction	4
All elementary industrial arts courses are to meet $1\frac{1}{2}$ clock hours p does not apply to the selection of regular industrial arts courses.	er credit. This
MUSIC FOR ELEMENTARY TEACHERS	
Music for the Elementary Grades Basic Theory I Basic Theory II (These courses include Fundamentals of Harmony, Solfeggio and Ear T Fundamentals of Conducting Classroom Piano Music in the Integrated Program Music Literature (Vocal and instrumental inclusive)	3 3 raining) 2 2 3
PHYSICAL EDUCATION FOR ELEMENTARY TEACHERS	
Principles of Physical Education in the Elementary School Basic Activities I Basic Activities II Basic Activities III Basic Activities IV Adaptive Physical Education for the Elementary School Physical Education Program in the Elementary School	3 cr. 3 cr. 3 cr. 2 cr. 2 cr. 3 cr.
All of the chara a soult source on to most for four clock house now work	

All of the above 3 credit courses are to meet for four clock hours per week. All 2 credit courses are to meet two clock hours per week.

THE INDUSTRIAL ARTS CURRICULUM

I. GENERAL EDUCATION	59	credits
II. PROFESSIONAL EDUCATION Student Teaching 12 cr. Professional Practicum and School Law 2 cr. Educational Psychology 3 cr. Foundations of Education 3 cr. Audio Visual Education 2 cr. Principles & Practices of Industrial Arts 3 cr. Curriculum Making in Industrial Arts 2 cr. 2 c	27	aredits
SPECIALIZATION SHOP Fundamentals of Woodworking 4 cr. Fundamentals of Graphic Arta 4 cr. Fundamentals of Sheet Metal 4 cr. Fundamentals of Machine Shop 4 cr. Fundamentals of Electricity 4 cr. Advanced Woodworking 4 cr. Advanced Woodworking 4 cr. Shop Electives 8 cr. Drawing and Design Introductory Mechanical Drawing 2 cr. Graphic Arts Design 2 cr. Sheet Metal Drawing 2 cr. Sheet Metal Drawing 2 cr. Sheet Metal Drawing 2 cr. Machine Drawing and Design 2 cr. Electric Theory 2 cr. Electric Theory 2 cr. Sheet Metal Drawing 2 cr. Sheet Metal Drawing 2 cr. Sheet Metal Drawing 2 cr.	44	eredits
Drawing Elective		
Minimum credits required for graduation	130	credits

SUGGESTED PROGRAM FOR THE INDUSTRIAL ARTS CURRICULUM

(For administrative reasons the sequence of courses is subject to change.)

/	or courses a subject to change;
FIRST TRIMESTER - 16 Credits	SECOND TRIMESTER - 17 Credite
Fundamentals of Woodworking 4 cr.	Fund. of Graphic Arts 4 cr.
Introductory Mechanical	Graphic Arts Design 2 cr.
Drawing 2 cr.	Communication II 4 cr.
Communication I 4 er.	Fundamentals of Speech 3 cr.
College Algebra 3 cr.	I. A. Physics & Lab 4 cr.
Health 2 cr.	
Physical Education I 1 er.	
Freshmen Orientation 0 er.	
THIRD TRIMESTER - 17 Credita	FOURTH TRIMESTER - 16 Credita
Fund. of Sheet Metal 4 cr.	Fundamentals of Machine Shop 4 cr.
Sheet Metal Drafting 2 cr.	Machine Drawing and Design 2 cr.
World Culture I 3 cr.	World Culture II 3 cr.
World Literature I 2 cr.	World Literature II 2 cr.
Man & His Biological World 5 cr.	General Psychology 3 cr.
Physical Education II 1 cr.	Introduction to Music 2 er.
FIFTH TRIMESTER - 16 Credita	SIXTH TRIMESTER - 16 Credite
Advanced Woodworking 4 cr.	Fundamentals of Electricity 4 cr.
Industrial Arts Design 2 cr.	Electric Theory 2 cr.
Educational Psychology 3 cr.	Prin. & Practices of I.A 3 cr.
Foundations of Education 3 cr.	Curriculum Making in I.A 2 cr.
Shop (Elective) 4 cr.	Introduction to Philosophy 3 cr.
	Audio-Visual Education 2 cr.
SEVENTH TRIMESTER - 14 Credite	EIGHTH TRIMESTER - 18 Credits
Student Teaching 12 cr.	Developmental Paychology II 3 cr.
Professional Practicum	American Government 3 cr.
including School Law 2 cr.	World Geography 3 er.
	History of U.S. & Pa. Survey 3 cr.
	Drawing (Elective) 2 cr.

DEGREE PROGRAM FOR PUBLIC SCHOOL NURSING

The program for Public School Nursing was revised by the Board of Presidents on August 2, 1960. The following requirements are effective for those nurses who began the degree program after September 1, 1961.

I.	All registered nurses in Pennsylvania who were graduated and registered	
	September 1952, be required to complete 60 credits of approved education	at the
	state college distributed as follows:	
	Courses related to Public School Nursing	credite
	Courses in Social Studies 9	credits
	Courses in English and Literature 7	credits
	Courses in Education	credita
	Electives in General Education	credits
	Total	credita

Any nurse graduated and registered previous to 1952 should bave her credits evaluated in order to determine if any additional work is necessary for a degree.

All persons desiring to enroll in the Public School Nursing Program should be interviewed by the Dean of Instruction. The Director of Secondary Curriculum will assist with the scheduling of classes.

THE SECONDARY CURRICULUM

I.	GENERAL EDUCATION	61	credits
II.	PROFESSIONAL EDUCATION 3 cr. Educational Psychology 3 cr. Foundations of Education 3 cr. Audio-Visual Education 2 cr. Problems of Secondary Education 3 cr. Teaching of Field of Specialization 3 cr. Secondary Reading—Academic Discipline 2 cr. Professional Practicum and School Law 2 cr. Student Teaching 12 cr.	30	credits
III.	SPECIALIZATION:		
	Comprehensive Specialisation English — Speech History and Government Modern Language Social Studies Speech — English	36 36 36	
	Subject Specialization		
	Biology Chemistry Earth Science English French Geography German History Mathematics Physics Russian Spanish	38 26 36 24 24 30 30 38 24	
	Speech	00	

SUGGESTED PROGRAM OF COURSES FOR THE SECONDARY CURRICULUM

(For administrative reasons the sequence	of courses is subject to change.)
FIRST TRIMESTER — 17 Credits Communication I	SECOND TRIMESTER — 16 Credits Communication II
THIRD TRIMESTER — 17 Credits World Culture I 3 cr. World Literature I 2 cr. Introduction to Art 2 cr. Fundamentals of Mathematics 3 cr. Physical Education II I cr. Elective 6 cr.	FOURTH TRIMESTER — 15 Credits World Culture II
FIFTH TRIMESTER — 18 Credits Survey of United States and Pennsylvania History 3 cr. Educational Psychology 3 cr. World Geography 3 cr. Elective 9 cr.	SIXTH TRIMESTER — 16
SEVENTH TRIMESTER — 18 Credits American Government	EIGHTH TRIMESTER — 14 Credits Student Teaching

CURRICULUM REQUIREMENTS FOR AREAS OF COMPREHENSIVE SPECIALIZATION

ENGLISH—SPEECH
HISTORY AND GOVERNMENT
MODERN LANGUAGE

SOCIAL STUDIES SPEECH-ENGLISH

COMPREHENSIVE ENGLISH-SPEECH (Emphasis on English)

English credits	0.4	
American Literature		CI.
English Literature	9	
English Philology and Grammar	3	
Advanced Composition or	_	
Creative Writing		
Shakespeare	3	
Electives in English	9	
Speech credits	15	CT
Phonetics	3	01.
Oral Interpretation		
Basic Public Speaking		
Technical Play Production		
Debate and Parliamentary Procedure	9	
Depaie and Farmamentary Procedure	3	
TOTAL credits required for field	39	er.
HISTORY AND GOVERNMENT		
History	18	CT.
History of Europe from 1815 to Present	3	-
Contemporary American History		
History of United States and Pennsylvania	9	
Twentieth Century World History	9	
Peters Century world mistory	0	
Diplomatic History of United States	3	
Constitutional History of United States	3	
Government	18	CT.
Comparative Government	8	
State and Local Government		
American Political Parties	2	
The United Nations: Org. and Function	9	
International Relations from 1919 to Present	9	
World Politics	9	
TOTAL credits required for field	96	
IUIAL credits required for tiefd	20	Ur.

MODERN LANGUAGE

Students electing any one of the modern languages will be scheduled for the Intermediate courses (103, 104) only if they have completed two years of language study in high school or can otherwise demonstrate competency. Students without a secondary background in modern language will schedule beginning language for two trimesters (101, 102), but these will not count in the area of specialization.

Students electing Modern Language will select two languages — 24 credits required in the first language and 12 credits required in the second language.

SOCIAL STUDIES

Total required for field	36	credits
GROUP I — (12 credits to be selected from this group) †History of Europe to 1815 ‡History of Europe since 1815 History of the Anciest World History of Medieval Europe Renaissance and Reformation Contended to the Anciest Wester the Anciest World Renaissance and Reformation	3	
History of the Ancient World	3	
History of Medieval Europe	3	
Renaissance and Reformation	3	
History of England History of Latin America	3	
History of Latin America	3	
History of the Far East	3	
History of the Far East History of the Middle East History of Russia	3	
Twentieth Century World History	3	
GROUP II — (6 credits to be selected from this group) ‡History of the United States and Pennsylvania I — Taken in lieu of Survey of U. S. & Pa. and counted as General Education ‡History of United States and Pennsylvania II Contemporary United States History Diplomatic United States History American Constitutional History History of Pennsylvanis Social History of United States		
Thistory of United States and Panneshania II	2	
Contemporary Inited States and Fernasylvania il	3	
Diplomatic United States History	3	
American Constitutional History	3	
History of Pennsylvania	3	
Social History of United States	3	
GROUP III - (6 credits to be selected from this group)		
State and Local Government	9	
Comparative Government	3	
Comparative Government International Relations	3	
United Nations	3	
Political Parties	3	
World Politics	3	
GROUP IV - (6 credits to be selected from this group)		
GROUP IV — (6 credits to be selected from this group) \$Principles of Sociology	3	
Contemporary Social Problems	3	
The Family	3	
Anthropology		
GROUP V — (6 credits to be selected from this group) ‡Principles of Economics I Principles of Economics II		
Principles of Economics I	R	
Money and Banking	3	
Industrial Relations	3	
Public Finance	3	
Public Finance History of Economic Thought ‡Required courses in the respective groups.	3	
COMPREHENSIVE SPEECH-ENGLISH (Emphasis on Speech)		
Total Credits Required for Field	34	avadis-
Speech Courses	V3	Cicdita
Phonetics OR		
Voice and Diction	3	adulina
	acu	enmind
further courses.)	_	
Fundamentals of Speech	3	
Argumentation and Debate		
Stage Direction OR		
Technical play production	3	
Oral Interpretation	3	
Electives in Speech	6	
English Courses	15	credits
American Literature	3	
English Literature		
Shakespeare		
English Philology and Grammar	3	
Creative Writing	3	

CURRICULUM REQUIREMENTS FOR AREAS OF SINGLE SUBJECT SPECIALIZATION

BIOLOGICAL SCIENCE CHEMISTRY EARTH SCIENCE ENGLISH FRENCH GEOGRAPHY GERMAN HISTORY MATHEMATICS SPANISH RUSSIAN SPEECH

	BIOLOGICAL SCIENCE	
	vised Program in Science Specialization, Effective October, 1964; all Science a	majori
Ger	neral Biology I (with laboratory) neral Biology II (with laboratory) organic Chemistry I (with laboratory) organic Chemistry II (with laboratory)	4 cr.
Ger	neral Biology II (with laboratory)	4 cr.
Ino	organic Chemistry I (with laboratory)	4 cr.
Ino	organic Chemistry II (with laboratory)	4 cr.
Col	llege Physics I — Mechanics (with laboratory)	4 cr.
Col	llege Physics II — Heat, Light & Sound (with laboratory)	4 cr.
Col	llege Physics III	4 cr.
Ana	alytic Geometry and Calculus I (Demonstrated competence or course credits in Algebra or	3 or.
D	Trigonometry is required.) diation Blology and Health	
T-J	lividual Work I and II (in area of specialization)	2 OF.
Sac	tividual work I and II (in area of specialization)	2 Cr.
TOTAL	minar (in area of specialization)	1 Cr.
In	addition, all science students will schedule Teaching of Science in the	32 CF.
	Secondary Schools(5)	
	BIOLOGY	••
TOTAL	credits required for field	24 CT.
Paguira	ed Courses	
Ore	panie Chemistry I	4
	pagio Chemistry II	
0.8	man district it is a second of the second of	- 0
Elective	e Courses	
Bot	any (I)	3 cr.
Zoo	logy (2)	3 or.
Ver	rtebrate Anatomy (3)	3 er.
Phy	raiology (4)	3 or.
	crobiology	
	netics	
Org	anic Evolution	3 cr.
Orn	itithology (5) tomology (5) lology (5) neral Embryology (4) imal Histology (4) aservation of Biological Resources (5)	3 cr.
Ent	tomology (5)	3 cr.
Eco	ology (5)	3 ст.
Ger	neral Embryology (4)	3 or.
Ani	imal Histology (4)	3 er.
Cor	neervation of Biological Resources (5)	3 cr.
rie	Id Bolany (3)	o cr.
Fie	ld Zoology (5) nors Course in Biology	3 cr.
Ho	nors Course in Biology	3 cr.
	(Students will select 24 credits from the above group)	
1 — 2	Botany and Zoology are recommended before any other electives are taken.	
3	Vertebrate Anatomy should be taken prior to electing Physiology.	
4	Physiology should not be taken unless preceded by Vertebrate Anatomy and O Chemistry.	rganic
5	Courses marked (5) are field courses. There should be at least one of these by the Biology major before graduation.	taken

CH	E 14	IST	ъ	w
CIL	TO IAT	101	л	

(See statement under Biological Science: applicable to all science majors) Total credits required for field
Required Courses Modern Physics
Elective Courses
Total credits required for field
Required Courses
ENGLISH
Total credits required for field
Pre-Shakespeare Pre-Shakespeare Romantic Movement Stabethan Literature Seventeenth Century Li
all and a second of the tribute of t

FRENCH

Required Courses Intermediate French I
French Culture and Civilization I
Electives 3 Readings in Contemporary French Literature 3 History of France 3 Field Work in French Studies I 3 Field Work in French Studies II 3
GEOGRAPHY
Total credits required for field
Required Courses Economic Geography 3 3 6 6 6 6 6 6 6 6
Commercial and Industrial Geography 3 Commercial Air Transportation 3 Urban Geography 3 Special Problems 1, 2, or 3
GROUP III — Physical Courses (3 credits to be selected from this group) Astronomy (Descriptive) 3 Geology (Physical) 4 Geology (Historical) 4 Physiography 3 Meteorology 3 Climatology 3 Oceanography 3 Field Methods in Geography 3 Physical Geography 3
Geography majors are strongly urged to take courses in Social, Biological and Physical Sciences as the chairmen and staffs of the departments consider desirable. The study of a foreign language is desirable for all geography majors.

GERMAN

Total credits required for field Elementary German I Elementary German II (Students without an adequate background of two years of high school Germ required to complete Elementary German I & II. These courses will not count in the second	24	
Elementary German II	3	
(Students without an adequate background of two years of high school Germ	an	will be
required to complete Elementary German I & II. These courses will not count i	n t	he area
of specialization.)		
Required Courses	2	
Intermediate German I Intermediate German II (Students in German will be expected to pass a proficiency examination in t	3	
(Students in German will be expected to pass a proficiency examination in t	he	German
language.)		
German Culture and Civilization I	3	
Composition and Conversation	3	
Rientimes		
German Literature I German Literature II Readings in Contemporary German I Readings in Contemporary German II	3	
German Literature II	3	
Readings in Contemporary German I	3	
History of Germany	3	
Field Work in German Studies	3	
HISTORY	-	
Total credits required for field	20	avadita
Required Courses		CIGUILE
GROUP I (12 credits to be selected from this group)		
GROUP I (12 credits to be selected from this group) Ancient World Medieval Europe	3	
Medieval Europe	3	
History of Europe to 1815	3	
Renaissance and Reformation	3	
Renaissance and Reformation Contemporary Europe	3	
History of England	3	
GROUP II (6 credits to he selected from this group)		
GROUP II (6 credits to be selected from this group) United States and Penusylvania II	3	
Contemporary United States Diplomatic History of the United States	8	
American Constitutional History	3	
History of Pennsylvania	3	
Social and Industrial History of United States	3	
American Constitutional History History of Pennsylvania Social and Industrial History of United States History of the American Worker	3	
GROUP III (6 credits to be selected from this group)		
GROUP III (6 credits to be selected from this group) History of Latin America	3	
History of the Far East	3	
History of the Far East History of the Middle East Twentieth Century World History History of Russia	3	
History of Russia	3	
Elective Courses	6	credite
MATHEMATICS		
Total credits required for field	30	credits
Required Courses		
*College Algebra(3)		
Appletical Competer and Calculus I	9	
*College Algebra	3	
Analytical Geometry and Calculus III	8	
Analytical Geometry and Calculus IV	3	
Geometry I	3	
Elective Courses		
Differential Equations	3	
Analytical Geometry and Calculus V Differential Equations Theory of Equations	3	
Abstract Algebra	3	
Statistical Analysis	3	
Field Work in Mathematics Mathematics of Finance Advanced Calculus II Advanced Calculus II	3	
Advanced Calculus I	3	
Advanced Calculus II	8	
Linear Algebra	3	
Free Electives: It is recommended that mathematics majors take at least		
eight credits of Physics.		
Mathematics majors will schedule Math Insights in lieu of Fundamentals		
of Math. * Required only for students needing mathematics competency to begin special	Epri	lon.

PHYSICS

(See statement under Biological Science; applicable to all science majors.) Total credits required for field	credite
Required Courses Physics I — Mechanics	
Physics III — Electricity and Magnetism	
Physics IV — Modern Physics	
Physics IV — Modern Physics	
Analytical Geometry and Calculus III	
Elective Courses	
Electronics 4	
Optics 4	
Wave Motion and Sound	
Astronomy II (Astro Physics)	
Astronomy II (Astro Physics)	
*Advanced Electricity and Magnetism	
*Advanced Mechanics	
*Atomic Physics 4	
Honors Course in Physics	
Students will select at least one of the starred courses.	
RUSSIAN	
Credits required for field	credite
Elementary Russian I	Crownia
Elementary Russian I	will be
toward the area of specialization.) Intermediate Russian I	ounted
Intermediate Russian I	
(Students in Russian will be expected to pass a proficiency examination in	Russian
Language before continuing since all further courses are offered only in Russian.) Russian Culture and Civilization I 3 Russian Culture and Civilization II 5 Russian Literature I 3 Russian Literature II 3 Readings in Contemporary Russian Literature 3 Russian History 3	
SPANISH	
Total Credits required for field	credits
(Students without an adequate background of two years of high school Spanish required to complete Elementary Spanish I and II. These Courses will not be toward the area of specialization.)	will be counted
Required Courses	
Intermediate Spanish I	
(Students in Spanish will be expected to pass a proficiency examination in the Slanguage.)	panish
Spanish Culture and Civilination I	
Hispanic American Culture and Civilisation II	
Electives	
Literature of Spain	
Literature of Hispanic America	
Readings in Hispanic American Literature	
Field Work in Spanish II	

GENERAL SPEECH

Total credits required for field	lits
Required Courses	lita
*Phonetics OR	
*Voice and Diction	
(The completion of either of these courses is considered essential before scheduling a	
elective course. They may be taken concurrently.)	my
Forms of Public Address	
Argumentation and Debate 3	
Oral Interpretation	
Stage Direction 3	
Technical Play Production	
Discussion and Conference Techniques	
Theories of Rhetoric 2	
Elective Courses	lita
Phonetics 3	
Voice and Diction 8	
Advanced Phonetics	
Parliamentary Procedure A	
Parliamentary Procedure B	
Parliamentary Procedure C	
Educational Television and Radio	
History of the Theatre 3	
Acting 3	
Choral Speaking 3	
Children's Theatre 8	
Teaching of Speech in Elementary School	
Speech Correction Elective 2 or 8	
(Anatomy of Speech and Hearing Mech. OR Elementary Clinical Practice) * Open to atudents in all curricula without prerequisites.	

SPECIAL EDUCATION CURRICULUM

A $-$ TEACHING THE MENTALLY RETARDED AND ELEMENTARY GRADES	
I. General Education	credits
II. Professional Education 25	credits
III. Specialisation	credits
Basic Courses for Elementary Teaching	credita
Music for Elementary Grades OR 2 cr. Teaching of Music in Elementary Grades 2 cr. Health and Physical Education for Elementary Grades 2 cr. Teaching of Reading 3 cr. Arithmetic Content and Method 3 cr. Teaching the Language Arts 3 cr. Geography of United States and Pennsylvania 3 cr. Teaching the Content Subjects 3 cr. Art for Elementary Grades OR 2 cr. Teaching Art in Elementary Grades 2 cr.	
Basic Courses for Teaching Retarded Children 21 Curriculum Planning, Material and Equipment for Retarded Children 3 cr. Mental Hygiene 3 cr. Arts and Crafts for Atypical Children 2 cr. Advanced Arts and Crafts 2 cr. Special Class Methods 2 cr. Diagnostic and Remedial Reading OR 2 cr. Diagnostic Testing and Remedial Teaching 3 cr. Guidance with Emphasis on Interviewing and Parent Education 3 cr.	credits
Psychology of Mental Retardation	Credita

SUGGESTED PROGRAM OF STUDIES FOR TEACHING OF THE MENTALLY RETARDED AND ELEMENTARY

(For administrative reasons the sequence of courses is subject to change.)

FIRST TRIMESTER - 17 Credits		SECOND TRIMESTER - 15 Credits	
Communication I	4 cr.	Communication II	4 CT.
Fundamentals of Speech	3 cr.	Man & His Physical World	5 cr.
Introduction to Art	2 cr.		2 cr.
Man and His Biological		Fundamentals of Math	3 cr.
World	5 cr.		l cr.
Health	2 cr.		
Physical Education I	l cr.		
Freshmen Orientation	0 cr.		
THIRD TRIMESTER - 17 Credits		FOURTH TRIMESTER - 17 Credits	
World Literature I	2 cr.		2 cr.
World Culture I	3 cr.		3 cr.
World Geography	3 cr.		
Foundations of Education	3 cr.		
Physical Education III	1 cr.		2 cr.
General Psychology	3 cr.		3 cr.
Health and Physical Education	o cr.	Audio-Visual Education	2 cr.
for Elem. Grades	2 cr.		3 cr.
for Elem. Grades	Z CI.	Art for Elementary Grades or Teaching Art in Elementary	
		Grades	2 cr.
FIFTH TRIMESTER - 16 Credita		SIXTH TRIMESTER - 17 Credits	
Arts and Crafts	2 cr.		3 cr.
Psychology of the		U.S. and Pa. Survey	3 cr.
Exceptional Child	3 er.	Arithmetic Content Method	3 cr.
Teaching Language Arts	3 cr.	Advanced Arts and Crafts	2 cr.
Diagnostic Testing &		Teaching of Reading	3 cr.
Remedial Teaching OR		Guidance with Emphasis on	
Diagnostic & Remedial Reading	3 cr.	Parent Interviewing	3 cr.
Educational Psychology	3 cr.		
Psychology of the			
Mentally Retarded	2 or.		
SEVENTH TRIMESTER - 15 Credits		EIGHTH TRIMESTER 14 Credits	
American Government			12 cr.
Curriculum Planning			
Philosophy	3 cr.		2 cr.
Teaching the Content			_ 011
Subjects	3 cr.		

B - TEACHER OF SPEECH AND HEARING

GENERAL EDUCATION	51	credits
PROFESSIONAL EDUCATION 2 Foundations of Education 3 Audio-Visual Education 2 Educational Psychology 3 Psychology of Exceptional Children 3 Student Teaching 12 Professional Practicam and School Law 2 Methods and Techniques in Speech Correction 3	18	credits
SPECIALIZATION COURSES	18	credits
II. Specialization Courses in Speech and/or Hearing Pathology A. Basic Areas Anatomy and Physiology of the Ear and Vocal Mechanism	6	credits
Phonetics 3 B. Speech and/or Hearing Pathology 2 Speech Pathology 3 Hearing Problems 3 Auditory Training and Speech Reading 3 Language and Speech Development 3 Administration of Public School Speaking and Hearing 3 Practice in Measurement of Hearing 2 Teaching of Reading 3 Speech Problems 3 Teaching of Reading 3		eredits
III. Clinical Practice (at least 200 clock hours)	6	credits
1V. Elective Courses Psychology of Speech and Hearing 3 Clinical Practice in Auditory Training and Speech Reading 3 Stuttering 3 Advanced Phonetics 3 Voice and Diction 3 Psychology of the Mentally Retarded 2 Methods and Techniques in Speech Correction 3	3	credits
Minimum Credits Required for Graduation120	8	Credits

SUGGESTED PROGRAM OF STUDIES FOR TEACHING SPEECH AND HEARING

(For administrative reasons the sequence of courses is subject to change.)

(101 1111111111111111111111111111111111	
FIRST TRIMESTER - 16 Credits	SECOND TRIMESTER - 17 Credits
Phonetics 3 cr.	Speech Pathology 3 cr.
Communication I 4 cr.	Communication 11 4 cr.
World Geography 3 cr.	Health 2 cr.
Man & His Biological World 5 cr.	Man & His Physical World 5 cr.
Freshmen Orientation 0 cr.	Introduction to Music 2 cr.
Physical Education I 1 cr.	Physical Education II 1 cr.
Injacan Document I committee a con-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
THIRD TRIMESTER - 17 Credits	FOURTH TRIMESTER - 17 Credits
General Psychology 3 cr.	Auditory Training and
Fundamentals of Mathematics 3 cr.	Speech Reading 3 cr.
Hearing Problems 3 cr.	Elementary Clinical Practice 3 cr.
Language and Speech Development 3 cr.	World Culture I 3 cr.
History of United States	World Literature I 2 cr.
and Pennsylvania Survey 3 cr.	Stuttering 3 cr.
Introduction to Art 2 cr.	Audio-Visual Education
	Physical Education III I cr.
	,
FIFTH TRIMESTER - 16 Credits	SIXTH TRIMESTER - 16 Credits
Methods and Techniques in	Advanced Clinical Practice 3 cr.
Speech Correction 3 cr.	Teaching Reading 3 cr.
World Culture II 3 cr.	Foundations of Education 3 cr.
World Literature II 2 cr.	Anatomy and Physiology of
Developmental Psychology I 3 cr.	the Ear and Vocal
Mental Hygiene 3 cr.	Mechanisms 3 cr.
Practice in Measurement and	Free Elective 1 cr.
Adjustment of Hearing	Fundamentals of Speech 3 cr.
Prosthesis 2 cr.	randamenta or openia o cr.
110000000	
SEVENTH TRIMESTER - 15 Credits	EIGHTH TRIMESTER - 14 Credits
Psychology of the Exceptional	Student Teaching 12 cr.
Child 3 cr.	Professional Practicum and
Speech Problems 3 cr.	School Law 2 cr.
American Government 3 cr.	DUMBUR AMEN COLORESTON & U.S.
Educational Psychology 3 cr.	
Philosophy 3 cr.	
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Course Offerings

follows:

The required and elective Teacher Education courses available at California are listed under the several departmental headings. Each course, when offered during the regular trimester, is taught for 16 weeks. The number of clock hours of instruction each week for the trimester hours of credit is indicated. The clock hours listed are minimal; individual courses, because of special needs or exceptional facilities, occasionally exceed these established standards in the interest of better teacher education.

