# ARIZONA STATE TEACHERS COLLEGE 

AT TEMPE

## BULLETIN

CATALOGUE ISSUE FOR THE SESSION OF 1937-1938



TEMPE, ARIZONA

## PUBLISHED QUARTERLY

ENTERED AS SECOND-CLASS MATTER, NOVEMEER 30, 1931, AT THE POST. OFFICE AT TEMPE, ARIZONA, UNDER THE ACT OF AUGUST 24, 1912.


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## COLJEGE CALENDAR

1937-1938
FALL SEMESTER, 1937

## First Faculty Meeting

7:30 P. M., Monday, Sept. 6
Assembly of Freshmen, Opening of Freshman Week 9:00 A. M., Tuesday, Sept. 7
Registration Thursday, Friday, and Saturday, Sept. 9, 10, 11
Instruction begins Monday, Sept. 13
Mid-semester scholarship reports due Friday, Nov. 12
Home Coming Day Saturday, Nov. 6
Thanksgiving recess Thursday, Nov. 25 to Sunday, Nov. 28
Christmas vacation Saturday, Dec. 18 to Sunday, Jan. 2, 1938
Final examinations....Tuesday, Wednesday, Thursday, Jan. 25, 26, 27
Last day of fall semester Friday, Jan. 28
SPRING SEMESTER, ..... 1938
Registration Monday, Jan. 31, Tuesday, Feb. 1
Instruction begins, second semester Wednesday, Feb. 2Friday, April 1
Spring Vacation Friday, April 15 to Monday, April 18
Last day for filing senior scholarship marks Friday, May 20
Baccalaureate Service ..... Sunday, May 29
Commencement Exercises .Tuesday, May 31
Final examinations Wednesday, Thursday, Friday, June 1, 2, 3
SUMMER SESSION, 1938
Summer session opens. Registration Monday, June 6
First summer term ends Friday, July 8
Second summer term begins. Registration Monday, July 11
Summer session ends Friday, August 12
Registration, fall semester, 1938Thursday, Friday, Saturday, Sept. 8, 9, 10

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## OFFICIAL DIRECTORY

## STATE BOARD OF EDUCATION



## BOARD OF EDUCATION, TEACHERS COLLEGE



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## FACULTY

1937-1938

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Arthur J. Matthews, LL.D., D.Pd. - - - - President Emeritus LL.D., Syracuse; D.Pd., University of Arizona.

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## THE COLLEGE

## PURPOSE


#### Abstract

Arizona State Teachers College at Tempe is accredited by the North Central Association of Colleges and Secondary Schools as a degree-granting institution. It is also a member of the American Association of Teachers Colleges.


The chief purpose of the College is to educate teachers for the elementary and secondary schools of Arizona. A wide selection of courses in liberal arts and sciences makes provision for the cultural background for dynamic and successful teachers. There is an adequate offering of professional courses to give the essential grounding in the theory and technique of teaching, keeping pace with the latest developments in the sciences of education and psychology.

Ample opportunities for participating in actual teaching are provided through an adequate system of training schools, and through special arrangements with the school authorities in neighboring cities.

Specialization in future teaching is provided for through a system of majors and minors whereby a student may build on his general background a special knowledge in his particular fields of interest.

A program of extra-curricular activities gives to the student the advantage of participation in forms of self-expression more directly under his control. Through these activities, desirable personal and social qualities are established.

A comprehensive program of physical training and health education is designed to insure the symmetrical development of the individual student in health and physical competence and to secure the establishment of correct health habits looking toward a greater civic usefulness.

Emphasis is laid upon the importance of student-faculty contacts and social directional influences through dormitory living and through the counsel of faculty advisers to societies and other student groups.

It is highly desirable that prospective teachers plan to spend all four years of their professional education in one institution that offers an integrated program of liberal arts, professional courses,
and activities, and that emphasizes throughout the objectives and ideals of the teaching profession.

In the Teachers' College, the state provides the means whereby graduates of approved high schools are enabled to enter a profession which solves the problems of self support and civic usefulness, and at the same time, renders the state a service of great value.

Experienced teachers, desiring to improve their status, find here an opportunity to complete their requirements for advanced certification.

With the recent development of a liberal arts background for the teaching profession, the teacher's curriculum has much in common with the curricula leading to degrees in other professions such as law, medicine, engineering, and dentistry. Such common liberal arts elements include English composition, literature, French, German, Spanish, trigonometry, analytic geometry, calculus, physics, chemistry, geology, history, sociology, and economics.

These courses are open to students who are interested in professions other than teaching and who find it convenient to take part of their general preprofessional work at Tempe and later to transfer to other colleges. For such students special programs of selected courses are arranged and planned to meet their individual needs. Such students will enjoy the advantages of the moderate costs of living and the greater amount of individual attention possible in classes of moderate size.

A further objective of the College is to continue the influence of the institution for culture beyond graduation through activities of the placement office and through contacts maintained with the alumni by the organization of alumni centers in various parts of the state.

Correspondence courses and evening courses and summer sessions afford opportunities to teachers for improvement in service and contribute to the spread of learning throughout the commonwealth.

## HISTORY

An act of the Legislative Assembly of Arizona under date of March 10, 1885, made provision for the establishment at Tempe of a school for the instruction and training of prospective teachers. The first class was graduated from the Tempe Normal School in 1887. At that time the entire institution was housed in a single
one-story building. During the years which followed, the attendance gradually increased, and with the growing public interest, the course of instruction was expanded year by year, new buildings replaced the historical structure, and from time to time additions were made to the faculty personnel.

For many years it was found necessary to provide facilities for high school training preparatory to the two-year normal school course, but by the year 1919, the growth of the high schools throughout the state had made it possible to eliminate the high school curriculum from the program of studies offered by the Normal School, and the entire attention of the faculty was devoted to the two-year normal school curriculum offered to high school graduates and leading to a diploma entitling the holder to teach in the elementary schools and the junior high schools of the state.

In 1922 the Tempe Normal School Alumni Association sponsored a movement to raise the grade of their Alma Mater to that of a standard Teachers College. After three years of thorough public discussion, in January, 1925, the question was presented to the Seventh State Legislature in the form of a bill which was passed unanimously by that body and signed by Governor Geo. W. P. Hunt on March 7, 1925. By the provisions of this bill, the Tempe Normal School became Tempe State Teachers College, with the power to establish a four-year college curriculum in education, and the authority to confer upon its graduates the degree of Bachelor of Education.

An act of the Ninth Legislature changed the name of the college to read, ARIZONA STATE TEACHERS COLLEGE AT TEMPE, and at the same time authorized the Teachers College to grant the degree of Bachelor of Arts in Education. This is the degree now conferred upon those who complete a four year curriculum. Those to whom this degree is granted are thereby entitled to receive the Arizona elementary certificate.

Students in the Teachers College may take the bachelor's degree in elementary education, entitling them to teach in the elementary grades and junior high schools, or they may elect a presecondary curriculum which leads to the secondary certificate when followed by a year's work in an institution offering graduate courses.

In March, 1937, an act of the Thirteenth Legislature authorized the College to grant the advanced degree of Master of Arts in Education.

## THE COLLEGE SETTING

## LOCATION

Tempe is in all respects an ideal location for a teachers' college. One might characterize it as a town of pleasant homes, numbering about 3,000 residents, and situated in the center of Salt River Valley, the wealthiest and most productive irrigated district in the United States. While enjoying freedom from many of the disadvantages and distractions of a larger city, yet this community is within easy reach, by automobile or by hourly motor bus, of Phoenix, the capital and largest city of the state. Three trans-continental highway systems are routed past the college campus, and the prinpal state highways feed through this route. Thus the college is easily reached from any direction by mator coach or private automobile. The Southern Pacific main line gives direct communication east and west, and connects at Phoenix with the Santa Fe line serving the northern part of the state.

The climate at this moderate altitude of 1,100 feet is ideal during the entire school year. Snow is unknown in the Valley, rain seldom mars plans for outdoor activities, and high winds are rarely experienced. Cloudless skies and bright sunshine are the rule, permitting the work of physical education and athletics to be conducted in the open air throughout the year.

Those who enjoy life out of doors will find a delight in the attractive natural features of Papago Park, a National monument, set aside for the preservation of the native fauna and flora of the desert. This park, including in its limits 2,000 acres of rolling arid country, lies just across the Salt River, within fifteen minutes from the college campus, and here one may quickly reach most attractive spots for hikes and picnic parties among the fantastic rocky ridges and shady hollows of the Elfin Hills, while such easily accessible elevations as View Point and Hole-in-the-Rock command views of the entire valley with its 300,000 acres of cultivated land stretching away to a horizon rimmed by blue ranges of rugged mountains. The park includes within its limits a chain of beautiful artificial lakes belonging to the state bass hatchery and a remarkable natural amphitheater available for the use of neighboring communities for pageants, concerts, and similar public programs.

Among the features of interest within easy reach by automobile for week-end excursions are the Superstition Mountains rising to an
elevation of five thousand feet and remarkable for their innumerable examples of grotesque rock sculpture. Each year many hiking parties make use of the interesting trails leading to the summit. An hour's drive brings one to a chain of beautiful artificial lakes, the storage reservoirs of upper Salt River. Stewart Mountain reservoir, Canyon Lake, Apache Lake, and the great Roosevelt reservoir offer unexcelled opportunities for bass fishing and boat racing. The famous Apache Trail leading to Roosevelt Dam and the great reservoir, and the Superior Highway tapping one of the richest copper districts, are among the finest examples of mountain road building in the world. The wooded banks of the Verde River offer beautiful sites for week-end camping trips.

A municipal swimming pool, the finest in Arizona, is located in a beautiful park a short half mile from the campus. This pool conforms to A.A.U. regulations, and is available for all manner of swimming contests.

The existence at Phoenix of many large industrial establishments, and the accessibility of great irrigation projects, power plants, and copper mines and reduction works offer unusual advantages for interesting and instructive excursions in connection with many of the college courses. These excursions serve for the accumulation of a wealth of subject matter and materials of value to the future teacher in service.

## CAMPUS

The setting of the College is exceptionally attractive. The campus comprises forty acres of fine level land within convenient walking distance of the business portion of the town, and is arranged in a most attractive manner, with broad shady lawns, cement walks and paved drives and a profusion of trees, shrubs and flowers. The twenty buildings are distributed over the grounds in two groups, between which extends the College Avenue drive, flanked by double rows of thrifty elms. In the distance one looks out toward the mountains, with their ever-changing lights and shadows and wonderful coloring. Portions of the lawn are specially arranged for lighting and are at the disposal of students for class parties, receptions and other social functions which derive much of their charm from being held in the open.

Ample facilities are provided for outdoor recreation in wellkept tennis courts of cement concrete, screened basketball courts, and fields for speedball, volleyball and women's baseball, archery and golf.

The athletic field occupies a tract of ten acres at the south end of the campus. The football field and the baseball diamond are maintained in perfect condition. A modern lighting system permits the use of the field for evening games and for pageantry productions. The new concrete stadium affords comfortable seating for 4,000 spectators. The main highway which borders the athletic field on the south gives easy access. Ample parking space is provided.

A tract of thirty acres within a half mile of the campus is equipped as a model farm, thus affording ample opportunity, close at hand, for experimental and practical work in all lines of agriculture. This tract is particularly valuable in preparing teachers to take charge of $4-\mathrm{H}$ Club work and other club work in the elementary schools.

## COLLEGE BUILDINGS

The original group of buildings of red brick and stone has grown up with the main building as a center, and encloses on three sides the Quadrangle of green lawn, having in its center a fountain in which pond lilies may be seen in blossom during the greater part of the year. On the west side of the main drive is a more recent group of buildings in cream-colored pressed brick, the tone of which blends harmoniously with the landscape. The dominant note in this late group is the Industrial Arts Building, with its imposing lines and dignified proportions.

During the past year an extensive building program has been carried out. All buildings have been thoroughly repaired and renovated and several have been remodeled. An addition to the library building has doubled its capacity. A new unit to accommodate one hundred students has been added to the group of women's dormitories. The new concrete-steel stadium on the recently acquired extension to the athletic field is built to house the shops, laboratories, and classrooms of the industrial arts department. A new central heating plant has been erected, and a social recreation center has been provided for off-campus women.

Main Building. The early traditions of the days of Tempe Normal School cluster about the MAIN BUILDING, with its three stories of ivy-covered red brick, which for many years after its erection in 1894, was the scene of nearly all student activities. With the growth of the institution, one department after another has been separately housed until at the present time this parent
building is devoted chiefly to classrooms for the academic work. The east half of the main floor contains the large recreation hall, which serves as the center for the social functions of the student body.

Science Hall faces the Quadrangle on the east. The lecture rooms, offices and laboratories for chemistry and physics are located on the first floor while those for biology, geography and geology occupy the second floor.

The College Auditorium is located on the west side of the Quadrangle, opposite the Science Hall. Seating capacity is provided for one thousand persons and the forty foot stage is well equipped with modern scenery, spot and flood lights, dressing rooms and showers, carpenter shop, make-up supplies, paint cabinets and stock properties sufficient to stage dramatic work of a high order. The lower floor of this building is devoted to the Women's Gymnasium with the usual apparatus, dressing rooms, lockers and showers.

The College Bookstore, conveniently located in the south end of the Auditorium Building, is kept stocked with all necessary textbooks and stationery supplies.

The Training School is located close to and south of the central group. It is a one story structure of brick in the SpanishColonial style with open corridors or colonnades enclosing an attractive patio. Here are located the offices of the Director of Training with assembly rooms and classrooms for the kindergarten, the grades and the junior high school. Many new features of lighting and arrangement are incorporated in the plans, and the furniture and equipment have been selected to conform to the latest accepted criteria. A special library of four thousand volumes suited to the work of the grades is housed in this building, and the playground adjoining is fitted with modern apparatus, permitting the play activities of the pupils to be carried on under the direct supervision of the teachers.

The Dining Hall is in a central location, conveniently reached from all dormitories. This is a thoroughly modern building and embodies in its construction late ideas with regard to sanitation, lighting and ventilation. The large, airy, well lighted kitchen is provided with a hotel range, steam cookers and charcoal broiler, and modern types of labor-saving machinery. The bakery is a model of its kind, with electrically driven machinery for mixing cakes and kneading bread. The brick oven, one of the finest in the state, has a capacity of 250 loaves. The ample refrigerating
and cold storage plant enables the steward to buy and store meats and other perishable foodstuffs in large quantities, an important factor in the low cost of board. The food is carefully selected and properly prepared. The dining room is under the direct supervision of a specially trained matron who is responsible for the cleanliness and efficiency of the service. A recent addition has doubled the floor space of the dining room. A modified cafeteria or buffet system of serving meals has so increased the capacity that five to six hundred students can be served at each meal.

The Infirmary is located in a quiet section of the campus, and is a fire-proof structure of brick and concrete with properly equipped examination room, operating room, women's and men's isolation ward, nurses' suite and every other essential feature contributing to the proper care of those cases of illness which cannot be handled effectively in the dormitories, such as cases requiring surgical operation or cases of contagious disease requiring isolation of the patient.

The President's Residence is a substantial two-story brick structure, completing the plan of the main group of buildings. Adjoining it on the west is a beautiful lawn which is provided with electrical flood lighting and is the scene of many social events of the year. The June Commencement exercises are held upon this lawn which affords seating room for three thousand people.

The buildings upon the western half of the campus form a distinct group, conveniently located and harmonizing in color and architectural design.

The Industrial Arts Building is a modern fire-proof building of concrete construction faced with cream pressed brick, which houses the departments of commerce, home economics, art and music.

Matthews Library and Administration Building is the newest addition to the Campus. It is of steel and concrete construction faced with cream brick and thoroughly fireproof. The entire upper floor is occupied by the library and reading rooms, the appointments of which embody the latest ideas in library equipment. The lower floor houses the offices of the president, the president emeritus, the dean, the registrar, the recorder, and the financial secretary. The central location of this important building facilitates access both from classrooms and from the dormitories. Its fireproof character insures the safety of the library and the valuable instructional and financial records.

The new addition to this building has doubled the capacity of the reading room and the stack room, and provides numerous classrooms, committee rooms and conference rooms.

The Men's Gymnasium is located on the athletic field at the south end of the campus. The floor space is ample for basketball, athletic exhibitions, and other public events as well as for the regular floor work connected with the physical education program. There is adequate provision for showers, locker rooms, and dressing rooms and for the storage of apparatus. A raised gallery is provided for spectators.

Stadium and Industrial Arts. This new fire-proof structure is so planned as to provide an amphitheater to seat 4,000 spectators at the athletic events, and at the same time to house the shops of the industrial arts department. The building fronts on College Avenue and careful attention has been given to the problems of correct lighting and convenient arrangement of shops and laboratories.

Dormitory Buildings. The dormitories are planned to serve as homes for the students. The facilities provided in all these buildings are practically uniform. All rooms are provided with electric light, steam heat, and hydrant water, and all are completely furnished with rug, dresser, study table, and chairs. Each student has the use of a wardrobe closet. Bathrooms are conveniently placed on every floor, and every attention is paid to details of sanitation. By means of ample screened sleeping porches provision is made, that all students sleep in the open air the whole year round. Infirmary rooms are set aside in cach dormitory and properly equipped for the care of cases of slight or temporary illness. In each dormitory living quarters are provided for a head resident, who exercises supervision over the occupants at all times.

Carrie Matthews Hall for women is a thoroughly modern structure of concrete faced with cream pressed brick. Each sleeping porch is adapted to accommodate four young women, that is, onc sleeping bay to every two rooms. One of the most attractive features of this building is the large and well lighted racreation room.

South Hall and North Hall, both for women, are situated in the west half of the campus. Fach of them accommodates seventyfive students, with the same character of furnishings and equipment as in the other halls. These two halls are joined on the west by the new West Hall, erected in the summer of 1936 , which provides rooms and sleeping quarters for one hundred women students.

Alpha Hall, a men's dormitory, in which the general equipment and furnishings are similar to those of the other dormitories, accommodates sixty young men.

East Hall, another dormitory for men, comfortably accommodates one hundred thirty-five students. In addition to the standard students' living rooms and the large sleeping porches, this dormitory furnishes a completely equipped room for the free use of those students who desire to do part of their own laundry work. There are also two large parlors, with piano, and broad shady verandas are welcome in the students' leisure hours.

## HEATING SYSTEM

All buildings on the campus are heated by steam from a central heating plant located south of the dining hall. The boiler house conforms, in its architectural features, with the other buildings of the eastern group. Two powerful boilers furnish the steam for the system of tunnels which distribute the supply pipes to all buildings on the campus. This system of concrete tunnels will eventually carry all electric wiring of the lighting, telephone and power systems underground. A third boiler supplies hot water under pressure to all buildings, thus effecting a considerable economy in fuel.

## GENERAL INFORMATION

## THE ALUMNI ASSOCIATION

All graduates of the College automatically become active members of the Alumni Association. Students who have attended for at least one semester and who have withdrawn from the institution in good standing automatically become associate members.

Including the class of 1937 , the association now numbers 4,390 active members, the majority of whom reside in the state of Arizona. This large group of influential citizens, through efficient organization, has become a potent force in promoting the welfare and advancement of the College. All loyal alumni take pride in the recent rapid growth and development of their Alma Mater, and it is their desire further to perfect their organization that it may continue effectively to serve her interests.

Endowment Fund. Confident that a teachers' college education is a most valuable asset in any walk of life, the alumni desire to extend to others the benefits of such preparation. With this objective in view, the association has conducted a vigorous campaign to raise a ten thousand dollar fund for the assistance of worthy students who need financial aid. Under the leadership of "The Father of the Endowment Fund," Clarence M. Paddock, '03, and with the co-operation of successive groups of officers of the association this fund has grown beyond expectations and now amounts to approximately $\$ 15,000$. In the few years since the establishment of this fund, over 280 students have practically owed their graduation to timely assistance received from this source.

It is the purpose of the association to keep the principal intact, the interest to be used for student assistance, therefore it has been the practice to make loans only to seniors in their second semester.

Scholarships. In addition to student loans, it has been found possible in the past two years to offer $\$ 200$ in scholarships. These awards are made annually to students in the second semester of the senior year. The number and size of the scholarships is left to the judgment of a committee of six which is composed of alumni, undergraduate, and faculty representatives. This committee selects, each year, the students who are to receive the benefits of the fund.

The first consideration in awarding the scholarships is that of economic need. Other factors considered are scholarship, leadership, dependability, and self help.

Regional Alumni Banquets. An outstanding achievement of the Alumni Association was the consummation of the plans for the state-wide series of regional banquets which were conducted as a feature of the celebration of the Golden Jubilee of the College in 1935. There has been a disposition on the part of the alumni to continue to hold these enjoyable regional meetings as annual or biennial events.

The stimulus of these events has led to the establishment of permanent alumni organizations in the various counties. A list of county chairmen is printed here for the information of members.

Cochise.................Vessa Wright Merrill, '05................. Warren, Arizona
Gila_......................Norman Clements................... 316 Apache St., Globe


Pima.....................Frank Kleinman.....................................................-. Tucson
Pinal_-................... Harvey Tyson...................................................Florence
Santa Cruz..........Lloyd Ledford...................... 124 Smelter St., Nogales
Yavapai.................Merrill Windsor.............................Box 505, Prescott
Yuma................... Mrs. Vade Long, '28........... 710 Orange Ave., Yuma
Annual Reception. The annual reception and banquet of the association is held on the evening of Alumni Day, giving every member an opportunity to renew old friendships and to pledge anew their loyalty to their Alma Mater. The date for the next reception and banquet is tentatively set for April 30, 1938.

Alumni Register. A card file is kept in the alumni office, which contains the name and present address, so far as known, of every active member of the alumni association. Members are earnestly requested to assist in the work of keeping this alumni register up to date by forwarding to the office of the Alumni Association a notice of each change in name or postoffice address.

All correspondence relative to change of address or to other alumni affairs should be addressed to:

THE ALUMNI SECRETARY<br>Arizona State Teachers College<br>Tempe, Arizona.



## EXTENSION DIVISION

Many teachers who desire to continue their studies while actively engaged in teaching find it impossible to attend the regular sessions of the College. In response to this demand, the Extension Division has been established and offers two types of service: extension courses and correspondence courses. By these two methods, the regular courses of the college curriculum are made available to the teacher in service at a moderate cost.

## EXTENSION CLASSES

Extension classes are given by regular members of the college faculty in the cities or towns within easy reach of the College or as evening courses on the college campus. By taking advantage of courses thus offered, teachers are enabled to accumulate the credits needed for the renewal of certificates or for the completion of requirements for the degree.

These courses carry either two or three hours of credit and are identical in every respect with the corresponding courses offered in the regular session.

Courses in any department of the college will be offered when there is sufficient demand for them.

For the organization of a class in any course, a minimum of twelve students must be registered. Classes are organized in September of each year. Since the selection of courses to be offered is determined largely by the number of applications received, it is important that applications for specific courses be filed with the Director as soon after September first as possible.

The fee for all extension courses is $\$ 5.00$ per semester hour of credit carried, and is payable at the time of registration.

## CORRESPONDENCE COURSES

Through the use of the mails, the privileges of the college campus and services of the teaching faculty are extended to the student whose daily occupation is such as to prevent enrolment in the regular sessions.

Persons desiring to enroll for correspondence courses will write to the Director of Extension for an enrolment blank and a copy of the Bulletin of the Extension Division. When this enrolment blank,
properly filled out and accompanied by remittance to cover the fee, is received by the extension office, the first lesson assignment will be mailed to the student with directions for study.

The bulletin lists the courses offered from which the student may select those in which he desires to enroll.

The fee for all correspondence courses is $\$ 5.00$ per semester hour of credit carried.

Credit earned in extension classes and in correspondence courses may be applied toward the bachelor's degree, subject to the rule that not more than one-fourth of any curriculum leading to the degree shall be taken in extension classes or by correspondence, and not more than half of this shall be done by correspondence. Correspondence courses are not accepted for credit toward the degree of Master of Arts in Education.

No student may enroll for correspondence courses during the time that he is registered for courses in residence, either at this College or at any other institution.

No student doing resident work may enroll for an extension class course if the latter constitutes an overload in the opinion of the scholarship committee.

All inquiries concerning extension classes or correspondence courses should be addressed to The Director of Extension.

## THE SUMMER SESSION

A Summer Session of ten weeks is conducted annually by the College to meet the needs of superintendents, principals, supervisors, teachers, and students who wish to meet certification requirements, or to work toward the completion of requirements for the degree of Bachelor of Arts, or the degree of Master of Arts in Education. The summer session also meets the needs of those who wish to earn extra credits for transfer to other colleges and universities, or for general culture.

All the educational facilities of the College are available to the summer students. Instruction is given by members of the regular faculty. All the advantages of the enlarged Matthews Library are placed at the disposal of the students, as well as full laboratory and shop facilities.

All classes meet in the forenoon, leaving the afternoons open for reference reading, study, laboratory work, or recreation. Under these conditions, it is possible for instructors to give attention to the individual needs of the students to a greater extent than is practicable in the larger classes and fuller program of the regular session.

Summer Session Credit. The summer session consists of two terms of five weeks each. By holding classes six days a week, or for equivalent time, it is possible for a student to earn as much as six semester hours of credit per term, or twelve semester hours for the full period of the summer session.

Full residence credit is given. By this arrangement, students are enabled to use the summer session to acquire credit toward graduation. In three summer sessions, the residence requirement may be satisfied, and a full year's work may be completed.

Admission to the Summer Session. In general, the applicant for admission will be expected to present evidence of graduation from an approved four year high school, or evidence of good standing in an accredited college. Mature students, over 21 years of age, are admitted without the above qualifications, but with the understanding that all standard admission requirements must be made up before they can become candidates for the bachelor's degree. For admission to graduate study leading to the degree of Master of Arts in Education, a bachelor's degree from an accredited institution is required.

Graduate Study. The summer session offers an excellent opportunity for superintendents, principals, supervisors, and other teachers, who have already acquired the bachelor's degree, to do graduate work leading to the degree of Master of Arts in Education without loss of time in their professional capacity or sacrifice of salary. The residence requirement for the advanced degree may be met by attendance in three full summer sessions.

Fees and Expenses. The tuition fee is $\$ 20$ per term, or $\$ 35$ for the full ten week session. A library fee of $\$ 1.00$ is required of all summer students. Textbooks and stationery may be purchased at the college bookstore on the campus. Board and room for the summer may be obtained at moderate rates. One dormitory for women is open to summer students.

Requests for the Summer Session Bulletin and inquiries for special information should be addressed to The Director of the Summer Session.

## PRIZES

The Moeur Medal. This prize, offered by Mrs. B. B. Moeur of Tempe, in memory of her late husband, Dr. B. B. Moeur, is awarded each year at commencement to the graduate of the standard teachers' curriculum who attains the highest standing in academic work during the four years immediately preceding graduation. All the work must have been done in residence during the regular sessions of the College.

The Moeur Pin, also offered each year by Mrs. B. B. Moeur, is awarded at commencement to the graduate of the standard teachers' curriculum who ranks second in scholarship under the conditions prescribed for the awarding of the Moeur Medal.

The Harvard Club of Arizona offers to the junior students of the college a "Harvard Book" for the best essay on some topic connected with Arizona. The subject-matter, as well as the treatment, must be original. Competition for the prize has resulted in much research work and in the production of many valuable and interesting essays on Arizona.

## PLACEMENT OF TEACHERS

The Placement Bureau of the College is maintained to assist graduating students in securing suitable teaching positions, and to help promote successful Tempe teachers in the field. It seeks at the same time to serve the best interests of the superintendents, principals, and school trustees of the state who desire to secure teachers adapted to the peculiar needs of their particular schools.

All graduating students enroll with the Placement Bureau each term, filling out the appropriate blanks and receiving full information and instructions relative to securing a position. Full records are kept on file in the Placement Office at the Training School. These records consist of (1) student practice teaching records, (2) recommendations from faculty members who are familiar with the student's academic work, (3) reports of supervisors and critics on the quality of work done in directed teaching, and (4) scholarship ratings. The record also includes personality ratings and a photograph. Copies of these records are sent out upon application to superintendents, principals, or trustees; or they can be examined and reviewed by them when they visit the Placement Office.

Superintendents usually prefer to select their teachers after personal interviews, and by actually seeing them at work in their classrooms. Many take advantage of the opportunity to visit the training schools and observe the performance of prospective teachers.

Although the Placement Bureau cannot guarantee the placement of students upon graduation, every effort is made to place all graduates in positions suitable to their training and ability.

Requests for teachers to fill positions, reports of vacancies, and all other correspondence relative to placement should be addressed to
I. D. PAYNE,

Director of Placement, Arizona State Teachers College, Tempe, Arizona.

# THE TRAINING SCHOOL 

## UNDER DIRECTION OF MR. PAYNE

Tempe Teachers College maintains three distinct schools for the training of student teachers. Each of these presents its own particular type of problems so that the institution is enabled to provide special training for practically all the different types of teaching that graduates will have to encounter upon entering the professional field. Opportunities offer themselves for training in all grades from kindergarten or pre-primary through the junior high school, the consolidated school, and the town school. All these schools are organized and maintained as regular public schools and class conditions are made to parallel as nearly as possible those in the other public schools of the state.

For the information of prospective students, a description is here given of the several training schools, their equipment and the nature of the work accomplished in each.

The Campus Elementary School. This school is organized on the same general plan as the regular schools of the state, but offers many advantages beside the ordinary grade school work. The kindergarten, first, second and thixd grades are consolidated into a primary unit, and here special attention is given to the social development of the primary children. The intermediate grades are treated as a unit for auditorium work, music, play, and athletics. Pupils with special musical ability are permitted to play in the junior high school orchestra, and the children have organized several clubs for the study of nature, science and literature. A Camp Fire organization is maintained for the girls of these grades, and boys who are qualified are admitted to the junior high school troop of Boy Scouts of America.

The Junior High School. In order to meet the growing demand for teachers who are specially trained for junior high school work this unit has been organized and in operation for several years. Here the sixth, seventh, and eighth grades are administered as a separate unit but as an integral part of the training school system. The junior high school idea is carried out by means of the flexible program, departmentalized work, a limited number of electives, adaptation to individual differences in abilities, needs and interests. Assembly and home room periods and the organization of social and
other extra-curricular activities are carried on as part of the regular school program. Beside the traditional subjects, there are courses in physical education including class instruction, supervised play, and athletics for both boys and girls; home economics; shop work consisting of woodwork, forge work, and sheet metal; general science; typing; Latin; Spanish; art courses especially adapted to the needs of junior high school pupils; and music. The music program includes glee clubs and orchestra. Individual instruction is given on the various orchestral instruments. Agricultural education is elective and is carried on by means of boys' and girls' clubs organized and sponsored by the agricultural department of the college in cooperation with the State extension work in agriculture and home economics. Unusual advantages are enjoyed by the pupils due to the fact that they have access to the equipment of the college, including gymnasium, athletic field, playground, shops, laboratories, gardens, farms, libraries, and auditoriums. The chief extracurricular organizations are the Camp Fire Girls' unit and the troop of Boy Scouts. Social activities are closely correlated with the school life of the pupil.

Eighth Street School. By special agreement with the local board of trustees the Teachers College has charge of the town school located on Eighth Street at Mill Avenue. This school, comprising grades one to eight inclusive, is located in an attractive setting with large, grass covered play grounds fully equipped with modern apparatus for physical training and outdoor games. The building with its large, airy rooms and tasteful decoration, is admirably adapted for the training of children in the primary and intermediate grades. The younger children have their own manual training shop and domestic science room. The older children have access to the shops and laboratories of the college. The music and art work is under the supervision of members of the college faculty, and opportunity is afforded for glee club and orchestra work. The prime objective of the operation of Eighth Street School is to furnish special teacher training to college students who are interested in Americanization work and the problems connected with teaching non-English speaking primary children.

Rural School. For several years an arrangement has existed with the trustees of a neighboring school district whereby the Teachers College takes full charge of the operation of this school as a training school for the preparation of teachers to supply the rural schools of the state. This school is under the immediate direction of a trained rural supervisor, and the student teachers are furnished
transportation forth and back by automobile, which arrangement enables them to do their teaching without inconvenience or interference with the classroom demands of their collegiate schedule.

The enrollment at this school includes the children from Rohrig School, Dist. 50. These children are brought to the school center at Rural by bus. Every effort is made to keep the conditions typical of rural situations elsewhere, so the student teachers may learn to meet actual rural problems.

## THE COLLEGE LIBRARY

Matthews Library. The main library occupies the entire upper floor of the Matthews Library and Administration Building. The general reading room will accommodate 200 persons and the reserve book room, set apart for reserves and other books used for collateral reading, will seat an additional hundred students. The stack room has an ultimate capacity of 86,000 volumes. This library now contains over 20,000 volumes and about 4,000 bound volumes of periodicals. In addition, there are several hundred unbound volumes of periodicals, bulletins, and reports. The library is a designated depository for the educational and agricultural publications of the United States Government. At the present time, the library receives regularly 200 general, educational, and technical periodicals. The subscription list also includes the leading daily newspapers of the country and many of the daily and weekly newspapers of the state.

Attractive features include the browsing room dedicated to the late Professor J. L. Felton, a conference room, an Axizona Room for all materials on Arizona and the Southwest, and carrels in the stack room for the use of students and teachers doing research work. The use of the stacks is open to the faculty, to seniors and graduate students, and to others who register for stack privileges.

Fees. Of the fees paid by each college student at the beginning of each semester, $\$ 2.00$ goes to the library. A library fee of $\$ 2.00$ (withdrawable at any time) is required of all persons not directly connected with the college who wish to use the library. Individuals borrowing books by mail pay the carriage charges both ways.


Hours. During the college year, the main library is open from 7:30 A. M. to 6:00 P. M., every week day except Friday and Saturday, and from 7:00 P. M. to $9: 30$ P. M., four nights a week. On Fridays it is open from $7: 30$ A. M. to $5: 00$ P. M.; Saturdays from 9:00 A. M. to 4:00 P. M. It is closed on Sundays and on all holidays.

Rules. A printed copy of the rules regulating the circulation of books and the use of the library is furnished to each student.

Training School Library. In addition to the general library, there is a children's library in the Training School. This collection contains about 3,000 carefully selected juvenile books covering all types of literature. The purpose of this library is two-fold: first, to develop the children's taste for the best in literature and to teach them the use of reference material in connection with their studies; second, to familiarize student teachers with a select collection of juvenile literature, and to supply them with material to use in teaching.

The book collection is supplemented by a large collection of pictures, by a selection of outstanding juvenile periodicals, and by a textbook exhibit for enrichment of directed teaching.

In each half-semester, two student teachers are given the opportunity for actual experience in library administration. This includes the care of the library, care of the books, keeping of records, a brief study of library science, reading of outstanding books, and a study of children's literature and illustrators. This work carries the same credit as other directed teaching.

## FEES AND EXPENSES

## BASIC EXPENSES

Activities Fee. Every student is required to pay an activities fee of $\$ 29.00$ each year. This fee is payable in two equal instalments, one at the beginning of each semester. This fee must be paid before the student is permitted to attend classes. Part of this fee is used for the costs of registration, college annual, and items of expense related to student welfare, such as health service, assembly programs, and socializing activities. $\$ 10.00$ is budgeted undex the direction of the Associated Student Council for extra curricular activities, such as athletics, student publications, music, dramatics, and student recreation.

Auditors. Those who wish to audit one or more classes without expectation of college credit must pay the regular activities fee. A student registered as an auditor in any course will not receive credit for the course under any circumstances. Students carrying full load ordinarily will not be permitted to audit additional courses.

Tuition. Tuition is free to all students who are citizens of Arizona. No student, however, is exempt from the payment of the annual activities fee.

Tuition for Non-Resident Students. Every non-resident student shall be required to pay a non-resident fee of $\$ 12.00$ each semester. A student to be considered a resident of the State of Arizona, for the purpose of registering at the Arizona State Teachers College at Tempe, must present evidence:

First, if under twenty-one years of age, that the supporting parent (or guardian) has been a bona fide resident of the State of Arizona for at least one year preceding registration.

Second, if over twenty-one years of age, that bona fide residence in the State of Arizona has been established for at least one year, and that he has become a qualified registered elector.

Text Books. The necessary outlay for books and stationery varies from $\$ 20.00$ to $\$ 30.00$ per year. The college book store is under the management of the business office of the College. All textbooks used in the college classes are on sale in the store located in the auditorium building. As the bookstore is operated at a very
small overhead cost, the students enjcy the advantage of a considerable saving in this important item of expense.

Library Fee. A library fee of $\$ 2.00$ each semester is payable at the time of registration.

Laboratory Fees. Fees will be collected each semester to cover the cost of materials in certain courses. With few exceptions, these fees are not returnable, in whole or in part, and in no case can any refund be allowed after 30 days from the first day of the semester.

Physical Education Equipment. All women students will provide themselves with the gymnasium suit especially designed for students enrolling in P. E. 101-102; 103-104. This suit must be purchased at the college bookstore and costs approximately $\$ 6.00$.

Board and Room. The fee for board on the campus and dormitory room is $\$ 25.00$ per four week month.

The fee for board and room is payable monthly, in advance, on a date set by the business office. No allowance nor refund will be made for vacations, absence over week ends, or absence due to disciplinary action. Students who are absent for one week or more for unavoidable reasons, may arrange for payment of half the usual rate for the period of such absence.

Summary. The following summary includes the fees and minimum expenses incurred by a student living in a dormitory for one college year:

Activities fee ( $\$ 14.50$ per semester) ......................................... $\$ 29.00$
Library fee (\$2.00 per semester) ................................................. 4.00
Tuition (free to Arizona students) .-.......................................... 0.00
Books and stationery (approximately) .............................................. 25.00
Laboratory fees (approximately) ................................................ 5.00
Gymnasium outfit....................................................................................... 6.00
Board and room ( 9 months) ....................................................... 225.00
$\$ 294.00$
To this amount must be added the student's necessary personal expenses for clothing, personal laundry, recreation, and other items. A student registering for the first time should be provided with cash to the amount of $\$ 75$ or $\$ 80$ for necessary initial expenses.

Graduation Fee. A graduation fee of $\$ 10.00$ is due at the time of making application for the bachelor's degree.

Master's Degree. A fee of $\$ 10.00$ is due from each applicant for the degree of Master of Arts in Education at the time of admission to candidacy.

## DEPOSITS

Dormitory Room Reservation. A deposit of $\$ 5.00$ shall be made by prospective dormitory residents when they request a room reservation in advance of the opening of the college year. No room will be reserved until the deposit is paid. No refund of a room reservation deposit may be made after August 20, to any student who does not enter a dormitory. If a student has made the $\$ 5.00$ dormitory room reservation deposit, no payment of breakage deposit will be required at the time of registration.

Breakage Deposit. At registration, every student who has not already paid the dormitory room reservation deposit, shall make a deposit of $\$ 5.00$ at the business office. If all fees are paid, this amount will be refunded at the close of the year, or upon authorized withdrawal from the college, less deductions for damage to College buildings or equipment, loss of library books or other property, or other charges against the student's account. A deduction of $\$ 1.00$ per semester will be made for every dormitory resident.