Not all of the courses listed in this section are given in any one trimester or even in any one year. Courses may be withdrawn without notice. A schedule of classes listing the days, hours and instructor for each course is available in the offices of the Division Deans, prior to registration. Students are encouraged to plan their programs carefully several years ahead so they may graduate as planned.

The course numbering system used at California is as

1 to 99	Remedial Courses—No college credit
100 to 199	First year undergraduate courses
200 to 299	Second year undergraduate courses
300 to 399	Third year undergraduate courses
400 to 499	Fourth year undergraduate courses
500 to 599	Graduate division courses in General Education
600 to 699	Graduate division courses in Professional Education
700 to 799	Graduate division courses in Areas of Specialization
800 to 899	Graduate division courses in Research

Descriptions of the graduate courses will be found in the Graduate Bulletin.

DIVISION OF TEACHER EDUCATION EDUCATIONAL FOUNDATIONS

DR. PROUD, Department Head; Mr. Aldstadt, Miss Bell, Dr. Daniels, Mrs. De-Carlo, Mr. Fettig, Mrs. Hamilton, Mr. Helfinstine, Dr. Hoyes, Miss King, Dr. Lebois, Mr. Natali, Mr. Richards, Mr. Welsh. Ed 1 REMEDIAL READING, no credit

Ed 100 Freshman Orientation, no credit Opportunity to help in problems of personal adjustment and for discussion of the nature, objectives, traditions and regulations of the college are provided. Basic materials for student's personnel files are prepared in orientation classes. Required for all entering freshmen.

Two hours each week for first six weeks.

Ed 101 Foundations of Education, 3 cr.
Studying the social, philosophical, and historical foundations of education; this is an orientation and guidance course acquainting prospective teachers with the opportunities and requirements of the profession; the relationship of the school to society; the organization and administration of the American school system. Extensive directed observation of various schools and learning situations will be required. Acceptable as credit for Introduction to Teaching.

Three class hours each week.

Ed 102 DEVELOPMENTAL READING, 2 cr.

The purpose of this course is to develop reading and study skills at the college level. Special objectives are the development and reinforcement of abilities to select judiciously, to read critically, to interpret cogently, to appreciate fully, and to adapt flexibility of reading rate and method to various kinds of material and to the different purposes in reading.

Two class hours each week.

Ed 301 Audio-Visual Education, 2 cr.

The need for sensory techniques and materials in the learning process with attention to the psychological principles involved are given major consideration in this basic course. Activities include the production of inexpensive audio-visual aids, the limited use of selected aids, and an understanding of the best sources of teaching materials. May not be taken by freshmen or sophomores.

Three class hours each week.

Ed 302 Audio-Visual Workshop, 2 cr. An opportunity for more intensive study in the Audio, Visual and Audio-Visual field with greater possibilities for the application of techniques involving sensory aids. Direct laboratory experiences involving machine competency and problem-solving situations are a major consideration. Motion picture film library experience is required. Special skills and abilities correlating this field provide areas for individual study.

Prerequisite: Audio-Visual Education or consent of the in-

structor.

Three class hours each week.

Ed 350 Teaching Reading in Content Subjects, 2 cr. The techniques of teaching reading in the content areas. The prospective teacher will gain knowledge concerning general reading practices and specific reading skills necessary in his area of specialization.

Two class hours each week.

Ed 401 Mental Tests, 3 cr.

A basic course in the theory and application of psychological tests with emphasis on the interpretation and application of results for pupil guidance purposes. The course includes laboratory work in administering, scoring, and interpreting test results. Problems in establishing and operating a testing program for guidance in the public school are also considered.

Prerequisite: General Psychology

Three class hours each week.

Ed 455 STUDENT TEACHING WORKSHOP, 6 cr.

For teachers with three or more years' experience who are candidates for degrees and who have not completed the required number of trimester hours in student teaching. After consultation with the Dean of Teacher Education and the Director of Student Teaching, the student will be assigned to a course suitable to his needs without duplicating courses already accredited. A student who has changed curriculums may not use the course to satisfy the student teaching requirements; he must earn at least six semester hours in accredited student teaching at the appropriate level.

Ed 470 CLINICAL OBSERVATION AND PRACTICE IN

EDUCATIONAL THERAPY, 6 cr.
The California State College, through an official affiliation with the Veterans Administration, prepares men and women as Manual Arts Therapists, Industrial Therapists, and Educational Therapists for employment under Civil Service Regulations in Veterans Administration Hospitals throughout the United States.

Students enrolled in the Industrial Arts Curriculum will qualify for positions in Manual Arts and/or Industrial Therapy by indicating such an interest prior to student teaching. Men and women in college curriculums other than industrial arts, may qualify as educational therapists. This preparation can be obtained without sacrificing certification in teaching.

In order to meet the requirements for employment in the Veterans Administration as Manual Arts Therapists, Industrial Therapists, or Educational Therapists, students must complete 240 clock hours of clinical laboratory experience in the Leech Farm Veterans Administration Hospital. This complete program may be taken as any one of the six-weeks student teaching assignments, or six-weeks summer program.

ELEMENTARY EDUCATION

Dr. Miller, Department Head; Miss Anderson, Miss Baliker, Mrs. Barry, Mr. Covell, Miss Dalaidi, Mr. Dochinez, Mrs. Hamilton, Mr. Herron, Mrs. Holman, Mr. Kulikowski, Mr. Kaiser, Mr. Pankey, Mrs. Weaver.

* Indicates Professional Trimester Courses

Elem Ed 303 TEACHING OF READING, 3 cr.

The several aspects of problems in the teaching of reading in all elementary grades. Presentation in theory and practice, from careful examination of research and from observation, opportunity for the student to acquaint himself with a variety of modern reading materials and with approved techniques in their use.

> Prerequisite: Educational Psychology. Three class hours each week.

✓ *Elem Ed 305 ARITHMETIC CONTENT AND METHOD, 3 cr. The various processes and operations in the arithmetic of the elementary school are carefully analyzed to determine which should be taught at each grade or developmental level and how they may be taught most effectively. Opportunities for observation and participation in actual teaching situations are provided. Stress is placed on understanding of concepts of modern trends in mathematics such as sets, inequalities, number line, numeral systems, modular arithmetic, field postulates, and results of research in arithmetic.

Prerequisite: Fundamentals of Mathematics

Three class hours each week.

*Elem. Ed 310 Teaching Health and Physical Education for Elementary GRADES, 2 cr.

Elementary school teachers are constantly called upon to supervise and plan programs for recreation or curriculum purposes. This course is planned to give the necessary background and experience in health and physical education on the elementary school level.

Two class hours each week.

Elem Ed 311 CRAFTS FOR ELEMENTARY GRADES, 3 cr.

Experimentation with a variety of materials to discover possible use and aesthetic quality. Special emphasis will be given to playground, camp or recreational needs.

Four class hours each week,

Elem Ed 321 FUNDAMENTALS OF MUSIC, 2 cr. Designed to prepare the elementary teacher in basic fundamentals and skills. It includes the study of note values, meter signatures, scales, key signatures, plus the use of syllables in reading music. A basic introduction to the piano keyboard is also included.

Two class hours each week.

Elem Ed 325 ART FOR ELEMENTARY GRADES, 2 cr.

A survey of the philosophy, psychology and trends in art education as it relates to the elementary grades.

Two class hours each week,

Elem Ed 351 CHILDREN'S LITERATURE, 2 cr. A survey of those poems and stories known as children's literature, with the selection of appropriate material for use in the elementary grades. To assist teachers in evaluating the reading which the child enjoys, criteria for every type of reading are presented.

Two class hours each week.

Elem Ed 353 DIAGNOSTIC AND REMEDIAL READING, 3 cr. An examination of the techniques of diagnosing reading difficulties and of determining appropriate remedial treatment. Opportunity is given for observing and participating in procedures in a clinic situation.

Prerequisite: The Teaching of Reading.

Three class hours each week.

*Elem Ed 355 TEACHING OF LANGUAGE ARTS, 2 cr. Survey of the content of the curriculum in English in the elementary grades. Methods of teaching oral and written composition, principles of grammar, poetry and literature. The teaching of handwriting is part of this course. Three class hours each week.

Elem Ed 358 EARLY CHILDHOOD EDUCATION, 3 cr. A study of pre-school, kindergarten, and primary grade activities in the traditional and activity school programs, with a sound evaluation of the practical aspects of the latter. Opportunity is provided for the administering of readiness tests.

Three class hours each week.

*Elem Ed 370 TEACHING MUSIC IN THE ELEMENTARY GRADES, 2 cr. A course designed to demonstrate proper techniques of teaching music to children. Includes the study of much source material and its proper application in the classroom. Covers procedures in all grades, kindergarten through sixth, in such activities as the use of rhythm instruments, records, part singing, singing games, dances and creative work. College students develop proven techniques and procedures through actual teaching experiences in a typical classroom situation.

Prerequisite: Music for the Elementary Grades.

Three class hours each week.

*Elem Ed 375 TEACHING OF ART IN ELEMENTARY GRADES, 2 cr. Development of problems suitable for the elementary grades. Emphasis is placed upon the intergration of art education with other school subjects. Three class hours each week.

*Elem Ed 406 TEACHING THE CONTENT SUBJECTS, 3 cr. Provides the elementary teacher with a comprehensive course in methods common to such areas of instruction as geography, social studies, and science. The student will be afforded an opportunity to investigate a variety of topics related to good teaching procedures, hear them discussed, and observe them in practice. Visits to various area schools, visits by area elementary educas tors, and the opportunity to handle some of the most recent educational materials are included in this course.

Three class hours each week.

Elem Ed 417 New Methods in Science for Elementary Teachers, 3 cr. For supervisors and teachers interested in child growth through activities. Opportunities are provided for observation and participation, with emphasis on critical evaluation. The course is of special significance to teachers who, holding the normal school or the standard certificate, are working toward certification in elementary education.

Three class hours each week.

Elem Ed 450 STUDENT TEACHING, 12 cr.

Observation and participation in all teaching and activities related to the

performance of a teacher's work in the elementary grades.

Prerequisite: A general quality point average of C or 2.0 and a 2.0 in student's area of specialization. The student spends full time in actual classroom teaching for a trimester of 16 weeks.

Elem Ed 451 Professional Practicum and School Law, 2 cr. Methods and practices of teaching. General techniques of teaching in the elementary curriculum. Pennsylvania school laws relevant to the work of the classroom teacher. Problems encountered by the students in their student teaching.

Two class hours each week.

HEALTH AND PHYSICAL EDUCATION DEPARTMENT

MR. HESTER, Department Head; Miss McConnell, Miss Martin, Mr. Nemeth, Miss Nevin, Mr. Ross, Mr. Slick, Dr. Sweeney, Mr. Vulcano, Mr. Witchey.

H & PE 101 Physical Education I - Men, 1 cr. The purpose is to help students attain a high degree of physical fitness and to grow in mental and emotional fitness through a program which includes seasonal sports. The development of those skills which may be carried on in college and after college life.

Two class hours each week.

H & PE 102 Physical Education I - Women, 1 cr.

The purpose is to help students attain a high degree of physical fitness and to grow in mental and emotional fitness through a program which includes seasonal sports. The development of those skills which may be carried on in college and after college life.

Two class hours each week.

H & PE 105 HEALTH - MEN, 2 cr.

Consideration is given to physical and mental equipment of the individual with the hope that practical application will be made in personal and community living.

Two class hours each week.

H & PE 106 Health — Women, 2 cr. Consideration is given to physical and mental equipment of the individual with the hope that practical application will be made in personal and community living.

Two class hours each week.

H & PE 201 Physical Education II, — Men, 1 cr.
To further develop skills and physical aptitudes and to grow in mental and emotional fitness. Emphasis being placed on individual sports.

Prerequisite: Physical Education I.

Two class hours each week.

H & PE 202 Physical Education II — Women, 1 cr.
To further develop skills and physical aptitudes and to grow in mental and emotional fitness. Emphasis being placed on individual sports.

Prerequisite: Physical Education I.

Two class hours each week.

H & PE 220 PRINCIPLES OF PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL, 2 cr.

An orientation course designed to provide a study of Physical Education in the elementary school. Consideration given to history, values, objectives, curriculum content and related areas of concern required to promote a sound program.

H & PE 231 Basic Activities I, 3 cr. An analysis of human motion: the theory and application of basic movement patterns. Physical fitness, exercise studied as part of this.

H & PE 232 Basic Activities II, 3 cr.
Games of low and high organization and team games. Emphasis on progression and skill development for each grade level.

H & PE 233 Basic Activities III, 3 cr.
Course is divided into two areas of instruction. One rhythms and dance, the other stunts and tumbling, self-testing activities, and gymnastics as they add their unique contribution to the physical and cultural development of the elementary school child.

H & PE 234 Basic Activities IV, 2 cr. Development of the elementary program in areas other than the regular physical education instruction period. Areas such as recess, noon hour activities, classroom program, intramural and extramural activities, camping and outdoor education, special events, integrated and correlated subject matter fields, rainy day programs, and aquatics.

H & PE 301 PHYSICAL EDUCATION III - MEN, 1 cr. Specialization in selected activities aimed to being personal performance ability to advanced levels.

> Prerequisites: Physical Education I and II. Two class hours each week.

H & PE 302 Physical Education III - Woman, 1 cr. Specialization in selected activities aimed to bring personal performance ability to advanced levels.

Prerequisites: Physical Education I and II.

Two class hours each week.

H & PE 320 ADAPTED PHYSICAL EDUCATION FOR THE ELEMENTARY SCHOOL. 2 cr.

The study and application of the modified or restricted activities to be provided at all grade levels for the child who may not safely participate in the regular instructional class period.

H & PE 321 PROGRAMMING PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL, 3 cr.

This programming constitutes the total organization of Physical Education in the elementary school as to curriculum content, methods, materials, lesson planning and teaching, evaluation, resource materials, facilities, equipment and supplies.

HIGHWAY SAFETY AND DRIVER EDUCATION

H Saf 301 Driver Education and Traffic Safety, 3 cr. Classroom instruction combined with road training and the teaching of driving to beginners using dual control cars. Emphasis is placed upon the essential facts, principles, skills and attitudes necessary for good driving and the teaching of same to beginning drivers. Ability to use and interpret the results of psycho-physical testing is required.

Three class and three practicum hours each week.

H Saf 302 Introduction to Safety Education, 3 cr. The development of habits and attitudes that will make for safe living by both teachers and students. Acquaintance with 1. Rules, regulations and laws concerning the operation of motor vehicles; 2. Rules, and regulations of pedestrian travel; 3. Other hazards to which we are commonly subjected such as fire, electricity, etc., especially in the home and school.

Three class hours each week.

H Saf 303 MATERIALS AND METHODS IN TRAFFIC SAFETY IN SECONDARY SCHOOLS AND ELEMENTARY GRADES, 3 cr. The development of habits and attitudes that will better enable the elementary and secondary school teacher in the teaching of safety at home and in the school. Evaluation of curricular materials, teacher as safety counselor, basic facts relating to accidents and hazards.

Three class hours each week.

H Saf 401 Organization and Administration of Safety EDUCATION, 3 cr.

Curriculum content and experiences for all school grades in safety education, its organization and graduation for teaching purposes. Ways and means of administering a safety education program.

Three class hours each week.

H Saf 402 VISUAL AND OTHER AIDS IN SAFETY EDUCATION, 3 cr.
Discussion of practical values in visual and other sensory aids; guiding principles and technique in the teaching of safety education.

Two class and two practicum hours each week.

H Saf 403 PSYCHOLOGY OF ACCIDENT PREVENTION, 3 cr.
The development of habits and attitudes that will better enable the elementary and secondary school teacher in the teaching of safety at home and in the school. Evaluation of curricular materials, teacher as safety counseler, basic facts relating to accidents and hazards.

Three class hours each week.

INDUSTRIAL ARTS DEPARTMENT

Dr. Coover, Department Head; Mr. Anderson, Dr. Andre, Mr. Birch, Dr. Campbell, Mr. Charney, Mr. Helsel, Mr. Hoover, Mr. Keightley, Mr. Kraft, Mr. Labute, Mr. McCrory, Mr. Sanfilippo, Dr. Shutsy, Mr. Sikora, Mr. Smoyer, Mr. Stavaski, Mr. Swearingen, Mr. Wighaman.

INDUSTRIAL ARTS EDUCATION

IA Ed 355 CURRICULUM MAKING IN INDUSTRIAL ARTS, 2 cr.
Analysis of Industrial Arts objectives for curriculum content; emphasis by grade levels; criterion basis of content selection and appraisal; curriculum construction in selected areas.

Four class hours each week.

IA Ed 440 Principals and Practices of Industrial Arts, 3 cr. A requirement for prospective industrial arts teachers in order that they may master a few of the fundamental principles, procedures and techniques of industrial arts teaching.

Three class hours each week.

IA Ed 450 Student Teaching, 12 cr.

Observation and participation in all teaching and activities related to the performance of a teacher's work, in the area of the student's specialization.

Prerequisite: A general quality point average of C or 2.0 and a 2.0 in major field. The student spends full time in actual classroom teaching for a trimester of 16 weeks.

IA Ed 451 Professional Practice and School Law, 2 cr. Methods and practices of teaching. General techniques of teaching and techniques for the students' special fields. Pennsylvania school laws relevant to the work of the classroom teacher. Problems encountered by the students in their student teaching.

Two class hours each week.

SHOP AND DRAWING

IA 100 Fundamentals of Wood, 4 cr. Woodworking with the major emphasis upon hand tool operations, wood turning, jig-saw work and wood finishing. A variety of projects are constructed which may be used in a later teaching situation in the public schools. The planning process is demonstrated and used by the students in addition to a pupil personnel system both of which have a place in the Industrial Arts work.

Two demonstration and six laboratory hours each week,

IA 101 FUNDAMENTALS OF GRAPHIC ARTS, 4 cr.

A study of the many processes involved in the graphic arts. Major emphasis is placed on letterpress composition, platen press operation, additional study of ink, paper, printing plates, composing methods, history, and the importance of the industry.

Two demonstration and six laboratory hours each week.

IA 150 Introductory Mechanical Drawing, 2 cr. Mechanical drawing with the major emphasis upon the theory of projection, blueprint reading, sketching, graphs, and charts, and basic forms of representation such as multi-view projection, auxiliary projection, sectioning, revolutions, dimensioning, isometric drawings and oblique drawings.

Four laboratory hours each week.

IA 151 GRAPHIC ARTS DESIGN, 2 cr. Basic principles of printing layout and design are presented. The student is given an opportunity to develop skills by applying these principles through assigned drawings. This course is correlated with the Fundamentals of Graphic Arts course (IA 101). Four laboratory hours each week.

IA 200 FUNDAMENTALS OF SHEETMETAL, 4 cr. An introductory course giving instruction in layout, seaming, soldering, rivet-

ing, shaping, and forming light gauge metals. Emphasis is placed on the safe use and care of metalworking tools and equipment. Students gain experiences in project design and construction suitable for use in secondary schools. It is recommended that the student enroll for IA 250 along with this course. Two demonstration and six laboratory hours each week.

IA 201 FUNDAMENTALS OF MACHINE SHOP, 4 cr. Instruction in the operation of hand and machine tools, including the engine lathe, and in foundry and forge practice, including the heat treatment of

Two demonstration and six laboratory hours each week.

IA 202 Power Mechanics, 4 cr.

The internal combustion engine, uses, types, construction, function, and theory. Disassemble, minor repair, and adjustment of component parts and assemblies of two and four cycle engines.

Two demonstration and six laboratory hours each week.

IA 250 SHEETMETAL DRAFTING, 2 cr. Surface developments of prisms, conicals, and transition pieces are studied. Emphasis is placed on designing functional projects. Many of the full-size patterns the student draws are also used as construction problems in IA 200.

Prerequisite: IA 150. Four laboratory hours each week.

IA 251 MACHINE DRAWING AND DESIGN, 2 cr. Special emphasis upon American Standard drawing room practice in the development of mechanical engineering drawings, conventional representation, standardization of machine parts and fasteners, preparation of tracings, and the reproduction of industrial working drawings,

Prerequisite: Introductory Mechanical Drawing,

IA 300 FUNDAMENTALS OF ELECTRICITY, 4 cr. Laboratory experiences designed to acquaint the student with the basic tools, materials, and electrical phenonoma basic to living in the industrial society. Student experiences include basic circuits fundamental to communications. home, automobile, and motors, as well as practice in the use of instruments.

Prerequisite: Completion of college I. A. physics and registration in IA 350

Two demonstration and six laboratory hours each week.

IA 301 CERAMICS, 4 cr.

An introduction to Ceramics as an art, a craft, an industrial pursuit, and an educational vehicle. Students are taught the major forming, decorating, and firing process in clay. Originality in ceramic design, sensitivity to tools and materials and technical proficiency are stressed.

Two demonstration and six laboratory hours each week.

IA 302 ADVANCED WOODWORKING, 4 cr.

Principally a course in machine woodworking. Safe operation of all basic woodworking machines is demonstrated. Students make projects involving operations in all basic machines. Spray finish method and techniques are demonstrated. Maintenance of equipment is discussed.

Prerequisites: Fundamentals of Woodworking and Introduc-

tory Mechanical Drawing.

Two demonstration and six laboratory hours each week.

IA 303 CRAFTS, 4 cr.

An introduction to the Crafts is provided in this course. Creative craftwork is done in a variety of media such as clay, metal, wood, leather, and mosaic. Creative and aesthetic design is stressed as well as attainment of technical proficiency. The student is made aware of the vital and significant role of crafts in life and education.

Two demonstration and six laboratory hours each week.

IA 304 FUNDAMENTALS OF COLDMETAL, 4 cr.

Development and construction of ornamental iron projects, including lamps, candle holders, wood baskets, and other projects suitable for high school shops. The work includes both cold and hot forming.

Two demonstration and six laboratory hours each week.

IA 305 JEWELRY MAKING, 4 cr.

The creative and aesthetic application of the fundamental processes of jewelry making are presented. Handwrought brooches, necklaces, bracelets, rings, and other types of jewelry are designed by the student. In addition, the student is introduced to the supplementary crafts of lapidary and enameling usually associated with jewelry making. Originality in design, aesthetic sensitivity, and craftsmanship are stressed.

Two demonstration and six laboratory hours each week.

IA 306 PLASTICS, 4 cr.

A general introduction to the history and development of plastics, with laboratory work in the designing and construction of plastic products. Two demonstration and six laboratory hours each week.

IA 307 LEATHERCRAFT, 4 cr.

Such fundamentals leathercraft techniques as carving, skiving, tooling, finishing, sewing, and lacing of leather are taught. A problematic approach to designing in leather is stressed, thus assuring originality of design and self-expression. Through creative and aesthetic experiences, leathercraft becomes an art expression.

Two demonstration and six laboratory hours each week.

IA 308 FOUNDRY, 4 cr.

For students who wish to major in the field of metalworking. The course is concerned with techniques in metal casting. Foundry procedures and processes that permit an increase in scope of the school metalworking program are covered.

Two demonstration and six laboratory hours each week.

IA 309 FUNDAMENTALS OF ART METAL, 4 cr.

The beginner is directed to develop his techniques systematically and to acquire a basic foundation in the art and science of metalcraft. Two demonstration and six laboratory hours each week.

IA 310 ADVANCED ART METAL, 4 cr.

To provide experience in planning and development of jigs and fixtures; forging of stamping and chasing tools; making tools for die cutting and cut-ting dies. Practice with new techniques in metalworking. Organization of teaching materials and curriculum development.

Prerequisites: IA 200 and IA 309.

Two demonstration and six laboratory hours each week.

IA 311 FUNDAMENTALS OF PHOTOGRAPHY, 4 cr. This course deals with the fundamental and advance problems of Photography. It includes the study and care of cameras, picture compositions, developing, contact printing, enlarging, dodging, toning and photo finishing. Special problems are assigned to individual students.

Two demonstration and six laboratory hours each week.

IA 312 ADVANCED PLASTICS, 4 cr.

A study of new plastics and their uses. The designing of molds and forms for use in plastics. A study of molding problems and processes.

Prerequisite: IA 306

Two demonstration and six laboratory hours each week.

IA 350 ELECTRICAL THEORY, 2 cr.

Fundamental theory of electricity and electronics with emphasis on practical applications. Practice is given in the use of electrical measuring units and American Standard symbols as applied to electrical circuit diagrams.

Prerequisite: Knowledge of mathematics, completion of IA

150, and registration in IA 300.

Four laboratory hours each week.

IA 351 INDUSTRIAL ARTS DESIGN, 2 cr.

Design is studied as a process made up of three major components: the creative, the aesthetic, and the technical. Students experience design creatively and aesthetically by actively participating in a series of design problems which stress the sensitive use of the elements and principles. Creative thinking and aesthetic sensitivity are encouraged and developed.

Prerequisite: IA 151. Four laboratory hours each week.

IA 352 ARCHITECTURAL DRAWING, 2 cr. Design experience is provided in a basic residence planning. The fundamental sequences in designing and drawing a residence are stressed and the student completes all architectural drawings necessary for construction. Elements of the course include: architectural styles, area planning, structural detailing, pictorial rendering, building specifications and cost analysis. Four laboratory hours each week.

IA 353 SHOP PLANNING, 2 cr. Experience is provided in all phases of modern industrial arts laboratory planning. The student proceeds through the entire sequence of shop planning-from the original design to the completion of all drawings necessary for the construction of industrial arts facilities. The major units of the course include: types of industrial arts programs, principles of laboratory planning, equipment selection, architectural and engineering practices, and evaluation of industrial arts facilities.

Four class hours each week.

IA 355 ADVANCED ARCHITECTURAL DRAFTING, 2 cr. Provides broad experiences in general architectural design and drafting techniques. The functional approach to the design of residences and commercial buildings is stressed. New trends in architectural design and new drafting techniques are introduced.

Prerequisite: Architectural Drafting. Four laboratory hours each week.

IA 400 FUNDAMENTALS OF ELECTRONICS, 4 cr.

Laboratory experiences in the use of electronics instruments; practical study of basic electronic circuits including power supplies, amplifiers, oscillators, to flip-flop; and studies of fundamental components including vacuum tubes and transistors.

Prerequisites: Completion of IA 300 and IA 350. Two demonstration and six laboratory hours each week.

IA 401 PATTERNMAKING, 4 cr.

For students who wish to major in woodworking in preparation for teaching a unit shop. Basic principles involved in the making of wood patterns and core boxes are stressed. Techniques are demonstrated. Patterns and core boxes made by students are used in the school foundry.

Two demonstration and six laboratory hours each week.

IA 402 ADVANCED MACHINE SHOP, 4 cr.

Experience in the operation of the milling machine, shaper, the drill press, and the engine lathe; in indexing and in the heat treatments of metals. Special emphasis is placed upon assembly and mass production.

Prerequisite: IA 201.
Two demonstration and six laboratory hours each week.

IA 404 ADVANCED GRAPHIC ARTS, 4 cr.

A continuation of IA 101 covering the organization of suitable shop equipment and teaching material, and providing experience in the study, selection and development of binding projects suitable for secondary schools.

Two demonstration and six laboratory hours each week.

IA 405 Special Machine Shop, 4 cr.
Project work in machine shop practice. Admission only by consent of the instructor.

Two demonstration and six laboratory hours each week. IA 406 ADVANCED ELECTRICITY, 4 cr.

Laboratory experiences in electrical power. Practice is provided with advanced instrumentation distribution circuits, motors and motor control, and transformer design. Students design, construct, and test a practical transformer.

Prerequisites: Completion of IA 300 and IA 350. Two demonstration and six laboratory hours each week.

IA 408 ADVANCED SHEETMETAL SHOP, 4 cr.

To provide practice in development and construction of advanced projects, e.g., equipment and projects for school shop use. Study of sheetmetal trade and industrial practices. Organization of teaching materials and curriculum development.

Prerequisite: Shop 21.

Two demonstration and six laboratory hours each week.

IA 409 Offset - Lithography, 4 cr.

An introduction to the basic principles of the offset-lithography printing process. Specific areas of work to include copy preparation, photography as applied to lithography, photo-lithography camera operation, stripping, platemaking, and press operation. Historical aspects, advantages of lithography, and current industrial practices and procedures are discussed thoroughly.

Two demonstration and six laboratory hours each week.

IA 410 FUNDAMENTALS OF AUTO MECHANICS, 4 cr. Credit is given for work taken at General Motors Institute.

IA 411 ADVANCED AUTO MECHANICS, 4 cr. Credit is given for work taken at General Motors Institute.

IA 412 SPECIAL AUTO MECHANICS, 4 cr. Credit is given for work taken at General Motors Institute.

IA 460 Advanced Graphic Arts Design.

Designing and preparing teaching materials as used in Advanced Graphic Arts through the study and use of various media in preparing of illustrative material for publication.

Two laboratory hours each week.

IA 461 ADVANCED MECHANICAL DRAWING, 2 cr. Special emphasis is placed upon the basic principles involved in machine design. The possibilities and limitations of the common metals, mechanical movements, and the use of fasteners, and the application of machine fits are stressed.

Four laboratory hours each week.

IA 462 BLUEPRINT READING, 2 cr.
This is a beginning course in blueprint reading designed for people enrolled in
the college as well as industrial workers. All kinds of common blueprints are
used as part of the course material. This is an elective drawing course.

Four laboratory hours each week.

IA 470 CLINICAL OBSERVATION AND PRACTICE
IN MANUAL ARTS THERAPY IN EDUCATIONAL THERAPY, 6 cr.
This course is designed to provide training (through Hospital staff lectures and practical clinical experience) in Manual Arts, Industrial Therapy, and Educational Therapy, as it is integrated in the Physical Medicine and Rehabilitation program of a hospital. As a phase of the professional educational requirements, which includes student teaching, an intensive six-week course is offered under the auspices of the professional staff at the Leech Farm Veterans Administration Hospital in Pittsburgh. Open to Juniors, Seniors, and Graduate Students in all curriculums. This course is offered as part of student teaching and also as part of the college summer school program.

IA 490 Honors Course in Industrial Arts I, 4 cr. Individual study and research in the woodworking area.

Prerequisite: Advanced Woodworking.

IA 491 Honors Course in Industrial Arts II, 4 cr.
Individual study and research in the metalworking area.
Prerequisites: Fundamentals of Machine Shop and Advanced Machine Shop.

IA 492 Honors Course in Industrial Arts III, 4 cr.
Individual study and research in the graphic arts area.

Prerequisites: Fundamentals of Graphic Arts. Advanced

Graphic Arts. IA 495 Seminar in Industrial Arts, 1 cr.

PSYCHOLOGY DEPARTMENT

Mr. McDonald, Department Head; Dr. Gamble, Mr. Levendos, Dr. J. A. Long, Mr. McIntyre, Miss O'Brien, Dr. Seidel, Jr., Mrs. Williams.

Psy 101 General Psychology, 3 cr.
A study of the psychological factors which determine human behavior.
Three class hours each week.

Psy 201 Educational Psychology, 3 cr.
The nature of the learning process with emphasis on the application of the principles of psychology to the problems of learning and teaching. An important aspect of the course is the study of actual classroom problems and procedures by observation of regular work and by special illustrative demonstrations in the laboratory school.

Prerequisite: General Psychology. Three class hours each week.

Psy 300 Developmental Psychology I, (Child Development), 3 cr. Acquisition of understanding and appreciation of the patterns of physical, mental, social and emotional growth in the period of early childhood. Consideration of local, state, and national agencies concerned with the welfare and education of early childhood. Observation of learning situations in the family, school, and community environments.

Prerequisites: General Psychology and Educational Psychology

Three class hours each week.

Psy 301 Developmental Psychology II, (Adolescent Psychology), 3 cr. A study of (1) developmental needs and adjustment problems experienced by pre-adolescents, adolescents, and young adults, (2) problems that confront parents, teachers, counselors, and other adults in their relations with individuals in these age-groups, and (3) case reports of secondary school pupils in need of various kinds of assistance.

Prerequisite: General Psychology and Educational Psychology.

Three class hours each week.

Psy 302 Psychology of Exceptional Children, 3 cr.
The problems of exceptional or atypical children. The major purpose is to gain a functional understanding of the various types of psychological and physical deviates, both as to the genesis of their behavior processes, their treatment, and the guiding principles involved in their training.

Prerequisite: General Psychology. Three class hours each week.

Psy 303 Psychology of Adjustment, 3 cr.
A study of the individuals adjustive process in the personal and social relationships. The course will review the defensive reactions, abnormal behavioral

reactions, problem solving, and superior adjustment.

Prerequisite: General Psychology
Three class hours each week.

Psy 310 Mental Hygiene, 3 cr.
Problems of personality and mechanisms of adjustment, including a study of the origin and resolution of conflicts, and the role of emotion in the pattern of behavior are studied.

Prerequisite: General Psychology. Three class hours each week.

Psy 320 Social Psychology, 3 cr.

A study of the interaction between the individual and his social groups within a cultural context. The course will be concerned with the individual in his social role, social status, social groups and social institutions.

Prerequisite: General Psychology and Sociology

Three class hours each week,

Psy 340 Psychological Testing, 3 cr. A study of the nature and function of measurement in psychology with concentration on test construction problems and procedures and an examination of some typical tests in the fields of intelligence, personality, special aptitudes, abilities and interests.

Prerequisite: General Psychology. Three class hours each week. Psy 401 Abnormal Psychology, 3 cr.

A study of the symptoms, causes, incidence and forms of treatment of the more common types of abnormal behavior. Included will be a consideration of the neuroses, psychoses, character and personality disorders, mental deficiency, and psychosomatic reactions.

Prerequisite: General Psychology Three class hours each week.

Psy 410 CLINICAL PSYCHOLOGY, 3 cr. Use of the case method of studying children; observation of and experience with the individual testing of mentality, vision, hearing, motor speed, coordination, and other capacities. Enrollment is limited to small groups. Three class hours each week.

Psy 411 Practicum in Psychology, varying cr. Case studies, practice in the giving, scoring, and interpretation of mental tests, the making of personal inventories, and the use of clinical instruments. One trimester of credit is allowed for each fifty hours of work satisfactorily completed. Maximum credit: six trimester hours. Open only to students who have the proper prerequisites and to graduate students specializing in psychological work, Admission by consent of the Director of the Clinic and the Dean of Instruction.

Psy 415 Experimental Psychology, 4 cr. An introduction to the experimental method as it is used in psychology. The course is concerned with methods, principles, and theories in psychology. Laboratory time will be used to give the student an opportunity to repeat experimental studies and to develop independent studies.

Prerequisite: Statistics for Social Sciences
Psychological Testing.

Two class and six laboratory hours each week.

Psy 420 Psychology of Personality, 3 cr. A study of the development, structure, and dynamics of personality. Some current theoretical approaches to the understanding and assessment of personality will be reviewed and evaluated.

Prerequisite: Psychology of Adjustment or Mental Hygiene Three class hours each week.

Psy 430 HISTORY AND SYSTEMS OF PSYCHOLOGY, 3 cr. A study of the historical development of psychology from its philosophical origins to the present day. The course will briefly review the philosophical origins and will place greatest emphasis on the development of scientific psychology from the early "schools" of psychology to the current "systems" of psychology.

Prerequisite: General Psychology. Three class hours each week.

Psy 435 Psychology of Learning, 3 cr. A study of the nature and conditions of learning. The course will examine the types of learning and the experimental procedures used in the study of learning problems. The various interpretations of the learning process will be examined and evaluated.

Prerequisite: General Psychology Three class hours each week.

Psy 440 Statistics for Social Sciences, 3 cr. This course is designed to acquaint the student in the social sciences with the common statistical procedures used in the description and interpretation of data. Three class hours each week.

Psy 461 Psychology Seminar I, 1 cr. This course provides opportunity for individual study and research by advanced students in psychology. Admission to this class is subject to approval of the department head.

Psy 462 Psychology Seminar II, 2 cr. This course provides opportunity for individual study and research by advanced students in psychology. Admission to this class is subject to approval of the department head.

Psy 463 Psychology Seminar III, 3 cr. This course provides opportunity for individual study and research by advanced students in psychology. Admission to this class is subject to approval of the department head.

SECONDARY EDUCATION

DR. BALL, Department Head; Dr. Benedetti, Mr. Butler, Mr. Cairns, Dr. Crowley, Dr. Culler, Dr. Jones, Mr. Mattee.

Sec Ed 301 PROBLEMS OF SECONDARY EDUCATION, 3 cr. The practical problems of teaching and learning in the secondary school with emphasis on principles of problem solving are studied. A survey is made of the structure and nature of American Secondary Education, Tools and techniques used in problem solving are introduced. A problem study using action research is a requirement of the course.

Prerequisite: Educational Foundations and Educational Psychology. Three class hours each week.

Sec Ed 420 Introduction to Guidance and Personnel Services, 3 cr. The principle objective of this course is to develop an understanding of the principles of guidance with emphasis on basic concepts and procedures for guidance services in elementary and secondary schools. Tools and techniques of guidance services as well as the organization and administration of the guidance program are considered.

Prerequisite: Educational Foundations and Educational

Psychology.

Three class hours each week.

Sec Ed 430 EDUCATIONAL TESTS AND MEASUREMENTS IN SECONDARY SCHOOLS, 3 cr.

This course is a consideration of the simpler statistical measures, with particular stress on the application to classroom work, and of the principles underlying the construction of valid, reliable objective tests. Practice opportunities are offered for the construction of classroom tests in various subject-matter fields.

> Prerequisite: Educational Psychology Three class hours each week.

Sec Ed 435 School and Community, 3 cr.

The development of classroom techniques which lead to cooperative understandings between school and community is a chief objective of this course. Considerable attention is given to the structure of the community, its groups, and their goals. The school is viewed in its role as a public relations laboratory.

Three class hours each week.

Sec Ed 440 Teaching of English in Secondary Schools, 3 cr.
The application of principles of educational psychology, philosophy, and sociology to the teaching of English in junior and senior high school. The course includes both practical techniques of classroom practice and an investigation of the larger problems of the profession. Adequate prior content courses in English are necessary to the student undertaking this course.

Three class hours each week.

Sec Ed 441 Teaching of Geography and Earth Science in Secondary Schools, 3 cr.

A review of concepts and basic philosophy in geography and earth science. The course includes a survey of available materials and current curriculums in the fields of geography and earth science which form the bases for analysis of modern techniques in the teaching of these subjects.

Prerequisite: 18 credits in geography and/or earth science. Three class hours each week, Observations.

Sec Ed 442 Teaching Mathematics in Secondary Schools, 3 cr. The mathematical abilities of the secondary student are diagnosed. Methods of mathematical teaching are discussed and presented. Results of mathematical education according to recent research are studied and trends are indicated. The control and use of the visual aids pertaining to mathematics is presented as well as sources of information. How to maintain a mathematics classroom, and a study of student, teacher, administration and community problems with proper methods of instruction are considered. Content material will be included at the discretion of the mathematics department. Evaluation is maintained by tests, reports, textbook evaluations, course outlines, unit plans, projects and teaching lesson.

Prerequisite: Mathematical Insights. Three class hours each week.

Sec Ed 443 Teaching Modern Languages and Reading in Secondary Schools, 4 cr.

This course will be taught in the language laboratory. It will cover the theory and practice of teaching any modern language. Instruction in the use of the laboratory will be given.

Prerequisite: Completion of at least one trimester of the Junior year.

Four class hours each week.

Sec Ed 444 Teaching of Science in Secondary Schools, 3 cr.
This course is planned to give the prospective science major a thorough grounding in the problems of teaching science. The objectives of the science program in the secondary school, selection of textbooks, sources of suitable literature, how to secure materials for instruction, the preparation of units, and special techniques are studied.

Prerequisites: 12 hours of work in major field. Three class hours each week. Sec Ed 445 Teaching of Social Studies in Secondary Schools, 3 cr. This course is intended to familiarize prospective teachers with desirable methods which may be used in teaching the social studies. Emphasis is placed on the philosophy, objectives, courses of study, and organization of subject matter for teaching purposes, curriculum materials, procedures and development.

Three class hours each week.

Sec Ed 446 Teaching of Speech in Secondary Schools, 3 cr. Problems in the selection of materials for courses of study, forensics, group discussions, assemblies, dramatics and correction and improvement programs on the secondary level. This study is planned to benefit students specializing in the teaching of oral English, speech and dramatics and those supervising extra-curricular activities in the speech field.

Three class hours each week.

Sec Ed 449 Principles of Teaching, 3 cr.

The course is primarily concerned with the direction of learning, the understanding and use of common procedures in teaching, the planning of instruction, the evaluation of the effectiveness of instruction, and the characteristics

of an effective teacher.

Prerequisite: Educational Foundations and Educational Psychology. In certain situations, this course may be substituted for the Secondary Teaching Methods Course. Admittance only by consent of the Department Head of Secondary Education.

Given summer session only.

Sec Ed 450 STUDENT TEACHING, 12 cr.

Observation and participation in all teaching and activities related to the performance of a teacher's work, in the area of the student's specialization.

Prerequisite: A general quality point average of C or 2.0 and 2.0 in their area of specialization. The student spends full time in actual classroom teaching for a trimester of 16 weeks.

Sec Ed 451 Professional Practicum and School Law, 2 cr. Methods and practices of teaching. General techniques of teaching and techniques for the student's special fields. Pennsylvania school laws relevant to the work of the classroom teacher. Problems encountered by the students in their student teaching.

Two class hours each week.

Sec Ed 455 Modern Methods in Secondary Schools, 3 cr. An analysis of the functions of secondary education and of classroom problems, followed up by the presentation of techniques for the solution of such problems advocated by the more recent literature in the field.

Three class hours each week.

Sec Ed 456 The Secondary School Curriculum, 2 cr. This elective course studies the secondary school curriculum.

This elective course studies the secondary school curriculum including: the historical development of the high school curriculum; current and projected trends; patterns of curriculum development; the dynamics of curriculum improvement; curriculum provisions for meeting individual differences; trends in specific instructional fields; the place and purpose of student activities and the extra-class curriculum.

Two class hours each week.

Sec Ed 460 Reading in the Secondary School, 3 cr. Problems unique to the secondary teacher in the area of reading are included. Programs such as developmental reading, remedial reading, and reading in the content areas are considered. Students will develop a critique and oral report on some special area of interest in reading instruction.

Three class hours each week.

Sec Ed 463 Teaching of Reading in the Secondary Academic Subjects, 2 cr. The purpose of this course is to help the prospective teachers of the Secondary Academic subject areas develop an understanding and appreciation of the necessary reading skills needed by their students. Methods of establishing awareness of general reading needs as well as the special reading skills unique to their subject area will be stressed.

Two class hours each week.

Sec Ed 490 Honors Seminar, 3 cr.

A seminar intended to provide an experience of quality that exploits the human and other resources of the College. The major emphasis is to be on inquiry rather than the mere acquisition of information. The methodology of the course is designed to feature the Socratic method, case study, action research, or problem-oriented techniques. The examination, in the form of a defense of a paper written by the student in his major field, is intended to minimize routine summary and to maximize critical thinking.

Prerequisite: Educational Foundations and Educational

Psychology.

Three class hours each week.

SPECIAL EDUCATION

DR. HENRY, Department Head: Mr. Bitonti, Mr. Bowlen, Mr. Dishong, Mrs. Hughes, Miss Kaleita, Mr. Yates,

MENTALLY RETARDED

Sp Ed MR 301 CURRICULUM PLANNING, MATERIAL AND EQUIPMENT, 3 cr. Problems in the selection and placement of children in Special Education class programs. Type and costs of equipment needed. Meeting parents and community problems. Education of teachers, parents, school board and community of values in Special Education programs. Selecting Special Education class teachers and planning for improvement in service. Two class hours each week.

Sp Ed MR 302 Arts and Crafts for Special Education Classes, 2 cr. Devices, techniques, and methods for making interesting, useful, and attractive articles are considered for use with children in Special Education classes. Projects in simple handloom weaving, rake knitting, textile toys, basketry, and wood are emphasized.

Two class hours each week.

Sp Ed MR 303 Advanced Arts and Crafts, 2 cr. Progressive steps in weaving techniques on two-and-four harness looms are taught. Opportunities for the beginning weaver to express himself creatively in color, design, and texture are offered. Consideration of sources and selection of equipment, accessories, and materials are given. Two class hours each week.

Sp Ed MR 305 Education of Children with Retarded Mental Develop-MENT IN THE SECONDARY SCHOOLS, 2 cr.

Appraisal of philosophies, curriculums and teaching methods is made in relation to learners enrolled in older youths on secondary level programs. Analysis of academic programs with on-the-job and vocational programs is included; apropriate research, materials, equipment and resources are evaluated.

Two class hours each week.

Sp Ed MR 306 Special Class for the Trainable, 2 cr.
Organization of classes, teaching methods, behavior and progress records and
reports, and home-school-community relations are studied.

Two class hours each week.

Sp Ed MR 401 Special Class Methods, 3 cr. Major emphasis is given to basic procedures for planning and implementing an adequate educational program for mentally retarded children of different age and ability levels. The course provides a developmental approach with emphasis on specific techniques and methods for meeting the needs of these children.

Three class hours each week.

Sp Ed MR 402 GUIDANCE WITH EMPHASIS ON INTERVIEWING AND PARENT EDUCATION, 3 cr.

It is important to help parents accept the handicap of their child whether it be mental retardation, physical impairment, a speech defect or any other condition. This course attempts to help parents recognize and adjust to the realities of their child's condition.

Three class hours each week.

Sp Ed MR 403 Psychology of the Mentally Retarded, 2 cr. Intensive review of research is made pertaining to etiology of mental retardation, of classification systems, and methods of diagnosis. Included are the study of brain injury, familiar retardation, research on learning characteristics and evaluation of psychological tests. Criteria distinguishing mental retardation from other problems are examined.

Two class hours each week.

Sp Ed MR 410 Diagnostic Testing and Remedial Teaching, 3 cr. Study of achievement tests useful for diagnostic purposes. Teaching procedures adjusted to particular needs or weaknesses. To include all school curriculum, elementary and secondary.

Three class hours each week.

Sp Ed MR 449 Student Teaching in Classes for Mentally Retarded Children, 6 cr.

Observation and participation in all teaching and activities related to the performance of a teacher's work in the class for mentally retarded children. The student spends full time in actual classroom teaching for one-half trimester of sixteen weeks.

Sp Ed MR 490 Honors Course in Mentally Retarded Education, 3 cr. Sp Ed MR 491 Honors Course in Mentally Retarded Education, 3 cr. Sp Ed MR 492 Honors Course in Mentally Retarded Education, 3 cr. Sp Ed MR 495 Seminar in Mentally Retarded Education, 1 cr.

SPEECH AND HEARING

Sp Ed SH 101 Hearing Problems, 3 cr.

The appreciation of the many problems of children and adults with hearing losses in order to acquaint interested persons as to how to improve and to adjust the child or adult to his hearing problem.

Three class hours each week.

Sp Ed SH 102 Speech Pathology, 3 cr.
A foundation course for speech correction, including a study of the anatomy and physiology of the speech mechanism and some consideration of the causes, symptoms, nature, and management of speech disorders.

Three class hours each week,

Sp Ed SH 103 LANGUAGE AND SPEECH DEVELOPMENT, 3 cr. A survey of methods, procedures and equipment in order to deal more intelligently as to what we do and what we can do for children and communi-

Three class hours each week.

Sp Ed SH 204 Auditory Training and Speech Reading, 3 cr. Students study and compose the different systems of teaching Speech Reading. Lessons in Auditory Training are planned for the different age and hearing difficulty groups.

Three class hours each week,

Sp Ed SH 205 Psychology of Speech and Hearing, 3 cr. An explanation of the psychological factors involved in the study of speech and hearing. Special emphasis is given to listening. Three class hours each week.

Sp Ed SH 206 Physiology and Anatomy of Speech and Hearing, 3 ct. A study of the anatomy and the physiology of the ear and the speech mechanism dealing with their functions and capabilities in their performance necessary for speech and hearing.

Three class hours each week.

Sp Ed SH 207 PRACTICE IN MEASUREMENT AND ADJUSTMENT FOR HEARING Prosthesis, 2 cr.

A study is made of the many types of tests involved in measurement. Practice is required in the use of the audiometer. Two class hours per week. One laboratory hour.

Sp Ed SH 270 STUTTERING, 3 cr. This course is designed to deal with the prevalent theories and therapies of stuttering. Students learn therapeutic techniques for both children and adults. Prerequisite: Elementary Clinical Practice. Three class hours each week.

Sp Ed SH 308 CLINICAL PRACTICE IN AUDITORY TRAINING AND SPEECH READING, 3 cr.

Students study and compose the different systems of teaching Speech Reading. Lessons in Auditory Training are planned for the different age and hearing difficulty groups.

Three class hours each week.

Sp Ed SH 309 Administration of Public School Speech and HEARING, 3 cr.

Acquaintance of students with the various problems of surveys, schedules, travel, recording keeping, interviews, materials, personnel, and team approach.

Three class hours each week.

Sp Ed SH 313 Elementary Speech Clinic, 3 cr. Practice in clinical procedure; a review of speech disorders and methods of diagnosis and remedial treatment; opportunity for the accumulation of corrective materials and observation of the work of the speech clinician. Six laboratory hours each week.

Sp Ed SH 314 ADVANCED SPEECH CLINIC, 3 cr. Correctionist practice. Each student is responsible for his own cases, including diagnosis, analysis, therapy, reports, follow-up, and other problems with planned supervision. Practice is carried on in the College Speech Clinic, Noss sboratory School, and an out-patient clinic for children of school age.

Prerequisite: Elementary Speech Clinic Six laboratory hours each week.

Sp Ed SH 440 Methods and Techniques in Speech Correction, 3 cr. Correction methods, a study of the application of various techniques of therapy and materials.

Three class hours each week.

Sp Ed SH 450 STUDENT TEACHING, 12 cr.
Observation and participation in all teaching and activities related to the performance of a teacher's work in the classroom. The student spends full time in actual classroom teaching one trimester of sixteen weeks.

Sp Ed SH 451 Professional Practicum and School Law, 2 cr. Methods and practices of teaching. General techniques of teaching and techniques for the student's special field. Pennsylvania school laws relevant to the work of the classroom teacher. Problems encountered by the students in their student teaching.

Two class hours each week.

Sp Ed SH 490 Honors Course in Speech and Hearing I, 3 cr.

Sp Ed SH 491 Honors Course in Speech and Hearing II, 3 cr.

Sp Ed SH 492 Honors Course in Speech and Hearing III, 3 cr.

Sp Ed SH 495 SEMINAR IN SPEECH AND HEARING, 1 cr.

V. Arts and Science Division

GENERAL INFORMATION
GENERAL CURRICULUM
PATTERN
SPECIFIC CURRICULUM
REQUIREMENTS
COURSES OFFERED



ARTS AND SCIENCE DIVISION

The Bachelor of Arts degree is awarded to those persons completing the requirements of the Arts and Sciences Curriculum,

ADMISSION

Students are considered for admission to the Arts and Sciences curriculum on the basis of:

- General scholarship, as evidenced by graduation from an approved secondary school, or equivalent preparation, as determined by the Credentials Evaluation Division of the Department of Public Instruction.
- Submission of scores of the Scholastic Aptitude test of the College Entrance Examination Board.
- Satisfactory character and personality traits plus interests and attitudes conducive to successful college work as reported by secondary school officials.
- Good health and physical condition as reported by a physician on the medical examination form of the college.
- 5. Inclusion of the following secondary school work is recommended:
 Academic Mathematics
 2 years

 English
 3 years

 Foreign Language
 2 years

 Science
 2 years

 Social Studies
 2 years

 Electives
 5 years

ADMISSION WITH ADVANCED STANDING

- 6. All previous listed requirements must be met.
- The student must request of the college (s) previously attended that a transcript of work completed and a statement of honorable dismissal be mailed to the Director of Admissions.
- 8. Transferred credit will be accepted on the following basis:
 - a. Final grade earned must be "C" or better.
 - Transferring college must be accredited by the regional crediting association.

INFORMATION ON ADMISSION

Applicants should write to the Director of Admissions for the necessary admissions and registration papers and should follow procedures directed by that office.

ADVISEMENT

Each student electing the Arts and Sciences curriculum is given advisement by the Director of Arts and Sciences Program concerning his individual needs in his area of concentration and field of specialization, Advisers in the various fields of specialization give further help to students in planning of their programs. Additional information may be obtained by writing to the Director of Arts and Sciences Program.