In order to receive the refund of the breakage deposit, the student must present, at the business office, a clearance card, duly signed by the designated officers of administration.

Locker Key Deposit. A charge of $\$ 1.00$ shall be made as a deposit for each locker key. This deposit will be refunded upon return of the key. Cards for locker keys may be obtained at the business office.

Laboratory Deposits. Laboratory deposits will be collected to cover breakage and materials in certain courses. These deposits minus the cost of material destroyed, are returnable at the close of the year.

## MISCELLANEOUS FEES

Fee for Late Registration. Students who register after the date set for regular registration are required to pay an additional fee of five dollars.

Fee for Late Transcript. A fee of $\$ 1.00$ will be charged to each new student whose transcript of record from the high school or college previously attended is not on file in the office of the registrar on the date of registration. This fee will be refunded
upon presentation by the student, within thirty days from the date of registration, of a statement from the registrar's office that the transcript has been filed.

Fee for Late Class Card. A fee of one dollar will be charged for each class card held more than one week after the date announced for filing.

Fee for Change of Program. A fee of fifty cents is required for change in the program as arranged on the student's registration card after the first week of any semester.

Fee for Reinstatement. A student who has been dropped from a class because of irregular attendance may be reinstated by the standards committee if, in their opinion, the circumstances warrant such action. For such reinstatement, the student shall be assessed a fee of one dollar.

Fee for Special Examination. When, because of absence, or for any reason, it becomes necessary for a student to request a special examination in any course, a fee of $\$ 1.00$ will be required for this special privilege.

Fee for Transcript of Record. A student is entitled to one transcript of record without charge. For each additional transcript a fee of one dollar is charged and remittance should accompany the request for additional transcripts. Official transcripts of record are forwarded directly to the institution to which the transfer of credit is to be made.

Ordinarily transcripts are issued within a week after receipt of the request. At registration time, at mid-year, and at the close of the college year, unavoidable delays are likely to occur, therefore requests should be filed well in advance of these times.

Board Only Fee. A fee of $\$ 20.00$ per four-week month payable monthly in advance on a date set by the business office, is required for board at the college dining hall from students who are not dormitory residents. Allowances and refunds shall be on the same basis as for dormitory residents.

Meal Tickets. For the accommodation of students not living in Tempe, who wish to eat only one or two meals a day at the college dining hall, meal tickets will be supplied at the rate of twenty meals for $\$ 5.00$.

Meals for Guests. There is a charge of 40 cents per meal for guests entertained at the college dining hall.

Single Room Fee. There shall be an extra charge of $\$ 2.00$ per month for the exclusive use by one person of a dormitory room As a rule two students share a room.

Residence Off the Campus. Board and room may be secured, subject to faculty approval, in private homes in Tempe at rates somewhat in advance of the regular dormitory fees.

Women students who desire to engage room and board outside campus limits must first obtain approval of the adviser of offcampus women and they must agree to observe all regulations adopted for the government of off-campus women.

Payment of Fees. Checks, drafts, and post office or express money orders should be made payable to the Arizona State Teachers College.

Refund of Fees. One-half of the activities fee and one-half of the non-resident tuition fee may be refunded within the first three weeks after the first day of instruction, if withdrawal is caused by conditions beyond control of the student. One-fourth of the activities fee and one-four of the non-resident tuition fee may be refunded within the second three weeks after the first day of instruction, if withdrawal is caused by conditions beyond control of the student. The Associated Student activity ticket must be surrendered to obtain any refund of activities fees.

Certain laboratory fees may be refunded up to fifteen days after the first day of instruction and one-half refunded between fifteen and thirty days after the first day of instruction. Requests for such refunds must be signed by instructors.

Attention of prospective students is invited to the fact that the State of Arizona here provides the advantages of a first class college education at an expense to the student not greatly in advance of that incurred by the average young man or woman at home. This, together with the fact that there is in Arizona a constantly increasing demand for well-educated teachers, is worthy of thoughtful consideration by those who, having completed the work of the high school, are contemplating the continuation of their education along professional lines.

## FINANCIAL RESPONSIBILITY

By a ruling of the Board of Education, activities fees and laboratory fees are payable on the day of registration and no credit can be extended.

Students may not enroll for any semester until all bills previously incurred have been paid, nor will credits be transferred to other institutions or epplications approved for graduation until all accounts have been paid, or satisfactory arrangements made for their payment.

## ASSISTANCE TO STUDENTS

## LOAN FUNDS

A fund for the assistance of worthy students has been established by the Tempe Teachers College Alumni Association through the active interest of some of its members. Loans from this fund are made at a nominal rate of interest and under favorable conditions to second semester seniors recommended by the faculty as being worthy of financial assistance.

Scholarships totalling $\$ 200$ annually are awarded by the Alumni Association to a limited number of seniors selected by a representative committee on the basis of economic need, academic scholarship, leadership, and self-help.

The Charles Trumbull Hayden chapter of the Daughters of the American Revolution has established a fund which is available for the use of responsible and worthy students during the entire year immediately preceding their graduation.

Other funds for student aid have been set aside by certain civic organizations. Students wishing to avail themselves of the advantage of loans from these funds should apply to the President of the College for full information and instructions.

## TWO SCHOLARSHIPS IN APPLIED PIANO

A scholarship in applied piano, including piano technique, song accompaniment, and repertoire, will be offered to the highest qualified music major in the academic year of 1937-1938, continuing until the date of his or her graduation. This scholarship will include the second semester tuition fees in applied piano (private lessons) for the years intervening between the year of the candidate's appointment and his graduation.

A scholarship of similar character will be offered to a highly qualified candidate for the kindergarten-primary or the elementary certificate under the same plan of alternate semesters, the first semester's tuition fee being paid by the student each year, the second semester fee being presented in the form of a scholarship.

## STUDENT EMPLOYMENT

A number of positions on the campus are assigned each year to students who by this means are enabled to earn part or all of their dormitory expenses. This work includes care of buildings,
hall work, care of linen, library and dining hall service, stenographic, typing, clerical work, and other work of similar character. It is customary for a student accepting such employment to pay the dormitory fee for the first month in advance. The student employee is then paid by check at the end of each month. Students desiring to avail themselves of such employment will apply to the office of the president for the usual blank forms on which to make application.

The criteria used for the selection of applicants for student employment are as follows:

1. Genuine economic need.
2. General scholarship.
3. Special ability in some particular field.
4. Ability to do satisfactorily such work as is available.
5. Good citizenship.
6. Evidence of leadership.

In the assignment of positions preference is given to residents of Arizona.

## ADMINISTRATION

## CHANGES IN REGULATIONS

1. The administration reserves the right without notice to make whatever changes in regulations or practice may seem to be for the best interests of the college.

## CREDITS

1. The college year is divided into two semesters of eighteen weeks each.
2. The unit of credit is the semester-hour which represents one fifty minute hour of class work per week for one semester of eighteen weeks, supplemented by such additional class, library, or laboratory work as the given course may require. As a rule, two hours of outside preparation or the equivalent shall be required for each hour of class work.
3. The standard requirement for graduation in any four year curriculum is one hundred twenty-six semester hours of credit.
4. No credit is allowed for experience in teaching. Each candidate for the bachelor's degree is required to teach one semester in the training school, under supervision of the training teachers. The student teaches one half day each day during the semester. For this work, ten semester hours of credit are given. Exception to this rule is made in the case of teachers who present satisfactory evidence of successful experience, on account of which they may be permitted to substitute five hours of academic credit for the second quarter of student teaching provided the first quarter of student teaching is completed satisfactorily.
5. Students who have transferred from other teachers' colleges, with advanced credit for at least five semester hours of practice teaching, and who present satisfactory evidence of a considerable period of successful teaching experience with the recommendation of former superintendents or other school authorities, may, with the approval of the director of the training school, be excused from all practice teaching requirements.

## STUDENT PROGRAM

1. The normal student program or normal load is sixteen units each semester. The minimum load for a student regularly enrolled in any curriculum is twelve units. In particular cases, by spe-
cial action of the scholarship committee, a student may be permitted to carry a lighter load for one semester, otherwise one who is carrying less than the minimum load will be registered as an irregular or unclassified student.
2. Excess load. Special faculty action is necessary to permit a student to register for an amount of work in excess of that prescribed in a given curriculum. Application for such excess work must be made in writing on the prescribed form to the scholarship committee, and must give a detailed statement of work regularly assigned and additional work desired, together with the student's reasons for the special consideration. As a rule, no consideration will be given to such a request unless the record of the applicant has attained a satisfactory scholarship index for the semester immediately preceding. The higher the index, the larger the load permitted.
3. During the semester in which a student is enrolled for practice teaching, the maximum load shall be sixteen semester hours.
4. Upper Division Program. At least two-thirds of the work of a student in the junior and senior years shall consist of advanced courses open only to juniors and seniors.
5. Extension Courses. Not more than one-fourth of any curriculum leading to the bachelor's degree shall be taken in extension classes or by correspondence, and not more than one-half of this shall be done by correspondence.
6. Enrolling in Courses. No person is permitted to attend any class or course without regularly enrolling for the work. At the beginning of each semester, the student enters the course by the presentation of the class card signed by the registrar or by a member of the registration committee. After the date of regular registration, a student who desires to enter a given course will obtain from the registrar a card for change of classification, properly filled out; will present this card for the signature of the instructor in charge of the course; and will then file the card in the office of the registrar. No credit will be allowed for work in any course unless the student is regularly enrolled in the manner here prescribed.
7. Auditing Courses. A student who desires to audit one or more courses without credit may do so with the approval of the registrar and the consent of the instructors concerned, provided the regular activities fee is paid. Such auditors will present the usual class card for admission to classes, but the card will be marked "not for credit".
8. Procedure for Dropping Courses. A student who, after regularly enrolling in any course or class, desires, for any reason, to withdraw therefrom, must obtain from the office of the registrar a card for change of classification, properly filled out and signed by the registrar. This card will be presented to the instructor in charge of the course or class, and when signed by the instructor, will be returned to the registrar's office. Failure to attend to this formality will result in a grade of $E$ being recorded in the course or class dropped. In case a student withdraws from the college, it is necessary to follow this procedure for each of the courses which are thus to be dropped.

## MARKING SYSTEM

In order to determine the scholarship standing of students, the instructor, as a rule, assigns a score-point value to each exercise, project, test, or examination required of the class, each student being rated according to the aggregate of score-points attained.

Scholarship ratings on the report cards and on the student's permanent record are indicated by letters of the following scheme:

A, Superior accomplishment.
B, Excellent; above middle half.
C, Middle half of class or section.
D, Passing, but below middle half.
E, Failure, requiring repetition of the course.
Cr , Credit (without defining grade).
Inc. Incomplete, but may be brought to passing grade by complying with certain conditions prescribed by the instructor.
W, Course dropped in the regular manner.
A mark of incomplete in any course must be made up and the passing grade recorded in the office not later than the end of the next following semester, otherwise the mark will be recorded a failure.

Honor points (quality points) are assigned to the various grade marks as follows:

A, 4 points per semester hour.
B, 3 points per semester hour.
C, 2 points per semester hour.
D, 1 point per semester hour.
E, 0 points.

The Scholarship Index. The scholarship index is obtained by dividing the number of honor points acquired by the number of semester hour units for which the student has registered. Cr courses are not included in computing the index.

Scholarship Requirement for Graduation. In order that a student may be cligible for graduation with the bachelor's degret. his general scholarship index must be equivalent to a mark of C or better.

Reports. Twice in each semester, each student receives a report showing his standing in each course taken. These reports are presented to the student in conference with the head of the department in which the student has chosen his major. The department head thus becomes the student's adviser throughout the period of his attendance. Upon request a copy of the student's quarterly report will be forwarded to the parent or guardian.

The mid-semester report is issued in order that the student may be advised of the state of his progress, but only the final semester marks are entered upon the student's permanent record.

## SCHOLARSHIP STANDARDS

Eligibility for Athletic Competitions. The student's eligibility to enter intercollegiate athletic competitions is determined by the rules of the Border Intercollegiate Athletic Conference.

Eligibility for Admission to Society Membership. In order to be eligible for admission to membership in any extra-curricular society or other organization regularly meeting in study-hour time, a student must have a scholarship index of 2.00 or better in all courses carried for the quarter or semester immediately preceding, and any member of such a society or other organization whose quarterly or semester report shows a scholarship index of less than 2.00 shall be suspended from active work in the organization for one half-semester.

Unsatisfactory Scholarship. A student who has a relatively low scholarship index for a given semester will be required to carry a reduced program during the semester next following.

Disqualification. A student who, in any semester, shall receive failing grades in as much as fifty percent of the total number of units for which he is registered shall thereby be disqualified for work at this College for the period of one semester. A student who is disqualified a second time can be reinstated only by special action of the Standards Committee.

Repeating Courses Failed. No student shall be permitted to attempt to raise a grade of E to a passing grade without regularly enrolling in the course in question by registration in the office, and no student, while repeating a course to replace a failing grade, shall carry more than normal load for the semester unless, in the opinion of the Standards Committee, the circumstances are such as to warrant an overload.

## ATTENDANCE

Students are advised to bear in mind the fact that satisfactory completion of any course implies and requires regular attendance upon lecture and laboratory periods. The following regulations should receive careful attention:

1. When the number of absences acquired by a student in a given course exceeds the number of credit units assigned to that course, such student shall be required to drop the course without credit.
2. In case an absence is due to severe illness of the student, the penalty prescribed in Section 1, above, may be remitted at the discretion of the Chairman of the Committee on Attendance, provided the student files a written explanation of the cause of the absence on the proper blank form within one week of return to class work. This statement must be signed by the College Nurse who may be found at the infirmary.
3. Private business, however urgent, is not considered a valid excuse for absence from college work. Exceptions to this rule can be made only at the discretion of the Chairman of Attendance,
4. When a student's absence is due to duty assigned by a faculty member, either in connection with college work or extracurricular activity, the explanation of absence will be filed in the same manner and on the same blank form as provided for explanation of absence due to illness, and the form must be signed by the faculty member assigning the duty.
5. A student who is dropped from a course because of unexcused absences, shall receive a grade of $E$ for the course, unless, in the opinion of the instructor, circumstances warrant giving a mark of W.
6. A student who, for any reason, has been absent for a period of two weeks or more must be reinstated by action of the scholarship committee, and such reinstatement shall ordinarily be conditioned upon a reduction of at least three semester hours in
the student's total load. A student desiring reinstatement must address a petition to the Standards Committee immediately upon returning to class work. Failure to secure regular reinstatement under the circumstances described will render the student ineligible to receive credit in any of the courses taken.
7. A student who has been dropped from a class because of irregular attendance may be reinstated by the standards committee if, in their opinion, the circumstances warrant such action. For such reinstatement, the student shall be assessed a fee of one dollar.

## GRADUATION

Credit Requirements for Graduation. A total credit of 126 semester hour units is required for graduation with the bachelor's degree.

Specific Requirements. In addition to the completion of the required number of credit units, the candidate for graduation from any curriculum must have completed satisfactorily all prescribed courses specified in the core curriculum, and must have complied with all specifications relating to majors and minors.

Major and Minor. Every candidate for graduation with the bachelor's degree is required to complete an approved major and at least one minor, both to be selected in fields other than education.

Scholarship Requirement. In order that a student may be eligible for graduation from any four-year curriculum, his general scholarship index must be equivalent to a mark of $C$ or better.

Residence Requirement. A minimum of one year in residence as a regular student is required of every candidate for the bachelor's degree, and the final twelve semester hours immediately preceding graduation must be taken in residence.

Exceptions to the rule of final residence may be made by the Standards Committee or by the Executive Council in cases which appear to justify such action.

Students who have already established their residence at this College may satisfy the final residence requirement by attendance during one entire summer session of ten weeks under the auspices of this College.

Application for Graduation. In order to allow time for accurate checking of records, candidates for the bachelor's degree must file
an application for graduation in the office of the registrar not later than November 15 of the college year during which graduation is expected. In order to receive consideration, each application must be accompanied by the prescribed graduation fee. Blank forms for the application may be obtained at the office of the registrar. Candidates who fail to file application punctually will be scheduled for graduation at a later date.

Graduation Fee. The fee of $\$ 10.00$ for graduation with the bachelor's degree is a charge against the student's account. The degree will not be conferred until this fee is paid.

The Master's Degree. A fee of $\$ 10.00$ is due from each applicant for the degree of Master of Arts in Education at the time of admission to candidacy.

Commencement Exercises. In order to receive a degree, the candidate must be present in person at the commencement exercises in the prescribed academic costume. Exceptions to this rule shall be made only in extreme cases and upon petition to the President of the college.

Financial Clearances. Financial clearances must be obtained from the business office immediately preceding graduation. These clearances state that all bills have been paid or that satisfactory arrangements have been made for the payment of the bills. The clearances cover:
a. College obligations.
b. Student body obligations.
c. Library obligations.

## STUDENT LIFE AND WELFARE

## LIVING ARRANGEMENTS

Dormitories for Women. No single college influence may contribute more vitally to the development of the personality and character of a student, than life in a hall with sixty or more other students. Here the problems of living together must be definitely faced, resulting in an experience which may be invaluable to every college man or woman. The dormitories at Tempe Teachers College are managed and equipped so as to insure the maximum values in student life at a minimum cost. For that reason women are asked to live in the dormitories and only under very special circumstances are they allowed to establish locations outside the campus boundaries. When, for any reason, such a privilege seems necessary the request is to be made by parents directly to the office of the Dean of Women.

The facilities provided in these dormitories are practically uniform. All rooms are provided with electric light, steam heat, city water, and are furnished with study table, dressing table, chairs, and rug. Sleeping porches in all dormitories are in use the year round. Unless by order of a physician, students are not permitted to sleep in their rooms. Generally, each room accommodates two students, although the exclusive use of a room, by one person, may be had when space permits, by the payment of an extra fee of $\$ 2.00$ per month.

Limited kitchenette privileges are provided in each hall, but no cooking of any sort is permitted in individual rooms. A laundry room, furnished with hot and cold water, gas plate and ironing boards is available for the laundering of personal belongings. All bed linens and towels are laundered by the college.

Vocal or instrumental music is not practiced in any of these halls; arrangement for such work can be made through the music department.

Young women are not permitted to be absent from the dormitories overnight without special permission from home being written directly to the head resident in charge.

Personal Equipment. The following list is the minimum with which students should be equipped when entering the dormitory:


Blankets and comforts for single bed.
4 sheets.
2 pillow slips.
4 bath towels.
4 hand towels.
Dresser scarf.

Ironing blanket.
Iron.
Hot water bottle.
A warm dressing gown.
Soft soled slippers without heels.
A study lamp.

All linens should be clearly marked with the name of the student.

Dormitories for Men. Alpha Hall, accommodating sixty-three, and East Hall, housing one hundred thirty-five students, are assigned as living quarters for men. Facilities, dormitory rates, and laundry privileges are the same as in the women's dormitories and students should be provided with the same room equipment as prescribed for the women's dormitories.

For information regarding rates, fees, deposits, and refunds in all dormitories see statement under the heading "Expenses" on another page.

Off Campus Housing. Rooms are available in the homes of Tempe to men or women who do not desire accommodations in college dormitories. Individual room rents with two people sharing a room range from $\$ 7.50$ to $\$ 10.00$ per month.

These rooms are approved by the Dean of Women and are the only rooms which registered students may use as residence during the period of attendance at the College. No exceptions can be made unless by special arrangement with the Dean of Women.

The administration reserves the right to change the boarding or rooming place of any student living off campus when the owner does not maintain the standard prescribed by the College; when the student is unwilling to co-operate cheerfully with the college management; or in case the student, without first registering with the Dean of Women, takes up residence in an approved apartment.

Students who live off-campus may board in the college dining hall for $\$ 20.00$ per month. Occasionally board may be secured offcampus, with the approval of the Dean of Women, at a higher rate. Generally speaking, living off-campus is more expensive than living in dormitory, and no student should expect to cover such expenses at less than $\$ 25.00$ per month.

The College does not arrange to collect rents nor to stipulate prices for off-campus accommodations.

## MEDICAL CARE

Health Examination. The faculty reserves the right to require medical examination of any student by a physician designated by the College whenever in their opinion, circumstances are such as to demand such examination or to render it advisable. Physical examination by a college physician is required of all entering freshmen.

Medical Care. The activities fee includes medical attention in all ordinary cases of minor illness which require a physician's advice. In such cases, students will be cared for in the college infirmary, and the services of a competent physician will be furnished free of further charge upon the order of the college nurse or other competent authority. In cases of serious or protracted illness, free medical attention will be furnished for the first week only of such illness, after which period the college will no longer assume financial responsibility for the services of physician or nurse. The College will not assume financial responsibility for any surgical operation, nor for any case of illness beyond the first week, nor for any cases cared for in hospitals or premises other than on the campus, nor for unauthorized office calls for the services of any physician.

## EXTRA-CURRICULAR ACTIVITIES

## STUDENT PARTICIPATION IN GOVERNMENT

Associated Students. Every student on the campus is automatically a member of the Associated Student Body. Self-government is a challenge to man's self-control and social vision. It provides security and opportunity for constructive action. These broad principles hold whether the unit of government be the nation, the state, the family, or a college community. Student government furnishes the laboratory in which the students may develop their powers of civic leadership.

By encouraging student participation in the government of the college, the Board of Education, the President, and the Faculty challenge every student to accept his responsibility for stimulating and regulating student activities, student customs, student welfare, college intellectual life, college moral life, and college social life.

In order to carry out this program of participation, delegated powers are centralized in the Student Body Council. This council is composed of representatives from each of the four classes and officers elected by the student body. Regular meetings of the council are held each week. These meetings afford opportunity for the presentation and consideration of any questions affecting student welfare.

Combined Council of Women's Halls. This group is made up of the members of the executive councils of each of the women's dormitories. The council makes recommendations to the administration for regulations which govern the living standards in the halls. The executive council in each of the halls is responsible for the enforcement of these regulations, subject at all times to the approval of the head resident in charge.

## ATHLETICS

Since the extra-curricular athletic activities of the College are closely related to the regular instruction in physical education, a very desirable correlation is established between the required courses and the performance of the selected groups of those who are found to be qualified to enter intercollegiate contests.

Men's Athletics. The College is a member of the Border InterCollegiate Conference which includes colleges and universities in

Arizona, New Mexico, and Texas, and is represented by teams in the conference football, baseball, and track and field schedules.

Separate intercollegiate contests for the freshmen are held in football, baseball, and track and field.
A. program of intramural and interclass contests in the various major and minor sports affords interesting competition between groups on the College campus.

Women's Athletics. The Women's Athletic Association offers a broad program of athletics to all women of the College. Through an intensive intramural and interclass program in all games, sports, and dancing, it is made possible that every woman student shall have the opportunity for participation in some form of activity and recreation. Interscholastic sports and field days, with their wide range of events, afford opportunities for game contact with the University and with the other colleges of the state.

Athletic Fields. On the campus, there are two well appointed athletic fields which provide space for three separate football fields and for two baseball fields. A quarter-mile track surrounds the main football field, and a five-hole golf course is available within campus limits.

The main athletic field is equipped with a system of flood lighting, permitting football and track events to be staged at night, greatly adding to the comfort of both players and spectators. The concrete stadium seats 4,000 spectators and the field borders directly upon the main highway, making it conveniently accessible.

Women's Building. An important development in athletic facilities is the new Women's building and women's sports field, located on the west side of College Avenue, opposite the main athletic field. The addition of this building and the improvement of the adjacent grounds makes possible a more comprehensive program with greatly expanded facilities for dancing and for health education. This outdoor sports field comprises two regulation hockey fields, archery range, baseball and volleyball fields, and badminton courts.

Located in various parts of the campus are ten concrete tennis courts which are used jointly by men and women students.

Intercollegiate Athletic Contests. Eligibility to enter intercollegiate athletic competitions is determined according to the rules of the Border Intercollegiate Conference of which the College is a member.

## SPEECH ARTS

Debate. Each year the college offers an extensive program of intramural and intercollegiate debating. The division of speech arts is affiliated with three forensic leagues--the Arizona Speech Arts League, which every year sponsors a tournament among five colleges in the state; the Western Association of Teachers of Speech, which sponsors an annual fall tournament for all western states; and the Pi Kappa Delta league which holds several tournaments during the year, most of them in the coast states. Students who become members of winning teams are eligible for membership in Pi Kappa Delta, national honorary forensic society.

Oratory. Campus orators are given opportunity to compete each year in a number of contests, local, state, and interstate. Each year in the state contest three cash prizes aggregating $\$ 100$ are offered for the best original oration on International Peace. Representatives of the college in oratory are sent to all state and interstate speech tournaments.

Dramatics. The policy of the Drama Workshop embraces several definite objectives:

1. To produce three-act plays of an unusually high caliber.
2. To produce as many one-act plays as are required to satisfy the needs of student actors and student directors.
3. To train students to direct plays and to develop skills in all the branches of production work; costuming, lighting, make-up, scene design, scenery painting, set construction, and theater management.
4. To build cultural appreciations and artistic discriminations in the field of drama.
5. To provide projects for the character development and the personally readjustment of as many individual students as can be reached by the facilities described above without detriment to the high quality of the work presented.

## THE ENTERTAINMENT BUREAU

Realizing that the practical training of speech students requires actual speaking experience in live situations before audiences, the speech division of the department of English has inaugurated an Entertainment Bureau which undertakes to furnish entertainers to civic clubs, societies, and other organizations throughout the state. Speech students who attain a high degree of excellence in achieve-
ment are allowed to represent the college with speeches, readings, orations, character portrayals, and even short plays. These activities afford an incentive for thorough work and an effective tie-up with classroom theories. Students of music and dancing are encouraged to offer their services through this bureau.

## MUSICAL ACTIVITIES

Opportunities are given for the expression of musical talent in recitals by the students of voice and piano, by the glee clubs, and by the band and the orchestra. College credit is given for regular work in these organizations, and during the year numerous concerts are presented on the campus and in cities throughout the state.

Through co-operation with the Entertainment Bureau, qualified music students, both vocal and instrumental, are offered further opportunities for public appearances before the many organizations desiring the services of the Bureau.

## JOURNALISM

The STATE PRESS Staff. Under the auspices of the Associated Students, there is published, weekly throughout the year, a sevencolumn, four-page newspaper. Originating years ago as The Tempe Normal Student, the paper was named The Collegian when the institution became a teachers' college. At the beginning of the academic year 1936-1837, the name was again changed to the ARIZONA STATE PRESS.

This college weekly, printed on good quality paper, serves as a record of current events of campus life. It is used as the laboratory course for the students in the division of journalism. The journalism instructor serves as adviser, but both the editor and the business manager are appointed by the student council. The experience gained in this activity has a definite educational and practical value, and staff positions are highly prized by the students.

A semester's subscription to the publication is included in the activities fee. Constant circulation among the alumni is maintained, and many graduates welcome this method of keeping in touch with campus events and college news.

In the National Scholastic Press contest for 1936-37, the ARIZONA STATE PRESS was awarded all-American rank which is the highest possible rating. Only four teachers' colleges in the country earned this award.

The SAHUARO. Although discontinued for several years, The Sahuaro, Arizona State Teachers College yearbook, will be published again in 1937-1938. Profusely illustrated after the manner of such college publications, it will become an important instrument for preserving the memories and strengthening the traditions of the College.

Financial security for this student project is assured by the inclusion of the subscription price in the activities fee. The book will be published by student editors and staff, supervised by the head of the division of journalism.

## STUDENT ORGANIZATIONS

The social and professional inclinations of the students find expression in a number of organizations of widely varying composition and objectives. Among these are honorary fraternities and sororities, scientific societies, study clubs, and organizations whose purpose is purely social or recreational.

## PROFESSIONAL AND DEPARTMENTAL ORGANIZATIONS

Kappa Delta $\mathbf{P i}$ is a national honor society organized for the purpose of encouraging in its members a higher degree of consecration to social service by fostering high professional and scholarship standards during the period of college training, and by recognizing outstanding service in the field of education.

Eligibility for entrance into the society is based upon these criteria: scholarship, character, professional attitude, future promise, and social adaptability. Candidates for membership are selected from those having full junior standing in the college and whose scholarship rating places them in the upper quartile. Members of the faculty who have accomplished some outstanding work in edacation are eligible for membership.

The monthly meetings of Beta Phi Chapter of Kappa Delta Pi are devoted to programs of papers and discussions pertaining mainly to the field of education.

The International Relations Club is an organization of students majoring in the field of social studies and is maintained by the college department of social studies. Membership is based strictly upon the attainment of a specified scholarship rating. By semi-monthly meetings, the organization promotes the discussion of international affairs, and aims to create an interest in matters of nation-wide and world-wide scope, as well as attention to the study of historical events.

In its relationships, the club is international, being one of 530 such organizations in the various colleges and universities of the United States and scores of similar clubs in foreign countries. It is sponsored by the Carnegie Endowment for International Peace, located in New York City.

Through the efforts of this institution a series of books and pamphlets are regularly secured for the exclusive use of the club
members in the college library. From time to time, moreover, the Club secures for the student body speakers on world events and relationships. The club maintains an average membership of about thirty students annually.

Lambda Delta Lambda is a national honor society whose aim is to promote interest in the study of chemistry and physics in teachers' colleges. In order to become a member, the student must be regularly enrolled in the college where the chapter is located; at the time of election to membership, he must have completed at least fourteen hours of physics or chemistry or both; he must have acquired honor grades in these subjects. The prospective member also must be interested in the teaching of science and its applications.

Sigma Tau Delta, Tau Gamma Chapter. Oldest but one among the national honor societies on the campus, Tau Gamma Chapter of Sigma Tau Delta was installed in February, 1932. Membership is restricted to English majors of high scholastic rating, and every member is expected to contribute original work in some field of creative writing.

Sophomores are admitted as associate members, and upperclassmen are promoted to more advanced degrees on the basis not only of English courses completed with high grades, but also of achievement in original compositions.

For the past two years, the chapter has sponsored a ten weeks series of broadcasts from radio station KOY, Phoenix, in which original contributions by the members and other students of the college are read. The chapter also publishes an annual volume, "Pieces of Eight", in which is printed the best work submitted during the year. Numerous productions of the members, in prose and verse, have been published in "The Rectangle", the national quarterly magazine of the fraternity.

Beta Chi is composed of girls whose major interest lies in the field of home economics. The organization is affiliated with the National Home Economics Association, and with the state organization. Twice each month, meetings are held which are planned to advance professional and cultural interests. Membership is open to any girl with a major or a minor in home economics who attains a specified scholarship index.

The Geographic Society is made up of students who excel in geography, general scholarship, and character. Week end trips to points of special interest are arranged for purposes of observation and study. The programs of the society include: (1) Meetings of
members and invited guests in which members report upon personal investigations or upon excursion activities; (2) A series of lectures open to the general public as service to the College and community. The society has included upon its list of speakers and guests some of the world's noted geographers and scientists.

Gamma Theta Upsilon is a national professional geographic fraternity, the Theta chapter of which is established in the College and is associated with the Geographic Society. In addition to the requirements for membership in the Geographic Society, prospective members must have completed a year of work in geography of high quality and beyond required courses, and they must be majoring or minoring in the subject and must have a distinct professional interest in the field of geography. The fraternity aims to unite superior students and teachers of geography in purposes of mutual helpfulness.

Los Hidalgos del Desierto constitute a club whose purpose is to promote and foster good fellowship and friendly relations among those who are interested in things Spanish on the campus. Outstanding among the activities of the club are the fiestas in honor of El Dia de la Raza and El Dia de la Lengua. Membership is by invitation.

Alpha Mu Gamma, national honorary fraternity for students of foreign languages, admits to membership majors in foreign languages who have done outstanding work in their field. Iota chapter was installed on the campus in May, 1936. The fraternity upholds the ideals of high scholarship, international understanding, and the advancement of peace.

The Pasteur Scientific Society was organized by the students of chemistry to promote interest in the importance of physical science in human progress. The activities of the society are largely educational and include: (1) Literary and demonstration programs by members, and invited guests as speakers. These meetings are open to the public as well as to the members. (2) Week-end survey trips to the major industries of the state. The activities of the organization are open to the public.

Lambda Chapter of the National Society of Wesley Players is sponsored by the Wesley Foundation for the purpose of studying the connection between the drama and religion, to further social life through the dramatics, and to promote an intelligent program of religious drama in the Methodist Churches. Members are provided the opportunity of participating in and producing religious drama.

All those who manifest an evident interest in the drama and play production and who express a sincere desire to promote the ideals and principles of the society, shall be eligible to pledgeship. In addition to plays being presented locally, productions are often given in surrounding towns. Regular meetings are held during the college year.

Alpha Psi Omega, Delta Lambda Cast, national honorary dramatic society, (formerly Proscenium Players), opens its membership to those students who acquire twenty points in the field of dramatics. Points may be acquired by acting, directing, producing and the writing of plays under supervision in the Drama Workshop of the college.

Pi Kappa Delta, national honorary forensic society. Membership is open to those students who become members of duly authorized winning teams in intercollegiate debate, or who place in an inter-collegiate oratorical contest.

The Forum, local honorary forensic society. Membership is open to those who show particular skill in the field of debate and extemporaneous speaking.

Tau Pi Tau, an association of kindergarten-primary majors and minors, was organized in May 1935, to represent the interests of Tempe primary teachers. It aims to promote professional interest and efficiency in the field, to foster a regard for high scholarship, and to maintain a close relationship between primary teachers in service and those in training. Meetings are held twice a month. Kindergarten-primary majors and minors are eligible to membership which is by invitation.

Theta Chi Epsilon is an organization open to students having either a professional interest in art or a liking for art as an avocation. The aim of the society is to arouse and preserve on the campus a greater appreciation for art, and to enlarge and enrich the esthetic experience of the members.

Members are chosen on the basis of their artistic abilities and aptitudes. Meetings are held on the first and third Thursday of each month.

Mu Rho Alpha is a professional music fraternity, the purpoze of which is to recognize and develop musical ability; to encourage an appreciation of good music; and to help maintain a high standard of scholarship.

Besides the regular business and social meetings, Mu Rho Alpha has, for the past two years, sponsored a series of music and dance
programs, held in the college auditorium the first Monday evening of each month, to which the student body, the faculty, and the townspeople are invited. Membership is by invitation.

The Pleiades is an honorary service club. Its membership is limited to twelve women of junior and senior class standing. Entrance into membership is based on the qualities of leadership, excellence, achievement, integrity, dependability, and personality. The object of the organization is to render altruistic service in the interests of the College.

Collegiate 4-H Leaders Club. Students who are interested in preparing themselves for leadership in 4-H clubs in the various communities of the state may become members of the 4 -H Leaders Club which is maintained on the campus. This club is said to be the only organization of its kind in the United States.

Meetings are held twice monthly to listen to addresses and discussions by members of the agriculture extension staff of the University, by successful 4-H leaders in the field, and by other persons vitally interested in the club program.

Executive officers of the annual $4-\mathrm{H}$ fair are chosen from the membership of this organization. Social features are not neglected. Members receive suitable recognition for one or two years of work in the course of study which is carried out each year.

Women's Athletic Association. The Women's Athletic Association co-operates with the department of physical education in furthering opportunities for a wide variety of activities. The association is affiliated with the Athletic Federation of College Women and with the women's division of the National Amateur Athletic Federation. Every woman in the student body is entitled to membership in this association, and, upon earning twenty-five points in athletics or dancing, becomes an active member.

The "A" Club. This is a newly organized honorary club whose membership is limited to women of junior or senior standing. The purpose is to promote physical efficiency and health, to encourage scholarship and service, and to develop in the entire student body a wider interest in women's athletics.

Admission to membership is open to active junior and senior members of the Women's Athletic Association who have won the Varsity sweater.

## SOCIAL ORGANIZATIONS

Believing that college life is incomplete unless ample opportanity is provided for social development, the college gives its official approval to a number of social organizations. Prominent among these are the nine sororities, originally organized as literary societies, some of which look back upon many years of uninterrupted operation. Membership in these groups is entirely voluntary and by invitation. Advisers are chosen from the faculty and wives of faculty members. Meetings are held at stated intervals with programs of literary, musical, and cultural value. During the year, each organization carries out certain customary, and, in many cases traditional, social activities, such as special picnics, bridge parties, dances, dinners, and trips of greater or less scope into the scenic regions of Arizona.

Although each society maintains its own chosen objectives, carried over from the days of the litexary society, the outstanding aim of all these organizations is the promotion of the highest standards of womanhood on the campus, by maintaining the spirit of friendliness and good fellowship, furthering the highest qualities of social personality, and by assuming a willingness to advance the best interests of the College at all times. A student, in order to be invited to membership, must have a scholarship index of 2.00 or better at the close of the semester preceding the date of invitation.

In adopting Greek letter names, the following sororities carry forward in their titles the motto or traditional objectives of the former organization.

| Chi Sigma | Pi Alpha Gamma |
| :--- | :--- |
| Delta Theta | Phi Beta Epsilon |
| Kappa Kappa Alpha | Phi Lambda Nu |
| Lambda Kappa | Zeta Sigma |
| Philomathian |  |

Fraternities. Four local fraternity groups are maintained to serve the college men in their need for social contacts. In this respect, these organizations might be considered as the counterparts of the women's sororities.

Lambda Phi Sigma has the distinction of being the first organization to maintain a fraternity house at Tempe.

Pi Delta Sigma is one of the oldest social fraternities on the campus. It was organized in the spring of 1931 and election to the group is based on scholarship, personality, and leadership in the various campus activities.

Tau Sigma Phi, a social fraternity, was founded in 1932 for the purpose of stimulating among its members the spirit of effective service to the College.

Mu Sigma Chi has for its main objective the welfare of the off-campus students. It endeavors to serve the College by the development of congenial contacts between off-campus students and campus residents.

The Cactus Walking Club was founded in 1913 by a group of desert lovers, and the twenty men and women who constitute the present organization, endeavor to perpetuate the club tradition by moonlight desert hikes and a yearly climb to the summit of Superstition Mountain.

The Thirteen was organized March 23, 1932, as an honora:y service club of the Arizona State Teachers College. The number of active members is restricted to thirteen as the name of the organization suggests. Its membership is also limited to men students of junior and senior class standing. Leadership in various fields of college activity determines the entrance into membership. Election to this organization is considered one of the highest honors that can come to any man student while enrolled in the college.

The purpose of the organization is to sponsor college activities, to support student enterprises, and to stand at all times for the welfare of the college. The first activity of the group was to sponsor the annual "Campus Day" program. Since then it has been instrumental in carrying on many worthwhile activities.

## RELIGIOUS ORGANIZATIONS

The Newman Club is a social organization open to all Catholic students of the College. This club has for its objective the special welfare of its members and the general welfare of the College as an institution. Regular meetings are held throughout the college year. The club is affiliated with the American Federation of Catholic Clubs.

The Wesley Foundation is the Methodist Episcopal Church at work among its students in the State College. Its objective is to provide a program of activities and Christian education which will supplement the education of the state in the field our college is limited due to the organic law of the land. The institution exists to create a wholesome religious atmosphere and to provide abundant opportunities for self-expression in religious activities. Regular meetings are held throughout the college year. Although primarily for Methodist students, yet the Foundation extends to any student who may be in-
terested a cordial invitation to join in one or more of its varied activities.