THE CURRICULUM IN ARTS AND SCIENCE

Sixt	NERAL STUDIES y semester hours in general education must be completed by all arts and sciences ents as follows:
A.	Communicative Arts
В.	Scientific Method
	General Chemistry I General Chemistry II General College Physics I General College Physics II General Biology I General Biology II General Biology (Physical and Historical)
, C.	Man's Understanding of Himself
	(6 cr. of World Calture) General Psychology
D	Appreciation
	Art 2 cr. Music 2 cr.
E. 3	Meaning of Life
in Socia For concentre	In the following — The degree of Bachelor of Arts in the Humanities, Bachelor of Arts in Natural Sciences will be sought by the student any one of the degrees the student will achedule 50 semester hours in his area of ation, of which 20 hours may be in his field of specialisation.
	A. THE HUMANITIES
In additi for a deg	ion to the General Studies required by all students in Arts and Sciences, each candidate ree in Humanities will take 50 semester hours as follows: English and Literature
	Total
The Fiel	lds of Specialization in Humanities are as follows:
L. FRE	NCH REQUIRED COURSES 6 credite
	Intermediate French I
	French Culture and Civilization I
b. I	French Literature II
	Literary, Cultural and Political History of France

2.	GE	RMAN			
				. 3	credita
		REQUIRED COURSES	3 cr		
		Intermediate German II	3 or		
		(taken as General Studies)			
		German Culture and Civilization I	3 or		
		German Culture and Civilization II	3 cr		
		(taken in Humanities Concentration) German Conversation and Composition			
		German Conversation and Composition	3 cr		
	b.	Advanced German Conversation and Composition II	15 on	21	credita
		Advanced German Conversation and Composition II	3 cr		
		German Literature I	3 cr	•	
		German Literature II	3 cr	•	
		German Classical Movement German Romantic Movement Goethe's Faust German Lyric Poetry	3 cr	•	
		German Romantic Movement	a or	•	
		Comment Train Destant	3 01	•	
		The Nineteenth Century After Goethe	3 01	•	
		The Nincteenth Century After Goethe Scientific German Readings in Contemporary German Literature	3 cr		
		Readings in Contemporary German Literature	3 cr		
		Literary, Cultural and Political History of Germany	3 cr		
		Studies in German Literature	3 or		
		Field Work in German Studies	3 cr		
		Literary, Cultural and Political History of Germany Studies in German Literature Field Work in German Studies Workshop	Varia	ble	
3.	SP	43/20/27			
	R.	ANISA REQUIRED COURSES Intermediate Spanish I Intermediate Spanish II (taken as General Studies)		12	credits
		Intermediate Spanish I	3 cr		
		Intermediate Spanish II	3 cr		
		(taken as General Studies)			
		Culture and Civilization of Spain	3 cr		
		Culture and Civilization of Hispanic America	3 cr		
		(Taken in Humanities Concentration)			
		Survey Literature of Spain Survey Literature of Hispanic America ELECTIVES Spanish Conversation and Composition I	3 cr	•	
	L	Survey Literature of hispanic America	3 61	. 10	3:4-
	b.	Shanish Conversation and Composition I	14 0	10	credits
		Advanced Spanish Conversation and Composition	3 01	•	
		Spanish Short Story	3 01	•	
		Cervantes	A cr		
		Spanish Drama Masterpieces of Hispanic American Literature Readings in the Literature of Spain and Hispanic America Literary, Cultural and Political History of Spain and	3 cr		
		Masterpieces of Hispanic American Literature	3 cr		
		Readings in the Literature of Spain and Hispanic America	3 er		
		Literary, Cultural and Political History of Spain and			
		Hispanic America Studies in Spanish Literature Fieldwork in Spanish Studies	3 or		
		Studies in Spanish Literature	3 cr	•	
	***	Fieldwork in Spanish Studies	3 cr		
4.		GLISH COURSES		-	
	H.	REQUIRED COURSES			credita
		Humanities Concentration.			
		· American Literature I	3 0		
		American Literature I	3 cr		
		English Literature I	3 cr		
		English Literature II	3 cr		
		Advanced Composition or Creative Writing	8 or		
		American Literature II English Literature II English Literature II Advanced Composition or Creative Writing English Philology and Grammar ELECTIVES	3 cr		-
	b.	ELECTIVES	12 0	15	credite
		Trees and Lann things	o cr		
		Old and Middle English Literature	3 cr		
		Chaucer Development of English Drama	3 er	•	
		Fliesbethen Titesstane	o er	•	
		Elizabethan Literature	3 01	•	
		Milton	B or	•	
		Restoration Literature	3 cr		
		Restoration Literature Eighteenth Century Literature	B er		
		The Romantic Movement	3 cr		
		The Novel to 1870	3 or		
		The Novel to 1870 Contemporary Novel The Short Story Creative Writing Contemporary Poetry Modern Draws	3 01		
		The Short Story	3 cr		
		Creative Writing	3 cr	•	
		Volum Days	5 cr	•	
		Modern Drama	o cr		
		The Essay Literature of Biography Literaty Criticism Shakespeare	3 CI	•	
		Literary Critician	B or	•	
		Shakespeare	3 0		
		Honors Course in English	3 cr		
		Seminar in English	1 0	-	

5. SPEECH	0 line
a. REQUIRED COURSES	9 credits
Fundamentals of Speech	3 er.
Forms of Public Address Argumentation and Debate Oral Interpretation Techniques of Play Production (9) credits taken as part of General S or Humanities Concentration.	3 cr.
Oral Interpretation	3 cr.
Techniques of Play Production	3 cr.
(9) credits taken as part of General S	itudies
b. ELECTIVES	10 3:4
If the student's interests are in the the	neter pine hours of electives
If the student's interests are in the the should be from the theater group; if	the interests are in public
address, nine hours should be from the	hat group.
Charal Speaking	Public Address Parliamentary Procedure 3 cr.
Choral Speaking 3 cr. Acting 3 cr.	Advanced Phonetics 3 cr.
Stage Direction 3 cr.	Advanced Phonetics 3 cr. Discussion and Conference
History of the Theater 3 cr.	Techniques 3 cr. Educational Television
Acting 3 cr. Stage Direction 3 cr. History of the Theater 3 cr. Children's Theater 3 cr. Honors Course in Speech 3 cr. Seminar in Speech 1 cr.	Educational Television
Honors Course in Speech 3 cr.	and Radio 3 cr. Theories of Rhetorio 3 cr.
Seminar in Speech 1 cr.	Honors Course in Speech 3 cr.
	Seminar in Speech 1 er.
B. THE NATURAL SCIENCE	S AND MATHEMATICS
n addition to the General Studies required by all for a degree in Natural Sciences and Mathemati	es will take 50 semester hours as follows:
General Biology I	4 сг.
General Biology I	4 cr.
General Chemistry I	4 cr.
General Chemistry II	4 ст.
College Physics II	4 cm
College Physics II Geology (Physical) Geology (Historical)	4 cr.
Geology (Historical)	4 cr.
Analytical Geometry and Calculus II	3 er.
Analytical Geometry and Calculus II Analytical Geometry and Calculus III Eight credits taken as part of General Studies	3 ст.
Total	30 credits
a. REQUIRED COURSES	9 credits
Botany	3 cr.
Radiation Biology	2 ст.
	1 cr.
Zoology	3 er.
b. ELECTIVES	12 or 15 credits
Vertebrate Anatomy	
Microbiology	3 cr.
Animal Physiology	3 cr.
Genetics	3 сг.
Ecology	3 er.
Field Zoology	3 ст.
Embryology Field Zoology Field Botany	3 cr.
Organic Evolution	3 er.
Ornithology	3 cr.
Entomology Conservation of Biological Resources	3 cr.
Plant Physiology	
Special Problems	3 cr.
Honors Course	3 cr.
2. CHEMISTRY	
a. REQUIRED COURSES Analytical Chemistry I Analytical Chemistry II	9 credits
Analytical Chemistry I	4 cr.
Analytical Chemistry II	4 cr.
Chemistry Seminarb. ELECTIVES	1 cr.
Organic Chemistry I	4 cr.
Organic Chemistry I	4 er.
Organic Preparations	3 er.

	Biochemistry I		
	Biochemistry II	3 cr.	
	Physical Chemistry I	4 cr.	
	Physical Chemistry II	4 cr.	
	Laboratory Techniques with Instrumental Analysis I	3 cr.	
	Laboratory Techniques with Instrumental Analysis II	S er.	
	Agricultural Chemistry	S cr.	
	Literature of Chemistry	1 00	
	Individual Work I		
	T_J:::J1 WL T	I Cr.	
	Individual Work II	I cr.	
	Advanced Inorganic Chemistry I	3 cr.	
	Advanced Inorganic Chemistry II	3 cr.	
	Advanced Organic Chemistry I	3 cr.	
	Advanced Inorganic Chemistry II Advanced Organic Chemistry II Advanced Organic Chemistry II	3 cr.	
3. PI	HYSICS		
a.	REQUIRED COURSES	4	credita
	College Physics III	A cr.	
Ь.		16	credite
	Astronomy	3 00	CIGUILE
	Wave Motion and Sound		
	Optics	4 Cr.	
	Modern Physics	4 cr.	
	Physical Measurements I	2 cr.	
	Physical Measurements II	2 cr.	
	Advanced Mechanics	3 cr.	
	Advanced Electricity and Magnetism		
	Electronics	4 cr.	
	Individual Work I	l cr.	
	Individual Work II	1 cr.	
	Thermodynamics	4 cr	
	Astro-Physics		
	Honors Course1.2.		
	Seminar	1 cr.	
4 14	ATHEMATICS		
2000		10	3:
a.	REQUIRED COURSES	10	creates
	Analytical Geometry and Calculus IV	S Cr.	
	Analytical Geometry and Calculus V	5 cr.	
	Geometry I	S cr.	
	Abstract Algebra	3 cr.	
	Advanced Calculus I	3 cr.	
	Advanced Calculus II	3 cr.	
Ь.	ELECTIVES	3	credits
	Geometry II	3 cr.	
	Fieldwork in Mathematics	3 er	
	Theory of Equations	9 07.	
	Statistical Analysis	9	
	Statistical Analysis Mathematical Insights	o cr.	
	Mathematical Insignts	o er.	
	Mathematics of Finance	3 cr.	
	Honors Course in Mathematics (may be repeated)	3 cr.	
	Seminar in Mathematics		
	Linear Algebra	3 cr.	
	C. THE SOCIAL SCIENCES		
In	addition to the General Studies required by all students in Arts and	Science	s. each
	te for a degree in the Social Sciences will take 50 semester hours as fol		-,
	Economics		
	History		
	Political Science		
		o cr.	
	Anthropology	o cr.	
	Geography		
	Psychology		
	Sociology		
	Total	30	credits

1.	HIS	STORY			
	a.	REQUIRED COURSES History of Europe to 1815 History of Europe sinee 1815 ELECTIVES	3 cr.	6	credits
	b.	History of U. S. and Pa. I History of U. S. and Pa. I History of U. S. and Pa. II History of Pennsylvania Contemporary History of U. S. History of Ancient World History of Medieval Europe Renaissance and Reformation Diplomatic History of U. S. American Constitutional History Social History of United States History of England	3 cr. 12 or	15	credits
		History of Il S and Pa II	3 cr.		
		History of Pennsylvania	3 cr.		
		Contemporary History of U. S	3 cr.		
		History of Ancient World	3 cr.		
		History of Medieval Europe	3 cr.		
		Renaissance and Reformation	3 cr.		
		American Constitutional History	3 cr.		
		Social History of United States	3 cr.		
		History of England	3 cr.		
		History of Latin America	3 cr.		
		History of Far East	3 cr.		
		History of Bussia	3 05		
		History of Contemporary Europe Foundations of American Diplomacy, 1776-1895 Twentieth Century World History History of American Worker	3 cr.		
		Foundations of American Diplomacy, 1776-1895	3 cr.		
		Twentieth Century World History	3 cr.		
		History of American Worker	3 er.		
2.		LITICAL SCIENCE			
	E.	REQUIRED COURSES	*****	6	credits
		American Government	3 er.		
	ь.	ELECTIVES	o or.	15	credits
	٠.	International Relations	3 cr.		*******
		United Nations	3 cr.		
		Political Parties	3 cr.		
		World Politics	3 CF.		
		Development of Political Thought	3 cr.		
		Modern and Contemporary Political Thought	3 cr.		
		State and Local Government ELECTIVES International Relations United Nations Political Parties World Politics Comparative Government Development of Political Thought Modern and Contemporary Political Thought Introductory Public Administration	3 cr.		
3.	CE	OCRAPHY			
	8.	REQUIRED COURSES		20	credits
		Feonomic Geography	B or.		
		A Regional Course	3 or.		
		A Regional Course Research in This Region	-2 CF.		
		A Physical Course	-4 cr.		
		A Physical Course	8 cr.		
		Cartography	B or.		
		Seminar in Geography	3 cr.		
	Ь.	ELECTIVES: One course selected from each group as part of 20 hours in a above.	9 or	10	credita
		REGIONAL GEOGRAPHY			
		Geography of United States and Pennsylvania	3 cr.		
		Europe	3 cr.		
		The Far East	3 er.		
		Pennsylvania The Soviet Union United States and Canada Latin America Asia	3 cr.		
		United States and Canada	3 cr.		
		Latin America	3 ст.		
		Asia	3 cr.		
		Africa	3 cr.		
		Africa The Pacific Basin Summer Field Trip	3 cr.		
		CULTURAL COURSES			
		W. II Dallana to Commanda	9		
		World Problems in Geography	3 cr.		
		Commercial Air Transportation	3 cr.		
		Conservation of Natural Resources	3 cr.		
		World Frontens in Geography Geographic Influences in American History Commercial Air Transportation Conservation of Natural Resources Trade and Transportation Commerce and Industrial Geography Urban Geography	3 cr.		
		Commerce and Industrial Geography	B cr.		
		Urban Geography	3 cr.		

PHYSICAL COURSES

Psychology of Personality Clinical Psychology			
Abnormal Psychology or Psychology of Exceptional Child	3 сг.		
Psychology of Adjustment or Mental Hygiens	3 cr.		
Psychology of Learning			creatm
History and Systems of Psychologyb. ELECTIVES			credite
Experimental Psychology			
Statistics (Math 109)			
Social Psychology			
Developmental Psychology II	S cr.		
Developmental Psychology I	3 er.		
Oue course taken in Area of Concentration			
a. REOUIRED COURSES		16	credit=
5. PSYCHOLOGY			
Amutitatias Weinods	o cr.		
National Income Analysis			
Advanced Theory			
Public Finance			
History Economic Thought			
Industrial Relations			
b. ELECTIVES		9	credite
Statistics (Math 109)			
Intermediate Theory	3 er	0	
History of Economic Thought	B CT.		
(taken under Area of Concentration)			
Principles and Problems of Economics II	3 cr		
Principles and Problems of Economics I	3 cr.		
a. REOUIRED COURSES		12	credita
4. ECONOMICS			
(m war krows)			
Special Problems in Geography	-5 CT	0	
Oceanography	3 cr.		
Physical Geography	3 cr.		
Meteorology			
Physical Geology	4 cr.		
Field Methods in Geography			
Physiography			
Climatology			
Historical Geology			
Astronomy (Descriptive)	3 er		

IV. OPPORTUNITIES FOR INDEPENDENT STUDY

Within the various fields of specialization the student may, with the help of his adviser, elect those courses which most directly serve his needs. The various academic departments offer Honors Programs which enable the student to pursue individual study over a period of as long as three trimesters. These Honors Programs give opportunity for exploration both in breadth and depth of the student's interests.

Course Offerings

The required and elective Arts and Science courses available at California are listed under the several departmental headings. Each course, when offered during the regular trimester, is taught for 16 weeks. The number of clock hours of instruction each week for the trimester hours of credit is indicated. The clock hours listed are minimal; individual courses, because of special needs or exceptional facilities, occasionally exceed these established standards in the interest of better teacher education.

ART DEPARTMENT

MR. DOUPLE, Department Head; Mr. Gabriel, Mr. Kipp, Mr. Krill, Mrs. Wood.

Art 201 Introduction to Art, 2 cr.
A course dealing with art as a vital part of contemporary living. Art of other ages will be given some consideration as a basis for interpreting the present. Students will be encouraged to experiment with materials in order to understand the creative process. Through a variety of experiences an attempt will be made to help students develop an awareness of and a sensitiveness to all forms of art.

Three class hours each week.

Art 205 CREATIVE ART ACTIVITIES, 3 or 4 cr. A course which aims to develop creative experience with various art materials, techniques, and processes. Experience with wood, sculpture, pottery, mosaics, and metals. Opportunity for specialization.

Three class hours each week.

Art 305 ART EDUCATION WORKSHOP, 3 cr. A special problems course designed to meet the individual interests of students including exhibit techniques, program planning, observations and visitations, evaluation of elementary art programs and elementary art supervision.

Three class hours each week.

Art 320 Drawing and Painting, 3 or 4 cr. An introduction to the fundamentals of drawing and painting, Instruction in pictorial representation in oil and watercolor techniques, Three class hours each week.

Art 340 THE ART OF ASIA, 2 cr. A specialized course in the fine arts, painting, sculpture, architecture, and the minor arts of the countries of Asia, Three class hours each week.

Art 350 THE ART OF LATIN AMERICA, 2 cr. A specialized course in the fine arts, painting, sculpture, architecture, and the minor arts of ancient civilizations of Latin America. A study of the Inca, Maya, and Aztec cultures. Three class hours each week,

Art 420 RESEARCH IN ART EDUCATION, 2 cr. Statistical techniques used in elementary art education. An analysis of art tests. Research in creative behavior; research into the problems of handicapped and exceptional children as it relates to art education. Three class hours each week.

Art 455 CONTEMPORARY ART IN AMERICA, 2 cr. A study of the development of Contemporary painting, architecture and sculpture in the United States, with emphasis on 20th Century developments. Three class hours each week.

BIOLOGICAL SCIENCE

Mr. Lewis, Department Head; Dr. Anderson, Mr. Bailey, Dr. Bausor, Dr. Black, Mr. Buell, Dr. Lister, Mr. Little, Mr. Sepsi, Mr. Snyder, Mr. Zadorozny.

GENERAL EDUCATION

Sci 101 MAN AND HIS BIOLOGICAL WORLD, 5 cr. This course deals with the functional principles of Biology, Concepts treated include dependence upon physical surroundings; food getting; assimilation; growth; maintenance of kind; classification; reaction to environment; adaptation; constant adjustment to environment; use; improvement; and the conservation of living things.

Given every Trimester.

Five class hours each week.

Sci 357 LABORATORY SCIENCE FOR TEACHERS, 3 cr. This course is designed to provide students in the elementary curriculum and elementary teachers with a more adequate background in science. The emphasis is placed upon science content and upon laboratory science suitable for the elementary grades.

Given every Trimester.

Three class hours each week.

Sci 413 Workshop in Science, 3 cr. This course is designed as an elective for students in the elementary curriculum and elementary teachers. The emphasis is placed upon the construction of materials and equipment suitable for the elementary science classroom and upon the science concepts related to the work pursued.

Given every Trimester. Three class hours each week.

Sci 414 FIELD SCIENCE FOR TEACHERS, 3 cr. This course is designed as an elective for students in the elementary curriculum and elementary teachers. Emphasis will be placed upon field trips, the observation of native specimens and habitats, and the collection and preservation of native materials.

Given every Trimester. Three class hours each week.

BIOLOGICAL SCIENCE

Biol 101 GENERAL BIOLOGY I, 4 cr. A survey course of the non-vascular and vascular plants with emphasis on grass anatomy and physiology. Classification, reaction, environment are studied through a biochemical, phylogenetic and ecological approach.

Three lecture classes and one

two hour laboratory each week.

Biol 102 GENERAL BIOLOGY II, 4 cr. A continuation of Biology 101, but with a survey of the animal kingdom from the first invertebrates up to and including man. Similarities and differences of organ structures and functions studied in both courses.

Three lecture classes and one two hour laboratory each week. Biol 111 BOTANY, 3 cr.

A phylogenetic study of selected plant types with special reference to their place in the plant kingdom. Typical life histories and importance to man will be emphasized.

Prerequisites: Biol 101, Biol 102.

Two class and one three hour laboratory each week.

Biol 121 Zoology, 3 cr.

A phylogenetic study of selected animal types with special reference to their place in the animal kingdom. Typical life histories and importance to man will be studied.

Prerequisites: Biol 101, Biol 102,

Two class and one three hour laboratory each week.

Biol 201 VERTEBRATE ANATOMY, 3 cr.

This course deals with the fundamental organ systems of vertebrates as they apply to the cat. Comparisons are made with the organ systems of other chordates.

Given every Trimester.

Prerequisites: Biol 101, Biol 102, Biol 121.

or consent of the instructor.

Two class and one three hour laboratory each week.

Biol 221 ANIMAL PHYSIOLOGY, 3 cr.

The functions of the animal body. Basic physiological phenomena are studied with considerable emphasis upon practical applications to the student's own life and well being.

Given every Fall and Spring Trimester Prerequisites: Biol 101, Biol 102, Biol 201, Chemistry 101, Chemistry 102, Organic Chemistry 301, Organic Chemistry

Two class and one three hour laboratory each week.

Biol 240 FIELD BOTANY, 3 cr.

A study of the identification and classification of ferns and flowering plants of Southwestern Pennsylvania.

Given summer session only. Prerequisites: Biol 101, Biol 102, or consent of the instructor. Two class and three laboratory or field hours each week.

Biol 260 Field Zoology, 3 cr.

Designed to acquaint students with the varied equipment and materials utilized in collecting, mounting, and preserving zoological specimens; to give them varied field experiences in the use of such equipment; to give them the opportunity of making personal collections of familiar forms of animal life of the region; and to give them practice in the identification and classification of these familiar forms.

Given summer session only.

Prerequisites: Biol 101, Biol 102, or consent of the instructor. Two class and three laboratory or field hours each week.

Biol 301 Microbiology, 3 cr.

An introduction to the study of microorganisms. Culture, morphology, identification and control of bacteria are emphasized. Some attention is given to the yeasts and fungi. The role of microorganisms in nature and industry is considered. Special attention is given to microorganisms of importance to health and sanitation.

Given every Trimester.

Prerequisites: Biol 101, Biol 102, Biol 111, Biol 121, Chemistry 101, Chemistry 102, Organic Chemistry 301, Organic Chemistry 302.

Two class and one three hour laboratory each week.

Biol 321 GENETICS, 3 cr.

The purpose of this course is to give the student an understanding of the laws of inheritance as they operate in plants, animals, and humans. Cell structure, Mendelian inheritance, Eugenics, linkage, probability, crossing over, and random assortment are all considered.

Given every Trimester.

Prerequisites: Biol 101, Biol 102, Biol 111, Biol 121, Chemistry 101, Chemistry 102, Organic Chemistry 301, Organic Chemistry 302.

Two class and three hour laboratory each week.

Biol 331 ORGANIC EVOLUTION, 3 cr.

An intensive study of the history of evolutionary theory and its impact upon the various disciplines of Biology. The ideologies of the opposing schools of thought of modern evolutionists are considered. The significance of the evolutionary doctrine to the present concept of species and races is emphasized. This course is designed for mature students, preferably upper classmen, and is especially recommended for Biology majors and Social Science majors with an interest in Anthropology.

Given every Spring Trimester. Prerequisites: Biol 101, Biol 102, Biol 111, Biol 121, or consent of the instructor.

Three class hours each week.

Biol 341 PLANT PHYSIOLOGY, 3 cr. A course dealing with the basic physio-chemical relationships of plants. Emphasis is placed upon solutions and colloidal systems, the chemical and physical nature of plant cells, membrane phenomena, water relations, mineral uptake and utilization, and photosynthesis. An introduction is given to respiration, growth responses, translocation of solutes, and the physiology of flowers.

Given every Fall Trimester.

Prerequisites: Biol 101, Biol 102, Biol 111, Chemistry 101, Chemistry 102, Organic Chemistry 301, Organic Chemistry

Two class and one three hour laboratory each week.

Biol 342 PLANT MORPHOLOGY, 3 cr.

An intensive study of the structure, both gross and microscopic, of representative plants. The structure of cells, tissues, and organs with implication of structure to function will be emphasized.

Given every Spring Trimester.
Prerequisites: Biol 101, Biol 102, Biol 111.

Two class and one three hour laboratory each week.

Biol 361 ORNITHOLOGY, 3 cr. An introduction to the birds of Pennsylvania with special emphasis on their identification in the field. Abundant field work gives practice in recognition by plumage, song, form, and behavior. Lectures deal with classification, migration, distribution, habitat preferences, song, courtship, nesting and rearing young, plumage changes, and economic importance.

Given every Spring Trimester. Prerequisites: Biol 101, Biol 102, Biol 121, or consent of the

instructor.

Two class and three laboratory or field hours each week.

Biol 362 Entomology, 3 cr.

An introductory course to the study of insects. Insect structure, life history, physiology, and economic importance are considered. An intensive study is made of the major orders and the most important minor orders found in our locality.

Given summer session only.

Prerequisites: Biol 101, Biol 102, Biol 121, or consent of the instructor.

Two class and three laboratory or field hours each week.

Biol 401 BIOTIC PRINCIPLES, 5 cr.

A comprehensive terminal course open only to Biology majors. Taken preferably the semester immediately preceding student teaching. The aim is to summarize and correlate the various phases of undergraduate Biology, and to help students gain a well formed concept of the life sciences.

Given every Trimester.

Prerequisites: 18 credit hours in Biology.

Five class hours each week.

Biol 402 Special Problems I, 1 cr. Given every Trimester.

SPECIAL PROBLEMS II, 1 cr. Biol 403 Given every Trimester.

SPECIAL PROBLEMS III, 1 cr. Given every Trimester.

Biol 410 GENERAL EMBRYOLOGY, 3 cr.

A study of the nature of development of living things. Studies deal with the process of germ cell formation and fertilization. Comparative embryological development of amphioxus, the lamprey, the dogfish shark, the frog, the chick, the pig, and the human fetus.

Given every Fall Trimester Prerequisite: Biol 101, Biol 102, Biol 121, Chemistry 101, Chemistry 102.

Two class and three laboratory hours each week.

Biol 415 Animal Histology, 3 cr.
The microanatomy of selected animal tissues and organs. Includes practice in the preparation and microscopic examination of materials.

Given every Spring Trimester.
Prerequisites: Biol 101, Biol 102, Biol 121. Two class and three laboratory hours each week.

Biol 420 Ecology, 3 cr.

A study of plants and animals in relation to their physical and biological environments. Concepts include migration, invasion, competition, succession, climax, and post-succession. Considerable attention is given to plant and animal communities in Pennsylvania. Individual problems may be assigned.

Given every Fall Trimester. Prerequisites: Since this is a terminal course in Biology. consent of the instructor is required before electing it. Two class and three laboratory or field hours each week.

Biol 421 Conservation of Biological Resources, 3 cr. This is a study of the basic principles of conservation as they affect man. The concepts taught include the historical background of the conservation movement, and the problems of water, soils, food-producing lands, forests, wildlife, minerals, areas for special use, and land-use planning. Special emphasis is placed upon conservation as it affects the individual in society.

Given every summer session. Prerequisites: None, open to all students. Two class and three laboratory or field hours each week.

Biol 430 RADIATION BIOLOGY, 2 cr. Deals rigorously with biophysical processes involved in the absorption of radiation by living systems. Includes physio-chemical production of radiation, and nature of fundamental particles. Provides necessary background for special certification in Adult Education.

Given every Trimester. Prerequisites: Required of all science majors at the senior year level. Three class hours each week.

Biol 481 Individual Work I, 1 cr. An opportunity for each student specializing in the area of Biology to organize, investigate and report on a specific problem of his own selection. Biol 482 Individual Work II, 1 cr.
The continuation of Individual Work I in the second semester.

Prerequisite: Completion of Individual Work I.

Biol 490 Honors Course in Science, 3 cr.

A student carrying all "A" grades in Biology, may on recommendation of a staff member sponsoring his work, enroll in special investigations of a biologic nature in satisfying the requirements of this Honors Course. Given on recommendation of the staff member responsible for sponsoring the candidate.

Biol 491 Honors Course in Science, 3 cr.

Biol 492 Honors Course in Science, 3 cr.

Biol 495 SEMINAR IN BIOLOGY, 2 cr. This course involves discussions and reports from the original literature upon topics of current interest in Biology and/or topics of special interest to the participating individuals.