The churches of Tempe all extend a welcome to students, and several of them maintain specific organizations to serve the student need, among which are the college B.Y.P.U. of the Baptist church, the Congo Club of the Congregational church, and the Wesley Foundation of the Methodist church as examples of the specific organizations that aim to serve the student need. The following denominations are represented in Tempe by active organizations: Baptist, Catholic, Christian, Church of Christ, Church of God, Congregational, Episcopal, Latter Day Saints, and Methodist Episcopal.

## ADMISSION TO THE COLLEGE

## GENERAL QUALIFICATIONS

Every person admitted as a student of the State Teachers College of Arizona must be of good moral character, of good health, without physical or other defect which would impair his fitness for the teaching service, and must present a statement of honorable dismissal from the school last attended.

Qualification of Applicants for Admission. Applicants for admission to the College must be at least sixteen years of age and must present satisfactory evidence of completion of a full four year high school course of at least fifteen units, pursued in an accredited high school and conforming to the requirements specified below.

High School Credits Required for Admission. For admission to a teachers' curriculum, the following fifteen units are specified:

English 3 units
History and Civies .......................................................... 2 units
Algebra .....--................................................................... 1 unit
Laboratory Science ---.-................................................- 1 unit
Electives, subject to committee approval ............... 8 units
Total .............................................................................. 15 units
Graduates of unaccredited high schools may be admitted provisionally at the discretion of the standards committee, upon passing a satisfactory entrance examination.

## PHYSICAL EXAMINATION

On entrance to the College, prior to beginning practice teaching, just before graduation, or at any other time necessary, a physical examination followed by conferences with the health counselor may be required. Students who fail to meet reasonable health standards may be denied either admission, practice teaching, or a teaching credential. A physical examination by a college physician is required of all entering freshmen.

## COLLEGE APTITUDE TEST

All new students are required to take a college aptitude test. The time for administering this test will be announced during the first semester, and the test will have precedence over all other college duties at the time.

RECEPTON ROOM. WHST HALL

At the discretion of the Standards Committee, students whose general scores in the aptitude test are unsatisfactory may be required to reduce their study load until such time as their scholarship index shows satisfactory improvement.

The aptitude scores will be used by the Standards Committee as one factor in determining the disposal of petitions for overload.

## ALTERNATIVE QUALIFICATIONS FOR ADMISSION

1. Teachers. Teachers holding valid credentials to teach in Arizona may be admitted for further study. Such students may become candidates for a degree only when deficiencies in entrance requirements have been satisfactorily removed, as determined by the Standards Committee.
2. Adults. Persons over twenty-one years of age may be admitted to undergraduate standing as special students provided they present satisfactory evidence of character, education, and general intelligence. Such students may become candidates for the degree, or teaching credentials only when deficiencies in entrance requirements have been satisfactorily removed, as determined by the Standards Committe.
3. Transfers with Advanced Standing. Applicants for admission who have had advanced work in any accredited institution of collegiate grade may be admitted and given such undergraduate standing as may be determined by the Standards Committee.

Graduates of the standard two-year curriculum formerly offered by the Tempe Teachers College may register in the third year with the expectation of receiving the degree after two years of further work.

Holders of two-year diplomas who present evidence of additional work done in summer sessions, in extension or correspondence courses, may have such work credited toward the degree provided a reasonable proportion is distinctly of upper division grade.

Experienced teachers who become candidates for the degree may be permitted to substitute academic credit for part, or in some cases, all of the required directed teaching, but no academic credit is allowed for teaching experience.

## TRANSFERS FROM JUNIOR COLLEGES

Junior college students who intend to transfer to the teachers' college at the end of the first year or upon completion of the second year, will do well to plan the program of studies to conform as
nearly as practicable to the outline of the standard degree curriculum as printed on page 73 of this catalogue. A major and a minor should be selected in the first year if possible, and at the latest, by the beginning of the second year. Twelve semester hours in the major should have been completed by the end of the second year.

The maximum amount of credit that can be accepted from a junior college is sixty-four semester hours or ninety-six quarter hours.

Not more than six semester hours of work in education and psychology can be accepted as satisfying requirements in professional education courses.

Courses ordinarily offered as upper division courses in the teachers' college can not be accepted for credit from a junior college.

Examination of the standard teachers' college curriculum on page 73 will show that about sixty per cent of the work in the first two years is elective, giving a wide selection, and providing a wide margin for adjustment of differences between the program of the junior college and that of the teachers' college. A junior college student who has followed such a program of studies as has been suggested above will find no difficulty in transferring to the teachers' college and adjusting his credits toward the degree.

## REGISTRATION

Time of Admission to the College. Students are admitted at the beginning of each semester of the regular session. They are expected to report for registration upon the days specified in the college calendar.

For the first semester, September 9, 10, and 11, 1937.
For the second semester, January 31 and February 1, 1938.
Summer session students register on the first day of each fiveweek term as given in the calendar.

Freshmen. Freshmen registering for the first semester are required to be present at the opening assembly of Freshman Week at 9:00 A. M., Tuesday, September 7, 1937. The exercises and events of Freshman Week are designed to assist freshmen in adjusting themselves to the new conditions of college life and work. Instructions are given in the registration procedure and in the planning of the study program. The freshman class is divided into advisory groups each of which is assigned to the guidance of a faculty adviser who becomes the permanent counselor of the group for the duration of the freshman year.

Sophomores, juniors and seniors may register on any one of the three registration days, Thursday, Friday, or Saturday. Usually an alphabetical schedule is arranged and announced at registration time to distribute the registrations over the three days in order to avoid congestion and tedious waiting. The details of the registration procedure are announced in printed form at the time of registration. Students who have already taken work in the College are required to present all their semester cards and the pre-registration slip to the adviser every time they register. Students who fail to observe this regulation will be subject to an extra fee.

All students are advised to recognize the importance of careful attention to all details of the registration procedure, and particularly to the planning of the study program, in order to avoid errors, delays and confusion. Attention must be paid to the proper sequence of courses, and care must be taken that all curriculum requirements are met in proper order.

Transcripts of Record. Transcripts of previous record should be filed in the office of the registrar at least thirty days in advance of the date of registration. Freshmen entering for the first time
must have on file the official transcript of the high school record. Students registering with advanced college credit must file the college transcript of record and an honorable dismissal. In the absence of these papers, admission ordinarily will be denied.

Graduate students register at the same time as undergraduates, but the application for admission to graduate study should be filed in the office of the registrar at least thirty days before the date of registration in order to receive the attention of the Graduate Council.

Late Registration Fee. An additional fee of $\$ 5.00$ is required for late registration. No student will be permitted to register more than five days late except by permission of the Standards Committee. Permission to register after the first week of the semester will, in every case, be conditioned upon reduction of the student's study load.

Student Load. The normal study load is sixteen units each semester. A student who desires to carry excess load in any semester must first secure approval of the Standards Committee. The petition for this privilege must be filed on the regular form to be obtained in the office of the registrar, or from the adviser at registration. As a rule, the consideration of a petition for excess load will be based on the student's previous scholarship index.

The minimum study load for a student regularly enrolled in any curriculum is twelve units. In particular cases, by special action of the standards committee, a student may be permitted to carry a lighter load for one semester, otherwise one who is carrying less than the minimum load will be registered as an irregular or unclassified student.

Change of Study Program. After the student's registration is approved no changes will be made on the class card. If changes in the study program become necessary, they are made by filling out a "Change of Classification" card in the office of the registrar. After the first week of instruction, any change in the program requires the payment of a fee of fifty cents. After the second week of a semester, no new courses may be entered on the student's program.

Filing Class Card. Registration is not complete until the class card is fully signed and filed in the office of the registrar. The card is due before the end of the first week of instruction. A fee of one dollar is charged for each card held more than one week after date announced for filing.

## CURRICULA AND DEGREE

The Standard Four-Year Curriculum leads to the degree of Bachelor of Arts in Education. The program of studies is so planned that the student, upon being graduated from this curriculum, is eligible to receive the Arizona Elementary Certificate.

By proper selection of courses constituting the major, the student may, at the same time, qualify for one of the special certificates.

The Four-Year Presecondary Curriculum is planned for those who do not desire elementary certification, but who intend to qualify themselves for the secondary certificate by an additional fifth year of graduate study after receiving the bachelor's degree. Those who complete the presecondary curriculum receive the degree of Bachelor of Arts in Education, but they are not entitled to certification. To become eligible for secondary certification they must complete not less than thirty semester hours of graduate work acceptable toward an advanced degree at Arizona State Teachers College or at a similar institution on the accredited list. This work also must be acceptable to the State Board of Education for certification purposes.

Certification Requirements. Students who are preparing to teach should study the rules of the State Board of Education regarding the certification of teachers in Arizona. The complete text of these rules will be found in a later section of this catalogue, following the section devoted to the description of college courses.

All teaching certificates are issued by the State Board of Education. To receive certification, application must be made directly to the State Board, giving evidence of graduation from the four year curriculum and completion of the specific requirements. Forms for this application may be obtained from the office of the registrar of the College.

Preprofessional Curricula. Students who do not intend to become teachers may enroll for one or two years of liberal arts courses preparatory to their transfer to another college for later professional or technical training.

After determining the ultimate objective and the college to which the transfer is to be made, each individual should present his plans to a faculty adviser who will give assistance in arranging an appropriate program of studies to meet the special curriculum
requirements of the pre-legal, pre-engineering, pre-medical, or predental student.

A suggestive outline of such a pre-professional curriculum will be found on a later page.

## BACHELOR OF ARTS IN EDUCATION

## REQUIRED COURSES

The standard curriculum leading to the bachelor's degree comprises certain specific requirements which are intended to supply a broad foundation for the prospective teacher in professional courses in education and psychology and in cultural subjects. These required courses are listed in the core curriculum outline on page 73.

The required courses make up a total of 63 units, or fifty per cent of the 126 required for graduation. The elective courses are to be grouped to form a suitable major and one or two minors.

## MAJORS AND MINORS

Definition of the Major. The major is the term applied to the line of work or sequence of courses, selected from one department or department group, which constitutes the student's more prominent interest. It represents the student's intensive preparation to teach in a special field. The major consists of not less than 24 nor more than 30 semester hours of related work, at least 12 of which must be in upper division courses. Every candidate for the bachelor's degree is required to complete a satisfactory major and at least one minor to be selected in fields other than education.

Definition of the Minor. The minor consists of not less than fifteen semester hour units selected from a field of learning different from that in which the major is chosen. It represents a field of interest and preparation secondary to that of the major.

Core subjects excluded. The courses to be accepted for or required in any given major or minor shall not include courses listed in the core curriculum as general requirements.

The major must be chosen not later than the beginning of the second year of the curriculum. With the approval of advisers, it may be begun in the first year.

The major may be selected in any one of the following departments or departmental groups:

Art
Commerce
English
Geography and Geology
Home Economics
Industrial Arts
Kindergarten-Primary

Foreign Languages
Mathematics
Music
Physical Education
Biological Science
Physical Science
Social Science

In selecting the major, the student will secure the advice and approval of the head of the department in whose field the major is chosen.

Courses taken in a given field beyond the maxinum limit of thirty semester hours for the major are not counted toward graduation.

A student majoring in Industrial Arts may choose a second minor in some special phase of that field, provided his first minor is selected in a different field of learning.

## UPPER AND LOWER DIVISION

Students are classified according to the amount of credit earned as follows:

Lower Division
Freshman, those who have acquired less than 32 semester hours;
Sophomore, those with 32, but less than 62 semester hours;

## Upper Division

Junior, those with 62, but less than 96 semester hours;
Senior, those who have acquired as many as 96 semester hours.

At least 40 of the semester hour units taken during the third and fourth years must consist of upper division courses.

Not more than 12 units in the education group may be allowed in the lower division, nor more than 40 units in education in the combined lower and upper division.

## RESIDENCE REQUIREMENTS

A minimum of one year in residence as a regular student is required of every candidate for graduation, and the final twelve semester hours immediately preceding graduation must be taken in residence.

Exceptions to the rule of final residence may be made by the Standards Committce or by the Executive Council in cases which appear to justify such action.

Students who have already established their residence at this college may satisfy the final residence requirement by attendance during one entire summer session of ten weeks taken under the auspices of this college.

## THE CORE CURRICULUM

This outline should be used for checking the program of studies at the beginning of each semester to insure fulfillment of requirements.

The standard curriculum is built around a central core of required courses which have been selected to give that foundation and cultural background which, it is believed, should be included in the preparation of every teacher.

The courses in education and psychology provide a suitable major in the professional field, including the course in directed teaching.

Enough elective units are provided to permit the student to complete a major of from 24 to 30 units in a field of interest other than education, and one or two minors in still different fleids.

It is belleved that such a curriculum is sufficiently integrated while affording a reasonable diversity of interests and experiences. It offols adequate preparation for efficient teaching, and, at the same time, provides the elements of a liberal arts program.

## CORE SUBJECTS



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The tabulation on the next page outlines, in approved sequence, the distribution of the required, or core courses through the four years of the curriculum. It also indicates a suitable distribution of the courses constituting the major and the minors.

A similar outline illustrating a typical arrangement of course: for each major will be found at the beginning of the description of courses offered by the department in which the major is chosen.

# SEQUENCE OF COURSES, STANDARD CURRICULUM 

## FRESHMAN YEAR

| First Semester Units | Second Semester • Units |
| :---: | :---: |
| Engl. 101 Composition................ 3 | Engl. 102 Composition................ 3 |
| Science -........................... (3 or) 4 | Science -.-...-................. (3 or) 4 |
| *Mus. 100 Fundamentals............. 2 | *Art 110 Public School Art......... 2 |
| *Hygiene .-.................................... 2 |  |
| P. E. Activity................................ 0.5 | P. E. Activity............................... 0.5 |
| Major (or Elective) (4 or)....... 3 | Major (or Elective) (4 or)....... 3 |
| Elective ......................................... 2 | Elective ...-.................................... 4 |
| 16.5 | 16.5 |

## SOPHOMORE YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Psych. 100 Gen. Psych..............-3 | *Educ. 120 Sociology..................... 3 |
| *Geog. 100 Elem. of Geog............ ${ }^{\text {a }}$ | *S. Sci. 100 Const. Govt. |
| Social Studies (See Note 2)....... 3 | Social Studies (See Note 2)....... 3 |
| P. E. Activity.............................. 0.5 | P. E. Activity ............................. 0.5 |
| Major .-..-----.....-.-...-...........(4 or) 3 | Major ...-.............................. (4 or) 3 |
| Minor or Elective...................... 4 | Minor or Elective...--................. 4 |
| (17.5 or) $\overline{16.5}$ | (17.5 or) $\overline{16.5}$ |

## JUNIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Psych. 200 Educ. Meas. <br> *Educ. 220 Sch. Syst. Laws, $\qquad$ <br> Rec. $\qquad$ 2 | *Education Elective..................... 3 |
|  | *Educ. 210 Teaching Reading.... 2 |
|  | Directed Teaching..................... 10 |
| Major ---................-.....-....-.............. 6 | or |
| Minor or elective......................... 4 | Major, minor, and elective.... |
|  | 15 |
| 15 |  |
| SENIOR YEAR |  |
| First Semester Units | Second Semester Units |
| *Educ, 230 Elem. Curric. Techn. 2 | *Educ. 250 Phil. of Educ.---... 3 |
|  | Directed Teaching........................... 10 |  |
|  |  |  |
| Major and minor...................... 10 | Major, Minor, and Elective....... 13 |
| 15 | 16 |

Note 1. In the starred courses, sections are to be so arranged that half the group take the course the first semester, and half in the second semester.
Note 2. The courses in social studies in the sophomore year are to be selected from the following:
Hist. 101, 102, Modern Europe; Hist. 103, 104, American Poi. and Social History; Econ. 131, 132, Principles of Economics.
Note 3. Electives are to be so chosen as to include a major of at least 24 units and a minor of at least fifteen in fields other than education.
Note 4. Men may substitute Art 108 Sign Writing in place of Art 110.
Note 5. Each year, half the student teachers do their teaching in the last semester of the junior year, and half teach in the first semester of their senior year.

## CURRICULUM REQUIREMENTS

The Curriculum outlined on pages 73 and 74 is standard for the Teachers College. At the beginning of each semester, the outline of core subjects and sequence of courses should be studied care-
fully and compared with the student's record to insure correct selection of courses for the program of the ensuing term. By preserving the semester report cards, the student will always have a complete record for checking with the printed requirements.

The Major in Education. The specified courses are selected to provide an appropriate major of thirty-one hours in education including general psychology and educational measurements.

Additional Major. Every candidate for the bachelor's degree must complete an additional major of not fewer than twenty-four nor more than thirty units in a field of learning other than education.

Minor. The student also must complete an approved minor of not fewer than fifteen units in a field different from that in which the major is chosen.

Time for Beginning the Major. Work on the major may begin in the freshman year, and it must be chosen not later than the beginning of the sophomore year. The major should be fully planned in advance under the guidance of the head of the department in which it is selected.

Approved Majors in Various Departments. For the guidance of students who wish to plan a program for the chosen major, a typical approved curriculum for the major will be found outlined at the head of the section of the catalogue which is devoted to description of the courses offered by the department. Suggestions for suitable minors also are given.

Required Courses in Science. All candidates for the bachelor's degree are required to take six to eight units in science. The selection of the science courses should be determined by the interests and needs of the individual student. The following combinations are recommended for the different majors:

Science Courses Units
Gen. Sci. 100 and $110 \ldots . . . .$. s sem. hrs.
Chem. 110, Physics 110.... 6 sem. hrs.

Chem. 110 and 181............ 8 sem . hrs.
Blol. 111 and 112
Chem. 111 and $112 \ldots .-\ldots . . . . . .$.

Home Economics.

## Majors

Art, commerce, English, kindergartenprimary, foreign lansuages, music, social studies.
Agriculture, geogranhy, biology, indusIrial arts, physical education, general sciences.

General science, geography, biology.
Incustrial arts, mathematics, preprofessional curricula.

## PRE-SECONDARY CURRICULUM


#### Abstract

Students who are not interested in securing elementary certification, but who wish to prepare themselves for high school teaching, may elect to follow the Presecondary Curriculum outlined below. For secondary certification, an additional year of graduate work is required.


## FRESHMAN YEAR



## SOPHOMORE YEAR



## JUNIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Educ. 200 Edu. Meas................. 3 | Psych. 213 Educ. Psych............. 3 |
| Pol. Sci. 100 Const. Govt........- 3 | Elective ........................................ ${ }^{3}$ |
| Major and Minors.------.-............. 10 | Major and Minors..................... 10 |
| 16 | 16 |

## SENIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Educ. 250 Phil. Educ.................. 3 | Educ. 211 Hist. Educ. $\qquad$ 3 (or Educ. 260 Teach. 5) |
| Flective ........................................ 3 | Elective .............................(1 or) 3 |
| Major and Minors...................... 10 | Major and Minors...................... 10 |
| 16 | 16 |

In addition to the above prescribed courses, this curriculum must include a major of 24 to 30 semester hours and two minors of at least 15 hours each, to be chosen in fields other than education.

Students electing this curriculum are strongly advised to include at least five hours of directed teaching.

Graduates of this curriculum receive the bachelor's degree, but are not thereby entitled to certification. In order to qualify for the sccondary certificate, those who complete the above program are required to complete at least thirty semester hours of graduate study, acceptable toward an advanced degree, at Arizona State Teachers College or at another institution authorized to grant the master's degree.

## SPECIAL CURRICULA PREPARATORY TO OTHER PROFESSIONS

For students interested in professions other than teaching, or in two or more years of general college work, special curricula are recommended. Since for the most part these curricula are composed of the arts and sciences and are distinguished from and preparatory to the later professional courses, they may be classified as pre-professional curricula.

In each case the student should confer with his faculty adviser after determining his ultimate objective and the college or university to which he will later transfer. Then the courses best fitting his needs may be chosen. The curriculum suggested below is an example of a good liberal arts preparation for upper division work. Variations should be made to meet special curriculum requirements, such as are necessary for pre-engineering, pre-legal, pre-medical, pre-dental needs.

## FRESHMAN YEAR

| English, including Composition | 3 units each |
| :---: | :---: |
| Foreign Language. | 4 units each |
| Science, Biological or Physical | 3 units each |
| History or Economics. | 3 units each |
| Mathematics | 3 units |

## 16

## SOPHOMORE YEAR

| English |  | 3 units each semester |
| :---: | :---: | :---: |
| Foreign | Language | 4 units each |
| Science | or Mathemati | 3 units each semester |
| History | or Economics | 3 units each seme |
| Elective |  | 3 units each seme |

## 16

Special sequences are arranged for those students who plan later to transfer to an agricultural college or who expect ultimately to pursue lines of agricultural education or practical farming. Such students will confer with the director of the department of agriculture.

## GRADUATE STUDY

## MASTER OF ARTS IN EDUCATION

## TWO CLASSES OF GRADUATE STUDENTS

The College offers opportunities for graduate study to those who are prepared to undertake graduate work. Two classes of graduate students are recognized: (1) Applicants for the master's degree; (2) those who wish to continue their education, but do not intend to become candidates for the advanced degree.

## ADMISSION TO GRADUATE STUDY

A student who is the holder of a bachelor's degree from Arizona Teachers College or from another accredited college, may be admitted to graduate study after satisfying the Graduate Council of the Faculty that preparation has been adequate, and that the applicant gives evidence of superior scholarship and the ability to carry graduate courses with profit.

## DEPARTMENTS OFFERING GRADUATE COURSES

Courses carrying graduate credit are offered in the departments of education, English, science, social studies, mathematics, and psychology. These departments are prepared to offer a major in graduate study. The departments of commerce and foreign languages are prepared to offer graduate courses to satisfy the requirements of a minor.

Admission to graduate study does not imply admission to candidacy for the advanced degree, and the mere accumulation of graduate credit does not confer upon the student any right to claim admission to candidacy.

## ADMISSION TO CANDIDACY FOR THE DEGREE

Before admission to candidacy for the degree of Master of Arts in Education, the Graduate Council will require the applicant to give evidence of superior scholarship in graduate courses and of the ability to do independent thinking and to undertake investigation in a scientific manner and with a reasonable degree of originality. Graduate students will be expected to recognize in the period of graduate study an opportunity for advanced study and research as
free as possible from restrictions and specific requirements. They will be motivated by the desire for self-improvement rather than by the urge to accumulate a stipulated number of credit units.

## REQUIREMENTS FOR THE MASTER'S DEGREE

Residence. The student is required to complete at least thirty semester hours of graduate courses in residence. The credit assigned to the thesis is included in this amount. The minimum time in residence as a graduate student is two semesters or three full ten-week summer sessions.

Time Limit. The graduate work leading to the master's degree must be completed within six years of the time of admission to candidacy. Any extension of time will be under conditions determined by the Graduate Council.

Transfer of Graduate Credit. Graduate credit may be accepted from other accredited institutions, in partial fulfilment of requirements, but the acceptance of such transferred credit shall not operate to reduce the minimum of thirty semester hours of graduate credit required to be taken in residence.

Extension and Correspondence Courses. Graduate credit shall not be given for courses taken in extension or through correspondence.

Thesis. A thesis shall be required in partial fulfilment of the requirements for the degree. The thesis may be counted for not to exceed four semester hours of graduate credit.

The subject of the thesis must be approved by the Graduate Council. It may be chosen from any field, but ordinarily it will deal with a problem directly related to teaching or education.

Credit Requirements. The minimum graduate credit of thirty semester hours including the credit assigned to the thesis shall be required of every candidate for the master's degree. Of this credit at least ten semester hours shall be in graduate courses in education and psychology. The total undergraduate and graduate credit in education and psychology sha! be not less than thirty semester hours.

Major and Minor. In order to secure suitable concentration and integration the following regulations will govern the program of graduate study:

1. Each applicant for the degree must choose at least one major and one minor.
2. The major must consist of a minimum of forty units of undergraduate and graduate work, of which not less than ten and not more than twenty, including the thesis, shall be of graduate level.
3. The major may be chosen from the departments of education and psychology or from any other department of the college which is prepared to offer such graduate courses.
4. The minor shall consist of at least thirty units of undergraduate and graduate courses, of which not less than ten shall be of graduate level.
5. The major and the minor shall not be chosen from the same department.
6. The work of the major or the minor may be chosen in part from a closely related field providing the head of the department in which the major or minor is chosen recommends it and the Graduate Council approves it.

Undergraduate Courses. Certain upper division undergraduate courses, designated by the Graduate Council, shall be accepted for graduate credit. In the catalogue description of courses, such courses are numbered 200 to 299 , inclusive. In order to be counted for graduate credit, these courses shall require such additional amount of work as may be approved by the Graduate Council. The amount of such eredit acceptable toward the degree shall be subject to the approval of the Graduate Council.

Quality. No graduate course shall be accepted for credit toward the master's degree unless the grade is $C$ or better; and if a candidate shall receive a grade lower than $B$ in two or more courses at mid-semester, or at the end of a semester, action will be taken by the Graduate Council to determine whether or not the student may continue as a candidate for the degree. No undergraduate course shall be counted for credit toward the master's degree unless the grade attained is $\mathbf{A}$ or $\mathbf{B}$.

Program of Graduate Study. The applicant for candidacy shall present his program of study to the Graduate Council for their approval not later than four weeks after the date of registration for graduate study. Before presentation to the Council, the applicant's program shall first have received the approval of the head of the department in which the major has been chosen.

Announcement of the Thesis. Announcement of the subject of the thesis must be made, and a brief outline presented to the Graduate Council not later than November 15 of the academic year in


which the degree is expected. In the case of a student who plans to do the graduate work in successive summer sessions, this announcement must be made and the outline presented not later than the middle of the the second five-week summer term.

Adviser. One member of the faculty shall be selected by the applicant for the master's degree to act as adviser in all matters pertaining to the preparation of the thesis. The selection of the adviser shall be made known at the same time as the announcement of the thesis subject and shall be subject to the approval of the Graduate Council.

Advancement to Candidacy. For advancement to candidacy for the master's degree, a petition shall be addressed to the Graduate Council not later than November 15 of the academic year in which the degree is expected. The fitness of the applicant shall be determined by the Graduate Council upon such bases as scholarship marks, examinations, and personal conference with the applicant.

Applicants for the degree who are doing the work in summer sessions may make application to the Graduate Council for formal admission to candidacy not later than the end of the first five-week summer term after admission to graduate study.

Approval of the Thesis. The finished thesis shall be presented to the head of the department in which the thesis subject has been selected, for final approval, not later than April 1. The thesis, having received the approval of the head of the department, shall be presented to the Graduate Council not later than May 1. Three copies of the thesis shall be submitted and final acceptance shall rest with the Graduate Council. All copies of the thesis shall be prepared in accordance with the specifications prescribed by the Graduate Council.

Final Examinations. The candidate shall pass a final written examination before he shall be permitted to present himself for the final oral examination. The final examinations, both written and oral, shall be given not later than one week preceding the date upon which instruction closes for the academic year in which the degree is expected. The Graduate Council may designate a committee of faculty members to prepare the examinations, but both written and oral examinations are under the direction and supervision of the Council.

Library Copies of the Thesis. Two copies of the Thesis, prepared according to specifications, shall be deposited in the College

Library. One of these shall be the original typed copy, suitably bound. The second may be a carbon copy of the original. Both copies shall bear the signed approval of the Graduate Council.

Graduate Council. The Graduate Council shall have full control of all details of the candidate's program and the final approval and recommendation for the degree lies with this body.

Summary of Graduate Requirements. The successive steps to be taken in the approach to the master's degree are outlined below:

1. Registration for graduate study, and filing, with the registrar, of the official transcript of previous college credit.
2. Announcement of the choice of the major and minor fields and presentation of the program of graduate study, not later than four weeks after the date of registration for graduate work.
3. Written application for advancement to candidacy for the degree. To be made not later than November 15 of the regular academic year, or, in the case of summer students, not later than the beginning of the fourth five-week summer term.
4. Announcement of the thesis subject and choice of the adviser. At the time of making application for candidacy.
5. The finished thesis is submitted to the head of the major department not later than April 1.
6. The thesis, bearing the approval of the department head, is submitted to the Graduate Council not later than May 1.
7. Final written examination and final oral examination not later than one week before the close of the academic year in which the degree is expected.

## DESCRIPTION OF COLLEGE COURSES

The unit of credit is the semester hour which is understood to be the equivalent of one hour of class work per week for one semester, 18 weeks, together with an amount of outside preparation estimated to average two hours for every class period. In those courses in which the number of class periods per week exceeds the number of credit units, it is assumed that the amount of outside preparation demanded is so adjusted that the total effort expected of the student will be equal to three hours per week for each unit of credit.

Numbering Courses. In designating courses by number, lower division courses are numbered 100 to 199 inclusive; courses intended primarily for upper division students are numbered 200 to 299 inclusive; courses numbered 300 to 399 are open to graduate students only. Numbers ending in 0 are offered either first or second semester. Odd numbered courses are offered the first semester only and even numbers not ending in 0 are used to designate courses given in the second semester only.

# DEPARTMENT OF FINE ARTS 

## MISS KLOSTER MISS CURTISS

This department offers a major in either of two fields:

1. Fine Arts.
2. Commercial Art.

In addition to the two curricula for art majors and art minors, emphasis is placed upon art education for the classroom teacher, practical art training for the layman, and art for leisure time.

## THE MAJOR IN FINE ARTS

Students majoring in fine arts will select courses to make a total of 24 units. Courses marked with a star (*) are required; other art courses to complete the major may be selected according to the wishes of the individual student. At least 12 units must be chosen in the upper division level.
Lower Division Courses

Units
*Art 102 Drawing and Perspective.................................................................................. 2

*Art 105 Color and Design 4
2


Art 108 Sign Writing .............--------.................................................................................... 2
*Art 114 Water Color............................................................................................................. 2
Art 115 Clay Modeling.....-..................................................................................................................................................................... 2
Art 121 Lettering ............................................................................................................... 2
Upper Division Courses Units
*Art 200 Elementary School Art ....-----.......................................................................................... 2

Art 203 Merchandise Display ........................................................................................ 2


Art 206 Sculpture -................................................................................................................... 2

Art 222 Domestic Archit. and Interior Decoration...........----................................ 3
Art 226 Contemporary Art ................................................................................................................................. 1
Art 228 Oil Painting .................................................................................................................................................... 2

## THE MAJOR IN COMMERCIAL ART

Students majoring in commercial art will select courses to make a total of 24 units. Courses marked with a star ( ${ }^{*}$ ) are required. Twelve units at least must be of upper division level.

Lower Division Courses Units
*Art 105 Color and Design.-............................................................................................... ${ }_{2}$
*Art 102 Drawing and Perspective .........................------................................................................................... 2

Art 106 Creative Design ........................................................................................................................................................... 2
Art 114 Water Color ..... 2
*Art 121 Lettering
Units
Upper Division Courses
*Art 201 Advertising Layout
2
Art 202 Advertising Illustration ..... 2 .....
2 .....
2
Art 208 Industrial Design
Art 208 Industrial Design
Art 203 Merchandise Display
Art 203 Merchandise Display3
Art 215 History
2
Art 220 Reproduction Methods ..... 2
TYPE CURRICULUM FOR STUDENTS MAJORING IN FINE ARTS
FRESHMAN YEAR

First Semester
Units
Engl. 101 Composition
Gen. Science 100
Music 100 Fundamental.....
Hysic 100 Fundamentals
-Hygiene 2
*Elective 1
P. E. Activity....................................... 0.5

Art 103 Life Drawing................. 2
Art 105 Color and Design...-....... 2

Second Semester Units
Engl. 102 Composition................ 3
Gen. Science 110.................---- 3
*Art 110 Public School Art......... 2
*Elective ....................................---....... 3

Art 102 Drawing and
Perspective
2
Art 106 Creative Design................- $\frac{2}{10.5}$

## SOPHOMORE YEAR



## JUNIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Education Elective. $\qquad$ 3 <br> *Psych. 200 Educ. Meas. $\qquad$ 3 | *Educ. 220 Syst. Laws, Rec....-- 2 |
|  | *Minor and elective..................... 3 |
|  | Directed Teaching......................... 10 |
| Minor or elective......................... 7 | or the following group: |
|  | $\left\{\begin{array}{l}\text { Minor and elective.......... } \\ \text { Art } 200 \text { Elem. Sch. Art... } \\ \mathbf{2}\end{array}\right\}$ |
| Art 215 Art History .................. 3 | Art Elective.................... 3 3 |
| 16 | 15 |

## SENIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Educ. 250 Phil. of Educ............ 3 | *Educ. 230 Curric. Techn........... 2 |
| Directed Teaching.-..................... 10 | ${ }^{*}$ Educ. 210 Tchng. of Reading.... 2 |
| or the following group: <br> \{Minor and elective.........7 7 \} | - ${ }^{\text {a }}$ ( 210 |
| \{ Art Elective................... 3 \} | Minor and elective |
| rt Electlve.......-................... 3 | Art Elective....--................................. 3 |
| 18 | 16 |

Note 1. In the case of the courses marked with a star (*), sections are so to be arranged that half of the group will take the course in the first semester and half the second semester.
Note 2. The courses in social studies are to be selected from the following combinations: Hist. 101, 102; Hist. 103, 104; and Econ. 131, 132
Note 3. Electives are to be so chosen as to include an approved minor of at least. 15 units in a field other than art or education.
Note 4. Men may substitute Ari 108 Sign Writing in place of Art. 110. Women may substitute Art 100 Everyday Art in place of Art 110.
Note 5. Half of the student teachers take Directed Teaching in the second semester of the junior year; half take Directed Teaching in the first semester of the senior year. Substitutions are indicated.

This type curriculum in Fine Arts may serve as a guide in planning a program for a major in Commercial Art.

## THE MINOR IN FINE ARTS OR IN COMMERCIAL ART

Students majoring in other fields may elect a minor in fine arts or in commercial art. Such a minor should conform to the following specifications:

Elect from lower division courses in fine arts or in
commercial art ...................................................................... 8 units
Elect from upper division courses in fine arts or in commercial art

7 units
Minimum for the minor in fine arts or in commercial art...... $\overline{15}$ units

## DESCRIPTION OF COURSES IN ART

Art 100 Everyday Art. A general cultural course for the layman. The principles of art and their application to everyday life situations in the exercise of good taste in dress, domestic architecture, and home decoration. A brief survey of fine arts expression in the past.

This course may be substituted for the general art requirement, Art 110 Public School Art, with the consent of the head of the department.

Miss Curtiss.
First year, either semester, two hours a wcek.
2 units.
Art 110 Public School Art. General art requirement for students of the standard four year curriculum. A course for classroom teachers and for art teachers, emphasizing tools and procedures which facilitate art expression. Art principles, modern ways of directing art activity, and pupils' experience, capacities, and interests are considered.

Two alternatives are offered for Art 110, namely: Art 108 Sign Writing, and Art 100 Everyday Art. One of these may be
substituted with the consent of the head of the department.
Laboratory fee, 50 cents.
Miss Curtiss.
First year, either semester, four hours a week. 2 units.
Art 102 Drawing and Perspective. Principles in elliptical, parallel, and angular perspective as well as free-hand drawing of animals and plant life. Laboratory fee, 50 cents.

Miss Kloster.
First year, second semester, two hours a week. 2 units
Art 103 Life Drawing. Proportion, line, action in the human figure along with solidity in form. Some quick sketch. Various mediums. Laboratory fee, $\$ 1.50$.

Miss Kloster.
First year, first semester, four hours a week. 2 units.
Art 104 Life Drawing. Advanced life with more detailed study of anatomy. Emphasis upon structure of heads, hands, feet, as well as the full figure. Nationalities and individual character are stressed. Quick sketch and memory sketch in addition to long poses. Various mediums. Laboratory fee, $\$ 2.00$.

Miss Kloster.
First or second year, second semester, four hours a week. 2 units
Art 105 Color and Design. The scientific basis of color; the properties of color; combinations producing harmony; design and color. Laboratory fee, 50 cents.

Miss Kloster.
First year, first semester, two hours a week. 2 units.
Art 106 Creative Design. Planned to stimulate originality and to develop the imagination. The primitive symbols in unit, border, and surface patterns in line, mass, and color. Imaginative representation of figure, animal, bird, fish, and plant forms in decorative renderings. Experience in handling different materials and in using various techniques. Laboratory fee, $\$ 1.00$.

Miss Klos̈ter.
First year, second semester, two hours a week. 2 units.
Art 107 Metal Craft. Emphasis on the simpler techniques in handling the metals; copper, brass, tin, aluminum, silver, and pewter in repousse, etching, and hammering. (Not offered in 1937-1938) Laboratory fee, \$3.00.

Miss Curtiss.
First, or second year, first semester, four hours a week. 2 units.
Art 108 Sign Writing. A practical course giving the essentials in lettering and layout for store card writing.

This course may be substituted for the general art requirement, Art 110, with the consent of the head of the department. Laboratory fee, 50 cents.

Mr.
First or second year, one semester, two hours a week. 2 units.
Art 114 Water Color. Painting in opaque and transparent water color. Landscape, still life, and figure. Prerequisite for art majors: Art 102 and 103. Laboratory fee, 50 cents.

Miss Kloster.
Second year, second semester, four hours a week, 2 units.
Art 115 Clay Modeling. A strictly laboratory course in designing and forming hand-built pottery; glazing and firing. Elementary problems in modeling in relief and in the round.
Laboratory fee, $\$ 3.00$.
Miss Kloster.
Second year, first semester, four hours a week. 2 units
Art 121 Lettering. Contemporary and classical styles; elements of design and spacing. Sound short cuts giving speed and finish. Adaptation of lettering to layout. Uses for reproduction. A fundamental course for students electing the major in commercial art. Laboratory fee, 50 cents.

Art 200 Elementary School Art. A continuation of Art 110 Public School Art with emphasis upon problems and procedures of specific elementary school grade levels. Especially recommended for elementary school teachers, kindergarten-primary majors and minors, and art majors and minors. Prerequisite, Art 110. Fee, 50 cents.

Miss Curtiss.
Third year, either semester, two hours a week. 2 units.
Art 201 Advertising Layout. The sales message through effective layout in the various types of advertising: newspaper, magazine, bill board, poster, and direct by mail. Professional technique in the development of layout from the rough sketch to the final working drawing. Required of majors in commercial art. Prerequisite; Art 121. Laboratory fee, 50 cents.

Mr. $\operatorname{Third}$ year, first semester, four hours a week. 2 units.
Art 202 Advertising Illustration. Finished drawings for special forms of advertising with emphasis upon techniques in pen and ink, dry brush, stipple, scratch board, line wash, scrub and tempera. Prerequisites: Art 121 and 201. Laboratory fee, 50 cents.

[^1]Art 203 Merchandise Display. A practical course dealing with the effective display of merchandise. Open to all upper division students.
(Not offered in 1937-1938)
Miss Curtiss.
Third or fourth year, first semester, two hours a week. 2 units.
Art 204 Costume Design. Fashion design, including costumes and millinery, sketching, and fashion prediction. Prerequisites: Art 103, 105.