Given every trimester. Required of all senior students in Biology. Two class hours each week,

ENGLISH DEPARTMENT

- Dr. Coon, Department Head; Dr. Bander, Mr. Bloemker, Mrs. Brigham, Mr. Broadd, Mr. Cassidy, Dr. Crockett, Mr. Cutshall, Dr. Edwards, Mr. Ferris, Mr. Gogoj, Mr. Grimes, Mr. Halboth, Mr. Herron, Mr. Johnson, Miss Krishnappa, Miss Maatta, Dr. Major, Mr. Newell, Miss Rakestraw, Mr. Rea, Mr. Small, Mr. Smith, Mr. Thomas, Dr. Watkins, Mr. Wise.
- * Starred courses are required of Secondary Education and Arts and Sciences English majors.
- Eng 101* Communication I, 4 cr.
 A basic course, required of all students their first trimester, in language, literature, and written composition. Four class hours each week.
- Eng 102* Communication II, 4 cr. Continuation of Communication I. Required of all students immediately upon the completion of Communication I. Prerequisite: Communication I Four class hours each week.
 - Eng 105 English Composition I, 3 cr. Communication I in somewhat condensed form, omitting conferences. Offered as required. Prerequisite: Énglish Composition I Three class hours each week.

Eng 110 Co-Curricular Activities-PUBLICATIONS

Eng 111 Co-Curricular Activities— PUBLICATIONS

Eng 112 Co-Curricular Activities-PUBLICATIONS

Eng 150 American Literature, 3 cr. An introductory survey, from the beginnings to the present,

> Not regularly offered. Three class hours each week.

Eng 151*American Literature I, 3 cr.

An introductory survey, through 1865. May be taken before or after American Literature II, or independently of it.

> Given every fall and spring; summer 1966, 1968; summer session 1967.

Three class hours each week.

Eng 152* American Literature II, 3 cr.

An introductory survey, from 1865 to the present. May be taken before or after American Literature I, or independently of it.

Given every fall, spring and summer 1967, summer sessions

1966 and 1968.

Three class hours each week.

Eng 201* WORLD LITERATURE I, 2 cr.

Acquaints the student in some depth with a limited number of books that are at the same time masterpieces of literature and representative of the chief integral elements in world culture from the beginnings to 1400 A.D. Required of all students (English majors should take it in their Freshman year). Best taken concurrently with Social Studies 201: World Culture I, a complementary course also required of all students; may be taken either before or after English-202: World Literature II, or independently of it.

Two class hours each week,

Eng 202*; World Literature II, 2 cr.

A continuation of World Literature I, from 1400 A.D. to the present. Required of all students (English majors should take it in their Freshman year). Best taken concurrently with Social Studies 202: World Culture II, a complementary course also required of all students; may be taken either before or after English 201: World Literature I, or independently of it. Two class hours each week.

Eng 205 SHAKESPEARE FOR NON-ENGLISH MAJORS. 3 cr.

Designed especially for students who are at least sophomores (and not open to Secondary Education or Liberal Arts English majors, who should take Eng 405: Shakespeare, below), this course introduces the general student to 12 or 13 of Shakespeare's greatest plays, including histories, comedies, and tragedies.

Given every fall Three class hours each week.

Eng 210 English Literature, 3 cr.

An introductory survey, from the beginnings to the present.

Not regularly offered.

Three class hours each week.

Eng 211* English Literature I, 3 cr.
An introductory survey, to 1798. May be taken before or after English Literature II, or independently of it.

Given every fall, spring and summer of 1966 and 1968; summer session 1967.

Three class hours each week.

Eng 212* English Literature II, 3 cr.

An introductory survey, from 1798 to the present. May be taken before or after English Literature I, or independently of it.

Given every fall, spring and summer of 1967; summer sessions

of 1966 and 1968.

Three class hours each week.

Eng 215 GREEK AND LATIN CLASSICS, 3 cr. Designed as a continuation of studies initiated in World Literature I, this course includes works by such authors as Homer, Aeschylus, Sophocles, Euripides, Aristophanes, Plato, Aristotle, Virgil, Horace, Ovid, Plautus, Terence, and others.

> Given every spring. Three class hours each week.

Eng 251* English Philology and Grammar, 3 cr. The course attempts to give some knowledge of the history of English as a language and to acquaint the student with the use of the larger dictionaries. The main body of the course is concerned with a systematic study of grammar, with emphasis on its historical development and on its more functional aspects.

Given every fall, spring and summer of 1966 and 1968; summer session of 1967. Prerequisite: Communication I and II

Three class hours each week,

Eng 252* ADVANCED COMPOSITION, 3 cr. Advanced experience in writing is afforded through the preparation of reviews,

and critical reports, employing expository and argumentative techniques.

Prerequisite: Communication I and II

Three class hours each week. Twelve credits in English courses numbered in the 300's must be elected by Secondary Education and Arts & Science English majors.

Eng 311 OLD AND MIDDLE ENGLISH LITERATURE, 3 cr. An introduction to Old English writings including the Beowulf, in translation, and to some of the chief writings in Middle English, such as those of Gower and Malory.

Given spring and fall of 1966; summer and fall of 1967. Prerequisite: English Literature I Three class hours each week.

Eng 312 CHAUCER, 3 cr. A study of the works of this author in relation to his times, with special emphasis on The Canterbury Tales and Troilus and Criseyde.

Given fall of 1965; spring of 1967 and 1968.

Prerequisite: English Literature I

Three class hours each week.

Eng 313 THE DEVELOPMENT OF ENGLISH DRAMA, 3 cr. A study of the folk and liturgical origins of English drama and of its development and chief exemplars (exclusive of Shakespeare) to the closing of the theatres in 1640.

Given every fall Prerequisite: English Literature I Three class hours each week.

Eng 314 ELIZABETHAN LITERATURE, 3 cr. A course in the prose, poetry, and drama (exclusive of Shakespeare) of the English Renaissance. Major writers include Spenser, Sidney, Marlowe, and Jonson.

> Given fall of 1965 and spring of 1967 and 1968. Prerequisite: English Literature I Three class hours each week.

Eng 316 Seventeenth Century Literature to 1660, 3 cr. Bacon, Jonson, Donne, Herbert, Marvell, Walton, and other poets and prose writers of the Stuart and Commonwealth periods.

Given spring, summer, and fall of 1966, and fall of 1967. Prerequisite: English Literature I Three class hours each week.

Eng 317 Milton, 3 cr.

A study of Milton, his times, and his works, including the early poems, Paradise Lost, Paradise Regained, Samson Agonistes, and such still timely prose works as his tractates on censorship (Areopagitica), divorce, and education.

Given spring of 1967 and 1968. Prerequisite: English Literature I Three class hours each week.

Eng 318 Restoration Literature, 1660-1700, 3 cr.

Major English writers of the latter part of the Seventeenth Century such as Dryden, Etherege, Wycherly, Congreve, Evelyn, Pepys, and Bunyan.

Given spring and fall of 1966, fall 1967. Prerequisite: English Literature I Three class hours each week.

Eng 329 Eighteenth Century Literature, 3 cr. A critical examination of major prose and poetic works of the eighteenth century with emphasis upon Pope, Defoe, Swift, Fielding, Smollett, Sterne, and Johnson.

Given fall 1965, spring 1967, and 1968, summer session 1967. Three class hours each week,

Eng 335 THE ROMANTIC MOVEMENT, 3 cr. A study of the poetry of Wordsworth, Coleridge, Byron, Shelley, and Keats, and of some of their contemporaries, in the light of the background of the age and biographical and critical doctrine.

Given spring and fall of 1966, fall 1967. Prerequisite: English Literature II Three class hours each week.

Eng 336 Victorian Literature, 3 cr.

Victorian culture and the Victorian frame of mind, from around 1830 to around 1900, as reflected in such poets as Tennyson, Browning, and Arnold and in anch prose writers as Carlyle, Mill, and Dickens.

Given fall 1965, summer trimester and summer session of

1966, spring of 1967 and 1968, summer 1968.

Prerequisite: English Literature II Three class hours each week.

Eng 341 THE NOVEL TO 1870, 3 cr.
The rise and development of the novel in English from its beginnings in the eighteenth century. A selected list of novels is assigned for analysis with a view to cultivating an appreciation of this dominant literary form.

Given spring 1966, fall 1966, summer and fall 1967. Prerequisite: Communication I and II

Three class hours each week.

Eng 342 Contemporary Novel, 3 cr. A study of modern and contemporary movements in fiction based on the critical reading and analysis of English and American novels published since 1870.

Given fall 1965, spring 1967, and 1968. Prerequisite: Communication I and II Three class hours each week.

Eng 351 THE SHORT STORY, 3 cr.

The development of the short story as a distinct and distinguished literary form is traced through its history and technique. Techniques of fiction are given through analysis in order to prepare the student for analysis of the novel. Recommended as preparation for Eng 341, "The Novel to 1870," and Eng 342, "Contemporary Novel."

Given spring trimester, summer session and fall trimester of 1966, fall 1967 and summer 1968. Prerequisite: Communication I and II Three class hours each week.

Eng 352 CREATIVE WRITING, 3 cr.

For students of marked ability in the creative processes of writing; may be substituted by such students for English 252. The course aims to develop creative ability and improve the student's own style.

> Given fall 1965, 1966, and 1967; spring 1967, and 1968. Prerequisite: Communication I and II. Three class hours each week.

Eng 362 Contemporary Poetry, 3 cr.

First of all a course in reading poetry, reading for pleasure and for understanding; finally a study of the origins of twentieth century poetry and its present day trends.

Given spring and fall 1966, summer session and fall trimester

1967, summer session 1968.

Prerequisite: Communication I and II Three class hours each week.

Eng 372 Modern Drama, 3 cr.

Study of the new dramatic literature of Europe and America. Representative plays for reading from Ibsen and Shaw to Becket and Albee. 20 plays.

Given fall 1965, summer 1966, spring 1967 and 1968. Prerequisite: Communication I and II Three class hours each week.

Eng 382 THE ESSAY, 3 cr.

Readings in American, British and Continental essayists along with the writing of an original essay.

Given fall 1965, spring 1967, and 1968. Prerequisite: Communication I and II Three class hours each week.

Eng 392 LITERATURE OF BIOGRAPHY, 3 cr.

The course will focus on biography as a literary form and as a discipline of literary and historical scholarship. Readings will be from the works of major biographers.

Given spring 1966, and summer session 1968. Prerequisite: Communication I and II Three class hours each week.

Eng 401* LITERARY CRITICISM, 3 cr.

A study of theoretical criticism and an introduction to the practice of criticism. Best taken in seventh or eighth trimester.

Given every fall, spring, and summer of 1966 and 1968, sum-

mer session 1967.

Prerequisite: see "The English Major" above.

Eng 405* Shakespeare, 3 cr. Assuming the basis for study provided by Eng 151, 152, 211, and 212, and other courses required in the freshman and sophomore years of Secondary Education and Arts and Science, English majors, this course is designed especially for 6th, 7th, or 8th trimester study by such students.

It explores in considerable depth, and with special reference to the conditions of Shakespeare's times and theatre, some of his greatest plays of all types, especially (a) those most often studied in secondary school and

(b) his great tragedies.

Given every fall, spring, and summer session of 1966 and

1968, summer 1967. Prerequisite: see "The English Major" above.

Three class hours each week.

- Eng 490 Honors Course in English, 3 cr. Given by arrangement.
- Eng 491 Honors Course in English, 3 cr. Given by arrangement.
- Eng 492 Honors Course in English, 3 cr. Given by arrangement.
- Eng 495 Seminar in English, 1 cr. Offered as required.

GEOGRAPHY AND EARTH SCIENCE

Dr. Brown, Department Head; Mr. Anthony, Mr. Furbush, Mr. Kendall, Mr. Leavy, Mr. Minnick, Mr. Procasky, Mr. Rampon, Mr. Tomikel.

Geo 100 WORLD GEOGRAPHY I, 3 cr.

A basic course organized to develop a knowledge and appreciation of the physical factors of the environment and man's adjustment to them. World patterns of land forms, climate, soils, vegetation, etc., are emphasized in relation to man's economic and cultural activities.

Given every trimester. Three class hours each week.

Geo 101 WORLD GEOGRAPHY II, 3 cr.

This course is designed for students wishing to broaden their knowledge and understanding of the world's culture regions as seen from the geographer's point of view.

Given every trimester. Prerequisite: World Geography I Three class hours each week.

Geo 102 ECONOMIC GEOGRAPHY, 3 cr.

The geographical bases for the production, manufacture and distribution of the earth's resources and the relationships arising as man engages in making a living.

> Given every trimester. Prerequisite: World Geography I Three class hours each week.

Geo 151 PHYSICAL GEOLOGY, 4 cr.

A study of the materials, structures, surface features of the earth and processes which have produced them. Course work includes: study of rocks and minerals, topographic maps and models. Field trips are an integral part of the course.

Given every trimester.

Prerequisite: World Geography I

Three hours lecture and a two hour laboratory each week.

Geo 152 HISTORICAL GEOLOGY, 4 cr.
A study of the geologic history of the earth and the succession of the major groups of plants and animals as based on the geologic interpretation of rock formations and fossils. Field trips are an integral part of the course.

Given Fall 1965, Spring 1967, Summer 1968. Prerequisite: Physical Geology or permission of instructor. Three hours lecture and a two hour laboratory each week. Geo 157 DESCRIPTIVE ASTRONOMY, 3 cr.

Recognition of the various elements of the solar system, their physical characteristics and motions, the phenomena of the galactic system and the extragalactic space and the constellations, with a consideration of the mathematical phases generally omitted from studies of the kind.

Given every term as Physics 110 by the Science Department.

Three class hours each week.

Geo 202 COMMERCIAL AND INDUSTRIAL GEOGRAPHY, 3 cr. A geographic analysis of the factors involved in the production and distribution of economic goods. Local and world patterns of commerce and industry and their effect on national and international affairs are studied.

Given Fall 1964, Spring 1966, Summer 1967.

Prerequisite: World Geography I Three class hours each week.

Geo 203 Trade and Transportation, 3 cr.

National and international trade, transportation routes, and transportation centers.

Not currently offered. Prerequisites: World Geography I and Economic Geography. Three class hours each week.

Geo 220 UNITED STATES AND PENNSYLVANIA, 3 cr.
The physiography, climate, vegetation, population, land utilization, production and trade of the various regions of the United States and the Commonwealth of Pennsylvania. The first part of the course deals with Pennsylvania, and through its economic position within the States, proceeds logically to an analysis of the nation as a whole.

Given every term. Prerequisite: World Geography I Three class hours each week.

Geo 243 Conservation of Natural Resources, 3 cr. Emphasizes the development of a working philosophy of conservation and the use of the various types of natural resources. The relationship between loss and waste in the varied uses of the natural resource, as in processing, production, transportation, and/or maintenance, will be considered.

Given Fall 1965, Summer 1966, Spring 1967, Fall 1967, Sum-

Prerequisite: World Geography I or permission of instructor. Three class hours each week.

Geo 254 METEOROLOGY, 3 cr. An introduction to the physics of the atmosphere, approached from the stand-point of earth—atmosphere interaction. The effects of the physical controls such as land and water distribution upon weather and climate is emphasized. Weather map analysis and weather observations are integral parts of the course. Given every trimester.

Prerequisite: World Geography I or permission of instructor. Two hours lecture and a two hour laboratory each week.

Geo 255 CLIMATOLOGY, 3 cr. A systematic study of the climatic regions of the world and the advantages and limitations of each for man's occupance. The physical aspects of the atmosphere and the regional characteristics of climate are examined.

Given Fall 1966, Spring 1968. Prerequisite: Meteorology or permission of instructor, Three class hours each week.

Geo 261 Physiography, 3 cr.

The study of the history, origin, and characteristics of land forms produced by weathering, fluvial, glacial, wind, and wave erosion, or by a combination of these acting upon the major kinds of geologic materials and structures.

Given to meet demand.

Prerequisite: Physical Geology or permission of instructor. Two hours lecture and a two hour laboratory each week.

Geo 303 COMMERCIAL AIR TRANSPORTATION, 3 cr.
The geographic factors which have determined commercial air centers and routes. The effects of national and international controls are considered.

Not currently offered.

Prerequisite: World Geography I and Economic Geography. Three class hours each week.

Geo 310 URBAN GEOGRAPHY, 3 cr.

An analysis of cities in selected regions: classification, location, distribution, function and growth; types and patterns of land use, Geography in city planning will culminate the study.

Given Spring 1966, Summer 1967. Prerequisite: World Geography I Three class hours each week.

Geo 320 GEOGRAPHY OF UNITED STATES AND CANADA, 3 cr. A regional study of the United States and Canada, considering man's adjustment to the physical factors of relief, climate, soil, vegetation and mineral resources. Political structure, and the relationships between the two countries and the rest of the world are analyzed from a geographic point of view.

Not currently offered.
Prerequisite: World Geography I
Three class hours each week.

Geo 322 GEOGRAPHY OF PENNSYLVANIA, 3 cr. A regional analysis of Pennsylvania, emphasizing man's cultural and economic response to environmental factors. Field trips are an integral part of the course.

> Given Fall 1965, Spring 1967, Summer 1968. Prerequisite: World Geography I Three class hours each week.

Geo 323 GEOGRAPHY OF LATIN AMERICA, 3 cr. The effects of the physical environment of Latin America upon the activities of man. Effects of the historical background, types of governments, and ethnic backgrounds of the peoples upon the development of the natural resources of Latin America. The study is regional by nations.

Given every Spring Trimester. Prerequisite: World Geography I Three class hours each week,

Geo 325 GEOGRAPHY OF EUROPE, 3 cr. Europe's natural and political regions, emphasizing the complexity of the continent's natural and cultural landscape, and the effect they have had on the occupants past and present.

Given every Fall Trimester. Prerequisite: World Geography I Three class hours each week.

Geo 329 Geography of Asia, 3 cr.

A regional study of the continent of Asia. An analysis of the political subdivisions will be made from the standpoint of cultural and political changes, as influenced by the physical nature of each province. The significance of

these changes in world relations is stressed.

Given Fall 1966, Spring 1968. Prerequisite: World Geography I Three class hours each week.

Geo 330 Geography of the Soviet Union, 3 cr. A regional study of the physical and cultural features of the Soviet Union. The emphasis is placed upon those factors responsible for the current position of the Soviet Union as a major world power, and upon potential future development.

Given Spring 1966, Summer 1967. Prerequisite: World Geography I Three class hours each week.

Geo 331 Geography of The Far East, 3 cr.
The natural environment of China, Japan, Southeastern Asia, Korea, and man's adjustments economically, politically, and socially.

Not currently offered. Prerequisite: World Geography I Three class hours each week.

Geo 333 Geography of Africa, 3 cr.

A regional study of Africa, showing the social and economic development of these lands in relation to their physical environment. The importance of Africa to the world, and the effect thereon of emergent nationalism in an Africa torn by strife are studied.

Given Summer 1966, Fall 1967. Prerequisite: World Geography I Three class hours each week.

Geo 334 Geography of The Pacific Basin, 3 cr. Lands and people of the great ocean. Particular attention is given to Australia, Indonesia, New Zealand and the Philippines.

Not currently offered. Prerequisite: World Geography I Three class hours each week.

Geo 341 Geographic Influences in American History, 3 cr. The interrelationships between the natural environment and the historical development of the United States. The attraction of North America for colonization, the expansion from sea to sea, the absorption of millions of immigrants, the schism and refusion of the nation, the development of resources to a position of world power are considered.

Given Fall 1966, Spring 1968.

Prerequisites: World Geography I, Geography of the United States, History of the United States.

Three class hours each week.

Geo 342 World Problems in Geography, 3 cr.
A political geography giving attention to the problems of State, internal and external, as influenced by the human and natural resources.

Given Summer 1966, Fall 1967.
Prerequisites: World Geography I, Economic Geography, and at least one regional course.

Three class hours each week.

Geo 358 OCEANOGRAPHY, 3 cr.
An introduction to the physical nature of the ocean, its topography and circulation. Chemical and physical nature of ocean water. Marine sedimentation. Biotic environments. Relation to biological, geographical, geologic and economic problems, including fisheries.

Given every Fall trimester. Prerequisite: World Geography I. Three class hours each week.

Geo 360 Physical Geography, 3 cr. A study of the physical elements in the geographic pattern of man's environment. Introductory phases of systematic geography. Field problems are an integral part of the course.

Given every Spring Trimester. Prerequisite: World Geography, Three hours lecture each week plus field trips.

Geo 370 Cartocraphy, 3 cr. A non-technical laboratory course designed to develop competence in map use and evaluation. Compilation of maps from statistical, descriptive, and cartographic sources. Use and interpretation of globes, cartograms, and geographic/geologic diagrams, topographic maps, and aerial photographs. History of maps.

Prerequisite: World Geography I and permission of instructor. Two hours lecture and a two-hour laboratory each week,

Geo 401 Special Problems in Geography or Earth Science I, 1 cr. Development of individual research problems by majors. Does not replace any course regularly given.

Prerequisite: Seminar and/or permission of staff. Hours to be arranged.

Geo 402 Special Problems in Geography or Earth Science II, 2 cr. Development of individual research problems by majors. Does not replace any course regularly given.

Prerequisite: Seminar and/or permission of staff. Hours to be arranged.

Geo 403 Special Problems in Geography or Earth Science III, 3 cr. Development of individual research problems by majors. Does not replace any course regularly given.

Prerequisite: Seminar and/or permission of staff, Hours to be arranged.

Geo 420 SUMMER FIELD COURSE I, 1 cr.
Planned trips in summer sessions, during which lectures and discussions are conducted.

Open to all students.

Geo 421 SUMMER FIELD COURSE II, 2 cr.
Planned trips in summer sessions, during which lectures and discussions are conducted.

Open to all students.

Geo 422 SUMMER FIELD COURSE III, 3 cr.
Planned trips in summer sessions, during which lectures and discussions are conducted.

Open to all students.

Geo 430 FIELD METHODS IN GEOGRAPHY AND EARTH SCIENCE, 3 cr. An intensive micro-geographic-geologic study through actual field work. An advanced course; permission of staff required for registration.

Given every Spring Trimester.

One hour lecture and four to eight hours field work each

week.

Geo 490 Honors Course in Geography I, 3 cr.

Directed reading and research in field of interest chosen by student in consultation with the instructor.

Prerequisites: Provisions of the Honors Program of the col-

lege. Approval staff of the department.

Weekly meeting with instructor to be arranged.

Geo 491 HONORS COURSE IN GEOGRAPHY II, 3 cr.
Continued, but individual, research on particular topic chosen from field of
interest studied in Geography 490. Comprehensive oral and written examination by staff near close of this trimester.

Prerequisite: Geography 490

Weekly meeting with instructor to be arranged.

Geo 492 Honors Course in Geography III, 3 cr.

The writing of an undergraduate thesis based upon the work of Geography
490 and 491. Comprehensive oral examination by faculty near close of this
trimester.

Prerequisite: Geography 491 Weekly meeting with instructor to be arranged.

Geo 495 SEMINAR IN GEOGRAPHY AND EARTH SCIENCES, 3 cr. An introduction to the literature, philosophy, techniques, and research methods of geography and/or earth science.

Given every trimester. Hours to be arranged.

MATHEMATICS DEPARTMENT

MR. Monroe, Department Head; Mr. Atkins, Mr. Bethem, Mr. Beyer, Mr. Blank, Mr. Dunbar, Mr. Fernandes, Mr. Novak, Mr. Riggie, Mr. Sapko, Dr. Thomas.

Math 101 Fundamentals of Mathematics, 3 cr.
Development of the number system; nature and application of fundamental processes; extension of the number system to include common and decimal fractions and negative numbers; approximate nature of measurements; percents; language of algebra including formulas, graphs, tables, and equations; meaning of proof; elementary concepts of statistics; art of indirect measurement; history of number systems, number line, inequalities, basic set notation, general principles of geometry.

Three class hours each week.

Math 102 COLLEGE ALGEBRA, 3 cr.
Fundamental operations; factoring; fractions; functions and their graphs, linear, quadratic, and systems of equations; proportions and variation; progressions; mathematical induction; determinants; equivalence relations; postulates of addition and multiplication (closure, associative, commutative, distributive identity, and inverse)

tributive, identity, and inverse).

Prerequisite: Three years of high school mathematics or honor grade in Fundamentals of Mathematics.

Three class hours each week.

Math 103 COLLEGE TRIGONOMETRY, 3 cr.

Functions of an angle; logarithms; use of tables; radians; identities, trigonometric and exponential equations; solution of triangles by natural functions and logarithms; inverse functions; complex numbers; application in practical problems.

Prerequisite: College Algebra. Three class hours each week.

Math 104 ANALYTIC GEOMETRY AND CALCULUS I, 3 cr.

Sets, inequalities, absolute value, rectangular coordinates, distances, slopes, graphs, straight lines, circles, translation of axes, functions, limits, continuity, derivatives, velocity, chain rule, implicit differentiation, differentials, tangents, and normals, maxima and minima, Mean Value Theorem.

Prerequisite: CEEB Math Score 550 or better and honor

Prerequisite: CEEB Math Score 550 or better and honor grades in High School Algebra II and Trigonometry or College Algebra, All mathematics and science majors unable to start this course will take College Algebra and Trigonometry in addition to meeting other requirements,

Three class hours each week.

Math 105 ANALYTIC GEOMETRY AND CALCULUS II, 3 cr. Concavity, points of inflection, curve sketching, integration, definite integral, area, volumes of revolution, work, liquid pressures, centroids, moments of inertia, arc length, parabolas, ellipses, hyperbolas, rotation, trapeziodal rule, fundamental theorem of integral calculus.

Prerequisite: Analytic Geometry and Calculus I. Three class hours each week,

Math 106 Geometry I, 3 cr.

Professionalized subject matter background for teachers of secondary school plane geometry; completes a restudy of Euclidean Geometry filling in gaps that exist. The emphasis here is placed in greater rigor in proofs. The approach used is that presented by Hilbert. Topics included are: the nature of defined and undefined terms, the use of postulates, the nature of a proof, logical proofs, constructions, and sets. The course includes work in both two and three dimensional geometry.

Three class hours each week.

Math 201 ANALYTIC GEOMETRY AND CALCULUS III, 3 cr.
Logarithmic functions, hyperbolic functions, trigonometric functions, integration by substitution, integration by parts, integration by partial fractions.

Prerequisite: Analytic Geometry and Calculus II.

Three class hours each week.

Math 202 ANALYTIC GEOMETRY AND CALCULUS IV, 3 cr. Polar coordinates, parametric equations, vectors in a plane, scaler product, dot products, curvilinear action, L'Hospital's rules, cartesion coordinates in three dimensional space, equations of planes and lines, spheres, surfaces, curve sketching, vector, velocity and acceleration.

Prerequisite: Analytic Geometry and Calculus III. Three class hours each week.

Math 203 Geometry II, 3 cr.
Topics of axiomatic geometry; selected topics of Euclidean Geometry such as theorems of Memelaus and Ceva; Harmonic elements and cross-ratio; an introduction to synthetic and analytic projective geometry; concepts of Non-Euclidean Geometries.

Prerequisite: Geometry I. Three class hours each week. Math 204 ABSTRACT ALGEBRA, 3 cr.

The number system; number theory; elementary theory of groups; rings; integral domain; fields; matrices and determinants.

> Prerequisite: Calculus II. Three class hours each week.

Math 205 Field Work in Mathematics, 3 cr.

Use of various instruments including the transit, slide rule, plane table, level sextant, E6B computer, hypsometer, angle mirror, planimeter, computing machines and other measuring instruments. Student projects making use of the various instruments.

> Prerequisite: College Trigonometry. Three class hours each week.