Miss Curtiss.
Third or fourth year, second semester, four hours a week. 2 units.
Art 205 Textile Printing. A laboratory course in reproduction methods of hand printing on textiles. Design, color, and craftsmanship are stressed. Laboratory fee, \$3.50.

Miss Kloster.
Third or fourth year, first semester, four hours a week. 2 units.
Art 206 Sculpture. Modeling in the round and in relief, carving, casting, applying patines. Prerequisite: Art 103.
Laboratory fee, $\$ 4.00$.
Miss Kloster.
Third or fourth year, second semester, four hours a week. 2 units.
Art 208 Industrial Design. Advanced design from present-day industrial and commercial angles. The course includes the field of modern packaging. Renderings and models. Prerequisites: Art 105, 106, 121. Laboratory fee, 50 cents.

Third or fourth year, second semester, four hours a week. 2 units.
Art 215 Art History. Fine arts expression in architecture, sculpture, painting, and the crafts, from prehistoric to modern times. Early and present-day primitive art of the Indian and the African. Open to all upper division students.

Miss Kloster.
Third or fourth year, first semester, three hours a week. 3 units.
Art 220 Reproduction methods. Various processes employed in reproduction in advertising including screen printing. Prerequisites: Art 121, 201. Laboratory fee, $\$ 3.00$.

Mr.
Fourth year, either semester, four hours a week. 2 units.
Art 222 Domestic Architecture and Interior Decoration. Study, investigation, and application of the principles of good taste to be exercised in interior and exterior home design. Emphasis is placed upon practical problems in reference to the Southwest. Open to all upper division students. Laboratory fee, 50 cents.

Miss Curtiss.
Third or fourth year, second semester, six hours a week. 3 units.

Art 226 Contemporary Art. A survey of the fields of contemporary art in America and abroad with emphasis upon the aims and tendencies in expression together with a study of the major artists and their accomplishments. Open to all upper division students.

Miss Kloster.
Third or fourth year, second semester, one hour a week. 1 unit.
Art 228 Oil Painting. Sketching excursions as well as indoor painting; landscape, still life, and figure. Emphasis on interpretations of the local scene. Open to special students upon request. Prerequisites: Art 102, 103, 114.

Miss Kloster.
Third or fourth year, second semester, four hours a week. 2 units.
Art 230 Cartooning. Caricature and strip cartooning; layout, composition, and draftsmanship. Open to special students upon request. Laboratory fee, 50 cents.

Mr.
Third or fourth year, one semester, four hours a week. 2 units.

# DEPARTMENT OF AGRICULTURE 

## DR. JUDD (Head of the Department), MR. OSTRANDER, MR. MORTENSEN

The Department of Agriculture is organized to provide a broad foundation for later study in the specialized fields of agriculture. The courses offered include the generally accepted standard prerequisites for advanced study and research in all phases of agriculture.

These courses also meet the needs of students who plan to go directly into the various fields of productive and applied agriculture.

The Agriculture Major provides the basic training for prospective teachers of vocational agriculture, who, by attending the University of Arizona or other agricultural college for a fifth year of advanced work, many complete the requirements of the State Board of Education for certification as vocational agricultural instructors in high schools.

4-H Club Leaders. Students majoring in another department may qualify also as teachers of elementary science and agriculture and as $4-\mathrm{H}$ club leaders in the elementary schools by completing a minor in this department.

Laboratory Farm. The department operates a laboratory farm located on the campus. This tract is devoted to vegetable gardening; to a college nursery; the poultry flocks; and to the production of seed and feed crops.

The Livestock Farm is located a mile and a half south of the campus, on a forty acre tract with a modern farm home, new dairy buildings and equipment, and a modern hog unit. A selected herd of registered dairy cows supply milk for the college dining hall. These, with the registered sheep and swine herds, provide excellent opportunities for students in this department to gain first hand information and experience in livestock problems.

SUGGESTED CURRICULUM FOR AGRICULTURE STUDENTS
FIRST YEAR


Second Semester Units
Engl. 102 Composition............... 3
Phys. 110 Gen. Physics............... 4
Biol. 140 Zoology............................... 4
Agric. 108 Plant Industry.........- 4
P. E. Activity....................................... 0.5

## SECOND YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Chem. 181 Organic Chem..-..... 4 | Biol. 222 Entomology...--........ 3 |
| Biol. 203 Bacteriology ............... 4 | Agric 128 Farm Mechanics-.... 3 |
| Agric. 125 Prin. Hortic....--...---- 2 | Agric. 126 Pract. Hortic.....--- 2 |
| Agric. 115 Dairying...-............... ${ }^{\text {a }}$ | Agric. 116 Poultry Husb......-- 3 |
| Econ. 131 Prin. Economics...... 3 | Educ. 120 Sociology.........- |
| P. E. Activity.........................-- 0.5 | P. E. Activity |
| 16.5 | $\overline{16.5}$ |

## COURSES IN AGRICULTURE

Agric. 107 Animal Industry. A study of farm animals, their breed history, management, feeding, judging, and marketing. In the first half of the semester, emphasis is laid on sheep and beef cattle. The remaining time is devoted to general problems of dairying, swine, and poultry culture. Fee, $\$ 1.00$.

> Mr. Ostrander. First year, first semester, four hours lecture, or its equivalent in laboratory and field work.

108 Plant Industry. A brief survey of agriculture in general, based upon the current Year Book of the U. S. Department of Agriculture. Then, through assigned readings, special reports, field observations, and laboratory work, the following topics are studied: The development of permanent agriculture; the basic principles of plant growth and improvement; the factors involved in profitable crop production; the leading crop plants and producing areas; cultural methods; the harvesting, storing, and marketing of field crops. Laboratory fee, $\$ 1.00$.

Mr. Mortensen.
First year, second semester, three lectures and three hours of laboratory or field work per week.

4 units.
115 Dairy Husbandry. A study of dairy farm management; methods of feeding, breeding, and herd improvement. A study of pedigree and other methods of animal selection. Calf raising and dairy equipment and the more common dairy cow diseases are also considered. Fee, $\$ 1.00$.

Mr. Ostrander.
Second year, first semester, three hours of lecture or its equivalent in dairy survey and field work. 3 units.

116 Poultry Husbandry. A general survey course including general principles of poultry management in large and small units, and the application of these principles to local and regional conditions.

Mr. Ostrander.
Second semester, three hours of lecture or its equivalent in field work.
125 Principles of Horticulture. The general principles of plant propagation. Nursery practices in the production of fruit and orna-
mental stock. Planting and care of orchards and home grounds. Prerequisite: General Botany. Laboratory fee, $\$ 1.00$.

Mr. Mortensen.
Second year, first semester, one lecture and three hours of
laboratory or field work per week.
2 units.
126 Practical Horticulture. A continuation of Agric. 125 with emphasis upon ornamental trees and shrubs and flowering plants. Landscaping of home sites, school grounds, and recreation parks. Prerequisite: Agric. 125. Laboratory fee, \$1.00.

Mr. Mortensen.
Second year, second semester, one lecture and three hours
of laboratory or field work per week. 2 units.
Agric. 128 Farm Mechanics. (See Ind. Art 108.) Designed to meet the needs of students of agriculture and farm management. Laboratory fee, \$2.00.

Second year, first semester, six hours laboratory. 3 units.
143 Soils. The formation, classification, and physical and chemical properties of soils; the relation of the physical and chemical properties of soils to crop production; cultural practices in conservation of soil fertility and permanent agriculture. Prerequisite: one course in college chemistry. Laboratory fee, $\$ 1.00$.

Dr. Judd.
Third year, first semester, two lectures and three hours lab-
oratory work per week.
3 units.
144 Irrigation Principles and Practices. A continuation of Agric. 143. Brief history of irrigation; present extent and importance. Water relations of crop plants; water duty; methods of application, conservation, and use of irrigation water. Prerequisite: Agric. 143. Laboratory fee, $\$ 1.00$.

Dr. Judd.
Second semester, two lectures and tbree hours laboratory. 3 units.
205 Animal Nutrition and Applied Feeding. Includes the principles of feeding, composition of feeds, physiology of nutrition, and practice in formulating rations for various classes of livestock. Evaluation of feeds and feeding practices current in Arizona. Prerequisite: Agric. 107 and one year of college chemistry. Laboratory fee, $\$ 2.00$.

Dr. Juâd.
Third year, first semester, two hours lecture and three hours laboratory work per week.

3 units.
208 Farm Organization and Management. Principles governing the economic and regional selection of the farm. Factors involved in profitable farm management; crop selection and acreage; diversification of effort; capital utilization; cost accounting; rural bookkeeping and analysis of labor income. A study of ways and means for profitable farming and for developing a happy and well rounded rural family life.

Dr. Judd.
Third year, second semester, two hours lecture and three
bours laboratory work per week.
3 units.

## DEPARTMENT OF COMMERCE

MR. MASTELLER (Acting Head of the Departmeni), DR. ATKINSON, MR. HILKERT
The Department of Commerce has a two-fold purpose. The primary objective is to train teachers in the field of commerce or business education. The other purpose of the department is to offer specialization in distinct business fields. In line with this last purpose the student may place emphasis in the field of business administration, in the field of accounting, in that area devoted to secretarial science, or in the merchandising realm.

Students who plan to teach commercial subjects in the secondary schools should follow the "type curriculum." Students who do not plan to teach but do desire to major in this department should consult one of the members of the department in following the "pre-secondary curriculum."

Ample opportunity has been provided for those who wish to minor in the department.

The following lower and upper division courses are offered during the year 1937-38, and are applicable on a major or minor in the Department of Commerce.

## LOWER DIVISION COURSES

Commerce 101, 102 Elementary Accounting
Commerce 105 Business Mathematics
Commerce 110 Beginning Typing
Commerce 113, 114 Shorthand 1 and 2
Commerce 120 Advanced Typing
Commerce 121, 122 Store Organization and Control
Economics 131, 132 Principles of Economics
Commerce 133, 134 Business Organization and Management

## UPPER DIVISION COURSES

Commerce 201, 202 Intermediate Accounting
Commerce 203, 204 Advanced Accounting
Commerce 205, 206 Business Law
Commerce 209 Marketing and Distribution
Commerce 212 Principles of Banking
Commerce 213 Advanced Shorthand
Commerce 214 Secretarial Science

Commerce 216 Office Machines
Commerce 221, 222 Commercial Teaching Methods
Commerce 224 Business Statistics
Commerce 227, 228 Retail Selling

## RECOMMENDED COURSES IN OTHER DEPARTMENTS FOR RELATED WORK

*Art 108 Sign Writing
*Geography 101 Economic Geography
*Art 201 Lettering and Advertising
*Art 202 Merchandise Display
*Home Economics 202 Problems of the Consumer
*Geography 218 Geography of Transportation and Trade Centers

* May be applied on a Commerce major.


## TYPE CURRICULUM FOR STUDENTS MAJORING IN COMMERCIAL SUBJECTS

| FRESHMAN YEAR |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| First Semester | Units |  | Second Semester | Units |
| Engl. 101 Composition.... | .... 3 | Engl. | 102 Composition. | - 3 |
| Gen. Science 100............... | --3 | Gen. Science 110...................... 3 |  |  |
| *Mus. 100 Fundamentals | $-2$ | *Art 110 Pub. School Art......----.... 2 |  |  |
| *P. E. 100 Hygiene.... | 2 |  |  |  |
| Elective -.-.-.....- |  |  |  |  |
| Physical Activity....... | - 0.5 | Physical Activity.....---........--- 0.5 |  |  |
| Com. 113 Shorthand 1. | ... 3 | Com. | 114 Shorthand 2 | 3 |
|  | 16.5 |  |  | 16.5 |

## SOPHOMORE YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Econ. 131 Prin. Economics..- 3 | Econ. 132 Prin. Economics....... 3 |
| *Psych. 100 Gen. Psychology.... 3 | *Educ. 120 Sociology ................ 3 |
| *Geog. 100 Elem. of Geog......... 3 | *S. Sci. 100 Const. Govt............ 3 |
| Elective .-................................... 3 | Elective |
| Physical Activity...---...............- 0.5 | Physical Activity.............------- 0.5 |
| Com. 101 or 201 Accounting.... 3 | Com. 102 or 202 Accounting.... 3 |
| $\overline{15.5}$ | 15.5 |

## JUNIOR YEAR

| First Semester | Units |
| :---: | :---: |
| -Educ. Elective.............................. |  |
| *Psych. 200 Educ. Meas...........-. 3 |  |
| Minor and elective.................... 3 |  |
| Com. 207 Salesmanship............. 3 |  |
| Com. 206 Business Law | 3 |
|  | 15 |


|  | Second Semester | Units |
| :---: | :---: | :---: |
| Directed T |  |  |
| $\left\{\begin{array}{c}\text { Educ. } 220 \\ \text { Rec. ............................ } 2\}\end{array}\right.$ |  |  |
| Com. 214 | 4 Office Training | ---. 3 |
| Com. 206 | Business Law. | -..-- 3 |

## SENIOR YEAR



Note 1. In the case of courses marked with a star (*), sections are to be so arranged that half the class will take the course the first semoster and half the second semester.
Note 2. Electives will be so chosen as to include an approved minor of at least fifteen semester hours in a field other than commerce.
Note 3. Half the students take directed teaching in the last half of the junior year, the others in the first half of the senior year.

## DESCRIPTION OF COURSES

Com. 101, 102. Accounting 1 and 2-.Elementary. An introduction to the field of bookkeeping, accounting, and business administration. Theory of modern accounts; debit and credit; classification of accounts; procedure of recording transactions; work sheets; adjusting and closing the ledger; balance sheets; profit and loss statements, and the more common type of business reports. Emphasis is placed upon the development of a general understanding of modern business procedure. The social and economic values of bookkeeping as well as the vocational values, are presented. For students with no previous training or experience in bookkeeping, this is an exploratory course and preparatory to intermediate accounting. A business course for pre-professional students. Those students who are deficient in the fundamentals of arithmetic, especially interest and percentage, should take Com. 107, Business Arithmetic, before enrolling in Com. 101.

Mr. Hilkert.
First and second semesters, lecture three hours,
laboratory two hours per week. $\quad 8$ units each semester.
105 Business English. No attempt is made to supplement the cultural studies in English. Only the practical side of English as used in everyday business receives attention. The course aims to teach students to speak and write effectively with a view toward accomplishing desired results in business. The correction of common errors in business forms and in oral and written applications for positions receives emphasis. The radio program broadcast by the Better Speech Institute of America is carefully analyzed and evaluated.


107 Business Arithmetic. Designed for those students who are deficient in elementary mathematical computations. Emphasis is placed on the improvement in speed and accuracy relative to the basic mathematical operations embodied in addition, subtraction. multiplication, and division. Short cuts and improved procedures receive attention. Students planning an accounting program are given preference in admission to the course. Permission of the instructor is required before enrolling.

Mr. Masteller.
First semester, three hours a week.
3 units.
110 Beginning Typing. The fundamentals of touch typewriting are mastered with appropriate emphasis upon proper position, rhythm, technique, and accuracy. Recommended for all those who desire to teach commercial subjects, and for those who merely wish to master the technique of typing.

Mr. Masteller. Fither semester, daily.

2 units.
113, 114 Shorthand 1 and 2. The theory and practice of Gregg Shorthand. The principles of shorthand are thoroughly mastered. Drills in reading and writing are presented. The course is recommended for those who are planning a major in commerce, and for those who desire to teach business subjects, or for other students who desire to learn shorthand in order to qualify for commercial positions. Prerequisite: one semester typing. Fee, 50 cents.

Mr. Masteller.
First and second semesters.
Lecture three hours a week; laboratory one hour. 3 units.
120 Advanced Typing. Emphasis is placed on the attainment of greater speed and accuracy in typing, as well as on laboratory work of more pertinent value in the modern office. Much practical work is presented. At the completion of this course the student should be qualified to fill a commercial typing position in the field of business. Fee, $\$ 1.00$.

Mr. Masteller.
Either semester, daily.
2 units.
121, 122 Store Organization and Control. A basic course for all students interested in merchandising. The organization and administration of the modern retail store is studied. Such problems as stock purchasing, stock turnover, personnel management and administration are given careful attention. The course is intensely practical in type, and is a prerequisite to the course in Retail Selling.

Both semesters, three hours a week.
3 units.
133, 134 Business Organization and Management. A practical study of the basic forms of business organizations and types of manage-
ment. An attempt is made to analyze the psychological qualities involved in management. Significant trends in modern business are noted. In general, this course is an orientation course to a further study of commerce. This course may be taken instead of Economics 131,132 in order to meet the requirements of the teaching major in Commerce.

Dr. Atkinson.
Both semesters, three lours a week. 3 units.
201, 202 Accounting 3 and 4.-Intermediate. An intensive study of corporations and corporation accounting; actuarial science; average due dates of accounts; inventories; tangible and intangible fixed assets; investments; funds and reserves; comparative statements; analysis of working capital and miscellaneous ratios; statement of application of funds; and an introduction to state and federal income taxes. Prerequisite: Accounting 1 and 2 (Elementary) or the equivalent.

Mr. Hilkert.
First and second semesters, lecture three hours, laboratory
two hours a week.
3 units each semester.
203, 204 Accounting 5 and 6-Advanced. A more intensive study of income tax; partnership organization, dissolution, and liquidation; venture accounts; statement of affairs; receiver's accounts; home office and branch accounting; parent and subsidiary accounting; consolidated balance sheets; consolidated profit and loss statements; foreign exchange; estates and trusts; budgets; public accounts; stock brokerage. Prerequisite: Accounting 3 and 4 (Intermediate) or equivalent. (Not offered in first semester, 1937-1938).

Mr. Hilkert.
First and second semesters, lecture three hours a week
and problems.
3 units each semester.
205, 206. Business Law. A study of the legal situations most frequently encountered in every-day life; contracts, sales, agency, partnerships, corporations, negotiable instruments, personal and real property, federal and state regulation of business. In addition to the legal theory, the practical application of the law is presented, especially as it applies to Arizona. This course includes a study of the origin and development of the law, the courts, legal remedies, court procedure, and the social aspects of law in general.
Lectures, textbook, and cases.
Required of all commerce majors.
Mr. Hilkert.
First and second semesters.
lecture, three hours a week.
3 units each semester.
209. Marketing and Distribution. Investigation of products and their analysis; forms of marketing; organizations; methods of marketing;
grading; storage; cooperative marketing; price policies; price maintenance; brands and trademarks.
Prerequisite: Econ. 131, 132; or Com. 133, 134.
Dr. Atkinson.
Lecture, three hours a week. 3 units.
211. Money and Credit. The principles relating to money and credit are today commanding an interest and assuming an importance never before experienced in American business life. In this course, a fair appraisement of controversial view points on these subjects is given. Probable trends in the future based upon facts of the past and changing conditions of the present receive careful consideration.
Prerequisite: Econ. 131, 132.
Dr. Atkinson.
Lecture, three hours a week. 3 units.
212. Principles of Banking. The history of American banking. Economics and credit. Correlation of banking with economics and economic conditions. Consideration of loans, discounts, types of credit, bank organization, and management, financial institutions, banking systems and banking statements.
Prerequisite: Econ. 131, 132: or Com. 133, 134.
Dr. Atkinson.
Lecture, three hours a week. 3 units.
213. Shorthand 3-Advanced. A study of advanced dictation and transcription. Thorough review of the piinciples of Gregg Shorthand. Specialized dictation and transcription from various fields of business. The functional method utjlized throughout.
Prerequisite: Commerce 113, 114. Laboratory fee, fifty cents.
Mr. Masteller.
First semester, dally. 3 units.
214. Secretarial Science. A study of the principles and practices of conducting a modern office. Intensive drill and lectures in various skills demanded in the modern office. Integration between the use of skills and the understandings, attitudes, and appreciations demanded in the typical business office. A critical study is made of business forms and correspondence.
Prerequisites: Econ. 131, 132; or Commerce 133, 134; Commerce 110; Commerce 113, 114, 213; or their equivalent.
Laboratory fee, fifty cents.
Mr. Masteller.
Second semester, daily. 3 units.
216. Office Machines. An advanced course for those who have completed preliminary work in the secretarial field. Instruction is given in the care and use of the typewriter, the calculator, adding ma-
chines, filing systems, the mimeograph, dictaphone, and other types of modern office equipment. Offered only to upper division students, preferably to senior and graduate students.
Prerequisites: Commerce 101, 102; Commerce 113, 114, 213; Commerce 110,120 ; or their equivalent. Laboratory fee, fifty cents.

Mr. Masteller.
Second semester, three hours a week. Additional laboratory work assigned. 3 units.
218. Advertising. A study of methods and problems of advertising in business. Emphasis is placed on market analysis as a basis for advertising; composition of copy; display and layout; and on an analysis and evaluation of advertising media. In every respect, this is an intensely practical course. Open to sophomores and upper division students.

Mr. Masteller.
Second semester, three hours a week.
3 units,
219. Labor Problems. Recent legislation in Congress embodied in Section 7 a of the National Recovery Act has made the labor problem one of the most important subjects for consideration by the American people. This course attempts to trace the conditions that have led up to the present situation and outlines the prospects for the future relation of labor and capital.
Prerequisite: Econ. 131, 132; or Com. 133, 134.
Dr. Atkinson.
Lecture, three hours a week. 3 units.
221, 222. Commercial Teaching Methods. A comprehensive survey of teaching methods and materials in all of the commercial subjects, with more definite emphasis on those which are more widely taught. The full year's work covers intensively the more progressive methods of teaching business subjects in each of the specialized fields.
Prerequisites: Economics 131, 132; or Commerce 133, 134; Commerce 101, 102; Commerce 113, 114; Typing 1 or its equivalent; Commerce 205, 206.

Mr. Masteller.
Both semesters; lecture, two hours a week. Laboratory, four hours per week to be assigned on individual basis.

3 units.
224. Business Statistics. Introduction to advanced statistical materials. Methods of graphic presentation; organization of statistical data; frequency distribution; the mean, mode, and median applied to business materials; index numbers of prices. Measurements in trends; analysis of time series; correlation.
Prerequisite: Econ. 131, 132; or Commerce 133, 134.
Second semester, three hours a week, additional laboratory work.

3 units.
225. Current Economic and Social Problems. An attempt to appraise the content and quality of the most momentous of the fundamental changes in our economic and social relationships which are being proposed at the present day. Methods of maintaining clear distinction between facts and rropaganda are kept clearly in mind.

227, 228. Retail Selling. A practical course utilizing the modern methods of selling in a cooperative method. Students who enroll in this course will be employed several hours each week in various Phoenix retail stores. Textual material will thus be supplemented by practical experiences in the selling of goods. Only those students who have taken Store Organization and Control, or a course in Salesmanship will be admitted to this course. All students must be at least in their third year of college work.

Both semesters, daily. 3 units each semester.
*Art 108. Sign Writing. Course may be taken by commerce students with permission from the Art Department. Particularly recommended for students placing emphasis in merchandising. See Art Department.

Miss Kloster.
First or second year, second semester, four hours a week. 2 units.
*Art 201. Lettering and Advertising. May be taken by commerce students by permission from Art Department. Recommended for students in the merchandising field. See Art Department.

Miss Kloster.
Third or fourth year, first semester, four hours a week. 2 units.
*Art 202. Merchandise Display. See Art Department. Recommended for students in merchandising.

Miss Curtiss.<br>Third or fourth year, second semester, two bours a week. 2 units.

*Home Economics 202. Problems of the Consumer. See Home Economics Department. Recommended for all students in Commerce who are interested in Consumer Economics.

Miss Douglass.
Third year, first semester, three hours a week. 3 units.
*Economics 131, 142. Principles of Economics. A study of economics that does not take into account the principles and projects developed in recent years fails to meet the requirements of today. In this course a fair estimate is made of the values of what is good in the old, and what must be modified by the changing conditions of modern life. In the second semester, study is directed chiefly to the effects of economic laws and tendencies upon present day
business problems. Open to sophomores and upper division students only.
Required of commerce majors.
Dr. Atkinson.
First and second semesters, three hours a week.
3 units each semester.
*Geography 101. Economic Geography. The description of this course will be found under the Science Department. The course may be taken by Commerce majors with credit to be applied either in science or in commerce. See Department of Sciences.

Mr. Hoover.
First semester, three recitation-lecture periods per week. 3 units.
*Geography 218. Geography of Transportation and Trade Centers. A geography course that may be applied on the commerce major. See Department of Sciences.

Mr. Hoover.
Second semester, three hours a week.
3 units.

* Courses marked with the asterisk (*) are found in other departments, but the offering is closely related to the commerce field. Students may take these courses and apply them on a commerce major if they so desire.


## DEPARTMENT OF ENGLISH AND SPEECH

## DR. MYERS (Head of the Department), MISS PLLCHER, DR. SCHILLING, MISS SIMPSON, DR. ANSBERRY, MR. SOUTHERN

The course in first year composition $(101,102)$ with a passing grade is prerequisite for all other English courses except Speech, and Dramatics. This course may not be counted toward the major.

An average index of 2.00 or higher in all English courses is ezpected of students majoring in English. Students electing to major in English will plan their programs under the advice and direction of the head of the department.

Engl. 151, 152, Survey of English Litesature should be taken by all English majors and minors in the sophomore year.

Students majoring in Enghish who wish to elect a minor in speech arts are required to elect a second minor in some other field. English majors who are not taking a full minor in speech arts are expected to include some courses in that field as a part of the English major.

English majors are particularly advised to elect some course: in foreign languages as part of their curriculum.

## SEQUENCE FOR ENGLISH MAJORS

## FOUR-YEAR CURRICULUM IN ELEMENTARY EDUCATION

FIRST YEAR
101. 102. English Composition (See above) ..... (6)
110. Elementary Speech ..... 3
SECOND YEAR
151, 152. Survey of English Literature. ..... 6
120. Literature for the Grades.. ..... 3
123. Stage $I^{2}$ roduction (elective).
THIRD YEAR
Elect 6 or 9 units from the following courses: ..... (6 or)
201, 202. History of the Novel.
203,204 . History of th211, 212. Victorian Poetry.
221, 222. American Literature
231, 232. English Grammar, and History of the Language.235.
Stage Directing.
FOURTH YEAR
Elect 6 or 9 units from the following courses: ..... (6 or) 9
207, 208. Romantic Period.
209, 210. Vjetorian Prose. 213, 214. Contemporary Prose. 215, 216. Contemporary Poetry.

    217, 218. Modern Drama.
    
    223,224 . Milton and Pope.
    
    225, 226. Dickens and the Short Story.
    
    240. Children's Dramatics.
                                    (24 or) 30
    SEQUENCE FOR ENGLISH MINORS
FOUR-YEAR CURRICULUM IN ELEMENTARY EDUCATION
FIRST YEAR
101, 102. English Composition (See above) ..... (6)
110. Elementary Speech ..... 3
SECOND YEAR
151, 152. Survey of English Literature ..... 6 ..... 3
120. Literature for the Grades
120. Literature for the Grades
THIRD AND FOURTH YEARS
Elect 6 units from the courses listed for English majors. ..... 6
SEQUENCE OF ELECTIVES IN SPEECH ARTS
FIRST YEAR
110. Elementary Speech (first semester) ..... 3
121. Dramatic Interpretation (second semester) ..... 2
SECOND YEAR
123. Stage Production (Arst semester) ..... 3
125. Drama Workshop (flrst semester) ..... 1
127. Debate and Oratory (first semester)$\stackrel{1}{2}$
122. Acting (second semester) ..... 1
124. Pageantry (second semester) ..... 1
THIRD YEAR
235. Stage Directing (first semester) ..... 2
237. Advanced Debate and Oratory (flrst semester) ..... 2
236. Advanced Drama Workshop (second semester) ..... 1
FOURTH YEAR
238. Playwriting (second semester) ..... 1
239. Radio Techniques (first semester) ..... 2
240. Children's Dramatics (second semester) ..... 3
MINOR IN SPEECH ARTS
FIFST YEAR
110. Flementary Speech (first semester) ..... 3
121. Dramatic Interpretation (second semester) ..... 2
SECOND YEAR
123. Stage Production (first semester) ..... 3
(Elect Engl. 151 and Engl. 152, prerequisite to upper division lit- erature courses; and Engl. 122, prerequisite to Engl. 235.)


## THIRD AND FOURTH YEARS

235. Stage Directing ..... 2
Elect 6 units from the following courses: ..... 6203, 204. History of the Drama.
205, 206. Shakespeare.
217, 218. Modern Drama.

## TYPE CURRICULUM FOR STUDENTS MAJORING IN ENGLISH



## SOPHOMORE YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| * Psych. 100 Gen. Psych...........- 3 | * Educ. 120 Sociology ................. 3 |
| *Geog. 100 Elem. of Geog........ 3 | *S. Sci. 100 Const. Govt...-------3 |
| Social Studies (See Note 2)... 3 | Social Studies (See Note 2)... 3 |
| P. E. Activity.............................. 0.5 | P. E. Activity.............................. 0.5 |
| Elective ....................................... 1 | *Elective ....................................... 4 |
| Engl. 151 Survey....................... 3 | Engl. 152 Survey........................ 3 |
| *Engl. 120 Lit. for Grades......... 3 | 16.5 |
| $\underline{16.5}$ |  |

## JUNIOR YEAR



## SENIOR YEAR

| *Educ. $250 \stackrel{\text { First }}{\text { Phil. of Educ.......... } 3}$ | Second Semester Units <br> *Education, elective......................- 3 |
| :---: | :---: |
| Directed Teaching....................... 10 | *Educ. 210 Teaching Reading....... 2 |
| Or | Minor or elective........................... 5 |
|  | English, Senior Elective............ 6 |
| English, Senior Elective............. 3 |  |
| 16 | 16 |

Note 1. In the case of the starred courses, sections are to be so arranged that half of the group will take the course in the first semester. and half in the second semester.
Note 2. The courses in sccial studies are to be selected from the following: Hist. 101, 102; 103, 104; and Econ. 131, 132.
Note 3. Electives will be so chosen as to include an approved minor of at least fifteen units in a field of learning other than English or education.
Note 4. Half of the teaching group in each year take directed teaching in the second semester of the junior year, the other half do the teaching in the first semester of the senior year.

## DESCRIPTION OF COURSES IN ENGLISH

Note: Courses not offered in 1937-1938 will be offered in 1938-1939.

Engl. 101, 102 First Year English. Drill in the mechanics of English theme writing and theme correction; conferences with instructors. Introduction to the principal types of literature and training in methods of literary stady. A regular requirement in the freshman year.

Dr. Myers, Dr. Schilling, Miss Pilcher, Mr. Southern.
First year, two semesters, three hours a week.
6 units.
105. Improvement in Reading. Planned to improve the reading technique and study habits of college students. Testing and diagnosis, methods of increasing reading efficiency, and materials of instruction are designed to help individual students use reading economically and effectively. Students will be assigned to this class on the basis of entrance tests.

Mr .
First year, first semester, three hours a week. 3 units.
110 The Elements of Speeci. Designed to give students an understanding of the fundamentals of the theory and practice of speaking. Audience analysis, speech structure, voice and action, and individual speech problems are considered from the point of view of the needs of the teacher.

Dr. Ansberry.
First year, either semester, three hours a week. 3 units.
112 Speech Correction. (Speech clinic) Remedial work with students having defects in speech. Individual conferences and group discussions. Open to students in need of corrective treatment.

> Dr. Ansberry.
> Second semester, three hours a week. Credit by arrangement. Consult the instructor before enrolling in this course.
120. Literature for the Grades. A wide knowledge and critical acquaintance with literature suitable for pupils at different age levels above the primary grades. A history of children's literature and study of classics in verse and prose. Emphasis upon sources of material for carrying out units of work and choices of books to satisfy the needs and interests of pupils in each grade. Character building and development of reading taste.

Mr.
Second year, either semester, three hours a week.
3 units.
121. Dramatic Interpretation. A study of the art of securing and presenting the intellectual and emotional content of literature. Three
recitals are required in the fields of prose, poetry, and drama. Prerequisite. Engl. 110.

Miss Simpson.
First year, second semester, two hours a week.
2 units.
122. Acting. One or two plays are produced during the semester, members of the class being assigned to the cast and staff positions. Prerequisite: Engl. 110 and 121.

Miss Simpson.
Second year, second semester, two hours a week. 2 units
123. Stage production. A study of the fundamentals of stage design and construction, lighting, costuming, make-up, and stage management.
No prerequisite.
Miss Simpson.
Second year, first semester, three hours a week. 3 units.
124. Pageantry. Writing and production problems of pageantry, with special emphasis on the possibilities of outdoor pageantry in Arizona.

Miss Simpson.
Second year, second semester, one hour a week. 1 unit.
125. Drama Workshop. One hour of credit is given for fifty-four hours of supervised work in Drama Workshop staff duties.
No text. Fee $\$ 1.00$.
Miss Simpson.
Second year, first semester.
1 unit.
127 Debate and Oratory. A study of the practice and theory of argumentation and debate; analysis of American masterpieces of debate and oratory.

Dr. Ansberry.
First semester, two hours a week. 2 units.
130. Journalism-News Writing. A general introduction to the field of journalism; study of the basic principles of news writing; practice in news writing; study of news sources; newspaper illustrations; related topics.
Prerequisite to other courses in journalism.
Laboratory fee, $\$ 1.00$.
Mr. Southern.
First year, either semester, three hours a week. 3 units.
140 Journalism-Reporting. A study of all types of stories assigned to a reporter. Practice in writing features, society, sports, interviews.
Prerequisite: Engl. 130 News Writing. Laboratory fee, $\$ 1.00$.
Mr. Southern.
Either semester, three hours a week.
3 units.

150 Journalism-Editing and Staff Work. Actual desk practice; copy reading; editing; head writing; proof reading and related topics. A maximum of three units may be earned in this course. Prerequisite: Engl. 130, 140, or equivalent.

Mr. Southern.
Either semester, hours and units of credit by arrangement with the instructor.

151, 152. Survey of English Literature. An historical study of English literature from the beginning to the present, with reading of representative masterpieces and attention to social backgrounds and intellectual movements.

Dr. Myers.
Second year, two semesters, three hours a week. 6 unts.
160. Great Books. Reading and discussion of examples of the principal types of literature, including translations of foreign masterpieces. This course is designed for students who do not intend to specialize in English, but who wish some acquaintance with literature, and guidance in general reading. (Not offered in 1937-1938.)

Dr. Myers.
Second year, either semester, two hours a week. 2 units.
200. The Teaching of Reading. A description of this course will be found under the listing, Education 210.

Dr. Netzer.
Third year, either semester, three hours a week. 3 units.
201, 202. History of the Novel. The origins of prose fiction; the novel in England and America, with some attention to significant examples in foreign literatures; analysis of typical examples and reading of outside assignments.

Miss Pilcher.
Two semesters, three hours a week. 6 units.
203, 204. History of the Drama. The English drama from the middle ages to the present, together with selected examples of foreign influences. Reading of representative plays of each period.

Dr. Schilling.
Two semesters, three hours a week. 6 units.
205, 206. Shakespeare. Critical study of ten plays, with special attention to Shakespeare's dramatic methods and development. A Midsummer Night's Dream, The Merchant of Venice, As You Like It, Twelfth Night, Hamlet, Othello, King Lear, Macbeth, Antony and Cleopatra, The Tempest.

207, 208. The Romantic Movement. English poetry of the period 1780-1830, a study of its literary characteristics and its relations with current philosophies and social conditions.

Dr. Schilling.
Two semesters, three hours a week. 6 units.
209, 210. Nineteenth Century Prose. The leading prose writers of England, with readings of their most significant work and study of their influence. The first semester deals with the romantic genera-tion-LLamb, DeQuincy, Hazlitt; the second semester deals with the Victorians.

Miss Pilcher.
Two semesters, three hours a week.
6 units.
211, 212. Victorian Poetry. The first semester is concerned with Tennyson and the Brownings, the second semester with Arnold, Swinburne, Rossetti, Morris, Meredith, and Hardy. The political and social background of the period; the personality of the writers; with extensive readings from their works.
(Not offered in 1937-1938.)
Dr. Myers.
Two semesters, three hours a week.
6 units
213, 214. Contemporary Prose. The chief writers of essays, biography, history, and fiction, since the beginning of the twentieth century; their careers and distinctive traits, with particular attention to the relationship of their ideas with important present-day problems. No text. Fee, $\$ 1.00$.
(Not offered in 1937-1938.)
Miss Pilcher.
Tro semesters, three hours a week.
6 units.
215, 216. Contemporary Poetry. English and American poetry of the twentieth century; literature forms and poctic outlook; relation of poetry to present day life.

Dr. Myers.
Two semesters, three hours a week.
6 units.
217, 218. Modern Drama. The chief dramatic writers of the last half century. Readings from representative plays in Dickinson's Second Series of Modern Dramatists. Study of the theatre as influenced by the national schools of the period.
(Not offered in 1937-1938.)
Dr. Schilling.
Two semesters, three hours a week.
6 units.
221, 222. American Literature. A review of the national period of American literature. Study of the New England movement; transcendentalism; modern realism. Wide readings in the works of the leading poets and essayists.

Dr. Schilling.
Two semesters, three hours a week.
6 units.
223. Milton. The life of Milton, his relation to the literary and social background of his period, and textual study of his chief works.
(Not offered in 1937-1938.)
Miss Pilcher.
First semester, three hours a week.
3 units.
224. Pope. The life of Pope, his relation to the literary and social background of his period, and textual study of his chief works.
(Not offered in 1937-1938.)
Miss Pilcher.
Second semester, three hours a week. 3 units.
225. Dickens. A study of the principal novels of Charles Dickens in relation to the social movements of his time, and as examples of the art of fiction.
(Not offered in 1937-1938.)
Dr. Schilling.
First semester, three hours a week. 3 units.
226. The Short Story. The development of the short story as a literary form; analysis of its technique through study of examples from the work of representative authors.
(Not offered in 1937-1938.)
Dr. Schilling.
Second semester, three hours a week.
3 units.
231. English Grammar. A study of technical grammar based upon the prose structure and idiom of the best modern writers. Etymology, word formation, and sentence formation. Variations in terminology and opinion in grammars of the present day are compared and harmonized.

Miss Pilcher.
First semester, three hours a week. 3 units.
232. History of the English Language. The development of English from Anglo-Saxon times to the present; illustrating the principles which have led to its present syntax and vocabulary.

Miss Pilcher.
Second semester, three hours a week. 3 units.
233, 234. Creative Writing. The first semester is devoted to the writing of verse, with analysis of the principal modern forms of poctry and frequent criticism of the students' own work. The second semester employs similar methods in studying prose forms, particularly fiction, drama, and the special article. Admission by approval of the instructor.

Mr. Southern.
Two semesters, two hours a week.
4 units.
235. Siage Directing. Theory and practice in the directing of productions under faculty supervision.
Prerequisites: Engl. 110, 121, 122, 123.
Miss Simpson.
Third year, first semester, two hours a week, with Iaboratory to be arranged with the instructor.

2 units.
236. Advanced Drama Workshop. Special projects in theatre arts.

Miss Simpson.
Second semester, hours to be arranged. 1 unit.
237. Advanced Debate and Oratory. Advanced study in the theory and practice of argumentation and debate. Participation in interscholastic debates.
Prerequisite: Engl. 127.
Dr. Ansberry.
Given this year in the second semester. Hours arranged. 2 units.
238. Playwriting. Two original one-act plays or one three-act play required in this course. Open only to advanced students of drama or composition or with the consent of the instructor.

Miss Simpson.
Second semester, one hour a week. 1 unit.
239. Radio Techniques. A survey in radio appreciation, radio acting, and radio writing, including actual laboratory practice in microphone delivery. Opportunities are given for appearance over Phoenix radio stations.

Miss Simpson.
First semester, two hours a week. 2 units.
240. Children's Dramatics. Theory and practice of dramatics for grade school children.
Prerequisites: Engl. 120, 123.
Miss Simpson.
Fourth year, either semester, three hours a week. .3 units.
251, 252. Advanced Problems in Children's Dramatics. Actual coaching of plays in the college training school; building of dramatizations and their attendant production problems. Open to upper division and graduate students who have had the prerequisites: Engl, 235 and 240.

Miss Simpson.
Both semesters, hours to be arranged. $\approx$ units.
301, 302. Seminar in English. Training of graduate students in finding and developing problems, using authorities, writing research papers. Conducted as a seminar with practice in individual projects. Open to graduate students only.

Dr. Myers.
Both semesters, two hours a week.
4 units.
Speech Clinic. In connection with Engl. 112, a fully appointed speech clinic is to be inaugurated this year to undertake the correction of speech defects and the adjustment of speech re-education problems. Equipment includes the latest devices in the recording of the voice. Motion-picture cameras and projectors made it possible to record both the voice and the personality of the individual for detailed study.

## DEPARTMENT OF EDUCATION


#### Abstract

DR. BURKHARD (Head of the Department), MR. PAYNE (Director of Teacher Training), DR. GRIMES (Director of Extension), DR. SALISBURY, DR. NETZER, MR. DUTTON, MISS ROLL, MISS HAULOT, MRS. EMPEY, MISS LYND, MISS ANDERSON, MISS CALLOWAY, MISS ROBINSON, MRS. O'CONNOR, MISS ROBERTS. MISS CHASE. MR. MARSHALL, MRS. KUHNS, MRS. PEARLMAN MR. STEVERSON, MR. ALLEN.


The purpose of the Department of Education is to provide candidates for the teaching profession with professional perspective and skill in the techniques of teaching and in the administration of public schools. To accomplish this end, the student is required to pursue courses dealing with the psychology of human nature, the nature of subject matter, and the problems of social reconstruction in the light of democratic social theories. Opportunities for doing student teaching under supervision are provided in the training schools. Students who wish to prepare for rural education are given opportunity to do their student teaching under rural conditions.

Candidates for the B.A. degree are required to complete a minimum of thirty hours in education and psychology. The following list of courses is prescribed for all candidates for the degree.

## REQUIRED PROFESSIONAL COURSES

Psych. 100 General Psychology 3 hours
Educ. 120 Sociology ..... 3 hours
Psych. 200 Educational Measurements ..... 3 hours
Educ. 210 Teaching Reading and Language ..... 2 hours
Educ. 220 Ariz. Sch. Systems, Laws, and Records ..... 2 hours
Educ. 230 Elementary Curriculum and Techniques ..... 2 hours
Elective in Education or Psychology ..... 2 hours
Educ. 250 Philosophy of Education ..... 3 hours
Educ. 260 Directed Teaching ..... 10 hours
30 hours

The prescribed courses in the department of education should be taken in the order in which they are listed above. General psychology and sociology should be taken in the sophomore year since these two courses are prerequisite to all other courses in education. The courses in educational measurements and school law and management must be completed before the student may register for the course in curriculum and techniques. Philosophy of education is open only


I'HOTOGRAPHI* REAORD OF PERSONAEITY TEST


to seniors, except by special permission of the head of the department. All other prescribed courses in education and psychology should have been completed as a condition for enrolling in the course in philosophy of education.

Directed teaching. Candidates for the degree will do their student teaching in the second semester of the junior year or the first semester of the senior year. All student teachers are required to teach for one-half day for each school day during one semester. This half-day includes three hours in the classroom and one and one-half hours in conference and school activities.

Students doing their directed teaching may take six units of academic work during that part of the day not occupied with their teaching. During the semester in which students are teaching, they are not permitted to take part in any activities that interfere with their student teaching, conferences, or other duties in the training school.

## KINDERGARTEN-PRIMARY MAJOR

Students who wish to qualify for kindergarten and primary teaching will be required to pursue professional courses in these fields in addition to the prescribed courses in education as listed above.

For the kindergarten-primary major, students will select at least thirty semester hours from the following list. The starred courses must be included.
Units
*Educ. 109 Literature for Kindergarten-Primary. ..... 3
*I. Art. 120 Elementary Wood Work ..... 3
*Educ. 205 Play Education for Kindergarten-Primary ..... 3
*Educ. 206 Construction and Play Materials ..... 3
*Educ. 209 Kindergarten-Primary Curriculum ..... 3
*G. Sci. 232 Nature Study ..... 3
*Psych. 233 Child Psychology ..... 3
Mus. 109 Music Appreciation ..... 2
*Mus. 110 Music in Kindergarten and Primary Grades ..... 2
Engl. 110 Elementary Speech ..... 3
Engl. 240 Children's Dramatics. ..... 3
H. Ec. 101 Elementary Nutrition ..... 3
H. Ec. 204 Family Health ..... 3
H. Ec. 207 Nursery School ..... 3

Kindergarten-Primary majors must satisfy all requirements of the core curriculum, and must complete an approved minor in some
other field. The directed teaching ( 10 hours) will be done in kindergarten and primary grades.

Before the kindergarten-primary major is approved, the student must pass a satisfactory examination in music, including sight reading, singing and piano accompaniment.

Kindergarten-Primary Minors are required to take fifteen units of work in courses to be chosen from those marked with a star ( ${ }^{*}$ ) in list given above.

## RURAL EDUCATION MAJOR

Since a large proportion of the schools of Arizona are classed as rural schools, the department of education provides opportunity for making special preparation to engage in rural education.

The directed teaching for rural teachers is done in a rural school operated under the sole supervision of the training school of the teachers' college. Students who wish to qualify for professional leadership in rural education should include the following major in their program of study. This program should be undertaken only with the advice and approval of the supervisor of rural education. Other courses may be substituted in this program at the discretion of the rural supervisor.

Units
Gen. Sci. 120 Biological Projects ........................................- 3
Engl. 108 Literature for the Grades .-................................ 3
Educ. 120 Sociology ................................................................... 3
Econ. 131 Principles of Economics ...................................... 3
Educ. 240 Rural Education .................................................... 3
Gen. Sci. 232 Nature Study ...................................................... 2
P. E. 230 School Health ......................................................... 3
P. E. 232 Social Recreation Leadership ............................. 2

Rural School Directed Teaching ........................................... 5
27

## DESCRIPTION OF COURSES IN EDUCATION

Educ. 120. Sociology. This is an introductory study of sociology. It is the aim to evaluate various problems growing out of the conflicts between individuals, groups, and nations. The psychology of human activity and the social institutions that have grown up as a result of the effort to satisfy human wants and needs are given critical analysis. The course deals with the basic interests of society as a
whole and aims to discover social laws upon which a progressive and stable civilization may be based.
Required of all candidates for graduation.
Dr. Burkhard.
Either semester, three hours a week.
3 units
Educ. 200. The Elementary School Curriculum. The subject matter and activities of the elementary school. The aims and objectives of education are determined; current practices are analyzed; new type schools are studied. An effort is made to determine just what materials belong in the modern curriculum, in the light of the discoveries that have been made through experimental studies and scientific research.
(Not offered, 1937-1938.)
Miss Roll, Miss Robinson.
Third or fourth year, three hours a week. 3 units,
210. The Teaching of Reading and Language. Principles and methods involved in determining reading readiness, the initial process of learning to read. Acquiring of suitable skills and habits. The nature of the reading process as applied to the expanding needs of pupils in and above grade four. Testing and diagnosis. Adaptation of reading program to individual differences. Provision for remedial training.

Dr. Netzer.
Third year, either semester, three hours a week. 3 units.
211. History of Education. A survey of the social life, ideas, and institutions that gave direction to western civilization. The purpose of such a survey is to enable the student to gain a better understanding of the problems confronting present day society.
(Not offered, 1937-1938.)
Dr. Burkhard.
Third or fourth year, three hours a week. 3 units.
214. Supervision and Administration in the Elementary School. A review of the purposes of elementary education. Following this review, the specific problems of the supervisor and the principal are considered, such as the newer type organizations and procedures; grading and promotions; use of new type examinations; rating of teachers; discipline; other related problems. Whenever possible, the problems are worked out in the training school.
(Not offered, 1937-1938.)
Mr. Payne.
Third or fourth year, second semester, three hours a week. 3 units.
216. Educational Sociology. A study of the social institution in which the individual gains his experience. Problems centering around the control of the environment and the control of social institutions
as a means of determining the educational processes are dealt with. Such institutions as the family, school, church, industrial groups, and civic organizations are given consideration.
(Not offered, 1937-1938.)
Dr. Burkhard.
Third or fourth year, three hours a week. 3 units.
220. Arizona School System, Laws and Records. The general plan of organization and legal set-up of the Arizona school system is discussed. School law is studied with special reference to the work of the teacher and administrator. Comparison with school laws of other states is made. Consideration is given to the making of reports and keeping of records. This course meets the requirement set up for the administrative certificate.

Dr. Salisbury.
Third year, either semester, three hours a week. 2 units.
223. The Junior High School. Problems of administration, curriculum, and teaching in grades 7,8 , and 9 . Open to juniors and seniors. Dr. Wert.
First semester, three hours a week. 3 units.
224. The High School. Problems of administration, curriculum, and teaching in the high school. Current problems growing out of present day economic industrial life as these pertain to the work of teaching and administration.

> Dr, Wert.

Second semester, three hours a week. 3 units.
230. Elementary Curriculum and Techniques. Deals with what is to be taught and how best to teach it. Work centers in the organization of the subject matter outlined in the state course of study. This work should result in an understanding of procedure both in organization of subject matter and in techniques of instruction suited to various types of school organization. Consideration is given to scientific investigation and principles as they relate to these problems.

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Dr. Netzer.
    Fourth year, (or third year if prerequisites have been met), three hours a week.
2 units.
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240. Rural Education. Designed to assist the rural teacher to solve the immediate problems in the school and the community. The following topics are discussed: the rural school plant; equipment and instructional supplies; organization of the daily program; grouping and classifying pupils; individual instruction; occupational activities; the hot lunch; health program; club work management and administration; community service. The work is planned to assist teachers with both English speaking and non-English speaking children.

Miss Lynd.
Third or fourth year, three hours a week. 3 units.
241. Current Educational Problems. A study of educational problems that have appeared as a result of changes in social and economic conditions. The current educational and social problems relating to school administration, school finance, curriculum revision, elementary-secondary schools, vocational guidance, textbooks, child welfare, private and public agencies, and school health are given careful consideration. (Not offered in 1937-1938.)

Dr. Burkhard.
Third or fourth year, three hours a week.
3 units.
242 Contemporary Social Movements. A critical study of current social theories and their relation to the work of social reconstruction. A sociological approach to the problem of education for social control in a dynamic society.
(Not offered in 1937-1938.)
(Offered in the summer session.)
Dr. Burkhard.
Second semester, three hours a week.
3 units.
245 Public Education in the United States. The evolution of the public school in the light of the many social forces that have come into conflict in the growth of our institutions. Open to juniors and seniors.

Dr. Wert.
First semester, three hours a week.
3 units.
247 Analysis and Treatment of Problem Children. A study of the causation of delinquency. Methods of treating the maladjusted child. Field work through the Juvenile Probation Office at Phoenix, involving case study, treatment, and investigation of court cases. Prerequisite: Psych. 100 and Educ. 120.

Mr. Allen.
First semester, two hours a week. 2 units.
250. Philosophy of Education. A critical study of social and educational theories. Ideas, institutions, and methods are evaluated in the light of the social consequences that attend their application. The work is designed to help the student reconstruct his experiences with a view to making him better fitted to give professional service to the school and society.
Open only to seniors.
Dr. Burkhard.
Fourth year, either semester, three hours a week.
3 units.
260. Observation and Directed Teaching. All fourth year students observe model teaching and teach in the training schools for a half day session during one full semester. The observation of model teaching alternates with the model teaching throughout the semester, so that students may immediately apply observed methods. All student teaching is done from carefully prepared lesson plans under the supervision of training teachers.

Each year a few selected students, who are preparing for secondary certification, are assigned to nearby high schools for student teaching. This teaching is done in regular high school classes under joint supervision of the high school and college.

Under direction of training teachers.
Fourth year, one semester-one-half day five days a week, elther semester.

10 units.

## KINDERGARTEN_PRIMARY COURSES

Educ. 109. Literature for the Kindergarten-Primary Grades. A detailed study of literature, appreciation, sources, standards of selection, with special emphasis upon practice in story telling and in planning of story hour programs. Old folk and fairy tales, myths, legends, fables, hero tales, modern and realistic stories, poems, and chiidren's illustrators are given careful study.

Mrs. Pearlman.
First year, first semester, three hours a week. 3 units.
Educ. 112. Play Education for Kindergarten-Primary Grades. A practical course in rhythms, games, and dramatic plays for indoor and playground uses, with a brief study of the theories of play and their bearing on present day interpretations of play in the schools.

Mrs. Pearlman.
Second year, second semester, three hours a week. 3 units.
Educ. 206. Kindergarten-Primary Industrial Arts. (Construction and play materials). A laboratory course in the creative use of everyday materials as a means of developing individual expression and spontaneity in primary work. Paper, clay, textiles, wood, and construction work of all kinds are used and related to the activity program and unit types of work.
Fee, $\$ 1.50$.
Mrs. Pearlman.
Third year, second semester, four hours a week. 3 units.
Educ. 209. Kindergarten-Primary Curriculum and Techniques. A basic theory course conducted through a survey of the curriculum for the kindergarten-primary grades, based on the social studies, with consideration of the integration of the formal school subjects and the activity program, as indicated in the best trends of present day education.

Mrs. Pearlman.
Fourth year, first semester, three hours a week.
3 units.
Educ. 260k. Directed Teaching in the Kindergarten-Primary Grades. For admission to the practice teaching in the kindergarten-primary grades, the student must pass a music test in sight reading, singing,
and piano accompaniment. During one semester, the student is required to spend one half-day (four and one-half hours) in conference, observation, and teaching.

Under direction of a training teacher.
Fourth year, either semester.
10 units.

## GRADUATE COURSES IN EDUCATION

303, 304 Public School Organization and Administration. A study of the state, county, and district organization of public schools and administrative practices. Deals with such topics as budgets, community relationships, district boards, personnel management, extra curricular activities, and maintenance of the school plant. Particular attention to the problems of the principal.

Mr. Payne.
Tuesdays, 7:00 to 9:00 P. M. 4 units.
305, 306 Education and Social Control. The sociological foundations of education. A scientific study of institutions and their bearing upon the work of education. Social measurement and sociological techniques for carrying on investigations are given consideration in the work of the course. Open to graduate students only.

Dr. Burkhard.
Saturdays, 8:00 to 10:00 A. M. 4 units.
311, 312 Elementary Education. The problems peculiar to the elementary school, the problems of methods in teaching the various school subjects, the function of the elementary school in the social order, the scientific approach to the problem of learning and teaching. Open to graduate students only.

Dr. Netzer.
Thursdays, 7:00 to $9: 00 \mathrm{P}$. M. 4 units.
315, 316. Secondary Education. An intensive study of the problems pertaining to the work of the high school and of children of high school age. Open to graduate students only.

Dr. Wert.
Mrondays, 7:00 to 9:00 P. M.
4 units.
325, 326 Research. The techniques used in research; construction of reports; the thesis. Open to graduate students only.

Dr. Salisbury.
Saturdays, 12:00 to 1:00 P. M. 2 units.

# DEPARTMENT OF HOME ECONOMICS 

## MISS DOUGLASS (Head of the Department), MISS REED

This department offers training in home economics designed to meet the needs of students of two groups: first, of those who wish to teach in this field, and, second, of those who wish to prepare for the vocation of homemaking, or who desire a background for other vocations which grow out of the study of home economics.

## THE MAJOR IN HOME ECONOMICS

Those who elect to major in this field will plan a program similar to the type curriculum outlined on the next page. In addition to the prescribed sequence of home economics courses, they will be required to elect certain specified courses in related fields as a supplement to the work in home economics proper.

In the first year, majors will take the science requirement in Chem. 110, Essentials of General Chemistry, and Biol. 120, Human Physiology. In the second year they will elect Chem. 181, Organic Chemistry, and Chem. 182, Applied Chemistry.

## THE MINOR IN HOME ECONOMICS

Students majoring in other fields may elect a minor of not less than fifteen units in home economics under the advice and with the approval of the head of the department who will designate the courses to be selected.

## TYPE CURRICULUM FOR MAJORS

The curriculum outlined on the next page is built around the standard core curriculum and represents a satisfactory arrangement of courses and sequences. Alterations and substitutions to fit special cases may be made under the advice and with the approval of the head of the department.

# TYPE CURRICULUM FOR STUDENTS MAJORING IN HOME ECONOMICS 

## FRESHMAN YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Engl, 101 Composition -----..... 3 | Engl. 102 Composition _- 3 |
| Chem. 110 Inorg. Chem............. 4 | Biol. 120 Physiology....-............ 3 |
| *Mus. 100 Fundamentals_......... 2*Hygiene |  |
|  |  |
| P. E. Activity.-.--..................... 0.5 | P. E. Activity.....................--- 0.5 |
| Elective |  |
| H. Ec. 101 Elem. Nutr............... 3 | H. Ec. 102 Cloth. Selection...... 3 |
| 16.5 | 16.5 |

## SOPHOMORE YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Psych. 100 Gen. Psych................ 3 | *Educ. 120 Sociology......._-_ 3 |
| *Geog. 100 Elem. of Geog.------..- 3 | *S. Sci. 100 Const. Govt............ 3 |
| Social Studies (See Note 2)... 3 | Social Studies (See Note 2)---3 |
| P. E. Activity -------------------0.5 | P. E. Activity..........-.-........---- 0.5 |
| Chem. 181 Org. Chem..----...... 4 | Chem. 182 Applied Chem........... 4 |
| H. Ec. 105 App. Food Prin..... 3 | H. Ec. 108 Cloth, Cons............ 3 |
| 16.5 | 16.5 |

## JUNIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Psych. 200 Educ. Meas..-_- 3 | Directed Teaching.--_-_-_-_-.-.-. 10 |
| *Educ. 220 Sch. Syst. Laws, | Or |
| Rec. .-........................---- 2 | **Education Elective......... 37 |
|  | *Educ. 210 Tchng. Readg. 2 \} |
| H. Ec. 202 Probs. of Consum, 2 | Minor and elective...-.-. 5 ] |
| H. Ec. 203 Child Devel......-- 3 | H. Ec. 204 Family Health..... 3 |
| H. Ec. 205 Home Man.........--3 | H. Ec. 206 Food for Family.... 3 |
| 15 | 16 |

## SENIOR YEAR

| First Semester Units | Second Semester U'nits |
| :---: | :---: |
| Directed Teaching--.----..-------10 | *Educ, 250 Phil. of Educ. ..---- 3 |
| Or | *Educ. 230 Elem. Curric. Techn. 2 |
| \{*Education Elective.......- $\left.{ }^{3}\right\}$ |  |
| $\{$ Educ. 210 Tchng. Readg. 2 | Minor and elective |
| H. Ec. 209 The Family............. 3 | H. Ec. 208 H. Econ. Educ..--... 3 |
| H. Ec. 211 Adv. Clothing......... 3 | H. Ec. 212 Adv. Nutrition...... 3 |
| 16 | 16 |

Note 1. In the case of starred courses, sections are to be so arranged that half the group will take the course in the first semester, and half in the second semester.
Note 2. The courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; and Econ. 131, 132.
Note 3. Electives will be so chosen as to include an approved minor of at least fifteen units in a field of learning other than home economics or education.

## DESCRIPTION OF COURSES OFFERED IN HOME ECONOMICS

H. Ec. 101. Elementary Nutrition. A study of the fundamental principles of nutrition, of the selection of an adequate diet, and the significance of food in its relation to health. Open to men and women.

Miss Douglass.
First year, first semester, three hours a week. 3 units.
102. Clothing Selection. Training is offered in the selection of clothing with consideration of materials, of cost, of style and design, of the individual, and occasions.

Miss Reed.
First year, second semester, three hours a week. 3 units.
105. Applied Food Principles. A study of general principles of cookery and the nutritive facts involved.
Fee, $\$ 3.00$.
Miss Reed.
Second year, first semester, six hours a week. 3 units.
108. Clothing Construction. An opportunity to develop the principles of dressmaking through the construction of several inexpensive garments. Also further experience in the selection of materials and designs with due regard to suitability and cost.

Miss Reed.
Second year, second semester, six hours a week. 3 units.
110. Household Equipment. The business of conducting the household based upon the six budget items-food, clothing, shelter, operating expenses, personal advancement, and savings; maintenance of family life in the home; household equipment.
202. Problems of the Consumer. A study of the problems, wants, needs, and practices of the consumer buyer in the fields of foods, textiles, clothing, and household equipment. Also a consideration of the part played by advertising, retail stores, and government agencies in influencing and protecting the consumer.

Miss Douglass.
Third year, first semester, three hours a week. 3 units.
203. Child Development. A study of the physical, mental, emotional, and social development of the pre-school child. Special emphasis is placed on habit formation and the correction of common behavior problems.
204. Family Health. Information on good health for the family, special attention being given to a study of the mother through pregnancy and childbirth and the care of the infant.

Miss Reed.
Third year, second semester, two hours a week. 2 units.
205. Home Management. A study of standards of living, the budgeting of time and income, household accounting, and the selection, care, and efficient arrangement and use of the house and equipment.
Fee $\$ 1.00$.
Miss Reed.
Third year, first semester, three hours a week. 3 units.
206. Food for the Family. The economic selection and nutritive value of foods are stressed. Various types of meals and table service are studied. Practice is given in planning, preparing, and serving suitable family meals.
Prerequisites: H. Ec. 101 and 105.
Fee, \$3.00.
Miss Douglass.
Third year, second semester, six hours a week.
3 units.
207. Nursery School Education. Opportunity is given to observe in and assist with the Nursery School program. A study is made of the development of the nursery school movement and the theories underlying current practices.
Prerequisite: H. Ec. 203.
Fee, \$1.00.
Miss Douglass.
Third year, second semester, five hours a week.
3 units
208. Home Economics Education. A study of the special content of the home economics curricula and the special methods to be used in the teaching of home economics.
Fee, $\$ 1.00$.
Miss Douglass.
Third year, second semester, three hours a week. 3 units.
209. The Family. A study of the organization of the family as an institution that is changing, and the development of guiding principles for the future family. Open to junior and senior men and women.

Miss Douglass.
Third year, first semester, three hours a week.
3 units.
210. Directed Teaching. Opportunity is offered to teach home economics one semester to training school pupils under the supervision of the department of home economics.

Miss Douglass, Miss Reed.
Fourth year, either semester, every afternoon. 5 units.
211. Advanced Clothing. This course offers experience in wool and silk problems of construction; advanced fitting problems with a further study of good style and design. Opportunity is also offered for making and assembling illustrative material for the teaching of clothing.
Prerequisite: H. Ec. 102 and 108.
Miss Reed.
Fourth year, first semester, six hours a week. 3 units.
212. Advanced Nutrition. A study of special problems in diet and nutrition.
Prerequisite: H. Ec. 101 and 105.
Fee, \$1.00.
Miss Douglass.
Fourth year, second semester, five hours a week. 3 unita.

## DEPARTMENT OF INDUSTRIAL ARTS

MR. NEEB (Head of the Department), MR. NAY, MR. STEWART
The work of this department has been arranged to prepare students to become teachers, supervisors, and directors of industrial arts subjects in both the elementary and secondary schools.

Two divisions of work are offered to students preparing to teach industrial subjects. The one concerns itself with problems as presented by the elementary and junior high schools, the other with subject matter and content suitable for the secondary schools.

## SPECIAL CURRICULA

The following curricula for the preparation of teachers of industrial arts subjects in the elementary and high schools have been arranged in cooperation with several committees of engineers whose activities have been sponsored by the Phoenix Chapter of the American Association of Engineers. The courses included in each curriculum and their sequences, together with their rich vocational content, are designed to fit the student for the successfal pursuit of his professional activities. A new industrial level of achievement, commensurate with commercial shop practice is attained with the completion of each year's work.

The Phoenix Chapter elected the following engineers to act as an advisory board to the Department of Industrial Arts.

Vic H. Housholder, Chairman
W. R. Hutchins

James L. Bone
J. Lee Chambers

Starling M. Morse
William L. Pendleton
Howard S. Reed
L. S. Neeb

This Advisory Board selected the following sub-committees to work with the department:

ELECTRICITY
B. F. Carter, Chairman

Lewis Doutrick
Roy Richards
BULLDING AND CONSTRUCTION
Sheldon Baker, Chairman
Ralph Hoffman
Walter Johannessen
DRAWING
V. O. Wallingford, Chairman

Otto Janssen
Lloyd Leraine Pike

## FARM ELECTRICITY

H. J. Lawson, Chairman

David F. Wilkie

## MECHANICS

Walter DuMoulin, Chairman
B. F. Carter
C. C. Tillotson

RADIO
A. C. Anderson, Chairman
F. C. Dodds

Roy Richards

## THE MAJOR IN INDUSTRIAL ARTS

The minimum requirement for the major should include a total of twenty-four units of work distributed according to the following outline.

Units
Drawing Courses .............................................................................................. 6
Electrical Courses .................................................................................. 6
Wood Working Courses .......................................................................... 6
Machine Shop Courses ....................................................................................... 6

## THE MAJOR FOR THE FOUR-YEAR CURRICULUM

This arrangement is planned for those who are preparing to teach in high schools. A minimum of thirty units is to be selected from the courses listed with the advice and approval of the head of the department. The sequence of courses is to be observed as indicated in the outline.

FRESHMAN YEAR
Units
Engineering Drawing .-.................................................................................. 3
Elementary Cabinet Making .................................................................. 3
Descriptive Geometry ...... .. ................................................................... 3
Advanced Cabinet Making ................................................................... 3
$\overline{12}$

## SOPHOMORE YEAR


Mechanism ........................................................................................................... 3
Machine Shop Practice .......................................................................... 3
Job Analysis .............................................................................................. 3
12
JUNIOR AND SENIOR YEARS
Auto Ignition ............................................................................................................ 6
Electrical Construction ........................................................................................ 6
Direct Current Electricity ...................................................................... 6
Supervision and Administration of Industrial Arts............................. 3

# FOUR-YEAR CURRICULUM IN INDUSTRIAL ARTS WITH EMPHASIS ON THE GENERAL SHOP 

FRESHMAN YEAR


JUNIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Psych. 200 Fduc. Meas............. 3 *Fducation Elective |  |
| *Educ. 220 Sch. Syst. Laws. | *Educ. 210 Tch of Reading.....-. 2 |
| Rec. -...--..-........................ 2 | Directed Teaching -.................... 10 |
| I. Art 101 Auto Ignition | Or the following group: |
| Or I. Art 208 Carpentry | fl. Art 102 Auto Ignition |
| Or I. Art 207 Mill Work....... 3 | Or I. Art 154 Elec. Cons. |
| I. Art 111 Machine Shop.......... 3 | ) Or 1. Art 164 Patt. Mkg.. 3 |
| I. Art 160 Sheet Metal................ 3 | 1. Art 112 Machlne Shop... 3 |
| 1. Art 211 Job Analysis............... 2 | I. Art 208 Carpentry......... 3 |
| 16 | (1. Art 212 Curric. Mkg.......2) |

SENIOR YEAR

I. Art 115 Radio............................ 3

15

Second Semester Units
*Educ. 250 Phil. of Educ....-......... 3
Elective ..................--........................ 10
Or the following group:
(1. Art 102 Auto Ignition

Or I. Art 154 Elec. Cons.
Or 1. Art 164 Patt. Mkg... 3
I. Art 112 Machine Shop... 3
I. Art 208 Carpentry ........... 3
(I. Art 212 Curric. Mkg........2)
I. Art 116 Radio............................ (17 or) $\overline{16}$

Note 1. In the case of the starred courses, sections are to be so arranged that half the group will take the course in the first semester and half in the second semester.
Note 2. The courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; and Econ. 131, 132.
Note 3. Electives may be so chosen as to include a minor of fifteen units in some special field other than education. This field may be a special phase of industrial art. Substitution for the I. Art courses listed above may be made with the advice of the head of the department.
Note 4. Men may substitute Art 108 Sign Writing in place of Art 110.
Note 5. Half the student teachers do their teaching in last half of junior year; the others in first half of the senior year.

## FOUR-YEAR CURRICULUM IN INDUSTRIAL ARTS WITH EMPHASIS ON BUILDING AND CONSTRUCTION

| FRESHMAN YEAR |  |
| :---: | :---: |
| First Semester Units | econd Semester Units |
| Engl. 101 Composition............... 3 | Engl. 102 Composition .-...-.... 3 |
| Chem. 111 Inor. Chem.............. 4 | Chem. 112 Inorg, Chem.----------14 |
| *Mus, 100 Fundamentals--------2 | *Art 100 Publ. Sch, Art....-.....- 2 |
| *Hygiene ---.--7.............--.............. 2 |  |
| P. E. Activity..................------- 0.5 | P. E. Activity..................-------- 0.5 |
| I. Art 121 Wood Work.....-----... 3 | I. Art 122 Adv. Cab. Mkg....... 3 |
| Mech. Drawing...-------.......------3 | Descr. Geom..-.......................... 3 |
| 17.5 | 16.5 |
| SOPHOMORE YEAR |  |
| *Psych First Semester Units | * Eecond Semester Units |
| ${ }^{*}$ Geog. 100 Eilem. of Geog.--------3 | ${ }^{*}$ S. Sduc. Sci, 120 Sociology |
| Social Studies (See Note 2) .... 3 | Social Studies (See Note 2)- |
| P. E. Activity ....-.............--- 0.5 | P. E. Activity |
| Math. 107 Algebra----------................... 3 |  |
| I. Art 164 Pat. Mkg. <br> Or 1. Art 163 Turning...__ 3 <br> Forge (See Note 4)...................... 3 | I. Art 207 Mill Work <br> Or 1. Art 105 Arch. Draw 3 <br> Sheet Metal (See Note 4)....... 3 |
| 18.5 | 18.5 |

## JUNIOR YEAR

| First Semester <br> Units | Second Semester Units |
| :---: | :---: |
| *Education Elective.....-.....-...-....... 3 | *Psych. 200 Educ. Meas........... 3 |
| *Educ. 210 Tchng. of Reading 2 | *Educ. 220 Sch. Syst. Laws, <br> Rec. <br> Directed <br> Teaching |
| Phys. 111 Gen. Physics.-............ 4 | Or the following group: |
| 1. Art 208 Carpentry | (Phys. 112 Gen. Physics... ${ }^{4}$ \} |
| 1. Art 154 Electr. Constr....--3 | \{1. Art 218 Steel Square.... 3 \} |
| 1. Art 211 Job Analysis....-.---..... 2 | I. Art Housewiring........... 3) |
| 17 | 1. Art 212 Curric. Makg.-----.---2 |

## SENIOR YEAR

First Semester Units
*Educ. 230 Ell. Curric. Techn..... 2
Directed Teaching.............................. 10 Or
Elective and Minor10
I. Art 217 Stair Bldg................ 3 $\frac{15}{15}$

Second Semester Units
*Educ. 250 Phil. of Educ............. 3 Elective and Minor-.................... 10

Or the following group:
(Phys. 112 Gen. Physics.-. 4
$\left\{\begin{array}{l}\text { I. Art } 218 \text { Steel Square..... } 3 \\ 3\end{array}\right\}$

1. Art 302 Supv, and Adm......-. 3

Note 1. In the case of the starred courses, sections are to be so arranged that half the group will take the course the first semester and half in the second semester.
Note 2. The courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; and Econ. 131, 132.
Note 3. Electives may be so chosen as to include a minor of fifteen units in some field other than education. This fleld may be a special phase of industrial arts. Substitution for the I. Art courses listed in the above outline may be made with the advice of the head of the department of industrial arts.
Note 4. Men may substitute Art 108 Sign Writing in place of Art 110.
Note 5. Half the student teachers do their practice teaching in the last half of the junior year; the others in the first half of the senior year.

# FOUR-YEAR CURRICULUM IN INDUSTRIAL ARTS WITH EMPHASIS ON ELECTRICAL COURSES 

FRESHMAN YEAR

| First Semester Engl. 101 Composition............... 3 | Second Semester Units <br> Engl. 102 Composition.................. 3 |
| :---: | :---: |
| Chem. 103 Inorg. Chem. -----------...- 4 | Chem. 104 Inorg. Chem...........---- 4 |
| *Mus. 100 Fundamentals.......---. 2 | *Art 110 Publ. School Art --......... 2 |
| *Hygiene ..................-.-.................. 2 | *Elective ..........-.............................. 2 |
| P. E. Activity............................. 0.5 | P. F. Activity |
| I. Art 101 Auto Ign................. 3 | 1. Art 102 Auto Ign................... 3 |
| Mechanical Drawing-................... 3 | Sh. Metal or Forge... |
| 17.5 | 17.5 |
| SOPHOMORE YEAR |  |
| First Semester Units | Second Semester Units |
| *Psych. 100 Gen. Pysch.............. 3 | *Educ. 120 Sociology..........-....... 3 |
| *Geog. 100 Elem. of Geog.......-- 3 | *Soc. Sci. 100 Const. Govt........ 3 |
| Social Studies (See Note 2).... 3 | Social Studies (See Note 2)...- 3 |
| P. E. Activity........................... 0.5 | $P . \quad$ E. Activity........................... $0 . \overline{\mathrm{j}}$ |
| Math. 107 Algebra....................... 3 | Math. 120 Trig.......................... 3 |
| I. Art 153 Elem. Elec.............. 3 | 1. Art 154 Elec. Cons.............. 3 |
| Machine Shop or Wood Shop... 3 | Machine Shop or Wood Shop 3 |
| 18.5 | 18.5 |

JUNIOR YEAR

| First Semester LTnits | Second Semester Units |
| :---: | :---: |
| *Education Elective..................... 3 | *Psych. 200 Educ. Meas............. 3 |
| *Educ. 210 Teachg. of Readng. 2 | *Educ. 220 Sch. Syst. Laws. |
| Phys. 111 Gen. Physics........... . 4 |  |
|  | Or the following group |
| 1. Art 203 D. C. Electricity.. - 3 | \{Phys. 112 Gen. Physics..... 4] |
| 1. Art 215 Radio.--.-.................. . 3 | \{1. Art 204a D. C. Mach.... 3\} |
| 1. Art 211 Job Analysis............. 2 | 1. Art 216 Radio................. 3) |
|  | I. Art 212 Curric. Making---m... 2 |
| 17 | 17 |

## SENIOR YEAR

First Semester Ünits
*Fduc. 230 Elem. Curric. Techn. ?

Directed Teaching 1 n
10
I. Art 251 A. C. Electricity $-\frac{3}{15}$


Note 1. In the case of the starred courses, sections are to be so arranged that half the group will take the course the flrst semester and half in the second semester.
Note 2. The courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; and Econ. 131, 132.
Note 3. Electives may be so chosen as to inclade a minor of fifteen units in some field other than education. This field may be a special phase of industrial arts. Substitution for the I. Art courses Iisted in the above outline may be made with the advice of the head of the department of industrial arts.
Note 4. Men may substitute Art 108 Sign Writing in plece of Art 110.

# MINORS FOR STUDENTS NOT MAJORING IN THE INDUSTRIAL ARTS DEPARTMENT 

## DRAWING MINOR

Units
Engineering Drawing ..... 3
Descriptive Geometry ..... 3
Elementary Mechanism ..... 3
Machine Design ..... 3
Job Analysis ..... 2
Curriculum Making ..... 216
WOODWORKING MINOR
Elementary Cabinet Making ..... 3
Advanced Cabinet Making ..... 3
Carpentry ..... 3
Carpentry ..... 3
Job Analysis ..... 2
Curriculum Making ..... 2
Toy Construction ..... 3
19
MECHANICS MINOR
Machine Shop Practice ..... 3
Machine Shop Practice ..... 3
Pattern Making ..... 3
Sheet Metal ..... 3
Job Analysis ..... 2
Curriculum Making ..... 216
ELECTRICAL MINOR
Elementary Electricity ..... 3
Auto Ignition ..... 3
Auto Ignition ..... 3
Electrical Toy Construction ..... 3
D. C. Electricity ..... 3
D. C. Machinery ..... 3
Job Analysis ..... 2
Curriculum Making ..... 2

## ELECTRICAL MINOR

Units
Principles of Radio ..................................................................................... 3
Radio Transmission ................................................................................... 3
Radio Receiving (equipment, design, and construction) ................... 3
Apparatus ................................................................................................. 3
Machine Shop Practice ....................................................................... 3

## DESCRIPTION OF COURSES

I. Art 109. Calculations. Involves the practical application of the fundamental arithmetical processes suitable for teachers in the elementary grades and instructors of shop work. Emphasis is placed upon the development of rapid calculations. A thorough survey of fractions, decimals, compound numbers, percentage, ratio and proportion, involution, evolution, and mensuration. The fundamental principles of the slide rule are taken up as well as other practice in its use.

Mr. Nay.
First semester, three hours lecture a week.
Six hours preparation.
3 units.

## DRAWING

105. Architectural Drawing. Designed to assist students who are preparing to teach in the junior and senior high schools or for architectural drafting and engineering work. Laboratory fee, $\$ 2.00$. Prescribed for prospective high school teachers. Open to all students as an elective.

Mr. Neeb.
First year, first semester, one lecture, six hours laboratory a week.

3 units.
106. Architectural Drawing. A continuation of I. Art 105. Complete plans and estimate of materials for a two story house. Open to all students. Laboratory fee, $\$ 2.00$.
Prerequisite: I. Art 105.
Mr. Neeb.
First. year, second semester, one lecture, laboratory, six hours a week. 3 unite.
201. Architectural Drawing. Consists of a study of some of the best classical elements in architecture and a study of the fundamentals of design. Prescribed for students majoring in architecture. Laboratory fee, $\$ 2.00$.
Prerequisite: I. Art 106.

[^2]202. Architectural Drawing. Consists of a series of problems involving a study of the principles of architectural composition. Laboratory fee, $\$ 2.00$. (Not offered, 1937-1938.)
Prerequisite: I. Art 201.
Mr. Neeb.
Third year, second semester, one lecture, laboratory, six hours a week.

3 units.
113. Mechanical Drawing. (Engineering Drawing.) A study of the elements of orthographic projection and standard presentation, including lettering, tracing, and blue printing; the making and reading of working drawings and commercial drafting room practice. Prescribed for all freshmen carrying a mechanic arts major. Laboratory fee, $\$ 2.00$.

Mr. Nay.
First year, first semester, one lecture, six hours laboratory each week.