Math 210 STATISTICS, 3 cr.

This course is for non-math majors, and is not counted toward a math major. Frequency distribution, percentiles, measures of central tendency, variability, normal distribution curve, populations, samples and error-sampling distribution of means, sampling distribution of proportion—null and alternative hypotheses, type I and type II errors, tests of means, confidence intervals and decision procedures, correlation, chi square, simple analysis of variance, statistics and the design of experiments.

Prerequisite: College Algebra. Three class hours each week.

Math 301 Analytic Geometry and Calculus V, 3 cr. Functions of two or more variables, partial directional derivative, extrema of a function of two variables, line integrals, work, multiple integrals and applications, sequences, infinite series, convergence, power series, Taylor's formula, ordinary differential equations, equations of first order, first degree, homogeneous equations, applications.

Prerequisite: Analytic Geometry and Calculus IV. Three class hours each week.

Math 302 THEORY OF EQUATIONS, 3 cr. Complex numbers; theorems involving polynomials in one variable; cubic and biquadratic equations; separations of roots; Sturm's theorem and approximate evaluation of roots.

Prerequisite: Analytic Geometry and Calculus IV. Three class hours each week.

Math 303 DIFFERENTIAL EQUATIONS, 3 cr. Elementary ordinary differential equations and their use in a wide variety of applications in geometry, engineering and physical sciences; methods employing symbolic operators; approximations, techniques and series solution.

Prerequisite: Calculus IV. Three class hours each week.

Math 304 STATISTICAL ANALYSIS, 3 cr. Basic principles and methods of statistics common to scientific research; probability theory, measures of central tendency; bionomial distribution, normal curve; reliability of statistical measures; statistical inference, confidence limits, Bayes Theorem.

Prerequisite: 12 credits in mathematics. Three class hours each week.

Math 305 LINEAR ALGEBRA, 3 cr.

Matrices and linear systems, vector spaces, determenants, linear transformations, nilpotent operators, Jordan canonical form, invariant subspaces, and Cayley-Hamilton Theorem.

Prerequisite: 24 credits of college math including Abstract

Algebra.

Three class hours each week.

Math 390 MATHEMATICAL INSIGHTS, 3 cr.

Language; symbols; compound statements; arguments and proofs; an introduction to the theory of sets; connection between the structure of sets and the structure of compound statements and arguments.

> Prerequisite: 24 credits in mathematics. Three class hours each week.

Math 401 ADVANCED CALCULUS I. 3 cr.

Elementary differential and integral calculus of functions and transformations from a more rigorous point-set topology point of view. This course is primarily for those who will continue with graduate work in mathematics. Prerequisite: Analytic Geometry and Calculus V.

Three class hours each week.

Math 402 ADVANCED CALCULUS II. 3 cr.

Continuation of Advanced Calculus I.

Prerequisite: Advanced Calculus I. Three class hours each week.

Math 420 Mathematics of Finance, 3 cr.

The algebraic approach to topics of money, interest, discount, annuities, insurance and related subjects.

Prerequisite: College Algebra. Three class hours each week.

Math 490 Honors Course in Mathematics, 3 cr.

Individual study and research on topics and materials not covered by regular course work in mathematics.

Prerequisite: 64 credits completed or scheduled with a QPA of 3.25 in all work, recommendation of the mathematics faculty, approval of the Department Head and the Dean of Instruction.

Math 491 Honors Course in Mathematics, 3 cr. Individual study and research on topics and materials not covered by regular

course work in mathematics.

Prerequisite: 64 credits completed or scheduled with a QPA of 3.25 in all work, recommendation of the mathematics faculty, approval of the Department Head and the Dean of Instruction.

Math 492 Honors Course in Mathematics, 3 cr.

Individual study and research on topics and materials not covered by regular

course work in mathematics.

Prerequisite: 64 credits completed or scheduled with a QPA of 3.25 in all work, recommendation of the mathematics faculty, approval of the Department Head and the Dean of Instruction.

Math 495 SEMINAR IN MATHEMATICS.

MODERN LANGUAGE

Dr. Marisa, Department Head; Dr. Halley, Mr. Long, Mr. Parascenzo, Mr. Romero, Miss Weber.

FRENCH

Fr 101 ELEMENTARY FRENCH I, 3 cr. For the student without previous knowledge of French who wishes to achieve a sound basis for an active command of the language. This course is devoted to aural -- oral adaptation in the language laboratory and to the study of fundamental speech patterns. Progressively greater emphasis is placed on correct grammar, writing and reading.

Not open to students who have had secondary school French.

Prerequisites: None.

Three class hours each week.

Fr 102 ELEMENTARY FRENCH II, 3 cr.

A continuation of Elementary French A for students who wish to increase their oral comprehension and their reading skill. There will be a review of the fundamentals of French grammar, combined with extensive readings in literary and cultural texts.

Prerequisite: Open to all students who have passed French

I or have had one year of secondary school preparation.

Three class hours each week.

Fr. 103 Intermediate French I, 3 cr. (French Grammar and prose reading). For students who have completed courses A and B or two years of secondary school French. This course develops aural - oral skills and increases the command of written French. Review and practice will be functional, combined with outside readings. Conducted largely in French.

> Prerequisites: French A and B. Three class hours each week.

Fr. 104 Intermediate French II, 3 cr.

(Conversation, Composition, and Reading). For students who are interested primarily in achieving fluency in speech and writing. The course is conducted, to a great extent, in French. After a short review of formal grammar selected literary texts will be read and discussed.

Prerequisite: Course 103 or equivalent. Three class hours each week.

Fr 201 FRENCH CULTURE AND CIVILIZATION I, 3 cr.

The purpose of this course is to study French culture and literature from the Middle Ages to the Twentieth Century. Selected literary works will be analyzed and discussed in French and in English.

Prerequisite: An ability to understand spoken French and to read with ease.

Three class hours each week.

Fr. 202 French Culture and Civilization II, 3 cr.
This is a continuation of French 201. More and more French will be introduced into discussions of French Culture and works of literature. Occasionally, conversation will be held on current events in French.

Prerequisite: French 201. Three class hours each week.

Fr. 205 French Conversation and Composition I, 3 cr. A complete audio-lingual course in French. This course is designed to improve the mastery of listening, speaking, reading, and writing French. Three class hours each week,

Fr. 206 Advanced French Conversation and Composition II, 3 cr. Interchangeably or in addition to the above course, utilizing a different textbook of the same level of difficulty. Three class hours each week.

Fr. 301 FRENCH LITERATURE I, 3 cr. A general survey of French Literature from the Middle Ages to 1800.

Three class hours each week.

Fr. 302 FRENCH LITERATURE II, 3 cr. A continuation for French Literature 301. Three class hours each week.

Fr. 316 FRENCH LITERATURE, 3 cr. A general survey of French Literature in the nineteenth and twentieth century. Three class hours each week.

Fr. 317 French Literature, 3 cr.
A continuation of French Literature 316.
Three class hours each week.

Fr. 318 French Literature, 3 cr. A study of eighteenth century thought.

Three class hours each week.

Fr. 319 French Literature, 3 cr.
A study of nimeteenth century French writers, with emphasis on the Romantic period.

Three class hours each week.

Fr. 401 Reading in Contemporary French Literature, 3 cr. Subject matter to be based on the latest writings of famous authors.

Three class hours each week.

Fr. 412 LITERARY, CULTURAL AND POLITICAL HISTORY OF FRANCE, 3 cr. A summary of the intellectual accomplishments of the French nation from the Gauls to Charles De Gaulle.

Three class hours each week.

Fr. 421 Studies in French Literature, 1 cr. Subject matter to be arranged. The course is designed for French majors who wish to take one additional credit.

Fr. 422 Studies in French Literature, 2 cr. Subject matter to be arranged. The course is designed for French majors who wish to take two additional credits.

Fr. 423 Studies in French Literature, 3 cr. Subject matter to be arranged. The course is designed for French majors who wish to take two additional credits.

Fr. 461 FIELD WORK IN FRENCH STUDIES I, 3 cr. Study the outside of the United States of America.

Three class hours each week.

Fr. 462 FIELD WORK IN FRENCH STUDIES II, 3 cr. Same as Field Work in French Studies I.

Three class hours each week.

Fr. 471 Workshop I, 1 cr. A course designed for teachers in service. Laboratory and audio-visual techniques.

Fr. 472 Workshop II, 2 cr. A course designed for teachers in service. Laboratory and audio-visual techniques.

Fr. 473 Workshop III, 3 cr. A course designed for teachers in service. Laboratory and audio-visual techniques.

Ger 101 ELEMENTARY GERMAN I, 3 cr.

For those who have had no previous instruction in German. Basic training in
the four goals of understanding, speaking, reading, and writing. Emphasis
upon speaking, but a sufficient outline of structure for this level is also provided. A language laboratory is used in conjunction with this and the following
courses.

Prerequisite: None. Three class hours each week. Ger 102 ELEMENTARY GERMAN II, 3 cr. Continuation of German 101. It contains more reading, and the speaking is more advanced.

> Prerequisite: German 101 or one year of high school German. Three class hours each week.

Ger 103 Intermediate German I. 3 cr.

The goals are understanding, speaking, reading, and writing on a more advanced level. It includes a review of the structural principles covered in German 101 and 102, and additional structural material, idioms, etc., are presented.

More emphasis is placed upon both speaking and reading.

Prerequisite: German 102 or two years of high school

German.

Three class hours each week.

Ger 104 Intermediate German II, 3 cr. Continuation of German 103, but speaking, reading, and writing on a more advanced level.

> Prerequisite: German 103. Three class hours each week.

Ger 201 GERMAN CULTURE AND CIVILIZATION I, 3 cr. Covers in outline the entire field of German literature with particular reference to the German people and their historical, political, economic, and geographic background and to their art and folklore.

Prerequisite: German 104. Three class hours each week.

Ger 202 GERMAN CULTURE AND CIVILIZATION II, 3 cr. Continuation of German 201.

Prerequisite: German 104. Three class hours each week,

Ger 205 GERMAN CONVERSATION AND COMPOSITION I, 3 cr. Concentrates on the further development of knowledge and skill in speaking and writing, based upon a relatively small amount of reading which is particularly well adapted to this purpose.

Prerequisite: German 104. Three class hours each week.

Ger 206 ADVANCED GERMAN CONVERSATION AND COMPOSITION II, 3 cr. Continuation of 205; conducted on a more advanced level.

Prerequisite: German 205 or the completion of German 104 with the grade of A or B. Three class hours each week.

Ger 301 GERMAN LITERATURE I, 3 cr. A study of several German masterpieces, Prerequisite: German 104. Three class hours each week.

Ger 302 GERMAN LITERATURE II, 3 cr. Continuation of German 301.

Prerequisite: German 104. Three class hours each week,

Ger 303 GERMAN CLASSICAL MOVEMENT, 3 cr. A study of the writings of German classical authors and thorough discussions of classical literary principles as they appear in Germany, France, England, Greece, and Rome.

Prerequisite: German 104. Three class hours each week.

Ger 304 German Romantic Movement, 3 cr. A study of the writings of German romantic authors and thorough discussions of romantic literary principles as they appear in Germany and elsewhere.

Prerequisite: German 104. Three class hours each week.

Ger 321 GOETHE'S FAUST, 3 cr.

Concentrates on the greatest German masterpiece and provides thorough discussions of a literary and social nature.

Prerequisite: German 104. Three class hours each week.

Ger 322 GERMAN LYRIC POETRY, 3 cr.

Readings and discussions from an anthology of the whole field of the German lyric.

Prerequisite: German 104. Three class hours each week.

Ger 326 THE NINETEENTH CENTURY AFTER GOETHE, 3 cr.

Readings and discussions concerning the literature and the social, economic, and political background of the century preceding our own.

Prerequisite: German 104. Three class hours each week.

Ger 340 Scientific German, 3 cr.

Readings from typical scientific books and periodicals in the various fields of science. Emphasis is laid upon vocabulary, word formation, sentence structure, and relating the parts to a meaningful whole.

Prerequisite: German 104. Three class hours each week,

Ger 401 CONTEMPORARY GERMAN LITERATURE I, 3 cr.

Readings from representative poets, dramatists, novelists, short story writers, and essayists of our own century. Particular attention is given to trends in thought, literary analysis, and the social and political scene.

Prerequisite: German 104. Three class hours each week.

Ger 402 CONTEMPORARY GERMAN LITERATURE II, 3 cr. Readings from contemporary newspapers and periodicals. Discussions with reference to the reading matter and the contemporary scene in Germany,

Not currently offered.
Prerequisite: German 104.
Three class hours each week.

Ger 412 LITERARY, CULTURAL, AND POLITICAL HISTORY OF GERMANY, 3 CT. Readings from German literature with reference to the history of the country in conjunction with a regular history.

Prerequisite: German 104. Three class hours each week.

Ger 421 Studies in German Literature, 1 cr.

Designed to meet special problems or deficiencies.

Prerequisite: 18 credits of German numbered 201 or higher; and consent of instructor.

Hours to be arranged.

Ger 422 Studies in German Literature, 2 cr. Designed to meet special problems or deficiencies.

Prerequisite: 18 credits of German numbered 201 or higher; and consent of instructor.

Hours to be arranged.

Ger 423 Studies in German Literature, 3 cr. Designed to meet special problems or deficiencies. Prerequisite: 18 credits of German numbered 201 or higher; and consent of instructor.

Hours to be arranged.

- Ger 461 FIELD WORK IN GERMAN STUDIES I, 3 cr. Prerequisite: Consent of instructor. Hours to be arranged.
- Ger 462 Field Work in German Studies II, 3 cr. Prerequisite: Consent of instructor. Hours to be arranged.
- Ger 471 Workshop I, 1 cr. Prerequisite: Consent of instructor. Hours to be arranged.
- Ger 472 Workshop II, 2 cr. Prerequisite: Consent of instructor. Hours to be arranged.
- Ger 473 Workshop III, 3 cr. Prerequisite: Consent of instructor. Hours to be arranged.
- Ger 474 Workshop IV, 4 cr. Prerequisite: Consent of instructor. Hours to be arranged.

SPANISH

Span 101 ELEMENTARY SPANISH I, 3 cr. For beginners in the language. Elementary pronunciation, grammar, reading, and simple spoken Spanish. Three class hours each week.

Span 102 ELEMENTARY SPANISH II, 3 cr. A continuation of Elementary Spanish I. Prerequisite: Spanish 101 or one year of high school Spanish. Three class hours each week.

Span 103 Intermediate Spanish I, 3 cr. Review of grammar and vocabulary building. Practice in listening, speaking, reading, and writing the language. Prerequisite: Spanish 101 and 102, or two years of high school Spanish. Three class hours each week.

Span 104 Intermediate Spanish II, 3 cr. Reading from modern authors. Practice in speaking and listening to Spanish.

Prerequisite: Spanish 103. Three class hours each week.

Span 201 CULTURE AND CIVILIZATION OF SPAIN, 3 cr. Elements of the rich heritage of Spain will be presented and explained entirely in the Spanish language. The course will cover the highlights of Spanish culture and civilization from the Golden Age to the Generation of '98.

Prerequisite: Spanish 104. Three class hours each week. Span 202 CULTURE AND CIVILIZATION OF HISPANIC AMERICA, 3 cr. Elements of Latin America Culture and Civilization from the Aztecs and Marjans to the present day Peace Corps projects. The course will be conducted in Spanish.

Three class hours each week.

Span 205 Spanish Conversation and Composition I, 3 cr. The aural-oral approach to the mastery of Spanish, Audio-visual and language laboratory techniques used.

Three class hours each week.

Span 206 Advanced Spanish Conversation and Composition, 3 cr. Similar to Spanish 205 but utilizing a different manual and tapes. May be taken before or after the preceding course which is of the same level of difficulty.

Three class hours each week.

Span 301 Survey Literature of Spain, 3 cr. A study of the master works of representative Spanish authors in each era and movement.

Three class hours each week.

Span 302 Survey Literature of Hispanic America, 3 cr. A panoramic view of the literature of the New World. Selections of prose and poetry by Latin American writers.

Three class hours each week.

Span 304 Spanish Short Story, 3 cr.
The development of this narrative form will be examined. Selections from the principle writers will include the period of the Poema del Cid, the picaresque era and modern times.

Three class hours each week.

Span 305 CERVANTES, 3 cr.
The literature of the Spanish Renaissance will be treated in depth. The emphasis will be on *Don Quixote*.

Three class hours each week.

Span 306 Spanish Drama, 3 cr.
A study of the dramatic literature of Spain with particular reference to the romantic and realistic movements.

Three class hours each week.

Span 320 Masterpieces of Hispanic American Literature, 3 cr. One author to be studied in depth. Subject to be selected. Three class hours each week.

Span 401 Readings in the Literature of Spain and Hispanic America, 3 cr.

This course is designed for Spanish majors wishing to study in depth an author of Spain and one of Hispanic America. Works to be selected.

Three class hours each week.

Span 412 LITERARY, CULTURAL AND POLITICAL HISTORY OF
SPAIN AND HISPANIC AMERICA, 3 cr.
A summary of the accomplishments of the Spanish-speaking world from the Golden Age to Francisco Franco.
Three class hours each week.

Span 421 Studies in Spanish Literature, 1 cr. For the benefit of teachers in service and others as needed.

Span 422 Studies in Spanish Literature, 2 cr. For the benefit of teachers in service and others as needed.

Span 423 Studies in Spanish Literature, 3 cr. For the benefit of teachers in service and others as needed.

Span 461 FIELDWORK IN SPANISH STUDIES I, 3 cr. Study the outside of United States of America.

Three class hours each week.

Span 462 FIELDWORK IN SPANISH STUDIES II, 3 cr. Study the outside of United States of America.

Span 471 WORKSHOP, 1 cr.
To be offered for teachers in service as needed.

Span 472 Workshop, 2 cr. To be offered for teachers in service as needed.

Span 473 Workshop, 3 cr.
To be offered for teachers in service as needed.

MUSIC DEPARTMENT

MR. DOVENSPIKE, Department Head; Mr. Colelli, Mr. Sporny, Miss Sutton.

Mus 180 Co-Curricular Activities I-Band, 1 cr.

Mus 181 Co-Curricular Activities I-Chorus, 1 cr.

Mus 182 Co-Curricular Activities I-Men's Glee Club, 1 cr.

Mus 183 Co-Curricular Activities I-Women's Glee Club, 1 cr.

Mus 184 Co-Curricular Activities I-Orchestra, 1 cr.

Mus 201 Introduction to Music, 2 cr.

This course provides an orientation in music experience which aims to equip the prospective teacher with a knowledge and understanding of music as it relates to general education and the art of daily living. Through the use of recordings, radio, concerts, and other media, every possible contact is made with music. The possibility of correlation with other subjects is explored. This course is required of all sophomores in general education. No prerequisite courses or special abilities are required. (One class hour may be integrated with World Culture II.)

Two class hours each week.

Mus 221 Music Materials and Procedures, 2 cr.

An intensive survey of source material beyond that contained in the above course. Includes study of the basic music series plus other publications of recordings, films, etc., with special emphasis on best methods of usage.

Mus 280 Co-Curricular Activities II-Band, 1 cr.

Mus 281 Co-Curricular Activities II-Chorus, 1 cr.

Mus 282 Co-Curricular Activities II-Men's Glee Club, 1 cr.

Mus 283 Co-Curricular Activities II-Women's Glee Club, 1 cr.

Mus 284 Co-Curricular Activities II-Orchestra, 1 cr.

Mus 301 THEORY I, 3 cr. Thorough training in the melodic and harmonic elements of music. Includes study of major and minor scales, intervals, major and minor triads, inversions, introduction and use of L. IV. and V chords. Melodic and harmonic dictation. Keyboard harmony.

Mus 302 Theory II, 3 cr.
Continuation of melodic and harmonic dictation. Introduction of seventh chords. Four part harmonization. Further investigation into other chords and their uses. Transportation, modulation and the writing of original songs.

Mus 311 Keyboard Experiences, 2 cr. Concentration on piano technique using beginners piano method and advancing as far as possible into higher graded material. Ability to play accompaniments for songs found in the basic music series for elementary schools.

Mus 312 Sight Singing, 3 cr. Concentration on sight reading of material traditionally taught in public schools. Includes both melodic and rhythmic aspects as well as two, three, and four part singing.

Mus 321 Fundamentals of Music, 2 cr. Designed to prepare the elementary teacher in basic fundamentals and skills. Includes the study of note values, meter signatures, scales, key signatures, plus the use of syllables in reading music. A basic introduction to the piano keyboard is also included. Three class hours each week.

Mus 326 CHILDREN'S SONG LITERATURE, 3 cr. Study and memorization of songs for all occasions. Songs about animals, seasons, transportation, other countries, etc., are representative of material to be included. Purpose of course is to provide a memory repertoire for the teacher.

Mus 380 Co-CURRICULAR ACTIVITIES III-BAND, 1 cr.

Mus 381 Co-CURRICULAR ACTIVITIES III-CHORUS, 1 cr.

Mus 382 Co-Curricular Activities III—Men's Glee Club. 1 ct.

Mus 383 Co-Curricular Activities III-Women's Glee Club, 1 cr.

Mus 384 Co-Curricular Activities III-Orchestra, 1 cr.

Mus 430 OPERA SURVEY, 3 cr.

This course will provide its students with (1) the origin and history of opera, (2) national contributions to the art, (3) the listing and analyzation of numerous representative operas, (4) the relationship of plots to history and events.

Three class hours each week.

Mus 432 Twentieth Century Music Survey, 3 cr. A study of the development of Contemporary music. A discussion of causes and effects of compositional styles and the listening of such styles on recordings. Also the implication of jazz in the contemporary scene. Three class hours each week.

PHILOSOPHY DEPARTMENT

DR. LACKNER, Department Head; Mr. Berman, Mr. Cherrington, Mr. Tsambassis, and Mr. Walsh.

Phil 201 Introduction to Philosophy, 3 cr. This course is designed to familiarize the student with the major problems of philosophy as discussed by classical and contemporary philosophers. Based on selected readings.

Three class hours each week.

Phil 202 Introduction to Locic, 3 cr. Examines the nature and forms of meaning and argument. It includes semantics (meaning of terms and functions of language), formal logic (deductive reasoning), and scientific methodology (induction).

Three class hours each week.

Phil 301 History of Ancient Philosopher, 3 cr. Ranges over the pre-Socratic philosophers, Plato, Aristotle, the Stoics, Epicureans, Skeptics, through to the philosophers of the Hellenistic period, including Plotinus.

Three class hours each week.

Phil 302 HISTORY OF MEDIEVAL PHILOSOPHY, 3 cr. Begins with Augustine and proceeds with Erigena, Anselm, Abelard, Aquinas, Roger Bacon, Duns Scotus, and William of Occam. Also includes such critical issues as the problem of Universals.

Three class hours each week.

Phil 303 HISTORY OF MODERN PHILOSOPHY, 3 cr. A survey of philosophical ideas from the Renaissance to the Enlightment. It lays special emphasis on such influential thinkers as Francis Bacon, Descartes, Hobbes, Spinoza, Leibnitz, Locke, Berkeley, Hume, and Kant. Three class hours each week.

Phil 304 NINETEENTH CENTURY PHILOSOPHY, 3 cr. Surveys the development of German Idealism with Fichte, Schelling, Hegel, and the voluntaristic reaction to it with Kierkegaard, Schopenhauer, and Nietzche. Also examines the developments in British Empiricism and French Positivism. Prerequisite: Philosophy 303

Phil 305 ETHNICS, 3 cr. Examines the major ethical system of Western civilization, and discusses their philosophical foundations. Analyzes the meaning of such moral terms as "good, "right," and "duty."

Three class hours each week.

Phil 306 Philosophy of Relicion, 3 cr. Discusses the nature of religion, the arguments for and against the existence of God, the question of religious knowledge (mysticism and revelation), the problem of evil, the quest for immortality, and the nature of religious discourse. Prerequisite: Philosophy 201.

Three class hours each week.

Three class hours each week.

Phil 307 Philosophy of Art, 3 cr.

Examines the nature and basis of criticism in the fine arts, including literature, painting, music, sculpture, architecture, and the dance. Based on selected readings from prominent classical and contemporaru philosophers and art critics.

> Prerequisite: Philosophy 201 Three class hours each week.

Phil 308 AMERICAN PHILOSOPHY, 3 cr. Surveys the development of American thought from Jonathan Edwards to the present. Lays special emphasis on Peirce, Royce, James, Santayana, Dewey, and Whitehead.

Prerequisite: Philosophy 201. Three class hours each week.

Phil 309 HISTORY OF SCIENCE, 3 cr. A survey of the development of scientific inquiry among Greek, Medieval, and Classical Renaissance thinkers. Three class hours each week.

Phil 401 CONTEMPORARY PHILOSOPHY, 3 cr. Discusses current philosophical movements, such as Linquistic Analysis and Logical Positivism, Phenomenology and Existentialism, Dialectical Materialism, Realism, Idealism, Naturalism, and Pragmatism.

Prerequisite: Philosophy 303 or 304.

Three class hours each week.

Phil 402 Epistemology, 3 cr. A historical survey of theories of knowledge, both classical and contemporary.

Prerequisite: Philosophy 303.

Three class hours each week.

Phil 403 Philosophy of Science, 3 cr. Study of the methods, concepts, and presuppositions of scientific inquiry.

Prerequisite: Philosophy 202 and 203. Three class hours each week.

Phil 404 METAPHYSICS, 3 cr. Inquiry into the nature of reality and the meaning of existence.

Prerequisite: Philosophy 303 or 304.

Three class hours each week.

Phil 405 Symbolic Logic, 3 cr. An advanced course in logic which examines the meaning of statement con-nectives and the use of truth tables, the structure of arguments in terms of the propositional calculus, quantification and classes, and the structure of axiomatic systems.

PHYSICAL SCIENCE

MR. CRAIG, Department Head; Mr. Biagas, Mr. Fleming, Mr. Gabor, Mr. Hackett, Mr. Hartman, Mr. McCloskey, Mr. Matzen, Mr. Petrick, Dr. Serene, Mr. Serinko, Mr. Zopetti.

GENERAL EDUCATION

Sci 111 MAN AND HIS PHYSICAL WORLD, 5 cr.
A broad, survey-type, non laboratory course devoted to the field of physics, chemistry and astronomy and their related branches. Besides lecture-recitation methods, motion pictures, demonstration experiments, oral reports and other activities of a research or audio-visual project type are used.

Five class hours each week.

CHEMISTRY

Chem 101 GENERAL CHEMISTRY I, 4 cr. The course includes a chemical study of the structure and behavior of matter. Topics stressed the first trimester include atomic structure and valence, equation and formula writing, the periodic table, the gas laws, oxidation and reduction, solutions, ionization stoichiometry. Three lecture hours and three laboratory hours each week.

Chem 102 GENERAL CHEMISTRY II, 4 cr. Includes the fundamental ideas concerning the common metals and non-metals. and introduction to radioactivity and nuclear reactions and semimicro qualitative analysis. Three lecture hours and three laboratory hours each week.

Chem 201 ANALYTICAL CHEMISTRY I. 4 cr. A study of the theoretical principles and practices underlying analytical chemistry. It includes study and practice in separating and identifying the cations and anions, mathematical computations of chemical equilibria in solutions of electrolytes, and an introduction to the statistical method applicable to qualitative and quantitative procedures.