3 units.
114a. Mechanical Drawing. (Descriptive Geometry.) Designed for students majoring in mechanic arts. This course presents the elements of descriptive geometry including problems in warped surfaces and intersections of solids. Prescribed for all freshmen carrying a mechanic arts major. Laboratory fee, $\$ 2.00$.
Prerequisite: I. Art 101.
Mr. Nay.
First ycur, second semester, one lecture, six hours laboratory each week.

3 units.
114b. Mechanical Drawing. (Descriptive Geometry.) Same as I. Art 114a with emphasis on shades and shadows. Laboratory fee, $\$ 2.00$.
Prerequisite: I. Art 101.
Mr. Nay.
First year, second semester, one lecture, six hours laboratory, 3 units.
155. Mechanical Drawing. (Mechanism.) The story and design of linkages, gears, cams, screws, and other machine elements are studied together with the relative motions of machine parts. Required of all students carrying a mechanic arts major, Laboratory fee, \$1.00. Prerequisite: I. Art 114a.

Mr. Nay.
Second year, first semester, one lecture, six hours laboratory each week.

3 units.
156. Mechanical Drawing. (Machine Drawing.) This course treats of machine drawing and takes up such subjects as shafts, bearings, pulleys, belts, clutches, standard machine parts, fastenings. Required of all students carrying a mechanic arts major. Laboratory fee, $\$ 2.00$.
Prerequisite: I. Art 130 .
Mr. Stewart.
Second year, second semester, one lecture, six hours laboratory each week.

3 units.

## WOODWORK

120. Wood Work. (No machine work.) Designed to meet the needs of beginning students and special students majoring in kindergarten-primary work. Fundamental tool processes; design and construction of small projects for the home and school; toy construction with emphasis on mechanical set-up; study of materials and their adaptation to constructive uses. Laboratory fee, $\$ 2.00$.

Mr. Neeb.
First year, first semester, five hours a week.
3 units.
121. Wood Work. (No machine work.) The students are given a thorough course in the basic types of furniture construction suitable for use in junior high school shop work; the principles of furniture repair. Laboratory fee, $\$ 2.00$.

Mr. Neeb.
First year, first semester, six hours a week.
3 units.
122. Cabinet Making. Gives definite practice in the proper use and care of hand tools; a study of the fundamental principles involved in furniture construction. Laboratory fee, $\$ 2.00$.

Mr. Neeb.
First year, second semester, six hours a week.
3 units.
123. Toy Construction. Provides instruction in the making and use of patterns and figures in the construction of all types of toys; children's furniture; small projects. Each student is required to work out a group of original mounted models. Prerequisite to advanced cabinet making. Fee, $\$ 2.00$.

Mr. Neeb.
First semester, three hours a week.
3 units.
151. Broadening and Finding. Designed to aid students preparing to teach in the junior high school. The work consists entirely of model work, boats, steam engines, electrical motors, and similar projects. Laboratory fee, $\$ 2.00$.

Mr. Neeb.
Second year, first semester, laboratory, six hours a week. 3 units.
152. Broadening and Finding. A continuation of I. Art 151, with some machine lathe practice and drill press work. Laboratory fee, $\$ 2.00$.

[^3]163. Wood Turning. Drills in spindle, face plate, and chuck work, together with practice in finishing and polishing.

Mr. Neeb.
Second year, first semester, six hours a week.
3 units.
164. Patternwork. Designed to give a thorough study of the following pattern allowances: draft, shrinkage, finish, warp, and shake. The construction of the patterns involving the common problems of the pattern maker. Prescribed for students preparing to teach industrial arts in the secondary schools. Laboratory fee, $\$ 2.00$.
Prerequisite: I. Art 163.
Mr. Neeb.
Second year, second semester, six hours a week. 3 untts.
207. Cabinet Making and Mill Work. A course dealing with advanced types of furniture; construction, involving the various methods of tenoning; the principles of panel construction; correct methods of glueing; the application of finishes; a study of design. Safe and practical methods involved in the use of wood working power machines. Prescribed for all students preparing to teach wood working in the secondary schools.
Prerequisite: I. Art 164.
Laboratory fee, \$2.00.
Mr. Neeb.
Third year, first semester, one lecture, six hours iáboratory
a week,
3 units.
208. Carpentry. The construction problems involved in the erection of buildings are studied. Emphasis is placed upon the use of the steel square; use and care of carpenter's tools; sharpening of cutting tools; framing processes; short cuts; trade terminology. Prescribed for students preparing to teach in secondary school shops.
Prerequisite: I. Art 207.
Laboratory fee, $\$ 2.00$.
Mr. Neeb.
Third year, second semester, one lecture, six hours laboratory a week.

3 units.
217. Stair Building. Construction of straight stairways, platforms, and circular stairways to one-third scale.
Fee, $\$ 2.00$.
Mr. Neeb.
First semester, six hours laboratory a week. 3 units.
218. Steel Square. A study of problems involving the use of the steel square in carpentry, framing, stair building, and sheet metal.

Fee, \$2.00.
Mr. Neeb.
Second semester, six hours laboratory a week. $\mathbf{3}$ units.

## MECHANICS

107. Forge. The content of this course combines a thorough study of, and practice in the elements of forging; drawing, bending, upsetting, welding, casehardening and tempering. Allied topics are also covered. Prescribed for students majoring in I. Arts. Laboratory fee, $\$ 2.00$.

Mr. Nay.
First year, first semester, six hours laboratory. 3 units.
108. Agricultural Mechanics. Designed to meet the needs of students of agricultural and farm management.
Laboratory fee, $\$ 2.00$.
Mr. Nay.
First year, second semester, six hours laboratory. 3 units
111. Machine Shop. A beginning course in machine shop practice. The projects include filing, drilling, turning, and polishing done with hand tools; general use of machine equipment. Prescribed for students majoring in I. Arts. Laboratory fee, $\$ 2.00$.

Mr. Nay.
First year, first semester, six hours laboratory. 3 units.
112. Machine Shop. Devoted to the making of industrial projects involving the use of the complete machine equipment of the department. The work is technical and practical to fit men as machinists and auto mechanics, as well as for teachers in the secondary schools. Prescribed for all students majoring in I. Arts.
Laboratory fee, $\$ 2.00$.
Mr. Nay.
First year, second semester, six hours laboratory. 3 units.
211. Machine Shop 1A. Designed to give the student special preparation in the care and use of the milling machine; the cutting of spur, worm, and bevel gears. Plain and direct indexing; indexing in degrees and parts of degrees. Study of various cutters and their upkeep.
Laboratory fee, $\$ 2.00$.
Mr. Nay.
Third year, first semester, six hours laboratory. 3 units.
212. Machine Shop 1B. A study of planers and the care of same. A variety of methods for the holding of the work. The use of fixtures, gages, and tools. Adjustments of belting to meet various demands for speed and power.
Laboratory fee, $\$ 2.00$.
Mr. Nay.
Third year, second semester, six hours laboratory.
3 units.
160. Sheet Metal Work. This course is to prepare the student to teach this work in junior high school classes. Laying out and cutting of sheet metal; soldering; riveting; projects from utensils to and including toys. Prescribed for all students preparing to teach prevocational courses in junior high school.
Laboratory fee, \$2.00.
Mr. Nay.
Second semester, second year, six hours laboratory. 3 units.
205. Sheet Metal Work. A course to include projects involving problems in roofing; cornice work, practical intersections and developments; use of sheet metal machines. For students preparing to teach in secondary schools or going into the trade.
Laboratory fee, $\$ 2.00$.
Mr. Nay.
Third year, First semester, six hours laboratory. 3 units.

## ELECTRICITY

100. Elementary Electricity. Designed to acquaint the student with the elementary phases of practical electrical work, including splicing; soldering; light, bell, and annunciator circuits. This course is a prerequisite for all electrical and radio courses.
Fee, $\$ 2.00$.
Mr. Stewart.
Either semester, three hours a week. 3 units.
Ind. Arts 101. Auto Ignition. This course is designed to prepare the student for commercial shop practice and includes testing, recharging, and repairing storage batteries; ignition coils; distributors, timing; lighting systems; fuses and circuit breakers. Machine shop practice is included in the course. Laboratory fee, $\$ 2.00$.

Mr. Stewart.
First year, first semester, two hours lecture, four hours laboratory.

3 units.
102. Auto Ignition. A continuation of I. Arts 101. Combined laboratory and class work consists of the study of repairing, adjusting and testing of generators, starting motors, magnetos, and other electrical equipment found on the modern automobile. Laboratory fee, $\$ 2.00$.

Mr. Stewart.
First year, second semester, two hours lecture, four hours laboratory.

3 units.
115. Radio Construction. Arranged to cover the elements of electrical theory; principles of electromagnetism; potential; current; resistance; capacitance; storage and dry cells; the vacuum
tube as a detector, audio and radio frequency amplifier. Vacuum tube circuits. Constructional problems involving assembly of many different types of receiving circuits. Laboratory fee, $\$ 3.00$.
Prerequisite: I. Art 154.
Mr. Stewart.
First year, first semester, two hours lecture, four hours laboratory. 3 units.
116. Radio Construction. A continuation of I. Art. 115, involving a study of the more advanced types of receiving sets; testing and servicing; vacuum tube characteristics. Constructional work and laboratory practice. Laboratory fee. \$3.00.

Mr. Stewart.
First year, second semester, two hours lecture, four hours laboratory.

3 units.
154. Electrical Construction. The object of this course is to teach the student how to install lighting circuits in houses with standard methods; underwriters regulations regarding the size, and kind of wire and fixtures for various purposes; conduit work; and the estimate of cost for the jobs. Laboratory fee, $\$ 2.00$.
Prerequisite: I. Arts 165, Shop Math 20.
Mr. Stewart.
Second year, second semester, two hours lecture, four hours laboratory.

3 units.
203. Direct Current Electricity. Includes a study of electric current; power and work; resistance; rheostats and resistors, the direct current electric circuit; magnets and magnetism; the magnetic effect of the electric current; induced electromotive force; and electrostatics, and condensers.
Prerequisite: I. Art 154.
Mr. Stewart.
First semester, three hours a week.
3 units.
203a. Direct Current Laboratory. A laboratory course given in conjunction with I. Art. 203. The experiments are designed to acquaint the student with the care and use of direct current measuring instruments as well as to demonstrate the various properties of the direct current electric circuit. Laboratory fee, $\$ 2.00$.

Mr. Stewart.
Third year, first semester, three hours a week.
1 unit.
215. Radio Construction. Designed to acquaint the student with the fundamentals of radio transmission. Oscillating circuits; system of modulation, antenna systems; frequency measurements; international Morse code; government regulations. The student is required to pass
equivalent of a government examination for an amateur operator's license. Laboratory fee, $\$ 3.00$.
Prerequisite: I. Art 116.
Mr. Stewart.
Second year, first semester, two hours lecture, four hours laboratory.

3 units.
216. Radio Construction. Seminar. Laboratory fee, $\$ 3.00$.

Mr. Stewart.
Second semester, six hours Laboratory. 3 units.
251. Alternating Current Electricity. Embodies a study of alternating currents and voltages; inductance; impedance; power and power factor; single and polyphase circuits; the production of polyphase voltages; theory of operating characteristics of alternating current machines.
Prerequisites: I. Arts 204 and 204a.
Mr. Stewart.
Fourth year, first semester, three hours lecture. 3 units.
251a. Alternating Current Laboratory. Experiments include voltage, current, and power measurements in inductive and non-inductive circuits; impedance; inductance; capacitance. Concise and intelligent reports are required.
Prerequisite: Enrollment in I. Art 251.
Mr. Stewart.
Fourth year, first semester, three hours laboratory. 1 unit.

## INDUSTRIAL ARTS METHODS

211. Job Analysis. Jobs are analyzed into their various steps and their relationship is studied. Continuity threads are worked out. This course is necessary in curriculum building. Prescribed for all students planning to teach industrial arts.

## Mr. Neeb.

Second year, first semester, two two-hour periods a week. 2 units.
212. Curriculum Making. For students preparing to teach. A course in which trade and technical material, tool processes, occupational information, and job analysis are arranged to form effective teaching guides. Prescribed for all students planning to teach industrial arts subjects.
Prerequisite: I. Art 211 Job Analysis.
Mr. Neeb.
Second year, second semester, two two-hour periods a week. 2 units.
255. Teaching Problems. A course designed to assist students preparing to teach industrial arts in the making of lesson plans, presentation of materials to students. Prescribed for prospective teachers in this field.

Prerequisite: I. Art 212 Curric. Making; I. Art 211 Job Analysis. Laboratory fee, \$2.00.

Mr. Neeb.
Third year, first semester, two hours a week. 3 units,
257. Supervision and Administration of Industrial Arts. This course offers the general principles of supervision as applied to the teaching of shop classes. Classification of tools, tool operations and projects. Purchasing of supplies and equipment. Prescribed for all students who plan to teach.
Prerequisite: Teaching Problems 228; Job Analysis 208.
Mr. Neeb.
Second year, second semester, two two-hour periods a week. 3 units.
Educ. 260. Methods and Teaching. Every student who selects a major in industrial arts with the intention of qualifying as a special teacher of the subject is required to teach industrial arts for one semester under supervision in the elementary and junior high school grades in the training schools. This work is accompanied by a suitable study of the methods involved. These courses may not be counted as a part of the major in industrial arts.

Fourth year, first or second semester, five hours a week. 10 units.

## DEPARTMENT OF FOREIGN LANGUAGES

This department offers a major in the Spanish language and literature, providing special training for students who wish to become teachers of Spanish. A major in French also can be earned by taking additional courses in the summer session. Students interested in a major in French should consult the head of the department.

Students working toward the master's degree and having earned already a sufficient number of undergraduate credits in French or Spanish, may find it to their advantage to complete a graduate minor in one of these subjects. The head of the department should be consulted for detailed arrangements. A minor is offered also in the German language.

Thirty semester hours of credit are required for the major in French and Spanish and not less than sixteen units for the undergraduate minor in foreign languages.

Students majoring in Spanish are strongly advised to select French as their minor. English and social science are also acceptable as minors for students majoring in this field.

In view of the fact that no higher institution accepts transfer of credit in language for less than a full year, students are cautioned against dropping a language after their first semester in the subject.

## TYPE CURRICULUM FOR STUDENTS MAJORING IN FOREIGN LANGUAGES

 FRESHMAN YEAR

## JUNIOR YEAR



Note 1. In the case of the starred courses, sections are to be so arranged that half of the group will take the course in the first semester and half in the second semester.
Note 2. The courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; and Fcon. 131, 132.
Note 3. Electives are to be so chosen as to include a minor of at least fifteen units in a field other than education.
Note 4. Men may substitute Art 108 Sign Writing in place of Art. 110.
Note 5. Half the student teachers do their practice teaching in the last half of the junior year; the others in the first half of the senior year.

## SPANISH LANGUAGE AND LITERATURE

## MISS WILSON

## LOWER DIVISION COURSES

Spanish 101. Elementary Spanish. Designed to give the beginner a knowledge of the fundamentals of pronunciation and grammar. Not open to those who have had previous instruction in Spanish. Text: House and Mapes-Essentials of Spanish Grammar.

First semester. four hours a week. 4 units.
102. Elementary Spanish. A continuation of Span. 101. To the study of grammar is added the reading of several elementary texts. Prerequisite: Span. 101 or one year of high school Spanish.

Second semester, four hours a week. 4 units.
103. Intermediate Spanish. Along with a review of grammar, reading is given which stresses vocabulary-building and accuracy of expression.
Text: Parker and Rioseco-Intermediate Grammar.
Prerequisite: Span. 102 or equivalent.
First semester. four hours a week.
4 units.
104. Advanced Spanish. The type of work is similar to that of Span. 103, with greater emphasis upon rapid reading and oral expression.
Prerequisite: Span. 103 or equivalent.
Second semester, four hours a week.
4 units.

## UPPER DIVISION COURSES

201. Modern Writers. An introduction to types of modern literature, including a study of La Barraca and other works of members of the Generation of 1898.
Prerequisite: Span. 104 or equivalent.
First semester, three hours a week.
3 units.
202. Survey of Spanish Literature to 1700. A history of the literature from its beginning through the Golden Age. Lectures, illustrative readings, and reports.
Text: Romera Navarro-Antologia de la literatura española.
Open only to juniors and seniors. Required of all Spanish majors. Prerequisite: Span. 202.

First semester, three hours a week. 3 units.
205, 206. Advanced Grammar and Composition. A study of the more troublesome grammatical phenomena. Meaning and choice of words. Translation of English to Spanish is stressed in the second semester. Two units required for the department's recommendation to teach.

Two semesters, two hours a week. 4 units.
211. Commercial Spanish. The course includes letter-writing, business terms and procedure, and attention to the theory and practice of salesmanship. (Not offered in 1937-1938.)
Prerequisite: Span. 104 or equivalent.
Dr. Cattelain.
First semester, two hours a week. 2 units.
212. Drama of the Nineteenth Century. Reading and discussion of representative plays from 1830 to 1900 .

Second semester, three hours a week. 3 units.
230. Prose of the Twentieth Century. Study of present day trends with special regard for the modern essay.

Second semester, three hours a week.
3 units.

## FRENCH AND GERMAN LANGUAGES

DR. CATTELAIN

## FRENCH

French 101. Elementary French. A beginners' course. Self-expression and oral drill in French is practiced throughout the course. The scientific method of pronounciation is emphasized. The text used is De Sauze's Francais pour Commencants, or similar text.

Dr. Cattelain.
First semester, four hours a week. 4 units.
102. Elementary French. A continuation of French 101. Oral drill, increased by means of dialogues and conversations. Students are trained to express their thoughts in short French sentences. Texts used: De Sauze, or a similar text, together with an easy French reader.
Prerequisite: French 101 or one year of high school French.
Dr. Cattelain.
Second semester, four hours a week. 4 units.
103. Intermediate French. A grammar review and composition course, followed by a fast reading course. Text: Carnahan's Intermediate French Grammar and Composition; Anatole France's De Livre de mon Ami.
Prerequisite: French 102 or its equivalent.
Dr. Cattelain.
First semester, four hours a week.
4 units.
204. French Civilization. The course is given in French and is a condensed review of French history, French literature, French system of education, French arts, sculpture, and music. Text used: Petite Histoire de la Civilisation Francaise.
Prerequisite: French 103 or its equivalent.
Dr. Cattelain.
Second semester, four hours a week.
4 units.
205. Survey of French Literature. A rapid survey of French literature, dealing especially with the classical, the romantic, and the modern periods of French literature. Text: Chinard's Petite histoire de littérature francaise.

Dr. Cattelain.
First semester, two hours a week. 2 units.
206. The Classical Period. Emphasis is placed upon the great plays of Corneille, Moliére and Racine, together with a study of other writers of this period.

Dr. Cattelain.
Second semester, two hours a week. 2 units.

## 207. The Writers of the Eighteenth Century. A study of Montes-

 quieu, Voltaire, Rousseau, Beaumarchais, Chateaubriand, and others leading to the French Revolution.(Not offered in 1937-1938.)
Dr. Cattelain.
First semester, two hours a week.
2 units.
208. The Romantic and Modern Writers. The works of Lamartine, Victor Hugo, de Vigny, Musset, and others.
(Not offered in 1937-1938.)
second semester, two hours a week. 2 units.
GERMAN
German 101. Elementary German. A beginners' course. The aim is to teach the principles of German grammar and pronunciation. Students who have had previous training in German are advised not to register for this course. Text: Alexis' First German Course.

Dr. Cattelain.
First semester, four hours a week.
4 units.
102. Elementary German. A continuation of German 101. Oral and written exercises are increased. Reading of easy German works. Text: Alexis' German Course, and Kenngott's Kleine Geschichten. Prerequisite: German 101.

Dr. Cattelain.
Second semester, four hours a week.
4 units.
103. Intermediate German. A grammar review and composition course, followed by rapid readings of German extracts. Texts: Pope's Simple Writing and Speaking German; Alexis' In Deutschland. Prerequisite: German 102.

Dr. Cattelain,
First semester, four hours a week.
4 units.
201. German Literature. Reading of modern works like Elf Neue Erzählungen, Immensee, Germelshausen, Lust und Leid, and others. Dr. Cattelain.
Second semester, four hours a week,
4 units.


THE: 1'ALMA, NORMA1, AVFNU\&

# DEPARTMENT OF MATHEMATICS 

## DR. WEXLER (Head of the Department)

Every student of good capacity, no matter in what direction his special interest may lie, is advised to include in his program of study courses in mathematics covering at least the fundamental concepts of the calculus. These concepts are as cultural and as inspiring as anything in the field of literature or of art.

The minor in mathematics consists of 15 units, including Mathematics 231: Integral Calculus.

The major in Mathematics must include mathematics 241 and 242: Theory of Functions, and at least one unit in Mathematics 250: Thesis Work in Mathematics. There is no specific number of units in Mathematics required in a major, but it must include at least six units of mathematics beyond Math. 232.

A student majoring in Mathematics is advised to include in his program courses in physical science, French, and German. In physical science the student finds important applications of his mathematics; while knowledge of French and German is required of candidates for graduate work in mathematics at most universities.

The following outline is only a suggested and tentative program of study for a Mathematics major; it can be made complete only after repeated conferences with advisers.

## TYPE CURRICULUM FOR STUDENTS MAJORING IN MATHEMATICS

 FRESHMAN YEAR| First Semester Lnits | Second Semester Units |
| :---: | :---: |
| Engl. 101 Composition.............. 3 | Engl. 102 Composition................ 3 |
| *Mus. 100 Fundamentals............... 2 | *Art 110 Publ. School Art.-........-- 2 |
| *P. E. 100 Hygiene..................... 2 | * Elective ....................-................... 2 |
| French ...................-..................- 4 | French ---------...............................- 4 |
| P. E. Activity............................ 0.5 | P. E. Activity ...............--.-......... 0.5 |
| Math. 111 Freshman Math....-. 4 | Math. 112 Freshman Math...-. 4 |
| 15.5 | $\overline{15.5}$ |
| SOPHOMORE | YEAR |
| First Semester Units | Second Semester Units |
| - Educ. 120 Sociology................... 3 | *Psych, 100 Gen. Psychology........ 3 |
| *S. Sci. 100 Const. Govi............. 3 | *Geog. 100 Elem. of Ceog.......- 3 |
| Social Studies (See Note 2).... 3 | Social Studies (See Note 2).... 3 |
| French .......................................- 4 | French ..............--.....................- 4 |
| P. F. Activity ..........................-- 0.6 | P. E. Aetivity........................--- 0.5 |
| Math. 121 Analytic Geom.......... 4 | Math. 122 Diff. Caiculus.......... 4 |
| $\overline{17.5}$ | $\overline{17.5}$ |



Note 1. In the case of the starred courses, sections are to be so arranged that half of the group will take the course in the first semester and half in the second semester.
Note 2. The sophomore courses in social studies are to be selected from the following: Hist 101, 102; 103, 104; and Econ. 131, 132.
Note 3. Electives will be so chosen as to include a minor of at least fifteen units in a field of learning other than mathematics or education.
Note 4. Men may substitute Art 108 Sign Writing in place of Art 110.
Note 5. Students majoring in mathematics will do their directed teaching in the first semester of the senior year.

## COURSES IN MATHEMATICS

## PRIMARIIY FOR UNDERGRADUATES

Math. 111, 112 Freshman Mathematics. Includes Algebra, Trigonometry, and Analytic Geometry. A year's course. No credit will be given for only one semester.

Dr. Wexler.
Five hours a week throughout the year. 8 units.
Math. 121 Analytic Geometry. Prerequisite: algebra and trigonometry.

Dr. Wexler.
First semester, five hours a week. 4 units.
Math. 122 Differential Calculus. Prerequisite: Math. 121.
Dr. Wexler.
Second semester, flve hours a week. 4 units.
Math. 231 Integral Calculus. Prerequisite: Math. 122.
Dr. Wexler.
First semester, flve hours a week.
4 units.
Math. 232 Advanced Calculus. Prerequisite: Math. 231.
Dr. Wexler.
Second semester, five hours a week.
4 units.

## FOR UNDERGRADUATES AND GRADUATES

Math. 241 Theory of Functions of Real Variables. Prerequisite: Math. 232 and grades above average in previous mathematics courses.
(Not offered in 1937-1938.)
Dr. Wexler.
First semester, four hours a week.
3 units.
Math. 242 Theory of Functions of a Complex Variable. Prerequisite: Math. 241. (Not offered in 1937-1938.)
Dr. Wexler.
Second semester, four hours a week. 3 units.
Math. 250 Thesis Work in Mathematics. May be taken more than once for credit.

Dr. Wexler.
Either semester, hours to be arranged. 1 or 2 units.

## PRIMARII FOR GRADUATE STUDENTS

Math. 301 Theory of Numbers.
Dr. Wexler.
First semester, four hours a week. 3 units.
Math. 302 Theory of Finite Groups.
Dr. Wexler:
Sečond semester, four hours a week. 3 units.
Math. 311 Differential Geometry.
Dr. Wexler.
FIrst semester, four hours a week. 3 units
Math. 312 Projective Geometry.
Dr, Wexler.
Second semester, four hours a week. 3 units.

## DEPARTMENT OF MUSIC

## MR. HARELSON (Head of the Department), MISS NORTON, MISS BARKLEY, MR. TATA, MR. HOYER, MRS. QUAID

The chief objective of the work in music is to prepare teachers to handle the subject in the public schools. The program is planned with that end in view. However, many of the courses offered are of general cultural value and are open to all qualified students, whether they are majoring in music or not.

Students desiring to major in music are tested to determine their fitness for this field and their probable success in this type of work.

All music majors and kindergarten-primary majors are required to show the equivalent of two or more years of piano study before graduation. This must include ability to read at sight music of hymn-tune difficulty, piano accompaniments for songs sung in the grades, and rhythm selections for lower grades.

In addition to the piano requirement, one year of instrumental instruction, and at least one year of applied voice are required of music majors.

Students who are able to meet the requirements in voice, piano, or instrumental instruction may, upon examination, be excused from applied courses in the given subject with the approval of the head of the department.

## THE MAJOR IN MUSIC

The major in music includes thirty semester hours of work in this field. A suitable selection and appropriate sequence of courses is indicated in the type curriculum which is presented in outline on the next page. Substitutions and adjustments to adapt this curriculum to the needs of individual students may be made under the advice and with the approval of the head of the department.

## MUSIC MINORS

Students majoring in other fields may elect a minor in music of at least fifteen units with the advice of the head of the department.

## SUGGESTED SEQUENCE FOR THE MINOR IN VOCAL MUSIC

Units
Music 102 Advanced Sight Singing and Ear Training ..................... 2
Music 109 Appreciation ....................................................................... 2
Music 211 or 212 Music Education ................................................... 3
Music 214 Problems in Music Activities .......................................... 3
Orchestra, Band, or Glee Club ............................................................. 5

## SUGGESTED SEQUENCE FOR THE MINOR IN INSTRUMENTAL MUSIC

Music 102 Advanced Sight Singing and Ear Training ..... 2
Music 109 Appreciation ..... 2
Music 103 Harmony I ..... 3
Music 207 Instrumentation and Conducting ..... 3
Band or Orchestra ..... 5

## TYPE CURRICULUM FOR STUDENTS MAJORING IN MUSIC

 FRESHMAN YEAR| First Semester Enits | Second Semester Units |
| :---: | :---: |
| Engl. 101 Composition.............. 3 | Engl. 102 Composition.............- 3 |
| Gen. Sci. 100 Introd. Phys. | Gen. Sei. 110 Introd. Biol......-. 3 |
| *Mus. 100 Fundamentals.............................. 2 | *Art 110 Publ. Sch. A |
| -P. E. 100 Hygiene---------------------2 |  |
| P. E. Activity............................. 0.5 | P. E. Activity ..-------.................-0.5 |
| Minor or elective----.-.-.-------........ 4 | Minor or elective..........-............. 6 |
| Mus. 109 Appreciation .-.-.-.-.---- 2 | Mus. 102 Adv. Sight Singing..... 2 |
| 16.5 | $\overline{16.5}$ |
| SOPHOM | YEAR |




Note 1. In the case of the starred courses, sections are to be so arranged that half of the group will take the course in the first semester and half in the second semester.
Note 2. The courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; and Econ. 131, 132.
Note 3. Flectives will be so chosen as to include an approved minor of at least fifteen units in a fleld of learning other than music or education.
Note 4. Men may substitute Art 108 Sign Writing in place of Art 110.

## COURSES IN MUSIC

## LOWER DIVISION COURSES

Music 100. Fundamentals of Music. This course includes song singing with and without syllables, in unison and in parts; common symbols of notation and their application; discovery and development of rhythms through singing and listening.
Required of all candidates for graduation.
Miss Barkley.
First year, either semester, two hours a week. 2 units.
102. Advanced Sight Singing and Ear Training. Further development of music reading with special attention to aural recognition and writing. Required of all music majors.
Prerequisite: Music 100, or equivalent.
Mr. Harelson.
First year, second semester, two hours a week. 2 units.
103. Harmony I. A study of scale forms, intervals, triads, inversions; tonic, dominant and subdominant progressions; cadences and inharmonic tones. Simple harmonization of section and phrase. Free composition. Keyboard application throughout. Required of all music majors.
Prerequisite: Music 102 or equivalent.

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Mr. Harelson.
Second year, first semester, three hours a week. 3 units.
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104. Harmony II. A continuation of Harmony I. Super-tonic, submediant, and mediant harmony. Analysis and free composition. Keyboard application throughout. Required of all music majors. Prerequisite: Music 103 or equivalent.

Mr. Harelson.
Second year, second semester, three hours a week. 3 units.

105, 106. Applied Music. Voice. Voice building for beginners or for those working on repertoire. Attention is given to resonance, breath support, diction, and interpretation. Required of music majors unless excused by the head of the department. Fees to be arranged.

Mr . Harelson.
Miss Barkley.
Either semester, two lessons a week. 1 unit each semester.
107, 108. Applied Music. Voice. Second year, further development of work begun in the first year. Required of all music majors unless excused by the head of the department. Prerequisite: Mus. 105, 106 or equivalent.
Fees to be arranged.
Mr. Harelson.
Miss Barkley.
Either semester, two lessons a week. 1 unit each semester.
109. Music Appreciation. Designed to develop judgment and discrimination in listening to music. The material used consists largely of phonographic recordings, and includes standard instrumental and vocal works. Procedures are applicable both to the non-music students and to the prospective teacher of music. Required of music majors.

Mr. Harelson.
First or second year, first semester, two hours a week. 2 units.
110. Music in Kindergarten and Primary Grades. Study and preparation of rote songs; emphasis upon rhythm and the singing voice of children. Open to all qualified students.
Prerequisite: Mus. 100 or equivalent.
Miss Norton.
Second year, either semester, two hours a week. 2 units.
111, 112. Class Vocal Lessons. For students interested in voice from the standpoint of the regular teacher of music in the school. The work includes (1) diagnosis as to quality, range, possibilities of development; (2) application of principles, breathing, resonance, diction; (3) study of songs as a means of establishing principles; (4) vocal performance and criticism.

Miss Barkley.
Any year, either semester, two lessons a week.
1 unit each semester.
113, 114. Private Piano Lessons. Courses are arranged according to the needs of the student. Provision is made for the beginner and for the advanced student working on repertoire. Each student is required to play before the music department faculty once during each semester. Advance students play in recital once during each semes-
ter. Required of all music and kindergarten-primary majors unless excused.
Number of lessons, hours, and fees to be arranged with the instructor.
Mrs. Quaid.
Any year, either semester, one or two lessons a week.
1 or 2 units each semester.
115, 116, Class Piano Lessons. Elements of piano playing; keyboard technique, sight-reading of folk song material; close correlation of aural, tactual, and visual imagery; study of piano literature and improvisation of accompaniments to simple songs.
Fees determined by the number enrolled in the class.
Mrs. Quaid.
Either semester, two lessons a week. 1 unit each semester.
117, 118. Class Piano Lessons. Second year. Continuation of study begun in first year, emphasizing piano literature.
Prerequisite: Mus. 115, 116 or equivalent.
Fees determined by number enrolled in the class.
Mrs. Quaid.
Either semester, two Iessons a week. 1 unit each semester.
151, 152. Women's Glee Club. Membership in this organization is open to women students who can qualify. Apply to the director for permission to enter. Students should plan to retain membership throughout the year in order to receive the benefit of public appearance in the mid-winter and spring.

Mr. Harelson.
Any year, either semester, four hours a week, unless otherwise
arranged. 1 unit each semester.
153, 154. Men's Glee Club. Membership in this organization is open to men students who can qualify. For membership, apply to the director. Students should plan to retain membership throughout the year in order to receive the benefit of public appearance in the midwinter and spring.

Miss Barkley.
Any year, either semester, four hours a week, unless otherwise arranged.

1 unit each semester.
161, 162. Class Instrumental Instruction. Affords opportunity for the study of string, reed, brass, and percussion instruments. Students sufficiently proficient are admitted to the beginners' orchestra, the band, or the college orchestra.
Required of all music majors.
Mr. Hoyer.
Either semester, two lessons a week. 1 unit each semester.
163, 164. Beginners' Orchestra. Students who have not yet acquired the degree of proficiency necessary for registration in the concert orchestra or band, but who desire experience in orchestral work,
may register in the beginners' orchestra. Application for enrollment should be made to the director.
Prerequisite: Mus. 161, 162 or equivalent.
Mr. Hoyer.
Either semester, two hours a week. 1 unit each semester.
165, 166. College Orchestra. Symphonic in character, the major objective of this organization is the preparation and presentation of a series of dignified and artistic concert programs. The repertoire is chosen from symphonies, overtures, and other standard works by representative composers. The orchestra also participates regularly in the college assembly programs and provides incidental music for major productions of the drama department. Membership is selective. Apply to the director.
Prerequisite: Mus. 163, 164 or equivalent.
Mr. Hoyer.
Either semester, five hours a week unless otherwise
arranged.
1 unit each semester.
167, 168. College Band. Functioning as a concert band, this organization presents a series of public performances during the midwinter and spring. In addition, the band drills in marching and formations, plays for college athletic contests and other public occasions, and wears the adopted uniform. Application is made to the director and admission arranged after a satisfactory showing of ability.
Prerequisite: Mus. 161, 162 or equivalent.
Mr. Hoyer.
Either semester, five hours a week unless otherwise arranged.

1 unit each semester.
169, 170. Violin. Individual instruction. First year. Fees to be arranged.

Mr. Tata.
Either semester, two lessons a week. 1 unit each semester.
171, 172. Violin. Individual instruction. Second year. Fees to be arranged.

Mr. Tata.
Either semester, two lessons a week. 1 unit each semester.

## UPPER DIVISION COURSES

Music 201 Harmony III. A continuation of Harmony I and II. Includes modulations, chromatic harmony, secondary sevenths, altered chords; analysis and free composition. Keyboard application throughout.
Prerequisite: Mus. 103, 104, or equivalent.
Mr. Harelson.
Third year, first semester, three hours a week. 3 units.

202 Music Literature and History. A cultural course dealing with various epochs in the development of music from primitive to modern times. The college record library affords valuable opportunity for the study of masterpieces from Beethoven to the present. Required of all music majors.
Prerequisite: Mus. 109, or equivalent.
Mr. Harelson.
Fourth year, second semester, two hours a week. 2 units.
203, 204. Class Piano Methods for the Public School. Designed for the teacher of piano class work in the elementary grades, the junior high school, or the senior high school. The Oxford course is used in the observation and practice teaching classes. The special features, such as the song approach, creative practice, and sight reading, correlate with other public school music.
Prerequisite: ability to play music of fourth grade difficulty.
Fees: $\$ 18.00$ per semester plus the price of materials.
Mrs. Quaid.
Third year, both semesters, two hours a week.
2 units each semester.
205. Choral Conducting. Designed to afford music majors, and others with superior musical ability, the opportunity to develop initiative and leadership, and to learn the fundamentals of teaching and conducting community singing and part work in large vocal groups.
Required of all music majors unless registered for Mus. 207.
Prerequisite: Glee Club and theory courses of first three years, or equivalent.

Mr. Harelson.
Fourth year, first semester, three hours a week. 3 units.
207. Instrumentation and Conducting. Designed especially for teachers of instrumental music. In addition to conducting, the work covers the range, tuning, and playing technique of the various band and orchestral instruments, transposition and possible substitutions.
Required of music majors unless registered for Mus. 205.
Prerequisite: band or orchestra, and theory courses of the first three years, or equivalent.

Mr. Hoyer.
Fourth year, first semester, three hours a week. 3 units.
206. Piano Accompanying. Designed to broaden the general usefulness of the teacher of music. The work includes accompaniment of vocal and instrumental solos and of group and choral singing; transposition, interpretation, sight-reading, and keyboard harmonization of melodies.
Prerequisite: Mus. 100, 115, and 116, or equivalent.
Mr. Harelson.
Third year, second semester, two hours a week.
1 unit.
211. Music Education-Primary and Intermediate Grades. For students preparing to become special teachers or supervisors. The work is arranged also for kindergarten-primary majors. Open to all qualified students. Music majors register also for Mus. 212, second semester.
Required of all music majors.
Prerequisite: Mus. 100 and the equivalent of two years piano instruction.

Miss Norton.
Third year, first semester, three hours a week. 3 units.
212. Music Education in Junior and Senior High School. Includes procedures in teaching part-singing, voice testing, beginning of work in conducting; teaching of theory. Required of music majors. Open to qualified students.
Prerequisite: Mus. 100 and the equivalent of two years of piano.
Miss Norton.
Third year, second semester, three hours a week. 3 units.
214. Problems in Music Activities. A practical course dealing with music problems frequently met outside the classroom period. These include auditorium work, projects, special days, music-play, materials, rehearsals, assembly singing, entertainments. Open to interested and qualified students. Required of music majors and minors.
Prerequisite: Mus. 100.
Miss Norton.
Fourth year, second semester, three hours a week. 3 units.
221, 222. Advanced Mixed Chorus. Open only to men and women who have had at least one year of training in the college glee clubs or other choral organizations maintaining equally high artistic standards of performance. Registration must be for the entire year.
Apply to the director for admission to membership.
Prerequisite: Mus. 151, 152; 153, 154; or equivalent.
Mr. Harelson.
Four hours a week. 1 unit each semester.

## DEPARTMENT OF PHYSICAL EDUCATION

## MR. LAVIK (Head of the Department). MR. POMEROY, MR. STEVERSON, MISS MURPHY (Director for Women), MISS WOOD, MISS GILLANDERS

The department of physical education has a threefold mission:

1. It organizes and supervises required and elective physical activities for all students.
2. It provides coaching and other supervision for all intramural and intercollegiate athletic teams.
3. It trains teachers of physical education.

## CORE CURRICULUM REQUIREMENTS

A two hour course in hygiene is required of all freshmen. Each student is required to take an activity course during each of the first four semesters for a total of two units.

## ATHLETICS

Opportunity is provided for students to take part in intramural and in intercollegiate athletics. Participation in men's athletics is subject to the eligibility rules of the Border Faculty Athletic Conference. A comprehensive intramural program offers opportunities for women to participate in all games, sports, athletics, and dancing. Sport, Field, and Play Days with the colleges and the University offer opportunity for competition with women students from all parts of the state.

Students using showers and locker rooms pay a fee for the use of towels for the year. Deposit is required of all women for locker combinations.

## MAJORS AND MINORS

The department offers a four year curriculum leading to a major in physical education which qualifies graduates to teach the subject in the elementary and the secondary schools of the state. The minimum departmental requirement for a major is 24 units and for a minor, 15 units. In either case, the following three subjects must be included: Biol. 231, Anatomy; Biol. 120, Human Physiology; and P. E. 215-216, Techniques of Activities. In addition, all majors are required to take P. E. 236 Organization and Administration of Physical Education; P. E. 251 Kinesiology; and P. E. 254 Physiology of Exercise. Women majors are required to take also
the courses, P. E. 205, 206, Techniques of Dancing. Courses which are required of all students, such as P. E. 100, Hygiene, and the first two years of activity courses may not be counted toward a major or a minor.

## RECOMMENDED SEQUENCE OF COURSES IN PHYSICAL EDUCATION

## FRESHMAN YEAR

P. E. 100 Personal Hygiene (may be taken either semester) ........ 2
P. E. 111, 112 (men) Sports Survey ............................................................. 1
P. E. Activities (women) ..................................................................... 1

## SOPHOMORE YEAR

## First Semester-

Activity (individual choice) ................................................................. 0.5

Biol. 231 Anatomy .................................................................................. 3
Second Semester-
Activity (individual choice) ............................................................... 0.5
Biol. 120 Human Physiology .................................................................. 3

JUNIOR AND SENIOR YEARS
First Semester-
Activities (elective, one-half unit each semester) ........................... 1
P.E. 205 Techniques of Dancing (women) ..................................... 2
P. E. 207 Coaching (women) continued through the year ........... 2
P. E. 215 Techniques of Physical Activities ...................................... 2
P.E. 217 Coaching (men) continued through the year ................. 2
P. E. 251 Applied Anatomy and Kinesiology .................................. 3
P. E. 235 Problems in Physical Education ....................................... 3

Second Semester-
Activities (elective, one-half unit each semester) ............................ 1
P. E. 206 Techniques of Dancing (women) ...................................... 2
P. E. 208 Coaching (women) continued from first semester........ 2
P. E. 216 Techniques of Physical Activities, continued from
first semester ........................................................... 2
P. E. 218 Coaching (men) continued from first semester ............ 2
P. E. 232 Social Recreation Leadership .............................................. 2
P. E. $236 \underset{\text { Education }}{\text { Organization and Administration of................................................. } 3}$
P. E. 252 Scout Leadership ..... 2
P. E. 254 Physiology of Exercise ..... 3
P. E. 238 School Health ..... 3
Either Semester-
P. E. 200 History and Principles of Physical Education ..... 3
P. E. 260 Camp Fire Leadership ..... 1
TYPE CURRICULUM FOR STUDENTS MAJORING IN PHYSICAL EDUCATION
FRESHMAN YEAR

| Fingl. 101 First Semesier Units | Second Semester Units Engl. 102 Composition. |
| :---: | :---: |
| Fngl. 101 Composition | Engl. 102 Composition............- 3 |
| Science $\qquad$ (3 or) 4 |  |
| Myygiene ...............................-........ 2 |  |
|  | P. E. Activity....................-------- 0.6 |
| Minor or Elective.-................-- 5 | Minor or elective...............-----.... 7 |
| 16.5 | 16.5 |

SOPHOMORE YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Psych. 100 Gen. Psych. .....--------3 | *Educ. 120 Soclology..........---- |
| *Geog. 100 Elem, of Geog............ 3 | *S. Scl. 100 Const. Govt.......----3 |
| Social Studies (See Note 2).... 3 | Social Studies (See Note 2).... 3 |
| P. E. Activity | P. E. Activity.........-.-.-..........-- 0.5 |
| Minor and Elective...--................ 3 |  |
| Biol. 231 Anatomy ...................... 3 | Biol. 120 Human Physiol...-----3 |
| 15. ${ }^{\text {¢ }}$ | 15.5 |


| JUNIOR YEAR |  |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| *Psych. 200 Educ. Meas............. 3 | Directed Teaching..........- .-........ 10 |
| * Educ. 210 Tchng. of Reading.... 2 | Or the following group: |
|  |  |
| Minor and Elective..................... 5 | *Educ. Elective.-----.............. 3 , |
|  | M |
| P. E. 205 Techn. of Dancing-..- 2 | P. E. 206 Techn. of Dancing.... 2 |
| P. E. 207 or 217 Coaching........ 2 | P. E. 208 or 218 Coaching......... 2 |
| P. E. 215 Techniques .-...----- 2 | P. E. 216 Techniques....----.-.-----2 |
| $\overline{16.5}$ | 16.5 |

## SENIOR YEAR

First Semester Units
-Educ. 230 El. Curric. Techn..... 2
Directed Teaching........................... 10
Or
Minor and Elective................ 10
P. E. 251 Klnesiology................... 3
P. E. Activity..................................... 0.5

Second Semester Units
*Educ. 250 Phil. of Educ............. 3 Elective and Minor--..................... 5 Or the following group: $\left\{\begin{array}{l}* \text { Educ. 220 Sch. Syst. } \\ \text { Laws, Rec....................... } 2 \\ \text { Educ. Elective.-.......... }\end{array}\right\}$ Elective or Minor......................... 2
P. E. 254 Physiol. of Exerc........ 3
P. E. 236 Org. Adm. P. E........ 3
P. E. Activity ...................................... 0.5

Note 1. In the case of the starred courses, sections are to be so arranged that half of the group will take the course in the first semester and half in the second semester.
Note 2. The sophomore courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; and Econ. 131, 132.
Note 3. Electives are to be so chosen as to include an approved minor of at least fifteen units in a field other than physical education.
Note 4. P. E. majors may elect four more units from the following upper division courses: P. E. 231, First Aid, 1 unit; P. E. 232, Soc. Recr. Leadership, 2 units; P. E. 252, Scout Leadership, 2 units; P. E. 200, Hist. and Prin. of Phys. Educ., 2 units; P. E. 230, School Health, 3 units; P. E. 260 Camp Fire Leadership, i unit.

## DESCRIPTION OF COURSES IN PHYSICAL EDUCATION

## PHYSICAL EDUCATION FOR MEN

111-112 Sports Survey, Required of all men in the freshman year.
Mr. Pomeroy.
First year, two semesters, two hours a week. $1 / 2$ unit each semester.
113, 114 Athletics. An advanced course open to men who are accepted as candidates for college teams.

Staff.
Second year, two semesters, five hours a week $1 / 2$ unit each semester.

## 125, 126 Boxing.

Mr. Pomeroy.
Second year, two semesters, two hours a week.
/i/2 unit each semester.

## 127, 128 Wrestling.

Mr . Pomeroy.
Second year, two semesters, two hours a week.
/2 unit each semester.

## THEORY COURSES

217, 218 Coaching. Theory and technique of major sport activities. Prerequisites: P. E. 113, 114.

Staff.
Third or fourth year, two semesters, two hours a week. 2 units each semester.
252. Fundamentals of Scouting. The philosophy of scouting organization and practices. Includes the background of the Scouting movement; national, local council, district, and troop organization and program; Court of Honor procedure; actual practice in scoutcraft and individual advancement. Affords opportunity for service as assistant scoutmaster in the scout troop maintained at the training school. Successful completion of the course entitles participants to receive Elements of Scoutmastership Certificates, Parts I and II.

Mr. Steverson and Roosevelt Council, Inc., Staff.
Third year, first semester, flve days a week.
3 units.
256. Advanced Scouting. A study of Scouting corresponding to the Principles of Scoutmastership Training Course as outlined by the National Council, B. S. A. Includes in addition, specialization courses in the techniques of camping, handicrafts, first aid, scoutcrafts, signalling, leathercrafts, cooking, and menu building. Successful completion of the course entitles participants to receive Principles of Scoutmastership certificate and Specialization Certificates in the above crafts.
Prerequisites: Fundamentals of Scouting (P. E. 252) or possession of Elements of Scoutmastership Certificate, Parts I and II.

Roosevelt Council, Inc., Staff.
Third year, second semester, five days a week. 3 units.

## PHYSICAL EDUCATION FOR WOMEN

Physical Education Activity courses for freshmen women. One semester hour of activities required of all women during their freshman year. May elect courses from the following group:
P. E. 101-102; 105-106; 110-115; 121-122.

## P. E. 101, 102. Sports Survey.

Staff.
Two semesters, two hours a week. $\quad 1 / 2$ unit each semester

## 110. Tap and Clog.

Miss Gillanders.
First year, first semester, 2 hours a week. $1 / 2$ unit.

## 115. Elementary Folk and Character dancing.

Miss Wood.
First semester, 2 hours a week. $\quad 1 / 2$ unit.

## 121-122. Interpretative Dancing.

Miss Gillanders.
First year. two semesters, two hours a week.
$1 / 2$ unit each semester.

## 105-106. Restricted Physical Education.

Staff.
Two semesters, two hours a week. $\quad 1 / 2$ unit each semester.
207-208. Coaching. Theory and technique of major and minor sports. Participating and officiating in games.

Miss Murphy.
Third or fourth year, two hours a week, two semesters.
2 units each semester.
260. Camp Fire Leadership. Develops the psychological background and educational foundations of Camp Fire as an activity for adolescent girls. The theory and practice of the seven crafts in the Camp Fire program, with symbolism and program making receiv-

ing attention. A limited opportunity is offered to assist with Camp Fire activities in the campus training school. Successful completion of the course entitles the participants to receive the certificate of graduation from a registered training course for leaders from National Camp Fire Headquarters. The work will follow closely the enlargement and improvement of the program as outlined in the new manual of 1937 .

Miss Anderson.
Third or fourth year, either semester, one hour a week. I unit.

## ACTIVITY AND THEORY COURSES

## (Courses Open to Both Men and Women)

110. Tap and Clog. (beginning) Elementary techniques; simple routines.

Miss Gillanders.
First semester, two hours a week. $\quad 1 / 2$ unit.
115. Elementary Folk and Character Dances. A study of authentic dances suitable for grade and high school.

Miss Wood.
F4rst semester, two hours a week. $1 / 2$ unit.
116. Advanced Folk Dancing. History of dances of different nations. A study of characteristic steps and dances.
Prerequisite: P. E. 115.
Miss Wood.
Second semester, two hours a week. $1 / 2$ unit.
118. Advanced Tap and Clog. Advanced techniques and routines. Prerequisite: P. E. 110.

Miss Gillanders.
Second semester, two hours a week. $1 / 2$ unit.
150. Social Dancing. Beginning course in the fundamentals of this type of dancing.

Miss Gillanders.
Either semester, two hours a week. $1 / 2$ unit,
120. Golf. Beginning and advanced sections.

Mr . Pomeroy, Miss Wood.
Either semester, two hours a week. $1 / 2$ unit.
123, 124. Tumbling. Beginning and advanced sections for men. A separate beginning section for women.

Mr. Pomeroy.
Second year, two semesters, two hours a week.
1/2 unit each semester.
130. Tennis. Beginning, intermediate, and advanced sections.

Staff.
Either semester, two hours a week. $1 / 2$ unit.
140. Archery. Beginning and advanced sections.

Miss Wood.
Either semester, two hours a week. $1 / 2$ unit.
220. Golf (advanced). Recommended for students interested in becoming members of golf teams.

Mr. Pomeroy, Miss Wood.
Either semester, four hours a week. $1 / 2$ unit.
200. History and Principles of P. E. Introduces the student to the physical education field from the standpoint of scope and development. Emphasis is laid upon extensive rather than intensive study.

Mr. Pomeroy.
Third year, either semester. 3 units.
205, 206. Techniques of Dancing. Practice and presentation of interpretative dancing, folk and character dancing, clog, tap, and social dancing. Required of all women physical education majors.

Miss Wood.
Third or fourth year, three hours a week. 2 units each semester.
215, 216. Techniques of Physical Education Activities. Includes the practice and presentation of individual sports, stunts, gymnastics, group and team games, calisthenics, and rhythmical activities.

Staft.
Third year, two semesters, three hours a week.
2 units each semester.
238. School Health Education. A study of personal and community health problems. Construction of health programs usable in the elementary and high schools.
Prerequisite: Biol. 120, 231.
Miss Murphy.
Third or fourth year, second semester, 3 hours a week. 3 units.
231. First Aid. A program of instruction in the principles of first aid and their application in practice. Demonstrations of the proper use of first aid materials and methods.

Mr. Steverson.
Second year, first semester, one hour a week.
1 unit.
236. Organization and Administration of Physical Education. A study of the organization, administration, and supervision of the physical education program in elementary and high schools.

Miss Murphy.
Third or fourth year, second semester, 3 hours a week. 3 units.
251. Applied Anatomy and Kinesiology. Origins, insertions, and actions of muscles with considerable emphasis upon postural problems.
Prerequisite: Biol. 231, Human Anatomy.

[^4]253. Community Recreation. A study of tax supported recreation, its history, present status, and trends. Attention is given to the correlation of the various agencies now engaged in administering public recreation. The role of community dramatics, community music, and community art are discussed. Emphasis is placed on organization and participation in social recreation leadership. How to conduct playgrounds, municipal sports, community centers, summer camps, and general recreational service are presented through the medium of lectures, demonstrations, and recitations.

Mr. Steverson.
Third or fourth year, two hours a week. 2 units.
254. Physiology of Exercise. The effects of exercises upon bodily functions. The literature concerning tests and measurements in physical education is reviewed.
Prerequisite: Biol. 120, Human Physiology.
Mr. Lavik.
Third or fourth year, second semester, three hours a week 3 units.
235. Problems in Physical Education. Readings, investigations and reports on current problems in Physical Education. A study of practices and procedures in the field of Physical Education. Fee, $\$ 1.00$.

Miss Murphy.
Third or fourth year, first semester, 3 days a week. 3 units.

## Biol. 120. Human Physiology.

Mr. Irish.
Second year, second semester, 3 hours per week. 3 units.
Biol. 231. Human Anatomy.
Laboratory fee, $\$ 3.00$.
Mr. Irish.
Second year, first semester. three hours per week. 3 unite.

## DEPARTMENT OF PSYCHOLOGY

DR. GRIMES (Head of the Department), DR. BURKHARD, MR. PAYNE, MISS ROLL، DR. SALISBURY, DR. WERT

The Minor in Psychology must include Psych. 100, General Psychology; Psych. 200, Educational Measurements; Psych. 213, Educational Psychology, and six additional hours in psychology courses selected by the student.

## DESCRIPTION OF COURSES

Psych. 100. General Psychology. An introductory study of the field of mental life. The primary emphasis is placed on normal adult psychology with application of the facts to the control of human behavior. The course aims to lay a foundation for all later study in education or psychology, and to give a general appreciation of the psychological approach to an analysis of animal and human behavior.

Dr. Grimes.
Second year, either semester, three hours a week.
3 units.
200. Educational Measurements. Deals with the use and interpretation of intelligence and achievement tests. The relationship of these devices to the administration and supervision of instruction, simple statistical and graphic methods, the significance of scores and diagnostic value of results obtained are carefully considered. The student is prepared to give, score, and interpret, the important tests now in use in the elementary schools.
Prerequisite: Psychology 100.
Dr. Grimes, Mr. Payne.
Third year, either semester, three hours a week. 3 units.
210. Educational Measurements in Secondary Schools. This course is the same as Psychology 200, except that the tests used are those relating to the secondary school subjects.
Prerequisite: Psychology 100.
Dr. Wert.
Third year, either semester, three hours per week. 3 units.
206. Mental Hygiene. A study of the principles of mental hygiene and their application to the personal needs of school children. Deals largely with the emotions, hereditary tendencies, types, causes, and educational treatment of mental instability and defects of personality.

Miss Roll.
Third or fourth year, second semester, three hours a week. 3 units.
213. Educational Psychology. Based upon the findings of general and experimental psychology. It makes a study of original nature, the learning process, and individual differences. The facts pertaining to the effective use of subject matter in the educative process are evaluated in keeping with the laws of the learning process. Prerequisite: Psych. 100, General Psychology.

Dr. Salisbury.
Third or fourth year, first semester, three hours per week. 3 units.
225. Social Psychology. This is an advanced course in psychology dealing with the science of social relationship. Problems of social organization, social control, racial cultures, leadership, communication, imitation, heredity and environment, are given attention. Problems in education, industry, commerce, and social organization are analyzed in the light of modern psychology.
Prerequisite: Psychology 100.
(Not offered in 1937-1938.)
Dr. Burkhard.
First semester, three hours per week, third or fourth year. 3 units.
231. Psychology of Adolescence. An upper division course presenting recent scientific work in such fields as the nature of development of interests, physical, mental, moral, and social traits of adolescence, the prediction and control of adolescent behavior, and their bearing upon the problems of instruction in junior and senior high schools.
Prerequisite: Psychology 100.
Dr. Wert.
Fourth year, first semester, three hours a week. 3 units.
232. Teaching Individual Children. Designed to help teachers to organize materials and activities which take into consideration the wide range of individual differences in any given classroom, from the very dull and slow learning pupils to the very bright. A study is made of the kinds of differences and their causes, mental and physical, emotional and social.
Prerequisites: Psych. 100, Psych. 200. Open to juniors and seniors only.
(Not offered in 1937-1938.)
Mise Roll.
Third or fourth year, three hours a week. 3 units.
233. Child Psychology. A study of the physical, mental, emotional, and social development of the child from birth to adolescence. The
period from five to ten or twelve years of age is especially empha sized. Designed to meet the needs of those planning to teach in the kindergarten, primary, or intermediate grades.
Prerequisite: Psychology 100.
Dr. Salisbury.
Third or fourth year, first semester. 3 units.
235. Mental Testing. A study of the principles of mental testing, with special training in the giving of Terman's Revised Stanford Binet Intelligence Test. Attention is paid to other recent mental tests through demonstrations. The course is specially designed for teachers and administrators interested in developing an individual testing program in schools in which they teach. Provision is made whereby each student registered in the course has practice in giving the Stanford Binet Test.
Prerequisite: Psych. 200.
Miss Roll.
First semester, two hours a week. 2 units.

## GRADUATE COURSES IN PSYCHOLOGY

Psych. 311. Advanced Statistical Methods. Designed to give students insight into the higher statistical processes such as partial and multiple correlations, and regression equations. Practical applications are made to the problems of the school. Important to those engaged in thesis or research work.

Dr. Wert.
Hours and times to be arranged. 2 units.
Psych. 312. Advanced Educational Psychology. A critical survey of the experimental literature of psychology with special emphasis on applications to the problems of teaching, administration, and supervision.
Prerequisite: at least two courses in psychology.
Dr. Salisbury.
Hours and times to be arranged. 2 units

## DEPARTMENT OF SCIENCES

## DR. BATEMAN (Head of Deportment), MR. IRISH, MR. OSTRANDER, MR. HOOVER, MR. MORTENSEN, DR. WATSON

The department of sciences offers courses in the following fields: Agriculture, Biology, Chemistry, Geography, General Science, Geology and Physics and General Science. The work in this department is designed to meet the needs of the following:
(1) Students desiring a cultural or broadening training in the field of science.
(2) Prospective elementary and secondary teachers who plan to major in one of the divisions of science.
(3) Prospective teachers who require prerequisite training in science for the majors, such as Home Economics or Physical Education.
(4) Pre-professional or other students requiring lower division science courses to meet the requirements of the various professional academic and vocational fields such as Agriculture, Medicine and Research, and who plan to continue their work at another college.

## SCIENCE MAJORS

The science student may emphasize one of the following fields:
a. General Science
c. Geography
b. Biological sciences
d. Physical sciences.

To complete a major, twenty-four hours, (twelve hours of which must be upper division) in one of the above fields must be completed in addition to the core requirements of eight hours of science.

Students are warned against over-specialization. Most of the elementary and secondary schools of the state prefer teachers of science, rather than some specific division of it. Science majors are arvised to take Biology 130-140, Chemistry 111-112, Physics 111-112, to insure a broad foundation, and then emphasize the field of their choice.

Students electing to major in science will plan their programs of studies under the advice and direction of the head of the department.

For the guidance of science majors in the selection of a course of study for the four years, several type curricula are presented
in the pages following. The curricula for Elementary Science and Geography are especially designed for elementary and junior high school teachers, while those for biological science and physical science are adapted to the needs of students who may desire later to qualify for the secondary certificate, or to continue their work in medicine, research, or other advanced field of study which requires a broad foundation in science.

Students who wish to prepare themselves for candidacy in the various phases of Federal Biological Survey or Conservation work, in addition to their professional preparation, will follow the biological science curriculum with electives selected in consultation with the head of the department.

## THE MINOR IN SCIENCE FOR THE FOUR YEAR CURRICULUM

Fifteen units to be chosen in conference with the department head and the instructor representing the student's minor interest. This work may be selected from any one of the following fields: biology, chemistry, geography, physics, or general sciences. Suggested minors for science majors:

General Elementary Science: Physical education, industrial arts, home economics, geography.

Geography: Commerce, social studies, biology.
Biological Sciences: Chemistry, home economics, physical education, geography, foreign languages.

Physical sciences: Mathematics, biology, industrial arts, foreign languages, physical education.

## CORE REQUIREMENT IN SCIENCE

All candidates for the bachelor's degree are required to take six to eight semester hours of science courses. The selection of these required courses should be based upon the interest or need of the individual student. The following combinations are recommended for the different majors:

## Subjects

Gen. Sci. 100, 110

Chem. 110, Phys. 1106

Chem. 110, 1818
Biol. 130, 140
8

Chem. 111, 112

Units
6 sem hrs. Art, commerce, English, kinder-garten-primary, foreign languages, music, social studies.
Agriculture, geography, biology, industrial arts, physical education, general sciences.
Home economics.
General science, geography, biology.
Industrial arts, mathematics, physical sciences, pre-professional.

## TYPE CURRICULUM FOR THE ELEMENTARY CERTIFICATE WITH A MAJOR IN ELEMENTARY SCIENCE FRESHMAN YEAR



Or the following group:
$\left\{\begin{array}{ccc}\text { Minor ........................................................ } & 4 \\ \text { Elective ............. }\end{array}\right\}$
*Edu. 220 Syst. Laws, Eec...................... 2 )
Biol. 204 Genetics............................. $\frac{4}{17}$
SENIOR YEAR
First Semester Units
${ }^{*}$ Educ. 230 El. Curric. Techn...... 2
Directed Teaching.............................. 10
Or the following group:
$\left\{\begin{array}{l}\text { Minor and elective.......... } 7 \text {, } \\ \text { Geog. } 217 \text { Cons. Nat. Res. } 3\end{array}\right\}$
Biol. 203 Bacteriology................. 4
Note 1. In the case of the starred courses, sections are to be so arranged that half the group will take the course in the first semester and half in the second semester.
Note 2. The courses in social studies are to be selected from the following: combinations: Hist. 101, 102; 103, 104: and Econ. 131, 132.
Note 3. Electives will be so chosen as to include an approved minor in some fleld other than education or biological science.
Note 4. Men may substitute Art 108 Sign Writing in place of Art 110.

# TYPE CURRICULUM FOR THE MAJOR IN GEOGRAPHY 

## FRESHMAN YEAR



## SOPHOMORE YEAR



## JUNIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Education Elective $\qquad$ 3 <br> *Educ. 210 Tchng. of Reading..... 2 | *Psych. 200 Educ. Meas......... |
|  | Directed Teaching............... |
|  | Or the following group: |
| Science or Social Science................................................................................ |  |
|  | Geog. 206 Anthrop. S. W.... 3] |
|  | og. 222 Physiog. of U. S..--..... 4 |
| 15 | 16 or |

## SENIOR YEAR



Note 1. In the case of the starred courses, sections are to be so arranged that half the group will take the course in the first semester, and half in the second semester.
Note 2. The courses in social studies are to be selected from the following: combinations: Hist. 101, 102; 103, 104; and Econ. 131, 132.

Note 3. In the public schools, there is a tendency toward a grouping together of geography, history, and civics, and frequently these subjects are taught by the same teacher. To meet this condition, students majoring in geography may substitute courses in history government, or commerce for the courses in physical and biological science.
Note 4. Half the students take their directed teaching in second semester of the junior year, half in first semester of the senior year.

## TYPE CURRICULUM WITH MAJOR IN BIOLOGICAL SCIENCE

## FRESHMAN YEAR



## SOPHOMORE YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Educ. 120 Sociology....................... 3 | *Psych. 100 Gen. Psychology........... 3 |
| *S. Sci. 100 Const. Govt................. 3 | * Minor or elective..-------...........-...- 3 |
| Foreign Language.-......................... 4 | Foreign Language........................... 4 |
| P. E. Activity...............................- 0.5 | P. E. Activity.................................. 0.5 |
| Minor or elective.......................... 3 | Biol. 120 Physiology......--.......-... 3 |
| Biol. 130 or Chem. 110 or Chem. 111 $\qquad$ 4 | Biol. 140 or Chem. 112 or Phys. 110. $\qquad$ 4 |
| 17.5 | 17.5 |

JUNIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| ${ }^{*}$ Psych. 200 Educ. Meas................ 3 | *Education Elective.......................- 3 |
| *Educ. 210 Tchng. of Reading..... 2 | Directed Teaching......................... 10 |
|  | Or |
| Chem. 181 or Chem. 211.---..----- 4 | (Minor and elective..............10) |
| Blol. 203 Bacteriology .-.................. 4 | Chem. 212 Org. Chem................. 4 |
| 16 | 17 |

## SENIOR YEAR

First Semester Units
*Educ. 230 El. Curric. Techn....... 2
Directed Teaching.............................. 10
Or
(Minor and elective................10)
Biol. 223 Compar. Anatomy........ 3
15

Second Semester Units
*Educ. 250 Phil, of Educ.................. 3
Minor and elective........................... 5
*Educ. 220 Syst. Laws, Rec........... 2
Blol, 222 or Blol. 224...................... 3
Blol. 212 or Biol. 134.............................. 3

Note 1. In the case of the starred courses, sections are to be so arranged that half the group will take the course the first semester, and half in the second sernester.
Note 2. The required courses in social studies are to be selected from the following combinations: Hist. 101,$102 ; 103,104$; and Econ, 131. 132.

# PHYSICAL SCIENCE MAJOR-TYPE CURRICULUM FOR STUDENTS CONCENTRATING IN CHEMISTRY 

## FRESHMAN YEAR



## SOPHOMORE YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Psych. 100 Gen. Psychology | *Educ. 120 Sociology......................- 3 |
| *Geog. 100 Elem. of Geog............. 3 | *S. Sci. 100 Const. Go |
| *Minor or elective.......................------3 | *P. E. 100 Hygiene........................ 2 |
| P. E. Activity ................................ 0.5 | P. E. Activity..................-.--.........-- 0. |
| Biol. 130 Botany .....--..................... 4 | Biol. 140 Zoology.--......................... 4 |
| Chem. 131 Qual. Analysis.........-- 4 | Chem. 142 Quant. Analysis......... 4 |
| 17.5 | ( $\overline{16.5}$ |

## JUNIOR YEAR

First Semester Units Second Semester Unils
*Educ. 220 Syst. Laws, Rec......... 2
*Educ. 230 El. Curric. Techn....... 2
Math. 122 Diff. Calculus................ 4
Phys, 111 Gen. Coll. Physics......... 4
Chem. 211 Org. Chem................ 4
Chem. 211 Org. Chem................... $\frac{4}{16}$

Directed Teaching............................ 10
Or the following group:
$\left\{\begin{array}{l}\text { *Psych. } 200 \text { Edue, Meas....... } \\ 3 \\ \text { Minor }\end{array}\right\}$
Math. 231 Integr. Calc........... 4 4
Phys. 112 Gen. Coll. Physics..... 4
Chem. 212 Org. Chem..................... 4 18

SENIOR YEAR

First Semester Units
-Education Elective................................. 2
Directed Teaching.............................. 10
Or
(Minor and elective................10)
Minor or Foreign Language........ $\frac{4}{16}$

Second Semester Units
*Educ. 250 Phil. of Educ................. 3
Minor or elective.................................... 4
Minor or Foreign Language........ 4
Educ. 210 Tchng. of Reading....... 2
Major ..................................................... 4
17

Note 1. Students concentrating in chemistry are advised to minor in physics, biology, mathematics, or foreign language.
Note 2. Half the students take directed teaching in the last semester of the junfor year. Others in the first semester of the senjor year.

## PHYSICAL SCIENCE MAJOR-TYPE CURRICULUM FOR STUDENTS CONCENTRATING IN PHYSICS

| FRESHMAN YEAR |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | First Semester | Units |  | Second Semester | Units |
| Engl. | 101 Composition | -.. 3 | Engl. |  | - 3 |
| Chem. | 111 Gen. Chemistry | ..... 4 | Chem. | 112 Gen. Chemist | ... 4 |
| Social | Studies...---............. | ---3 | Social | Studies...---- |  |
| - Mus. | 100 Fundamentals. | --. 2 | * Art 100 | Publ. Sch. Art. | - 2 |
| Math. 111 Freshman Math.....-.- 4 Math 112 Freshman Math........... 4 |  |  |  |  |  |
| P. E. Activity ..........................-- 0.5 P. E. Activity................................. 0.5 |  |  |  |  |  |
|  |  | $\overline{16.5}$ |  |  | $\overline{16.5}$ |

SOPHOMORE YEAR


## IUNIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Fduc. 220 Syst. Laws, Rec.......... 2 | * Psych. 200 Educ. Meas ................ 3 |
| Elective .......................................... 3 | Directed Teaching......................... 10 |
|  | Oriol. 140 Zoology................. 47 |
| French or German........................ 4 | $\left\{\begin{array}{l}\text { Biol. } 140 \text { Zoology } \\ \text { French or } \\ \text { or............ } \\ 4 \\ 4\end{array}\right\}$ |
| Biol. 130 Botany.-........................... 4 | *Educ. 210 Tehng. of Rdng. 2] |
| Chem. 131 Qual. Analysis............ 4 | Chem. 142 Quant. Analysis........ 4 |
| 17 | 17 |


| SENTO | YEAR |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| Directed Teaching..-.-................... 10 | *Educ. 250 Phil. of Educ................. 3 |
| Or the following group: | Elective |
| \{Education Elective.............. . $\}$ |  |
| French or German.............. 4 4 | French or German........................ 4 |
| [Elective …............................ 3] |  |
| Educ. 230 El. Curric. Techn....... 2 |  |
| Chem. 291 Physical Chem........... 4 | Chem. 292 Physical Chem........... 4 |
| 16 | $\overline{16}$ |

## COURSES IN GENERAL SCIENCE

Gen. Sci. 100. Introduction to the Physical Sciences. A non-mathematical, informative course giving a knowledge of the fundamental facts within the province of the physical sciences, the scientific method of approach, the grouping and explanation of facts, and the applications of the physical sciences to daily life. The course consists chiefly of lectures with experimental demonstrations. Physice and chemistry are emphasized. This course is open to all students. Fee $\$ 1.00$, to defray cost of lecture demonstrations.

Dr. Watson.
Either semester, three lecture periods per week. \& units.
110. Introduction to Biology. A brief survey of the scope of biology and of the development, relationship and characteristics of the plant and animal phyla. A study of the principles and the structures involved in nutrition, reproduction, variation and heredity in plants and in animals. This course counts toward meeting the science requirement of all students except science majors.
Laboratory fee, $\$ 2.00$.
Mr. Mortensen.
First year, either semester.
Two lectures and one laboratory period per week. 3 units.
120. Biological Projects and Correlations. A course in applied biology which emphasizes practical aspects, rather than scientific principles. The more common plants and animals and their economic importance are studied as a background for practical material for vivifying curricula and extra curricula subjects of the elementary schools. Some attention is given to the inter-relations of rural and urban economic and social problems. Organization and methods of presentation of project material are stressed.
Laboratory fee, $\$ 1.00$.

> Mr. Ostrander.
> Second year, second semester, two hours lecture and four hours of project and feld work.

3 units.
121. Elementary Photography. Light and its behavior; lenses. Camera construction and performance. Exposure. Developing. Printing. Enlargement. Making of lantern slides. Copying. Intensification. Composition. The course will be suited to the needs of the amateur, or the teacher who wishes to make use of photography as an aid to his teaching.
(Not offered in 1937-1938.) Prerequisite: Physics 112, or Chemistry 112 or 104.
Laboratory fee, $\$ 3.50$.
232. Nature Study. A survey of the Nature Study programs offered in several of the leading schools in the United States, with a view to setting up a Nature Study and Elementary Science program for the elementary schools of Arizona. The selection, preparation and use of demonstration material in teaching Nature Study. The organization and supervision of such activities as kodak clubs, hiking clubs, bird study clubs, junior game protective association units, flower clubs, and similar projects. One week end desert trip and one week end mountain trip.

Mr. Mortensen.
Third year, second semester, two hours lecture supplemented by an equal amount of observation and study.

2 units.

## GEOGRAPHY

Geography 100. Elements of Geography. An introductory analysis of principles for a scientific interpretation of the world and its regions. Special studies of type regions to illustrate application of principles and to establish procedure for further acquisition of geographic knowledge as a foundation for teaching. Required in the standard curriculum.
Laboratory fee, 50c.
Mr. Hoover.
Either semester.
Three recitation-lecture periods per week. 3 units.
Geography A. Map Studies and Locations. For those only who are unable to pass satisfactorily a test on minimum essentials in map studies and planning to follow the standard curriculum. Students needing this special drill will take it when they register for Geography 100 or before.

Mr. Hoover.
Either semester, one hour a week until completed. No credit.
101. Economic Geography. A study of the relations of physiographic, climatic and economic conditions to production, trade, and transportation. Important agricultural, forest, mineral, and manufactured products of the world. Special emphasis is placed upon regional aspects of commodities. (Not offered in 1937-1938.)

Mr. Hoover.
First semester. Three recitation-lecture periods per week. 3 units.
201. Geography of North America. A regional study of the continent. An analysis of the relation of the physical environment in the various sections to production, industries and cultural forms.
Prerequisite: Geog. 100. (Not offered in 1937-1938.)
Mr. Hoover.
First semester. Three recitation-lecture periods. 3 units.
202. Regional Geography. Regions of the world delimited on the basis of physical and cultural factors. The evolution or modification of economic and cultural types under the influence of natural environment. Selected contrasting regions are studied in some detail and similar regions compared with them and classified.
Prerequisite: Geog. 100.
Fee, 50 cents.
Mr. Hoover.
Second semester, three recitation-lecture periods per week. 3 units.
203. Geography of Europe. Natural regions and political divisions compared. An investigation of the geographical backgrounds necessary for the interpretation of major economic, social, and political problems.
Prerequisite: Geog. 100.
Fee, 50 cents.
Mr. Hoover.
Three recitation-lecture periods a week. 3 units.
206. Anthropogeography of the Southwest. Cultures of Arizona and bordering areas interpreted in their setting of physiographic, climatic and biotic environment. The emphasis is placed upon the primitive Indian cultures, prehistoric to the present. The culture and scenic wonders of the region are illustrated. No text.
Fee, 75 cents.
Mr. Hoover.
Second semester. Three lecture-recitation periods a week. 3 units.
214. Field Work in Arizona Geography and Geology. Saturday and week-end trips arranged to include type localities and areas, Prerequisites: Geog. 100, Geog. 206, Geol. 151 and approval of the instructor.
Transportation fee, $\$ 5.00$ per unit.
Mr. Hoover.
Credit $1 / 2$ to 2 units, depending upon the amount of work covered.
217. Conservation of Natural Resources. Measure and distribution of the natural resources of the United States; their most efficient utilization and conservation. Problems of land reclamation, erosion, forestry, conservative mining, flood prevention, water supply, water power, navigation, conservation of wild life and scenery.
Prerequisite: Geog. 100.
Fee, 50 cents.
Mr. Hoover.
First semester, two hours a week. 2 units.
218. Geography of Transportation and Trade Centers. A geographical analysis of the world's railways, roads, inland waterways,

ocean and air transportation. Transportation advantages of great commercial centers.
Prerequisite: Geog. 100, Geog. 101. (Not offered in 1937-1938.)
Mr. Hoover.
Second semester, three hours a week. 3 units.
222. Physiography of the United States. The physiographic regions of the United States analyzed. The many interesting scenic features of the United States are studied as illustrative of the various types of land forms in relation to geologic processes; also the human adjustments to physiographic conditions.
Prerequisite: Geog. 100, Geol, 151.
Laboratory Fee, $\$ 2.00$.
Mr. Hoover.
Second semester, three hours recitation-lecture and
four hours laboratory per week.
3 unite.

## COURSES IN GEOLOGY

Geol. 151. Physical Geology. Processes modifying the earth's surface through the agencies of water, ice, wind, vulcanism, and diastrophism. Structures, minerals, and rocks. Laboratory work with topographical maps, models, rock and mineral specimens. Field work.
Fee, $\$ 3.00$.
Mr. Hoover.
First semester. Three hours recitation-lecture, two hours laboratory and a minimum total of eighteen hours of fleld work.

4 units.
Geol. 252. Historical Geology. Principles of stratigraphy, revealing the history of the earth and the changing world geographies, with developing life through the geological periods.
Fee, \$1.50.
(Not offered in 1937-1938.)
Mr. Hoover.
Second semester. Three recitation-lecture periods per week together with laboritory assignments.

3 units.

## THE BIOLOGICAL SCIENCES

Biol. 130. General College Botayy. A course in elementary botany, designed to give a broad survey of the plant kingdom. The makeup of a typical flowering plant is studied in some detail, as regards its structure and physiology, after which attention is given to the morphology of the thallophytes, bryophytes, and pteridophytes. The principles of growth, reproduction, variation, and heredity as applied to plants are reviewed and summarized.
Laboratory fee, $\$ 2.00$.
Mr. Mortensen.
First semester. three lectures and
three hours laboratory per week. 4 units.
140. General Zoology. Includes the general principles of animal structure and function and comparative methods of reproduction. Introduction to systematic classification and a consideration of the geographical distribution in relation to the origin and development of animal life. This, with Biology 130, constitutes a year course in collegiate biology.
Laboratory fee, $\$ 3.00$.
Mr. Ostrander.
Second semester, three hours lecture,
three hours of laboratory per week.
4 units.
Note. Biology 130 and 140 constitute a one-year course in college biology. This course is the foundation for all work in biological science and in agriculture. It is required of all science majors and is accepted as meeting science requirements of majors in other departments.
120. Human Physiology. The human body is studied as a mechanism in relation to its environment. A study of the vital functions and the physical principles which govern them. Intended to supply the foundation for those who contemplate more extended work in hygiene, health education, or physical education. Lectures; demonstrations; individual and group projects.