> Prerequisite: Chemistry 101 and 102 Three lecture hours and four laboratory hours each week.

Chem 202 ANALYTICAL CHEMISTRY II, 4 cr. A continuation of Chemistry III, including a study of the relationship of qualitative and quantitative analytical procedures; theory and practice of volumetric, gravimetric, and colorimetric determinations; electro-deposition and oxidation reduction methods; and unknowns involving the practices of both qualitative and quantitative procedures, stressing precision, accuracy, significant figures, and errors.

> Prerequisite: Chemistry 201 Spring 1966, Summer 1966, Spring 1967, Summer 1967, Spring 1968, Summer 1968. Three lecture hours and four laboratory hours each week.

Chem 301 ORGANIC CHEMISTRY I, 4 cr. An elective for those who plan to major or minor in Chemistry. It includes a study of the hydrogen compounds of carbon of the aliphatic series and emphasis on structural relationships and nomenclature as well as uses, characteristics properties, and synthesis.

> Prerequisite: Chemistry 101 and 102 Fall 1965, Summer 1966, Fall 1966, Summer 1967, Fall 1967, Summer 1968. Three class and four laboratory hours each week.

Chem 302 ORGANIC CHEMISTRY II, 4 cr. A continuation of Organic Chemistry I, dealing primarily with the amines and proteins and those compounds belonging to the aromatic series. Both microand semi-micro techniques are employed to stress the properties and type reactions of the usual classes of organic compounds.

Prerequisite: Chemistry 301 Spring 1966, Summer 1966, Spring 1967, Summer 1967, Spring 1968, Summer 1968. Three class and four laboratory hours each week.

Chem 311 ORGANIC PREPARATIONS, 3 cr. An advanced course in synthetic organic chemistry. Important reactions and special experimental techniques are applied to the preparation of more complex organic compounds.

Prerequisite: Chemistry 201 and 202. Summer 1968.

Three class and four laboratory hours each week.

Chem 321 Biological Chemistry I, 4 cr. Includes the chemistry of the carbohydrates, fats and proteins; a survey of the chemistry and function of enzymes, vitamins and hormones.

Prerequisites: Chemistry 301 and 302. Fall 1965, Summer 1966, Fall 1966, Fall 1967, Summer 1968. Three class and four laboratory hours each week.

Chem 322 BIOLOGICAL CHEMISTRY II, 4 cr. Includes the chemistry of the carbohydrates, fats and proteins; a survey of the chemistry and function of enzymes, vitamins and hormones. Prerequisites: Chemistry 301 and 302, and 321. Spring 1966, Summer 1966, Spring 1967, Spring 1968, Summer 1968.

Three class and four laboratory hours each week.

Chem 351 AGRICULTURAL CHEMISTRY, 3 cr. Includes discussion of plant fertilizers and their soil reactions, plant composition and chemurgy, chemical control of weeds, etc., as well as laboratory work in the field.

> Prerequisites: Chemistry 201 and 202, and 301. Summer 1967. Two class and three laboratory hours each week.

Chem 361 INDIVIDUAL WORK I, 1 cr.

Chem 362 INDIVIDUAL WORK L. 1 cr.

Chem 401 PHYSICAL CHEMISTRY I, 4 cr. Properties of gases; elementary thermodynamics; thermochemistry; Kinetic molecular theory; atomic and molecular structure; introduction to the theory of chemical bonding.

Prerequisites: Chemistry 201, and 202, Mathematics through intergral calculus. Fall 1965, Summer 1966, Fall 1966, Spring 1967, Summer 1967, Fall 1967, Summer 1968. Three hours lecture and four hours laboratory each week.

Chem 402 Physical Chemistry II, 4 cr. Kinetics; properties of solids and liquids; phase equilibria; colligative properties of solutions; electrolytic conductance and electrochemistry.

Prerequisites: Chemistry 401.
Spring 1966, Summer 1966, Spring 1967, Summer 1967, Spring 1968, Summer 1968.
Three hours lecture and four hours laboratory each week.

Chem 411 ADVANCED INORGANIC CHEMISTRY I, 3 cr. Modern treatment of principles of inorganic chemistry emphasizing chemical bonding, stereochemistry, coordination compounds with emphasis on periodic properties, acids and bases and non-aqueous solvents.

Prerequisites: Physical Chemistry 401 and 402. Fall 1965, Fall 1967. Three class hours per week.

Chem 412 ADVANCED INORGANIC CHEMISTRY II, 3 cr. Modern treatment of principles of inorganic chemistry emphasizing chemical bonding, stereochemistry, coordination compounds with emphasis on periodic properties, acids and bases and non-aqueous solvents.

Prerequisites: Chem 411

Spring 1966, Spring 1968.

Three class hours per week.

Chem 421 Advanced Organic Chemistry I, 3 cr.
Consideration of synthetic methods, structure determinations, and reation mechanisms for acyclic, alicyclic, and aromatic compounds of synthetic and natural origin, with emphasis on modern theory and practice.

Prerequisites: Chemistry 301 and 302. Fall 1966

Three class hours per week.

Chem 422 ADVANCED ORGANIC CHEMISTRY II, 3 cr. Consideration of synthetic methods, structure determinations, and reaction mechanisms for acyclic, alicyclic, and aromatic compounds of synthetic and natural origin, with emphasis on modern theory and practice.

Prerequisites: Chemistry 421. Summer 1966.

Three class hours per week.

Chem 431 LITERATURE OF CHEMISTRY, 1 cr. Designed for chemistry majors and includes a survey of the literature in the field.

> Prerequisites: Completion of 18 hr. in Chemistry and German I (two trimesters). Every chemistry major should endeavor to take this course.

Spring 1967. One class hour each week.

Chem 441 LAB. TECHNIQUES WITH INSTRUMENTAL ANALYSIS I, 3 cr. Includes Laboratory planning; selecting, use, care, and storage of equipment, making of solutions and various reagents from stock supplies. Setting up of classroom demonstrations for use in secondary schools is stressed.

Prerequisite: Chemistry 201 and 202.

Given Fall 1966.

Three class and four laboratory hours each week.

Chem 442 LAB TECHNIQUES WITH INSTRUMENTAL ANALYSIS II, 3 cr. Includes laboratory planning; selecting, use, care, and storage of equipment, making of solutions and various reagents from stock supplies. Setting up of classroom demonstrations for use in secondary schools is stressed.

Prerequisite: Chemistry 441.

Given Spring 1967. Three class and four laboratory hours each week.

Chem 445 CHEMISTRY FOR HIGH SCHOOL TEACHERS, 3 cr. Designed to strengthen the preparation of the teacher in service and will include recent ideas in chemical bonding, crystal structure, radio and nuclear chemistry.

Prerequisite: Certification in Physical Science or Chemistry. Given Summer 1966, Summer 1967, Summer 1968.

Three class hours each week.

Chem 481 INDIVIDUAL WORK I, 1 cr. An opportunity for each student specializing in the area of Chemistry to organize, investigate and report on a specific problem of his own selection.

Chem 482 Individual Work II, 1 cr.

The continuation of Individual Work I in the second semester.

Prerequisite: The completion of Individual Work I.

Chem 495 CHEMISTRY SEMINAR, 1 cr. Given Fall 1965, up to and including Summer 1968.

PHYSICS

Physics 100 Physics Industrial Arts, 4 cr. An introductory course in physics with emphasis on mechanics. The topics include vectors, forces, work, power, and energy. Considerable attention is given to the application of the principles of physics to machine.

Fall 1965, Spring 1966, Summer 1966, Fall 1966, Spring 1967, Summer 1967, Fall 1967, Spring 1968, Summer 1968.

Prerequisite: Algebra

Three class periods and three laboratory hours each week.

Physics 101 Physics I, 4 cr. An introductory course in mechanics. Some of the topics studied are the mechanics of solids, liquids, gases. The student is given an opportunity and required to solve some problems and proofs by calculus.

Fall 1965, Spring 1966, Summer 1966, Fall 1966, Spring 1967, Summer 1967, Fall 1967, Spring 1968,

Summer 1968.

Pre or Co-requisite: Differential Calculus. Three class and three laboratory hours each week.

Physics 102 Physics II, 4 cr.
A continuation of Physics I. Some of the topics discussed are: production and nature of sound waves, including music sounds, thermometry, calorimetry and heat transference; reflection and refraction, optical instruments, spectra and interference; and selected topics of the newer developments in physics such as radio-activity and atomic energy.

> Fall 1965, Spring 1966, Summer 1966, Fall 1966, Spring 1967, Summer 1967, Fall 1967, Spring 1968, Summer 1968.

Pre-requisite: Cal I Co-requisite Cal II. Three class and three laboratory hours each week.

Physics 103 Physics III, 4 cr.

A course in general electricity and magnetism. It includes electrostatics, magnetism, direct and alternating current circuits, and some electromagnetic theory. Vector Algebra (dot, cross product, etc.) is introduced.
Fall 1965, Spring 1966, Summer 1966, Fall 1966,
Spring 1967, Summer 1967, Fall 1967, Spring 1968,

Summer 1968.

Pre-requisite: Phy 101 and Integral Calculus. Three class and three laboratory hours each week.

Physics 110 ASTRONOMY, 3 cr. Non-mathematical presentation of methods and results of astronomical discovery. The planet Earth — its shape, motions, and atmosphere. The seasons, calendar, time of day. Telescopes and their uses. The moon-effects on the earth, surface features, phases and eclipses. The planetary system — Law of Gravitation — satellites, comets, and meteors. The sun — its atmosphere, sunspots, and eclipses. The stars in their seasons, constellations, star clusters.

Cosmic dust and gas, the galactic system, the exterior galaxies.
Fall 1965, Spring 1966, Summer 1966, Fall 1966,
Spring 1967, Summer 1967, Fall 1967, Spring 1968, Summer 1968.

Three hours lecture each week.

Physics 221 Modern Physics, 4 cr.

This is a study of the twentieth century physics. The course includes the development in thermoionics, X-rays, and radiactivity. Considerable attention is given to the modern concepts of atomic structure together with the mechanisms of release of atomic energy and its subsequent utilization.

Pre-requisite: Physics I & II Cal II.

Three class and three laboratories each week. Spring 1966, Spring 1967, Spring 1968.

Physics 243 WAVE, MOTION Sound, 2 cr.

An intermediate course in physics considering stationary and moving waves, electromagnetic waves, Lorentz transformation of length and time, relativistic dynamics, sound and accoustics.

Pre-requisite: College Algebra and Trigonometry. Two class periods each week. Fall 1965, Spring 1968.

Physics 251 Electronics, 4 cr.

A first course in electronics which includes electronic emmision, operation of vacuum tubes, gas filled tubes, amplifiers, rectifiers, oscillators, control and wave shaping circuits, and transistor theory.

Pre-requisite 1 year of Physics. Recommended pre or co-requisite: Phy 103 and Differential Calculus.

Three hours lecture and three laboratory each week. Fall 1965, Summer 1966, Fall 1966, Summer 1967, Fall 1967. Physics 301 ADVANCED MECHANICS, 4 cr. In this course calculus is used freely in the solution of problems involving centroids, moment of inertia, statics and kinetics of a particle and rigid body. Vector Algebra (gradient, divergence, curl) and different coordinate systems are presented in solving problems.

Pre-requisite Phy 103 and 3 trimesters of Calculus. Spring 1966.

Physics 316 ADVANCED ELECTRICITY AND MACNETISM, 3 cr. This course includes topics in Electrostatic, Magnatostatic, and electromagnetic fields. Electric circuit theory, electromagnetic waves, Maxwells equations included. Vector Algebra (gradient divergence, curl, etc.) and different coordinate systems are presented in solving problems.

Pre-requisite Phy 103 and 3 trimesters of Calculus. Three hours of lecture. Spring trimester 1967.

Physics 361 Individual Work I, 1 cr. A course by conference with an instructor in Physics. Assignments may include research reading, solving problems, or experimental research. Reports of work is submitted to the instructor for evaluation.

Physics 362 Individual Work II, 1 cr. Continuation of Physics 321.

Physics 391 THERMODYNAMICS, 4 cr.

An intermediate course in Physics considering equations of state, work, the laws of themodynamics, change of phase, kinetic theory of gases, molecular velocities, transport phenomena, and statistical mechanics.

Pre-requisites: Calculus I and II.

Three class periods and three laboratory hours each week.

Physics 411 Astrophysics, 3 cr. A course dealing with the applications of Physics and Mathematics in the field of Astronomy. A study of recent discoveries in radio astronomy and the space program.

Pre-requisite: Astronomy — 12 credits of Physics & Calculus I and II.

Three lecture hours per week.

Phys 481 Individual Work I, 1 cr. An opportunity for each student specializing in the area of Physics to organize, investigate and report on a specific problem of his own selection.

Phys 482 Individual Work II, 1 cr.
The continuation of Individual Work I in the second semester.
Prerequisite: Completion of Individual Work I.

Phys 495 Seminar in Physics, 1 cr.
An introduction to the literature, history, teaching and research methods of Physics. Strongly recommended for Physics majors.

Prerequisite: 12 hours of credit in Physics.

SOCIAL STUDIES DEPARTMENT

Dr. Jack, Department Head; Mr. Buchovecky, Dr. Coode, Mr. Fear, Mr. Friedman, Mr. George, Dr. Harris, Dr. Hart, Mr. Hepner, Mr. Kania, Dr. Keller, Mr. Lechnar, Mr. Marshall, Mr. Norman, Mr. Papacostas, Dr. Seigal, Mr. Wagner, Mr. Zemo.

SOCIAL STUDIES

S Std 201 WORLD CULTURE I, 3 cr. A survey of the evolution of man's culture - his governmental, economic, social, religious, intellectual, and aesthetic activities from ancient times to the beginning of the modern world. Three class hours each week.

S Std 202 WORLD CULTURE II, 3 cr.

A survey of the evolution of man's culture - his governmental, economic, social, religious, intellectual and aesthetic activities from the end of the ancient world to modern times.

Three class hours each week.

S Std 490 Honors Course in Social Studies

S Std 491 Honors Course in Social Studies

S Std 492 Honors Course in Social Studies

S Std 495 SEMINAR IN SOCIAL STUDIES

ECONOMICS

Econ 201 Principles and Problems of Economics I, 3 cr. The course emphasizes economic principles and problems which are fundamental for an understanding and appreciation of our modern system. While stressing the basic economic concepts and national income, attention is also given to practical economic matters, including labor problems, finance, taxation, business cycles and fiscal policy.

Three class hours each week.

Econ 202 Principles and Problems of Economics II. 3 cr. The course consists of an analytical study of certain crucial present day problems such as the composition and pricing of national income, the distribution of income and the pricing of the productive factors, international trade and finance, current economic problems and the individual's responsibility as a citizen of the world.

> Prerequisite: Economics 201. Three class hours each week.

Econ 203 Industrial Relations, 3 cr. The methods by which workers, employers and the public have been and are now attempting to solve their problems are examined in the light of underlying economic principles. Labor and management representatives from the area are invited to discussion sections when possible, Three class hours each week.

Econ 205 History of Economic Thought I, 3 cr. An extensive survey of the development of economic thought from approximately 1700 to 1900, stressing the contributions of Smith, Malthus, Ricardo, Marx, and Mill.

Three class hours each week.

Econ 206 History of Economic Thought II, 3 cr. An extensive study of twentieth century economic thought starting with the contributions of Marshall and working forward to the present day. Econ. 205 is not a prerequisite,

Three class hours each week.

Econ 301 Money and Banking, 3 cr.
The course concentrates on the functioning of the monetary and banking system as a whole and its relationship with the rest of the economy. Emphasis is placed on the study of commercial banks, the Federal Reserve System, the Treasury Department, the nature of money and the significance of monetary policy.

Prerequisite: Economics 201. Three class hours each week.

Econ 302 Public Finance, 3 cr. A study of governmental activities in the collection and spending of public income. Subjects covered include; government expenditures, taxes and revenues, public debt management, fiscal policy and fiscal administration.

Prerequisite: Principles of Economics.

Three class hours each week.

Econ 321 Intermediate Economic Theory, 3 cr. A review of the nature and scope of economic theory. A study of value theory, wage theory, the theory of factor prices and income distribution, output determination, capital investments, rents and profits. Three class hours each week.

Econ 470 Community Resources Workshop A method of providing teachers in all levels of education with the opportunity to discover, study, and adapt community resources to their classroom work. The workshop includes the production of teaching materials based on workshop findings for the use of the participants and other teachers.

First Summer Session - 4 weeks, daily 9 A.M. to 4 P.M. Four credits - Graduate or Undergraduate.

Econ 471 The American Economy, 6 cr.
The American Economy course is a college-of-the-air production presented over the CBS television network and over independent as well as educational stations. One hundred fifty-nine, one-half hour lessons are broadcasted over a two trimester period. Formal class sessions are held bi-weekly. The course covers a general survey of economic principles and problems of our modern economic system.

HISTORY

Hist 101 HISTORY OF UNITED STATES AND PENNSYLVANIA I, 3 cr. A broad study of the political, economic, social, and intellectual forces which shaped the American past to 1865. Pennsylvania history assumes a prominent place in this course. Three class hours each week.

Hist 102 HISTORY OF UNITED STATES AND PENNSYLVANIA II, 3 cr. A broad study of the political, economic, social, and intellectual forces which shaped the American past since 1865. Pennsylvania history assumes a prominent place in this course.

Three class hours each week.

Hist 103 Survey of United States and Pennsylvania, 3 cr. A course for secondary curriculum students who are not majoring in history or social studies; Industrial Arts students and Speech Correction students. This course will survey the major issues of United States growth and development from 1607 to the present. Problems in American, political, social and economic history will be discussed.

Three class hours each week.

Hist 121 HISTORY OF EUROPE TO 1815, 3 cr.

The development of the social, economic, political, religious and cultural experiences of the European people. The decline of monarchial Europe and the major democratic movements in Europe.

Three class hours each week.

Hist 122 History of Europe Since 1815, 3 cr.

The growth of European national states as reflected in their political, social and economic activities. An understanding of the casual and intergroup relationships are essential to the analysis and interpretation of the difficulties facing the European world today.

Three class hours each week.

Hist 201 HISTORY OF PENNSYLVANIA, 3 cr.
The founding and development of Pennsylvania from its colonial beginnings to the present time. Emphasis is placed on the social, economic and political developments in the different periods of its history. Special attention is given to the diversity of the people and their institutions and to the growth of Pennsylvania as a leader in our modern industrial world.

Three class hours each week.

Hist 202 CONTEMPORARY HISTORY OF UNITED STATES, 3 cr.
The policies and problems of United States in the twentieth century, with
emphasis upon the Second World War and the post-war period.

Prerequisites: United States and Pennsylvania I and II.
Three class hours each week.

Hist 221 HISTORY OF CONTEMPORARY EUROPE, 3 cr.
The development of political, social, and economic forces since World War I and a history of the several attempts to resolve these problems.

Three class hours each week.

Hist 222 HISTORY OF ANCIENT WORLD, 3 cr.
The origins of Western Civilization from Pre-historic man to the disintegration of the Roman Empire, embracing a thorough study of the cultural aspects of the Fertile Crescent and Greco-Roman Civilizations.

Three class hours each week.

Hist 223 HISTORY OF MEDIEVAL EUROPE, 3 cr.
The political, social, economic, and cultural history of the Middle Ages with emphasis on institutional and cultural life from the fall of Rome to the Renaissance.

Three class hours each week.

Hist 224 Renaissance and Reformation, 3 cr.
Renaissance Culture in Europe from the 14th to the 16th century, with emphasis on Italy. It will include a treatment of late Medieval Civilization, the growth of Humanism, and the rise of the Middle Class. Also surveyed is disruption of the Universal Church, the rise of the principle branches of Protestantism, and the reform movement within the Roman Catholic Church.

Three class hours each week.

Hist 301 DIPLOMATIC HISTORY OF UNITED STATES, 3 cr. Special emphasis is placed on a study of our foreign relations from the beginning of our national history to the present. Included are separate topics such as the growth and influence of a policy of "isolation," the creation and development of the Monroe Doctrine, the changing position of the United States as a world power, and the problems incident to the assumption of the resulting responsibilities.

Three class hours each week.

Hist 302 AMERICAN CONSTITUTIONAL HISTORY, 3 cr.

The growth of the American Constitutional system, with special emphasis on constitutionalism, federalism, national-state relations, judicial review, economic regulations and civil liberties.

Three class hours each week.

Hist 303 Social History of the United States A study of the major groupings and ways of thought of the United States from colonial days to the present.

Three class hours each week.

Hist 331 HISTORY OF ENGLAND, 3 cr.

The growth of the people and institutions of England from the conquest by the Anglo-Saxons to the present. The emphasis is placed on the development of those factors that gave rise to the struggle for the establishment of democratic principles in our modern world.

Three class hours each week.

Hist 332 HISTORY OF LATIN AMERICA, 3 cr.

The development of the Latin American countries from the period of discovery to the present. The colonial period, the revolutionary period, and the national period are surveyed. European and American relations with Latin America are emphasized.

Three class hours each week.

Hist 333 HISTORY OF THE FAR EAST, 3 cr.

The interaction of East and West with emphasis on developments since 1800. The impact of modern technology, imperialism, nationalism and communism on Oriental cultures is given special attention.

Three class hours each week.

Hist 334 HISTORY OF THE MIDDLE EAST, 3 cr. The rise of the modern national state in the Middle East is the focal point of international concern since World War I. A review of the history of the peoples of the region in addition to a consideration of major political, economic and cultural factors which color international affairs in the Middle East is the basis for this work.

Three class hours each week.

Hist 335 HISTORY OF RUSSIA

Hist 401 TWENTIETH CENTURY WORLD HISTORY, 3 cr.
Background and analysis of 20th century events and emerging issues is brought out by a study of the growth of capitalism, imperialism, totalitarianism, World Wars I and II and recent effects toward collective security and international understanding.

Three class hours each week.

Hist 405 HISTORY OF AMERICAN LABOR, 3 cr.

POLITICAL SCIENCE

Pol Sci 201 American Government, 3 cr.

The general principles of the American system of constitutional government; special emphasis is placed upon the organization and functions of the national government - legislative, executive and judicial; careful treatment is given to the rights and duties of citizenship, the electorate, political parties, civil rights and the growing regulatory function of government.

Three class hours each week.

Pol Sci 301 STATE AND LOCAL GOVERNMENT, 3 cr.

A treatment of the organization, powers functions, and problems of state and local governmental units. Emphasis is placed on the growing complexity of relationship among the various levels of government as a result of technological developments and the growth of metropolitan areas.

Three class hours each week.

The case hours cach week

Pol Sci 302 International Relations, 3 cr. Background of international politics since the First World War, emphasizing successes and failures of the League of Nations, the rise of totalitarianism and World War II; the patterns of international affairs, the balance of power systems and various efforts at collective security.

Three class hours each week.

Pol Sci 303 United Nations, 3 cr.
The background, structural organization, functions and activities of the United Nations; emphasizing continued efforts toward collective security, together with the problem of strengthening the United Nations.

Three class hours each week.

Pol Sci 401 POLITICAL PARTIES, 3 cr.

This course deals with the organization and operations of political parties in the United States. Careful attention is given to the methods used by parties in nominating candidates and conducting campaigns, and to the significance of pressure groups, public opinion, and the electorate in our political life.

Three class hours each week.

Pol Sci 402 World Politics, 3 cr.

An inter-disciplinary approach to the study of international politics, stressing the basic factors of national strength-economic and military, political and strategic-and theories of power patterns as applied to regional areas of the world in the struggle of the great powers to win the neutral nations.

Three class hours each week.

Pol Sci 403 The Development of Political Thought, 3 cr. A study of the principle writings and theories of the major political philosophers from the time of the Greek City State to the eighteenth century.

Three class hours each week.

Pol Sci 404 Modern and Contemporary Political Thought, 3 cr. In this course an effort is made to provide a systematic analysis of liberalism, conservatism, modern concepts of sovereignty, pluralism, and federalism.

Three class hours each week.

Pol Sci 405 COMPARATIVE GOVERNMENT, 3 cr.
Major attention is given to Great Britain and Soviet Russia as best representing, among foreign governments, the democratic and authoritarian systems. Brief consideration is given to the governments of France and Germany. Frequent comparisons and contrasts are drawn between these governments and governments in the United States.

Three class hours each week.

Pol Sci 420 Introductory Public Administration, 3 cr.
An analysis of the history, and scope of public administration in United States; organizational theory and practice are emphasized; likewise, problems of centralization, decentralization, management, and political and legal controls.

Three class hours each week.

SOCIOLOGY

Soc 201 Principles of Sociology, 3 cr.
This is a basic course in sociology dealing with the interaction arising from the association of human beings. Emphasis is placed upon natural and social heritage, the meaning and functions of culture, the origin, functions, and characteristics of social institutions; with inquiry into the nature and genesis of social pathology.

Three class hours each week.

Soc 202 CONTEMPORARY SOCIAL PROBLEMS, 3 cr. Selected contemporary social problems, including crime, divorce, delinquency, etc., in their relation to our traditional social institutions. Current data and remedial proposals will be carefully examined and evaluated in the light of basic sociological principles.

Three class hours each week.

Soc 301 The Family, 3 cr.
This course deals with the development of the family and the home in its historical, economic and legal aspects. The various factors influencing the organization, disorganization, and reorganization of the family are considered, as well as the modern trends in this basic institution,

Three class hours each week.

Soc 302 Anthropology, 3 cr.

Antiquity of man; varieties of ancient and modern types; origins, development of preliterate culture, primitive social organization.

Three class hours each week.

SPEECH DEPARTMENT

Dr. Wilson, Department Head; Mrs. Coover, Mr. Coursey, Dr. Cowles, Mr. Emelson, Miss Langham.

Sp 101 Phonetics, 3 cr.

A study of the International Phonetic Alphabet with an analysis of positions and movements involved in the production of speech sounds based on phonetic principles; emphasis on phonetic transcription and correct pronunciation.

Sp 102 Advanced Phonetics, 3 cr.

The advanced study of the International Phonetic Alphabet with an analysis of the phonetic sounds according to their kinesthetic, acoustical, and physiological principles; variations of phonemes and the matter of producing them.

Sp 201 Fundamentals of Speech, 3 cr.
This course is designed to provide the student with both the theory and practice of public address. Emphases are placed upon the speech processes and upon speech as a communicative and motivating activity.

Sp 202 Forms of Public Address, 3 cr.

Sp 202 Forms of Public Address, 3 cr.

This course is designed to reinforce and intensify the values of Speech 201. It is further designed to give the student an introduction to the characteristics of various types of speeches and speech situations, and practice in the preparation and delivery of speeches for various occasions.

Prerequisite: Speech 201.

Sp 203 Oral Interpretation, 3 cr.
The oral re-creation of literature, based on the processes of finding the meaning in idea and in feeling and communicating that meaning to others, both orally and visually.

Three class hours each week.

Sp 204 Voice and Diction, 3 cr.

A course planned to aid teachers in gaining vocal control. Part of the time is devoted to correction, pronunciation, articulation, and enunciation.

Three class hours each week.

Sp 221 CHORAL SPEAKING, 3 cr.

Practice of correct and expressive speech through the group achievement of the verse speaking choir. This course is designed to aid both elementary and secondary teachers in the organization, selection of materials, methods, and direction of choral speaking.

Three class hours each week.

Sp 301 Arcumentation and Debate, 3 cr. This course is designed to give the student familiarity with, and practice in, the principles of logical reasoning and oral presentation of reasoned discourse. Practice is provided in formal debate, utilizing a variety of formats. Prerequisite: Speech 201.

Sp 302-304 PARLIAMENTARY PROCEDURE, 1 to 3 cr. This course is designed to give the student a basic knowledge of the principles and practices of parliamentary procedure, in order to prepare him for more effective participation in the formal conduct of business in general assemblies.

Sp 302 Parliamentary Procedure: Basic Principles, 1 cr.

Sp 303 Parliamentary Procedure: Motions, 1 cr.

Sp 304 Parliamentary Procedure: Organizations, 1 cr.

Sp 305 Discussion and Conference Techniques, 3 cr. This course is designed to acquaint the student with the basic principles of the scientific method as applied to the cooperative solving of contemporary problems, and the employment of this method by committees, panels, symposia and forums. Students will plan and participate in discussion of contemporary problems.

> Prerequisite: Speech 201. Three class hours each week.

Sp 311 STAGE DIRECTION, 3 cr.

A fundamental approach to the staging of a play, including script selection and analysis, casting, set design, rehearsal techniques and performance. Students will direct short scenes and one-act plays as class projects. Three class hours each week.

TECHNICAL PLAY PRODUCTION, 3 cr. A practical course in the design, planning and execution involved in play production for the following kinds of work; scenery, lighting, costume, makeup, properties, supervision and running of rehearsals and performances.

Three class hours each week.

Sp 325 CHILDREN'S THEATRE, 3 cr. The purpose of this course is to give vocational training in children's theatre to the prospective elementary and secondary Speech teachers, and to give experiences in the creative arts to those students who are engaged in other programs. This course includes consideration of methods of producing drama for the child audience: play choice, acting, directing, and technical play production, including workshop in children's theatre.

Sp 331 Acting, 3 cr. A practical course in the teaching and training of acting, considering voice, movement, characterization, internal and external techniques, plus study and application in historical periods and styles, high school and college play production. Students will get practical experience in class and campus productions. Three class hours each week.

Sp 370 Co-Curricular Activities - Forensics, 1 cr. This course is designed specifically for those students participating in intercollegiate debate, who have not taken Speech 301, Argumentation and Debate.

Prerequisite: Speech 370. Two meetings per week.

Sp 371 Co-curricular Activities— Forensics, 1 cr.

Sp 372 Co-curricular Activities—Forensics, 1 cr.

Sp 375 Co-curricular Activities-Theatre, 1 cr.

Sp 376 Co-curricular Activities-Theatre, 1 cr.

Sp 377 Co-curricular Activities-Theatre, 1 cr.

Sp 401 Theories of Rhetoric, 2 cr. This course is a study of the major works of ancient, renaissance and modern rhetoricians as they developed the currently accepted theories of persuasion. Emphasis is placed upon Aristotle's Art of Rhetoric and its influence upon later theoriests.

Prerequisite: 12 hours Speech credit. Two class hours per week.

Sp 411 History of the Theatre, 3 cr. A study of the history and development of dramatic literature from the Greeks to Off-Broadway, considering historical changes in the physical theatre, styles, costumes, acting audiences and productions.

Three class hours each week.

Sp 421 EDUCATIONAL TELEVISION AND RADIO, 3 cr.
This course is designed to give the student a basic knowledge of the theory
of television and radio. Standard techniques of production, and some insight into applications to the educational process.

Prerequisite: Sp 201 or its equivalent. Three class hours each week.

Sp 490 Honors Course in Speech I, 3 cr.
This course provides an opportunity for individual study and research on topics and materials of interest to the student but not included in other courses offered by the department, under the direction of a member of the department staff.

Prerequisite: High academic standing and approval of the proposed director of the study, the Department Head and the Dean of Instruction.

Three class hours each week.

Sp 491 Honors Course in Speech II, 3 cr.

This course provides for a continuation of work begun in Honors Course in Speech I.

Prerequisite: In addition to above, satisfactory completion of the first course in this sequence.

Three class hours each week.

Sp 492 Honors Course in Speech III, 3 cr.
This course provides for the opportunity for completion of the individual study undertaken in Speech 490 and 491, and under the same conditions.

Three class hours each week.

Sp 495 Seminar in Speech, 1 cr.

This course provides an opportunity for intensive group study of areas within the field of Speech not treated in other courses.

Prerequisite: Approval of the instructor in charge and the

Department Head.

One class hour each week.

VI. Academic Procedures

RESIDENCE

CITIZENSHIP

CREDITS

GRADING SYSTEM

SCHOLARSHIP AND ACADEMIC STANDARDS

ADVISORY SYSTEM

ADVANCED STANDING

GRADUATION

Honors

PLACEMENT

Academic Procedures

Responsibility for knowing and following the academic rules and regulations, including requirements for graduation, rests with the student. Faculty advisors assist students in planning their academic programs but are not expected to relieve the students of their responsibility.

RESIDENCE REQUIREMENTS

Students in all curriculums must complete a minimum of thirty-two credits, in courses given by the College, if they expect to receive degrees from this institution. These credits may be gained on the campus in regular day, evening, or Saturday classes; 25 percent of the number of credits required may be in extension courses given by the college.

CITIZENSHIP

In keeping with legislative provisions, a student, to be eligible for a teacher's certificate, is required to present evidence of citizenship of the United States. If he is not a citizen of the United States at the time of his admission, he is required to become naturalized before he may be granted a Teacher's Certificate. A non-citizen, however, can be awarded the Bachelor of Science in Education degree.

CREDITS

Courses are recorded in terms of "trimester hours of credit." A trimester hour of credit represents one hour a week of recitation or lecture throughout a trimester of sixteen weeks. In laboratory courses, however, a ratio of two, three, or four hours of laboratory work for one credit prevails, according to the department. Varying amounts of required outside work are also assigned, so that, where the total number of credit hours is stated to be 15 or 16, the number of clock hours a week may total as high as 30, 32 or more. Descriptive titles and credit values of courses appear in the section of this bulletin devoted to course offerings.

EVALUATION OF CREDITS

An evaluation of credits is considered valid only for the year in which the distribution is made. The situation exists because of frequent changes in regulations governing the value of credits and in the requirements for certification and graduation made by the State Department of Public Instruction, the State Council of Education, and the Board of Presidents of the State Colleges. Students are

urged to keep themselves informed about their credit standing by occasional inquiry, other than at registration periods, at the office of their Curriculum Director.

Students who are not graduates of first-class four-year secondary schools must have their credits evaluated by special procedure. Persons to whom this applies should consult the Dean of Instruction.

NORMAL SCHOOL CREDITS

All persons who were graduated from a State Normal School prior to September 1927, and who have a four-year secondary school education will be granted not more than 68 trimester hours of credit toward a degree.

Students who were graduated from a State Normal School before four years of secondary school preparation were required and who still have not satisfied this requirement should apply to the Secondary Credentials Division of the Department of Public Instruction, Harrisburg, Pennsylvania, for information about obtaining a secondary school equivalent certificate, which, when issued, will be accepted by the college for admission to a degree curriculum.

CREDIT BY EXAMINATION

- (a) A student may request an examination in any subject matter area in which he registers for the purpose of securing exemption from taking a course.
- (b) A student shall be given credit for a course in which he registers and in which he demonstrates competence by a qualifying examination.

Application for examination under (b) should be made to the Dean of Instruction at the time of registration. The examination will be given within two weeks of the time of application.

ADVANCED STANDING CREDIT

Credit for advanced standing is not allowed for work done by correspondence, nor will credit be given for courses which are not equivalent to those required or approved in the curriculums offered at this college or for courses completed at other colleges or universities in which grades below C were earned. All credits of students who apply for admission with advanced standing must be approved by the Dean of Instruction. Credits from colleges not approved by the Department of Public Instruction of Pennsylvania or other accrediting organizations will not be accepted toward either certification or graduation.

EXTENSION CREDITS

The college will accept for graduation a limited number of extension credits from other accredited institutions only when those credits have been earned in courses taught by persons who were then giving their full time to extension instruction in such institutions or to a combination of extension and campus instruction. Usually not more than the equivalent of one year's work of 32 trimester hours in extension courses will be accepted toward a degree.

CORRESPONDENCE COURSES

Credits for correspondence courses are not accepted except for members of the armed forces submitting records through the United States Armed Forces Institute, Madison, Wisconsin.

TRANSCRIPTS OF CREDITS

Official transcripts, obtainable through the Registrar upon the written request of the student, will be sent to the State Department of Public Instruction for use in obtaining certification or to institutions to which credits are to be transferred.

Only the work completed at the California State College will be included in the transcript. Work taken at another institution should be certified directly from that institution.

One copy of a transcript of credits earned at California State College will be issued free of charge. A charge of one dollar is made for a second and for each subsequent transcript. This fee of one dollar will be waived for transcripts that are "to be used in connection with induction, enlistment, or advancement in the armed forces."

Transcripts cannot be prepared during the last week of trimester or during the registration period. Persons planning admission to graduate school or to transfer to another collegiate institution should file the request for transcript with the Registrar at least a month before the end of the trimester. Women who have married since leaving college should give their maiden name as well as their married name.

WITHDRAWALS

Students who find it necessary to leave the college during a trimester should, before discontinuing attendance at classes, confer with the Dean of Instruction. If after such conference it is found that the student should not continue, official withdrawal forms must be filed in the Registrar's Office. Students who leave the college without following this routine, especially the filling in of withdrawal cards, jeopardize their status.

Withdrawal forms must be properly filled in by students who desire to discontinue part of their schedules. When students merely stop attending classes without officially withdrawing, F (failing) grades are recorded on the permanent records.

CLASSIFICATION

Students are classified as freshmen when they have earned 32 or fewer credits; as sophomores when they have earned 33 to 64 credits inclusive; as juniors when they have earned 65 to 96 credits inclusive; and as seniors when they have earned 97 or more credits.

The credits used to determine the classification of students include those earned at this college and those accepted by the college from other accredited institutions on the basis of official transcripts.

GRADE REPORTS

Grade reports for students doing failing or low quality work are handed to the Dean of Instruction at the end of each eight-week period. Students reported are notified of their low grades and where deemed necessary, information is sent to the parents. The final trimester grades are mailed to the parents.

GRADING SYSTEM

A-indicates superior attainment

B-indicates attainment above the average

C-indicates average attainment

D-is the lowest passing grade

F-indicates failure

P—indicates passing. (Used for required preparatory courses, orientation, and student teaching courses.)

Inc-indicates incomplete work

W-indicates withdrawal from a course

For the purpose of interpreting percentage grades into letter grades, the following local standards have been approved by the faculty.

> 95% to 100%—A 88% to 94%—B 76% to 87%—C 70% to 75%—D Below 70%—Failing

The symbol, Inc., is not used unless the student has been in attendance throughout the trimester or session and because of personal illness, covering two or more consecutive weeks, the student is not able to meet the requirements of the course at the end of the session. It indicates that as the work is incomplete the final grade is being withheld until the student fulfills all the requirements of the course. It is only used when conditions and circumstances warrant and when evidence is presented to justify its being given. An incomplete is always accompanied by a supplementary symbol indicating the character of the work already done: IncF, IncD. The following conditions govern an incomplete:

- 1. It must be removed by arrangement between the student and the instructor in the session, either trimester or summer, immediately following.
- 2. After the lapse of one term, trimester or summer, the grade may be changed only upon approval of the Dean of Instruction.
- 3. After the lapse of one year, the incomplete grade automatically becomes a grade of F and cannot be removed without the student's repeating the course.

QUALITY POINT SYSTEM

As there is a quality standard for passing each course, so there is a standard for completing a curriculum. This is made possible by the establishment of a quality point system which states that students cannot be graduated by getting merely passing grades in each course.

The quality point system requires that a student, before he can be graduated, must complete all required and elective courses in the curriculum which he is pursuing, have the minimum number of credits required by his curriculum, and earn a quality point average of at least 2.0 (C) for all courses in which grades other than P are given. Only courses completed at this college are included in the quality point computation.

Each credit of work completed at California is awarded quality points which are computed according to the following scale; each credit of A grade is multiplied by 4, B grade by 3, C grade by 2, D grade by 1, and F grade by 0. Courses dropped without the consent of the Dean of Academic Affairs shall constitute an F. Courses in which P grades are given do not count in quality point computation. Courses transferred from other approved collegiate institutions are not counted in the quality point average.

SCHOLARSHIP AND ACADEMIC STANDARDS

Students admitted to California State College are expected to maintain an adequate academic average each trimester in attendance in order to continue their studies.

- 1. First trimester freshmen who earn a quality point average of less than 1.75 will automatically be placed on academic probation for the following trimester.
- 2. Students other than first trimester freshmen who earn a quality point average of less than 2.00 during the trimester will automatically be placed on academic probation for the following trimester.
- 3. Students who earn a quality point average of less than 2.00 during the trimester of academic probation will be placed on probation for a second trimester. During the second consecutive period of probation, the student will be placed on a limited schedule under the supervision of the Director of Academic Guidance. At the end of the second probationary period, approval by the Director of Academic Guidance is necessary for continuation in the college program. An appeal of the decision may be reviewed by an appropriate committee. Requests for an appeal must be made in writing to the Director of Academic Guidance.
- 4. Re-admission to the college is not automatic. Each case will be reviewed by the Director of Academic Guidance.
- 5. Students who earn a quality point average of 2.00 or better for the trimester of academic probation will be considered clear students the following trimester.
- 6. Withdrawal from a course may be permitted by the Registrar during the first eight weeks of a trimester for the following reasons: (a) illness; (b) economic hardship where the student must obtain a job; and (c) special academic problem. Withdrawals may be permitted for the first three weeks of a term without any penalty to the student. At the end of three weeks, all withdrawals will count in computing the quality point average of the student. If a student fails to withdraw from a course in the official manner, an "F" grade will be assigned for the course.
- 7. A student's quality point average will be determined by dividing the number of credit hours taken into the total number of quality points earned.
- 8. When a course is repeated the grade received will be counted in computing the total quality point average of the student.

Re-admission Procedure

1. All requests for re-admission to college must be made in writing to the Director of Academic Guidance.

- 2. Requests for re-admission may be reviewed by a special committee consisting of:
 - (a) a faculty member of the student's choice.

(b) one of the personnel deans.

(c) the department head concerned or the student's adviser in the department.

(d) the division dean.

- (c) the Director of Academic Guidance.
- 3. A majority vote of the committee is required for the re-admission of the student who filed the request.
- 4. The college reserves the right to refuse the privilege of further attendance to a student who fails to meet the academic standards.

HONOR CREDITS

Students who wish to carry more than a normal schedule, (honor credits) of 15 or 16 trimester hours must have earned the right by reason of a high quality point average in session completed prior to registration. Exceptional cases must obtain permission from the Scholarship Committee or the Dean of Academic Affairs at the time of registration. Under no circumstances will excess credits be honored, whether taken in the college or in another institution without the approval of the Committee or the Dean. In reviewing applications to carry excess credits, the Committee or the Dean will give consideration not only to the academic standing of the applicants but also to their health records and extra-curricular activities.

Students will be given approval to carry honor credits according to the following quality point average based on the grades of the previous trimester:

Quality Point Average

Total Credits Scheduled

3.00	to	3.49	17	credits
3.50	to	4.00	18	credits

College rules, in keeping with regulations of the State Department of Public Instruction, sanction only one credit a week during a summer session; that is, six credits during a six weeks' session, three credits during a three weeks' session and twelve credits during the summer trimester.

Students are advised not to take more than one credit a week during summer terms at other colleges if they expect to use credits thus earned toward degrees from this college. Students planning a summer session at another college should consult the Dean of Academic Affairs or their Curriculum Director before registering.

SUMMER SESSION

To accelerate, a student should plan to spend several summers in full attendance. It is possible for a student to earn 12 credits in each summer session of full attendance and for this purpose a large and active summer program is provided. Generally speaking, all required courses are offered each summer as well as a representative group of elective courses in every area of specialization. Full information may be obtained from the Summer Session Bulletin issued in the Spring of each year. Address the Dean of Academic Affairs, California State College, California, Pennsylvania.

SATURDAY AND EVENING PROGRAMS

Part-time students or teachers-in-service may utilize Saturday and evening courses designed to meet the needs of a limited number of persons unable to attend regular classes.

ADVISORY SYSTEM

The college gives special attention to the new student through interviews, counseling, and testing. Efforts are made to appraise the interests and abilities of each student. Results of these data and anecdotal records are available to all counseling personnel concerned. While the whole faculty assists, upon request, with the guidance program, certain members have been assigned the following responsibilities:

- 1. The Dean of the Faculty and Academic Affairs, the Division Deans, the Director of Academic Guidance, and Directors of Curriculum assume responsibility for educational guidance: selection of curriculums, course requirements, certification requirements, student load.
- 2. The Director of Academic Guidance administers the testing program and works with students who have academic difficulties.
- 3. The Deans of Personnel are responsible for social adjustments: housing, organization of commuting students, religious activities, social activities and development of study programs.
- 4. Director of Student Activities establishes and maintains the master calendar of co-curricular activities, coordinating this program with the curricular program of the college. Through the student activities fund he serves as an adviser to the student government in determining and carrying out the request of student body activities. The scheduling and planning of activities also falls in the realm of the Director's office.

- 5. A Veteran's Clerk has been designated as Veteran's Adviser to deal with special problems relating to veterans.
- 6. A Group Guidance meeting is held during the fall and spring trimesters to advise and present up-to-date and adequate information to the entire student body on curriculum, certification, schedule, Advanced Standing and student teaching. Each department then meets regularly with its majors and provides individual advisement of these students.
- 7. Health guidance is the primary responsibility of the resident nurses and college physician.

ADVANCED STANDING PROGRAM

Formal admission to Advanced Standing is a requisite for continuing the program in the college. This marks the time when the professional work is intensified. Fourth semester students will make application for admission to Advanced Standing, for which they are required to meet the following qualifications:

- 1. The scholastic record must be a "2.0" average or better for the first two years of work taken by the student.
- 2. A "2.0" average must be attained in Communication I and Communication II (Composition I, II and Speech I, II) or the student must make a score equivalent at least to the 21st percentile on the STEP test.
- 3. Adequate background as measured by the STEP series of the Sophomore Tests in selected areas must be shown. A student whose average score in all areas is below the 21st percentile or who has any single test score below the 10th percentile will be required to pass a selected course in his area of deficiency.
- 4. A satisfactory recommendation of the Counseling Service Committee is required of each applicant.
- 5. Satisfactory evidence of physical stamina, good posture, and freedom from physical defects that may interfere with the duties of a teacher must be presented.
- 6. The voice must be pleasing and free from objectionable qualities. A student who has failed to pass the speech test because of either voice or speech defects is required to take correction work in the College Speech Clinic until his deficiencies, if remediable, have been overcome. Evidence of his having reached a satisfactory speech standard must be included in his record at the time application is made for Advanced Standing.

7. Evidence of participation in at least two co-curricular activities must be presented; a community activity may be substituted for one of the two required. This is filled in on the application form by the student.

Credentials will be examined by the Director of Academic Guidance and the decisions will be reached on the basis of all evidence available.

Students who fail to meet the requirements of Advanced standing may be given two consecutive sessions with a minimum of 12 semester hours each to remove the deficiency. If, however, the student fails to remove the deficiency by the close of the first trimester, he will be placed on a limited schedule during the second trimester.

SUMMARY OF GRADUATION REQUIREMENTS

- 1. A minimum of 128 trimester hours, including the satisfactory completion of all required courses, is necessary for graduation, together with a general quality point average of 2.0 for all courses in which grades other than P are given. Quality points are not computed for work done at other colleges or universities and only for courses taken at the college after 1931. Specific curriculum requirements may exceed the 128 credit minimum.
- 2. The student must be pronounced physically fit by a physician legally qualified to practice medicine in Pennsylvania.
- 3. The teaching ability of the student must be satisfactory to the Dean of Teacher Education regardless of other credits.
- 4. No student will be graduated with less than two years of bona fide residence. The last 32 credits needed to complete a curriculum must be taken while the student is in actual attendance at the college.
- 5. Students who have not paid all bills previously incurred shall not be permitted to re-enroll, to be graduated, or to have credits sent to other institutions or to the Department of Public Instruction until such accounts have been paid. The records of such students are "Sealed" and no information will be given until cleared.
- 6. All credentials for graduation, including certificate application and transcripts of credits from other institutions, must be filed at times specified by the Registrar. If this requirement has not been met, graduation and certification will be postponed to the following graduation date.
- 7. Students must register with the Placement Service by filling out in every detail the registration form supplied by the Placement Service.

8. Attendance at the commencement exercises is necessary, unless unusual circumstances warrant graduation in absentia. This permission is granted only through the President of the College.

HONORS DISTINGUISHED SERVICE AWARDS

The Distinguished Service Awards are granted to the most outstanding woman and the most outstanding man of each graduating class. The awards are made on the basis of activities, character, citizenship, leadership, and personality. The election of persons to receive the awards is through a committee composed of members of the faculty.

SCHOLARSHIP AWARDS

The Scholarship Award is given to the person making the highest academic average in each of the curricula of the college.

COMMENCEMENT HONORS

Commencement Honors are awarded to a limited number of the graduating class. Not more than one-eighth of the class may have honors and a minimum of two (2) years residence is required.

Highest Honors—Quality Point Average 3.75 to 4.00—No D or F grades.

High Honors—Quality Point Average 3.50 to 3.74—No D or F grades.

Honors—Quality Point Average 3.25 or better—No F grades.

This recognition can be bestowed only upon evidence of unusual ability as shown by scholastic records and in keeping with standards established and approved by the faculty.

TRIMESTER HONORS

Trimester Honors (The Dean's Honors List are awarded on the basis of quality point average at the end of the trimester as follows:

Highest Honors		
High Honors3.50	to	3.99
Honors	to	3.49



VII. Directory

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ADMINISTRATIVE ORGANIZATION ADMINISTRATION

STUDENT AFFAIRS AND SERVICES

Dean of Student Affairs and Services ALLEN G. WELSH Dean of Women Lela T. Hamilton Director of Student Activities College Physician College Nurses Dorothy Hanjorgiris, R.N. Margaret Sanders, R.N.
MARY L. VERRY, R.N.
Assistant Dean of Men ROBERT H. ALDSTADT
Assistant Dean of Men
Assistant Dean of Women ISABELLA R. KING
Director of Athletics Eugene J. Hester
ADMINISTRATIVE SERVICES
Dean of Administrative Affairs and Services
BUSINESS SERVICES
Business Manager

Professors

ASA H. ANDERSON (1956) Professor of Biology A.B., Salem College; M.A., West Virginia University; Ph.D., West Virginia University
Nevin E. Andre (1964)
Professor of Industrial Arts
B.S., The Pennsylvania State University; M.Ed., The Pennsylvania State University; D.Ed., University of Missouri
ARTHUR L. BALL (1964)
Professor of Education
Director of Secondary Education
B.A., Washington & Jefferson College; M.Ed., Duquesne University; Ph.D., University of Pittsburgh

ROBERT G. BANDER (1965)

Professor of English
A.B. Stanford University; M.A. Stanford University; Ph.D. Stanford University

Sydney C. Bausor (1960)

Professor of Biology

A.A., Columbia College; M.A., Columbia College; Ph.D., Columbia College

GABRIEL P. BETZ (1955)

Professor of Geography
Dean of Liberal Arts
B.S., University of Illinois; M.S., University of Illinois; D.S.S., Syracuse University

W. LE ROY BLACK (1965)

Professor of Ecology

B.S., University of Pittaburgh; M.S., University of Pittaburgh; Ph.D., University of Pittaburgh

RALPH C. Brown (1961)

Professor of Geography
Head of Geography Department
B.A., University of Buffalo; Ph.D., Syracuse University

B.A., University of Buffalo; Ph.D., Syracuse University

MERRILL G. CAMPBELL (1948)

Professor of Industrial Arts ...
Director of Research and Development
B.S., California State College; M.Ed., University of Pittsburgh; Ed. D., University of
Pittsburgh

ARTHUR M. COON (1960)

Professor of English
Head of English Department
A.B., Cornell University; M.A., University of Michigan; Ph.D., Cornell University

SHRIVER L. COOVER (1930)

Professor of Industrial Arts Education
Head of the Industrial Arts Department
B.S., Geneva College; M.A., University of Pittsburgh; Ed.D., University of Pittsburgh

HAROLD K. CROCKETT (1965)

Professor of English
B.A., Central State College; M.F.A., Oklahoma University; Ph.D., University of Illinois

LESLIE E. CROWLEY (1955)

Professor of Education A.B., University of South Carolina; M.Ed., University of South Carolina; Ed.D., George Peabody College for Teachers

NED CULLER (1961)

Professor of Education B.S., Pennsylvania State University; M.Ed., Pennsylvania State University; Ed.D., University of Pittsburgh

WILLIAM F. DANIELS (1964)

Professor of Education
A.B., University of North Carolina; M.A., Appalachian State Teachers College;
Ph.D., Indiana University

RALPH W. EDWARDS (1965)

Professor of English

B.A., Bowdoin College; M.A., Bread Loaf School of English; Ph.D., Boston University

KARL W. GAMBLE (1961)

Professor of Education B.S., California State College; M.Ed., University of Pittsburgh; Ed.D., University of Pittsburgh

ALBERT BROWNING HALLEY (1960)

Professor of Modern Languages
A.B., Marshall University; M.A., Harvard University; M.A., University of Michigan;
Ph.D., University of Cincinnati

GEORGE S. HART (1938)

Professor of Social Studies
A.B., University of Pittsburgh; M.A., University of Pittsburgh; Ph.D., University of Pitteburgh

ARTHUR G. HENRY (1958)

Professor of Education

Head of Atypical Education Department

B.S., University of Pittsburgh; M.A., University of Pittsburgh; Ed.D., University of Pittaburgh

JACK F. HOYES (1946)

Professor of Education B.S., California, State. Teachers College; M.Ed., University of Pittsburgh; Ed.D., University of Pittsburgh

PHIL R. JACK (1955)

Professor of Social Studies

Head of Social Studies Department

A.B., Pennsylvania State University; M.A., Pennsylvania State University;

Ph.D., University of Pittaburgh

HAROLD C. JONES (1960)

Professor of Education
B.S., California State College; M.Ed., University of Pittsburgh; Ph.D. University of Pittsburgh

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IMPORTANT BUSINESS BY APPOINTMENT

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Calendar for Academic Year 1966-1967

SUMMER TRIMESTER

Registration and Orientation ActivitiesMonday, June 6, 1966
Registration and Orientation ActivitiesTuesday, June 7, 1966
Summer School EndsSaturday, August 27, 1966
Summer CommencementSaturday, September 24, 1966
Trimester EndsSaturday, September 24, 1966
FALL TRIMESTER

SPRING TRIMESTER

Registration and Orientation Activities
Wednesday, February 8, 1967
Registration and Orientation Activities
Thursday, February 9, 1967
Registration and Orientation Activities
Friday, February 10, 1967
Classes Begin Monday, February 13, 1967
Easter Recess Begins (after classes) Thursday, March 23, 1967
Easter Recess Ends (8:00 a.m.) Tuesday, March 28, 1967
Spring CommencementSaturday, May 20, 1967
Trimester EndsMonday, May 29, 1967