Mr. Irish.
Either semester, three hours a week. 3 units.
133. Plant Anatomy. The morphology of plant cells, of plant tissues, and of tissue systems. A study both of prepared slides and of fresh materials which the student will prepare in the laboratory. Required for the major in biological science and in agriculture.
Prerequisite: Biol. 130, General College Botany.
Laboratory fee, $\$ 2.00$. Given in 1936 -1937 and alternate years.
203. General Bacteriology. Emphasis upon the fundamental principles of bacteriology, and their hygienic, industrial and agricultural application. Organisms representing the principal groups are studied in cultural and microscopic preparations. Milk, soil, water, and hygienic surveys are conducted by the students.
Prerequisite: Biol. 110 or its equivalent.
Laboratory fee, $\$ 4.00$.
Mr . Ostrander.
Third year, flrst semester. Two lectures and three two-hour laboratory periods per week. 4 units.
204. Genetics and Eugenics. The principles of heredity and their application to social and educational problems. A continuation of the study of the biological principles underlying race betterment. Prerequisite: Biol. 130, 140 or its equivalent.

Mr. Ostrander.
Second semester. Three hours lecture per week. 3 units.
204A. Laboratory Course in Genetics. The study is based on fruit fly breeding and herediscope problems.
Prerequisite: Biol. 204 or concurrent registration.
Laboratory fee, $\$ 1.00$ per unit.
Mr. Ostrander.
Second semester. 1 or 2 units.
214. Plant Physiology. A study of the plant functions of absorption, food synthesis, nutrition, respiration, growth, and reproduction, with special reference to agricultural practices.
Prerequisite: Biol. 134, Plant Anatomy and one year of College Chemistry.
Laboratory fee, \$2.00. Given in 1937-1938 and alternate years.

[^5]4 units.
222. General Entomology. A general study of insects, including structure, physiology, economic importance, classification and relationships. Each student is required to complete a project including collection and special report on some group of insects.
Prerequisite: G. Sci. 110, or its equivalent.
Laboratory fee, $\$ 1.00$. Alternates with Biol. 224.
Mr. Ostrander.
Second semester, two hours lecture and
one two-hour period of laboratory and fleld work per week. 3 units.
223. Comparative Anatomy of Vertebrates. A study of the structure, development, and homology of the organ systems of vertebrates.
Laboratory dissection of the shark, frog, pigeon, and cat.
Prerequisite: Biol. 112 and 120.
Laboratory fee, $\$ 5.00$.
Mr . Ostrander.
First semester, two hours lecture,
two three-hour laboratory periods a week. 3 units.
224. Animal Ecology. A survey of the wild animals of North America stressing: responses and adaptations; natural organization of animal communities; population equilibrium; succession; habitat types; and methods of conservation. (Not offered in 1937-1938.) Alternates with Biol. 222.
228. Mammalian Anatomy. A study of gross mammalian anatomy using the cat as the type. Offered for pre-medical students and physical education majors, subject to advice of department heads. Prerequisites: Biol. 140 and 120.
Fee, $\$ 5.00$.
Mr. Ostrander.
Second semester, one hour lecture and two three-hour laboratory periods per week.

3 units.
Note: When Biol. 228 is taken for graduate credit, the student registers for three three-hour periods. Fee, \$8.00.
231. Anatomy. Human anatomy with special emphasis on the anatomy of muscles and joints and application to the movements involved in exercises and sports.
Laboratory fee, $\$ 3.00$.
Mr. Irish.
First semester, three hours a week. 3 units.
240. Elementary Biological Techniques. Special bacteriological methods; blood grouping, counting, and testing; elementary serological, immunological, and urological techniques.
Prerequisites: Zoology, bacteriology, organic chemistry, physiology, and human or comparative anatomy.

Mr. Ostrander.
Hours and credits by arrangement with the instructor.

## THE PHYSICAL SCIENCES

## CHEMISTRY

Chem. 110. Elements of General Chemistry. Deals with the common elements and their simpler compounds; presents modern conceptions of matter and its behavior and the part that chemistry plays in life. Especially adapted to the needs of those students who desire a cultural course, or who require a knowledge of the fundamentals of chemistry in their major or minor fields. Open to all students.
Laboratory fee, $\$ 4.00$, and breakage deposit, $\$ 2.00$.
Dr. Bateman and assistants.
First semester, three recitation-lecture periods and three hours of laboratory or demonstration per week.

4 units.
111, 112. General College Chemistry and Qualitative Analysis. Includes intensive treatment of the principles of general chemistry in connection with the metals, non-metals and their compounds. Fundamental principles and practices of qualitative analysis are introduced in the second semester. Intended primarily for students of science, mathematics, engineering, and pre-medicine.

Prerequisite: high school chemistry or equivalent.
Laboratory fee, $\$ 4.00$ per semester and breakage deposit, $\$ 2.00$.
Dr. Bateman and assistants.
Both semesters, three lecture-recitation periods and three hours of Iaboratory per week.

4 units.
131. Qualitative Analysis. The theory and practice of inorganic qualitative analysis. A systematic qualitative separation of the most important metals and acids, together with a careful consideration of the theories, principles, and laws involved.
Prerequisite: Chem. 112 or equivalent.
Laboratory fee, $\$ 5.00$, and breakage deposit, $\$ 4.00$.
Dr. Bateman.
First semester. Two lecture-recitation periods and six or more hours of laboratory per week.

4 units.
142. Elementary Quantitive Analysis. A study of the fundamentals of volumetric and gravimetric analysis. Analysis of common substances is undertaken. Includes practice in the standardization of acids, bases, and oxidizers. Careful manipulation of apparatus, integrity, and accuracy are stressed in the laboratory.
Prerequisite: Chem. 112 or equivalent.
Fee, $\$ 5.00$ and breakage deposit, $\$ 4.00$.
Dr. Bateman.
Second year, second semester, one lecture period and
nine or more hours of laboratory per week.
4 units.
181. Elementary Organic Chemistry. A brief survey of the compounds of carbon, including the representative groups of the aliphatic and aromatic compounds. Especially adapted to the needs of students of agriculture, home economics, and biology.
Prerequisite: Chem. 110 or 111 , or equivalent.
Fee, $\$ 5.00$ and breakage deposit, $\$ 2.00$.

## Dr. Bateman.

Second year, first semester, three lecture-recitations and one three-hour laboratory period per week.

4 units.
182. Applied Chemistry. Includes a brief study of the applications of chemistry in the home and the community. Subjects considered are fuels, fire-prevention, sanitation, textiles, paints, cellulose products, toilet preparations, drugs, food and nutrition.
Prerequisite: Chem. 181 or equivalent.
Laboratory fee, $\$ 5.00$ and breakage deposit, $\$ 2.00$.
Dr. Bateman.
Second or third year, second semester, three lectures and three hours of laboratory per week.

4 units.
211, 212. General Organic Chemistry. An intensive treatment of the chemistry of organic compounds, including the aliphatic and aromatic hydrocarbons and their derivatives. Emphasis is placed on the
theories and reactions of organic chemistry. The laboratory work includes the study and preparation of typical carbon compounds. Laboratory fee, $\$ 5.00$ per semester, and breakage deposit, $\$ 2.00$.

Dr. Bateman.
Both semesters, three lectures and three or more hours
of laboratory each week. 4 units each semester.
270. Advanced Quantitative Analysis. Special methods of analysis such as water, food, ore, rock, steel, urine. Time and credit to be arranged.
Prerequisites: Chemistry 112, 142, and 212; Physics. 112.
Dr. Bateman.
Hours to be arranged. Credit by arrangement.
282. Biochemistry. A study of the chemistry of animal and plant life; the physical and chemical properties of compounds of biological origin; the chemistry of the tissues, secretions, excretions; the composition of foodstuffs, and phenomena of their digestion, absorption, and metabolism; and the role of enzymes in the plant and animal world.
Prerequisites: Biol. 120, Chem. 181 or 211.
Laboratory fee, $\$ 4.00$, and breakage deposit, $\$ 2.00$.
Dr. Bateman.
Second semester. Three lectures and
three hours of laboratory per week. 4 units.
291, 292. Elementary Physical Chemistry. Includes a brief consideration of the properties of liquids, gases, and solids; solutions, equilibrium, phase rule, osmotic pressure, electrochemistry, colloids. Prerequisites: Chem. 112, 142; Phys. 112; calculus.
(Not offered in 1937-1938.)
Laboratory fee, $\$ 5.00$ and breakage deposit.
Dr. Watson.
Both semesters, three lectures and three or more hours
of laboratory work each week.
4 units each semester.

## PHYSICS

Physics 110. Elements of Applied Physics. The fundamental principles of physics are developed and discussed in an elementary way and application is made of these principles to practical problems of the farm and home. Treatment of such topics as: mechanical principles of machinery, heating systems, air conditioning, home lighting, refrigeration, and electrical appliances. Neither high school physics nor college mathematics is required.
Laboratory fee, $\$ 3.00$.

Physics 111, 112. General College Physics. A detailed Iecture and laboratory course in general physics, including physical interpretation of everyday phenomena. It covers mechanics, heat, weather, sound, light, electricity, magnetism. Properties and structure of matter treated from the modern point of view.
Prerequisites: College algebra and trigonometry.
Laboratory fee, $\$ 3.00$ per semester.
Dr. Watson.
Second year, both semesters. Three lecture-recitation periods and three hours of laboratory per week. 4 units each semester.
116. Descriptive Astronomy. A non-mathematical treatment of general astronomy. The course includes a detailed study of the members of the solar system and their characteristics; stars, constellations, nebulae, and the structure of the universe.
Open to all students.
Dr. Watson.
Second semester. Three lecture periods per week. 3 units.
118. Meteorology. Composition and circulation of the atmosphere; hygrometry; weather; methods of observation and prediction; frost warnings; climate in its relations to man and agriculture.
Fee, $\$ 1.00$.
Dr. Watson.
Second semester, three hours a week. 3 units.
211. Mechanics and Heat. Problems based upon the material covered in Physics 111, but with the principles restated in the notation of the calculus. May be taken with or following Phys. 111, and with or following differential calculus.

Dr. Watson.
First semester, two periods a week. 2 units.
212. Electricity, Sound, and Light. Similar to Phys. 211, but covering the fields of electricity and magnetism, sound, and light. May be taken with or following Phys. 112, and with or following integral calculus. Physics 211 and 212 together with Phys. 111 and 112 are the equivalent of a year's course in engineering physics.

> Dr. Watson.
> Second semester, two periods per week. $\quad 2$ units.
241. Modern Physics. Deals with the discoveries made in the past few decades regarding the nature of matter and energy. Among other topics the following are discussed: X-ray and crystal structure; the wave and particle properties of light and matter, atomic properties and structure; isotopes; radioactivity; protons, neutrons, and atomic nuclei; artificial transmutations of elements.
Prerequisites: Physics 112; calculus.
(Not offered in 1937-1938.)

## DEPARTMENT OF SOCIAL STUDIES

DR. WYLLYS (Head of the Deparment), MISS KEMP, DR. TILDEN

Courses in the social studies are designed to make one's college education well-rounded, and to produce intelligent, broad-minded graduates of this institution. Not all students are preparing themselves to enter the same profession; but nearly all expect to be citizens of the United States. In order to be able citizens of the United States or of Arizona, it is desirable to have a knowledge of our human backgrounds and our human relationships, gained through the study of our past history and our present political and social institutions.

The Major in Social Studies requires a total of thirty semester hour units in this field, exclusive of Pol. Sci. 100, which is a general curriculum requirement.

Eighteen units should be in lower division courses selected from among the following department offerings: Hist. 101-102; 103-104; 105-106; 107-108; 110; 113; 114; 116; or Political Science 101; 102; 103; 104.

The remaining twelve units may be chosen from the following courses: Hist. $202203 ; 204 ; 205 ; 206 ; 207 ; 208 ; 210$; or Pol. Sci. 201; 202; 203; 204.

A Minor in Social Studies should consist of at least fifteen units. Nine units should be in lower division selected from the lower division courses enumerated above and six units should be in upper division work chosen from the upper division courses listed for the major.

Both History 101-102 and 103-104, or their equivalent are required of all students majoring in the field of Social Studies. Pol. Sci. 100, Constitutional Government, may not be counted toward either the major or the minor. Econ. 110, Economic History of the United States, and Econ. 131-132, Principles of Economics, will be accepted as electives in Social Studies.

On pages 185,186 will be found a suggestive arrangement of such a major as described above. Courses in the social studies acceptable toward the major are in bold face type. The outline is intended to indicate desirable sequences of these courses.

The actual selection of the courses which are to constitute the major will depend, to a large extent, upon the desires and the
preparation of the individual student. The major should be fully planned and worked out under the direction of the head of the department. Graduate courses will be organized and conducted as the demand for them becomes sufficient.

## SUGGESTED CURRICULUM FOR STUDENTS MAJORING IN SOCIAL STUDIES

FRESHMAN YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Engl. 101 Composition .............--- 3 | Engl. 102 Composition...............- 3 |
| Gen. Sci. 100 Phys. Science.....- 3 | Gen. Sci. 110 Gen. Biol. Science 3 |
| -Mus. 100 Fundamentals................ 2 | * Art 100 Public Sch. Art............-- $\frac{3}{9}$ |
| ${ } P^{2}$ E. 100 Hygiene........---------------2 | *Elective ........................................... 2 |
| Elective .-...................................... 3 | Elective |
| P. E. Activity...........-..................... 0.5 | P. E. Activity.................--...--......-0.5 |
| Social Studies; elect from: | Social Studies; elect from: |
| Hist. 105, England to 1603; | Hist. 106, England Since 1603; |
| Hist. 107, Anc. Orient, Greece; | Hist. 108, Hist. of Rome; Hist. |
| Hist. 110, Hist. of S. W.; or | 114, Col. of N. Amer.; or Poi. |
| Pol. ScI. 101, Introd.................. 3 | Sci. 102, State Govt......-- |
| 16.5 | 16.5 |

## SOPHOMORE YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Educ. 120 Sociology .....................- 3 | *Psych. 100 Gen. Psychology....... 3 |
| *S. Sci. 100 Const. Govt...........--3 | *Geog. 100 El. of Geog................. 3 |
|  | Elective |
| P. E. Activity ................................ 0.5 | P. E. Activity -----......-................... 0.5 |
| Hist. 101 Early Mod. Eur. or | Hist. 102 Eur, Since 1815 or |
| Hist, 103 Amer. Pol. History.... 3 | Hist. 104 Amer. Pol. Histry. 3 |
| Social Studies................................. 3 | Soclal Studies....-........................... 3 |
| Elect from the following: | Elect from the following: |
| Hist. 105, 107, 110, 113, or Pol. | Hist. 106, 108, 114, 116, or Pol. |
| Sci. 101, 103, or any of col- | Sci. 102, 104, or any of col. |
| lege req. not chosen above. | lege req. not chosen above. |

## JUNIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Educ. 220 Syst. Laws, Rec.......... 2 | Directed Teaching-.......................... 10 |
| "Psych. 200 Educ. Meas...............- 3 | or the following group: |
|  | *Education Elective............ 37 |
| Elective .--........................................ 5 | $\{*$ Educ. 230 Curric. Techn. 2$\}$ <br> Elective $\qquad$ 5) |
| Sociaf Studies................................. 6 | Soclal Studies.....-................................ |
| Elect from following: | Elect from following: |
| Hist. 203, 205, 207, 210 or Pol. | Hist. 204, 206, 208 or Pol. |
| Sci. 201, 203 ...-............ | Sci. 202, 204. |

## SENIOR YEAR



Note 1. In the case of the starred courses, sections are to be so arranged that half of the group will take the course in the first semester and half in the second semester.
Note 2. Students majoring in social studies will consult the head of the department for advice in the selection of the alternative courses offered above.
Note 3. An approved minor of at least fifteen units is to be chosen in some field other than social studies.
Note 4. Half the students do their directed teaching in last semester of the junior year; other half in first semester of the senior year.

COURSES IN SOCIAL STUDIES

## HISTORY

History 101. Early Modern Europe. The history of Europe is covered from the latter part of the fifteenth century down to 1815. In something over three centuries, four great revolutions in commerce, religion, politics, and industry changed the whole course of modern life. Required of all students majoring in the department.

Dr. Wyllys.
First semester, three hours a week.
3 units.
102. Europe Since 1815. A survey of the history of Europe from the French Revolution to the present time, with stress on the period since 1870. Some of the chief topics covered are: the Congress of Vienna and its results; the era of Metternich; the Industrial Revolution; the development of nationalism and the unification of all the states of Central Europe; imperialism and alliances; the World War; and a brief survey of post-war Europe.

Dr. Wyllys.
Second semester, tbree hours a week.
3 units.
103. United States History to 1865. American history is carefully surveyed for judicial decisions, legislative enactments, administrative rulings, political party practices, and social and economic developments throwing light upon our constitutional expansion. The utterances of public men, party platforms, diplomatic incidents, are used to make clear the growth of our unwritten constitution and national life.
Required of all students majoring in the department.
Dr. Wyllys.
First semester, three hours a week. 3 units.
104. United States History Since 1865. American history prior to the Civil War is largely concerned with constitutional questions. The great economic revolution in this country during and after the Civil War ushered in political and social problems which demand chief attention. This course aims to bring out the significance of the rise of capitalism, the growth of city life, and perplexing intricacies of our commercial and industrial system, and the effect of all this upon our present institutions.
Required of all students majoring in the department.
Dr. Wyllys.
Second semester, three hours a week. 3 units.
105. History of England to 1603. A survey of the political, economic, and social development of England from the earliest times to the end of the Tudor period.

Miss Kemp.
FYrst semester, three hours a week. 3 units.
106. History of England Since 1603. (Modern England). A survey of the political, economic and social development of England and the British Empire from 1603 to the present time.

Miss Kemp.
Second semester, three hours a week.
3 units.
107. History of the Ancient Orient and Greece. A survey of the developments of ancient culture, including the valley of the Nile, the Euphrates and the western coast of Asia Minor and the mainland of Greece. Special emphasis is laid upon the causes and extent of Greek colonization, throughout the Mediterranean region. The growth of Greek art and philosophy are given a fair share of attention.

Miss Kemp.
First semester, three hours a week.
3 units.
108. History of Rome. A brief survey of Roman and ancient Italian history. The social and economic factors are emphasized, and the causes of the rise of the Roman Empire, as well as the reasons for its downfall, are brought out.

Miss Kemp.
Second semester, three hours a week. 3 units.
110. History of Arizona and the Southwest. To understand the conditions and institutions of this state, it is necessary to be familiar with the history of the commonwealth and of those neighboring communities from which Arizona drew her population and political ideals. This is distinctly a course for teachers, stressing the political history of Arizona, but not neglecting the other phases
of her remarkable story. Prehistoric man and Spanish explorers and missionaries are given due share in the narrative.

Dr. Wyllys.
First semester, three hours a week. 3 units.
113. Medieval Europe. The story of Europe from the fall of the Roman Empire in the west to the time of the Reformation. This was the germinating period of modern nations. The Church, the Crusades, and the Holy Roman Empire are outstanding phases covered. Stress is laid on social and economic life of the period.

Miss Kemp.
First Semester, three hours a week. 3 units.
114. Colonization of North America. Devoting special attention to the colonial period of our country, this course surveys the history of North America from 1492 to 1783. Social and economic life are subjects of greatest emphasis. A detailed account of French and Spanish North America, and of the American Revolution, is included. The course is designed to help prospective teachers make our colonial history more vivid and interesting to their pupils.

Miss Kemp.
Second semester, three hours a week. 3 units.
116. History of Hispanic America. In view of the increasing relations between the United States and the nations to the south of us, it is felt that this course should lay stress upon the life and traditions of our Hispanic-American neighbors. A knowledge of Spanish is desirable but not essential for students choosing this course.

> Dr. Wyllys.
> Second semester, three hours a week.
202. History of the Far East. This advanced course takes up the early as well as the modern history of China and Japan, but places emphasis on the period since the opening of the nineteenth century. Special attention is given to the topic of Japanese and Russian expansion, and to conflicting international interests in the Orient.
Not open to lower division students.
Prerequisite: Hist. 101, 102, or equivalent.
Dr. Wyllys.
Second semester, three hours a week. 3 units.
203. American Foreign Relations. This course deals not only with the machinery of American diplomacy, but also with the history and course of American foreign policies. It is designed to enable teachers to understand the underlying currents of our foreign relations and the place of the United States in world politics. The topics esspecially discussed are: the development of early American foreign policies; the problems of expansion and Manifest Destiny; the

Monroe Doctrine and its application; the share of the United States in international conferences; relations with the League of Nations; and relations with other countries of the New World.
Open to upper division students only.
Prerequisite: History 103, 104 or equivalent.
204. History of the American Frontier. Dealing with the movement of population westward across the United States, this course is designed to show the effect of the West and the frontier upon our national life, and upon the expansion of the United States. Social and cconomic factors are given most attention, and the advance of the frontier line is traced from about 1763 to 1890.
The course is open to upper division students only.
Prerequisites: History 103, 104 or equivalent.
Dr. Wyllys.
Second semester, three hours a week. 3 units.
205. The Period of the French Revolution and Napoleon. The central theme of this special course is the critical period of European history from 1789 to 1815 , an era that completely altered world affairs. Stress is laid upon the Old Regime in France, the causes and leading events of the French Revolution, and the career of Napoleon Bonaparte.
Open to upper division students only.
Prerequisite: History 101, 102 or equivalent.
Dr. Wyllys.
First semester, three hours a week. 3 units.
206. Contemporary Europe. Beginning with a brief survey of the period since 1870 and continuing through the World War, this course then deals with the problems of post-war Europe. Stress is laid on international organization since the War, and some of the problems discussed are: the foreign relations of Soviet Russia; the development of new alliances among the new nations; international conferences and their results; contemporary imperialism; the League of Nations; and the present conditions of most of the European countries.
The course is open to upper division students only.
(Offered in 1938-1939.)
Prerequisite: History 101, 102 or equivalent.
Dr. Wyllys.
Second semester, three hours a week. 3 units-
207. History of Mexico. An advanced course in Hispanic-American history. Deals with the history of the Mexican nation from colonial times to the present. Emphasis is laid upon the social,
economic and racial background of the Mexican nation. A knowledge of Spanish is desirable, but not essential for students choosing this course.
Open to upper division students only. (Offered in 1938-1939.)
Prerequisites: History 103, 104, or equivalent.
Dr. Wyllys.
First semester, three hours a week. 3 units.
208. American Cultural History. American history has many phases. This culminating course deals with the cultural development of our people. This growth is evidenced by improvements in living conditions, in dress, in amusements or recreation, and in music, art, and literature. This study takes particular note of the higher attainments of our people such as are expressed in their drama, their recreation, their education, and their religious and social life.
Open to upper division students only.
Prerequisites: Political Science 100, Hist. 103, 104, or equivalents.
Miss Kemp.
Second semester, three hours a week. 3 units.
210. Renaissance and Reformation. An advanced course dealing with the antecendents and development of the Renaissance in Italy, together with its political, economical, intellectual, and artistic phases in other European countries, and with the revolution in religious and political thought which accompanied the attack upon the church in the sixteenth century. Prerequisite: Hist. 108, 113 or equivalent.
Open to upper division students only.
Miss Kemp.
First semester, three hours a week. 3 units.
300. Seminar in History. Offered as graduate work, if demand is sufficient.

Dr. Wyllys.
Either semester. 2 units.

## POLITICAL SCIENCE

Pol. Sci. 100. Constitutional Government. Covers the essentials pertaining to our national government and to that of Arizona. It meets the requirements of the state law on the study of the national and state constitutions. Required in the sophomore year. The course should be taken by those who wish to prepare for the constitution examinations required of all candidates for graduation from the college. Required of all students for graduation.
NOT OPEN TO FRESHMEN.
Miss Kemp.
Either semester.
3 units.
101. Introduction to Political Science. The fundamental principles of government. Discussion of sovereignty, legislation, and the origins of the state.

Dr. Tilden.
First semester. 3 units.
102. State Government. The workings of a typical American state government are discussed, together with the principles of administration and legislation and county government.

Dr. Tilden.
Second semester.
3 units.
103. Municipal Government. The methods of city government and comparison of the leading types of city administration.

Dr. Tilden.
First semester. 3 units.
104. American Political Parties. This course sketches the formation of the two major parties under Hamilton and Jefferson, down to the present day Republican and Democratic parties. Chief emphasis is laid upon the diametrically opposed Hamiltonian and Jeffersonian political philosophies. A dozen or more important third parties come in for notice. Party movements are directed by outstanding political leaders. This survey includes a study of outstanding party leaders.
Not open to lower division students.
Dr. Tilden.
Second semester, three hours a week. 3 units.
201. Comparative National Governments. A desirable background for understanding current history and the world's changing political forms. Emphasis is laid upon the constitutional structure and political machinery of the governments of Great Britain, France, Germany, Italy, Switzerland, and the Soviet Union.
Open to upper division students only.
Prerequisites: Hist. 101, 102, or equivalent; Pol. Sci. 100.
Dr. Tilden.
First semester, three hours a week. 3 units.
202. Public Administration. Discussion of the methods of administration as commonly practiced in the United States.
Open to upper division students only.
Prerequisite: Political Science 100.
Open to upper division students only.
Dr. Tilden.
First semester, three hours a week. 3 units.
203. International Law and Relations. Full treatment of the principles and practices of nations under the laws of peace and war, and the conduct of international relations.

Dr. Tilden.
First semester, three hours a week. 3 units.
204. History of Political Thought. The rise of political theories and ideas of leading political scientists, past and present.
Open to upper division students only.
Prerequisite: Political Science 100.
Dr. Tilden.
Second semester, three hours a week. 3 units.
300. Seminar in Political Science. Offered as graduate work, if demand is sufficient.

Dr. Tilden.
Either semester. 2 units.

# RULES AND REGULATIONS GOVERNING THE CERTIFICATION OF TEACHERS IN ARIZONA 

The following rules and regulations supersede all former rules for certification of teachers. Effective October 1, 1936.

Nothing in these rules and regulations shall be construed as retroactive; all rights granted to holders of certificates under previous regulations shall be recognized.

## CERTIFICATION GRANTED UPON SCHOLASTIC PREPARATION

I. KINDERGARTEN-PRIMARY
A. Kindergarten-Primary certificates shall be granted upon evidence of graduation from the four-year kindergarten-primary course in one of the Arizona State Teachers Colleges or any accredited teacher-training institution authorized to train elementary and kindergarten teachers.
B. The requirements shall include a major of twenty-four semester hours (thirty-six quarter hours) in Education, Psychology, and Kindergarten-Primary courses, including such courses as Kinder-garten-PrImary Curriculum, Children's Literature and StoryTelling, Reading and Language, Play Education, Construction and Play Materials, Educational Measurements, including eight semester hours (twelve quarter hours) of practice teaching, four (six quarter hours) of which must have been in kindergarten and four (six quarter hours) in grades 1, 2, or 3 .
Candidates for this certificate must present evidence of proficiency in Sight-Singing, Sight-Reading, and Piano Accompaniment.
C. The name Kindergarten-Primary shall be designated on the face of this certificate.
D. The Kindergarten-Primary certificate shall be valid for four year: and shall entitle the holder to teach in the kindergarten and in grades 1, 2, and 3 in the elementary school.
II. KINDERGARTEN-ELEMENTARY
A. If the candidate has completed a total of thirty semester hours (forty-five quarter hours) in Education. Psychology, and Kinder-garten-Primary courses, including all the specific requirements for the Elementary certificate as well as the Kindergarten-Primary, except for practice leaching, this certiffate shall be valid also in all the grades of the elementary school, and shall be so endorsed. The practice teaching requirement for this combined certificate shall be eight semester hours (twelve quarter hours), four (six quarter hours) of which must have been in grades $4.5,6$, 7 , or 8 , and four (six quarter hours) of which must have been in kindergarten.
B. The name Kindergarten-Flementary shall be designated on the face of this certificate.
C. The Kindergarten-Flementary certificate shall be valid for four years and shall entitle the holder to teach in the kindergarten to grade 9 , inclusive.
III. ELEMENTARY
A. Elementary certificates shall be granted on evidence of graduation from the four-year course in one of the Arizona State Teacher Colleges or any accredited teacher-training institution authorized to train elementary teachers.
B. The requirements shall include a major of twenty-four semester hours (thirty-six quarter hours) in Education and Psychology, in-
cluding instruction in Psychology, the Elementary School Curriculum, Educational Measurements, including eight semester hours (twelve quarter hours) in practice teaching, all of which must be in the field for which the certificate is valid.
C. The name Elementary shall be designated on the face of the certificate.
D. The Elementary certificate shall be valid for four years and shall entitle the holder to teach in grades 1 to 9 , inclusive.

## IV. SECONDARY

A. Secondary certificates shall be granted to holders of the Bachelor's degree from the University of Arizona or the Arizona State Teachers Colleges, or from any other accredited university or college authorized to train teachers, who shall present, in addition, evidence of the satisfactory completion of not less than thirty semester hours (forty-five quarter hours) of graduate work acceptable toward an advanced degrec at the University of Arizona or at similar accredited institutions, and also acceptable to the State Board of Education for certification purposes.
B. Requirements include-

1. (a) A major of not less than twenty-four semester hours (thir-ty-six quarter hours) and a minor of not less than fifteen semester hours (twenty-two and one-half quarter hours) in subjects usually taught in high schools; or
(b) A major in a non-high school field and two minors in subjects usually taught in high schools.
NOTE: A non-high school field is a subject not generally taught in junior and senior high schools, i.e., Archaeology, Psychology, Education, etc.
2. Twenty-four semester hours (thirty-six quarter hours) in edu-tion-
(a) Courses in General Psychology; Educational Psychology; Educational Measurements; aims, outcomes, principles, and practices of secondary education; and the Philosophy or History of Education.
(b) Not less than five semester hours (seven and one-half quarter hours) of practice teaching.
(c) Not less than six semester hours (nine quarter hours) of graduate courses in Education.
C. The names of the major and minor teaching flelds shall be designated on the certificate.
D. The Secondary certificate shall be valid for four years and shall entitle the holder to teach in grades 7 to 12 , inclusive, and Junior College.

## V. SPECIAL

A. Special certificates shall be granted upon evidence of graduation from a regular four-year high school course, or the equivalent, and in addition thereto evidence of graduation from a regular four-year course in a special school, special department of a teachers college or university whose accrediting is recognized by the Arizona State Board of Education.
B. Requirements include-

1. Not less than ibirty semester hours (forty-flve quarter hours), or the equivalent, in the special field for which certificate is granted.
2. Not less than eighteen semester hours (twenty-seven quarter hours) in Education and Psychology appropriate to the field and including not less than five semester hours (seven and one-half quarter hours) of practice teaching or approved experience in teaching. either of which shall be in the special field for which certification is granted.
3. The name of the special field shall be designated on the face of this certificate. These fields are-
a. Agriculture
b. Art
c. Commerce (Business Subjects)
d. Home Economics
e. Industrial Education (Manual Arts)
f. Music
g. Physical and Health Education
4. This certificate shall be valid for four years and shall entitle the holder to teach in grades 1 to 12 , inclusive, but only the subjects designated on the face of this certificate.

## VI. ADMINISTRATIVE

A. Administrative certificates shall be granted upon evidence of-

1. A minimum of three years of successful teaching experience.
2. Eligibility for an Elementary or a Secondary certificate.
3. A minimum of fifteen semester hours (twenty-two and one-half quarter hours) in Education, in addition to and after securing the Baccalaureate degree, devoted to school organization, administration, and supervision, selected as follows:
REQUIRED: Not less than ten semester hours (fifteen quarter hours) in courses in the following groups with at least two semester hours (three quarter hours) of credit in each group:
Group I-School Administration and Supervision
a. Two semester hours (three quarter hours) in this field in addition to
*(1) Arizona School Systems, Laws, and Records.
Group II-Statistics and Measurements
a. Two semester hours (three quarter hours) in this field in addition to

* (1) Educational Tests and Measurements

Group III-Organization and functions of the elementary school or of the high school, including a study of the curriculum.
a. Two semester hours (three quarter hours) in this fleld in addition to
*(1) Philosophy of Education
-(2) History of Education
ELECTIVES: Five semester hours (seven and one-half quarter hours) may be selected from the following courses:

1. Mental Tests and Measurements
2. Extra-curricular activities in Junior and Senior High School
3. Student Personnel Guidance
4. Vocational Education, Problems, and Guidance
5. Visual Education
6. Character Education
7. Educational Sociology
8. Educational Research
9. School Surveys
10. Laboratory in Teaching
11. School Finance
12. Current Educational Problems
B. The Administrative certificate shall be valid for the same period of time as the general teaching certificate held, and shall entitle the holder to administer public education and engage in such school supervision as may be properly included in the duties of a superintendent or principal of a school, or supervisor of non-special instruction. Provided services upon the Administrative certiflcate must be performed within the grade of the general teaching certificate held and shall be so endorsed.

[^6]C. Any administrator, to qualify for a position where eligibility is required for both an Elementary and a Secondary certificate, must show as a minimum requirement an additional ten semester hours (fifteen quarter hours) of eredit in Education, including a course in Curriculum, from a college of approved rank in the field (elementary or secondary) for which he may not meet the requirements as to the general teaching certificate held.
The holder shall be entitled to administer and supervise in grades kindergarten to 12, inclusive.
D. The name Administrative certificate shall be designated on the face of this certificate.
NOTE: The Administrative certificate shall be required of any administrator in charge of a school or school system with five or more members on the staff.

## RENEWAL

The requirement for the initial renewal of Kindergarten-Primary, Kin-dergarten-Elementäy, Elementary, Secondary, and Special certificates for a six-year period shall be the satisfactory completion during its life of two years of successful teaching in the public schools, evidenced by recommendation from persons qualified to judge and officially associated with the teacher, as to successful teaching experience and professional spirit, or five semester hours, (seven and one-half quarter hours) in an accredited college or university may be substituted where the teaching experience is deffient.

Additional renewals for a six-year period shall be granted upon the completion during the renewal period of four years of successful teaching experience in the public schools and flve semester hours (seven and onehalf quarter hours) of acceptable work in an accredited school, or ten semester hours (flfteen quarter hours) of such work where the teaching experience is deficient or such additional requirements as may be prescribed by the State Board of Education.

Application for renewal must be made on or before the expiration of this certiflcate; otherwise the renewal clause is void.

The Administrative certificate shall be renewed on the same basis as each general certificate held.

NOTE: Those who have a Master's degree from an approved accredited institution, or any other recognized advanced earned degree from such accredited institutions, may renew their certificate on presentation of evidence of continuous successful teaching experience in the public schools during the life of the certificate.

Certificates may be renewed on foreign travel provided special arrangement is made by the applicant with the State Board of Education by submitting proposed itinerary.

Correspondence work from the University of Arizona, the Arizona State Teachers Colleges and other recognized accredited institutions may be accepted in the granting and renewal of certificates.

Before any certificate may be issued the applicant must satisfy the requirement in Federal and State Constitutions and take the Oath of Allegiance required in Arizona.

All applicants for certificates must furnish evidence of the fact that work offered as a basis for said certificate was procured, to the extent of five semester hours (seven and one-half quarter hours) and two years of successful teaching experience, before or after graduation, within the four years immediately preceding said application. If desired, an approved course of ten semester hours (fifteen quarter hours) may be substituted for the two years of teaching and five semester hours (seven and one-half quarter hours).

Teachers now holding valid certificates shall be given until July 1, 1946, to qualify under these new requirements, provided, that on all certificates granted prior to July 1, 1930, holders of the same shall be given until July 1, 1950, to meet these requirements.

The State Board of Education is of the opinion that successful teaching over a period of years should have some consideration as certification regulations and standards are raised. Therefore, all teachers who were certificated prior to July 1, 1920, and who still continue teaching under a valid certificate may make application to the State Board of Education who will review their respective status and if found advisable may consider same for renewal without additional credits being required or make any other recommendation that may seem applicable.

## STATISTICS

## SUMMARY OF REGISTRATION, 1936-1937

College

## Resident Students

Regular Session

|  | Freshmen | Sophomorez | Juniors | Seniors | Specials | Total |
| ---: | :---: | :---: | :---: | :---: | :---: | ---: |
| Men | 270 | 122 | 138 | 74 | 7 | 611 |
| Women | $\mathbf{1 7 1}$ | 119 | 140 | 94 | 14 | 538 |
|  | $\underline{241}$ | 241 | -278 | 168 | 21 | 1149 |

## Summer Session 1936

Men 99
Women .................................................................................... 312
Total ....................................................................................... 411
Extension Courses
Men 43
Women ........................................................................................................................... 141
Total .................................. ..................................................... 184
Training Schools
Boys ....................................................................................... 526
Girls ........................................................................................ 455
Total ........................................................................................ 981
Total Registration
In College ............................................................................ 1744
Counted more than once..................................................... 100
Total different students..................................................... 1644
In Training Schools......................................................................................... 981
GRAND TOTAL................................................................ 2625
SUMMARY OF GRADUATES, 1937
Prior to 1937.................................................................................. 4231
Class of 1937-B.A. Degree.................................................................................. 159

# COMMENCEMENT 1937 

## BACHELOR OF ARTS IN EDUCATION

January 29, 1937
*Charles Austin Burkhard
Bill A. Cavalliere
Charles H. Crichlow
Lloyd DuQuesne Dickey
Richard J. Follett
Aaron Conrad Gerrish
Angeline Hardwick

Ronnie James Farwood Henrietta Frances Humbert Ruth A. Kennaugh
Melvin I. Sizemore
Ruth L. Tolmage
Betty Jane Tyler

June 1, 1937

Manuel Torres-Alcantar
J. Newel Allred

Anna K. Barich
Barbara M. Benson
Edgar Carl Benzing
Ralph F. Blankenship
Lettie Houdyshell Bond
Margaret Dell Buck
George Arthur Burgham
John H. Burke
Leona Mildred Callahan
Lois Genevjeve Carlton
Winifred Marjorie Chapple
Addaline M . Cheney
Margaret Clevenger
Ruth Ada Curlee
Albert Joseph Dalmolin
Evelyn May Devinny
Jane Diefenderfer

* Herbert Jamison Edwards George Douglas Ellingson
Charlesetta C. Favors
Mildred Roma Gentry
Adda Jane Giroux
Dorothea Julia Goodwin
Margery Tmily Hamar
Glodeen Ladona Hamilton
*Gerald I. Harrison
*Charles F. Hart Harris Samuel Hayhurst
Kenneth P. Heywood
Daniel Warren Higgins
Nola Irene Hill
Nell Hinton
Virginia Mae Hollingshead
Martha Lou Howeli
Rebecca Clare Hurst
Leola L. Jennings
William Masao Kajikawa
Harold R. Keebler
Bertha Kendrick
Roberta J. Kincaid
Evalyn Lavinia Laine
Leonard Glenn La Rue
Marjorie Jean Lawson
Bernice Logan
Peggy Luening
Clydean MacDowell
Evalyn Louise Macon

Sadie Martin
Hugh Cecil McCullar
William Bruce McKellar
Mary T. McLeod
Maurine Medlin
Mary Robertson Meyer
Joseph J. Milardovich
Virginia Kathryn Millam
Charlie Earl Narramore
Norene R. Nash
Naomi Horne Nelson
Allen Dandridge Northen
Henry Sylvester Oliver
Elizabeth Viola Orr
Bernice O. Ott
William Reese Parry
Thomas Andrew Pavelin
Nolan Fartford Payton
Robert Pelsue
Thomas Virgil Pyle
Mae Rose Rais
Marjorie Ellen Reid
Helen Marjorie Rhue
Ethel Louise Robinson
Helen Marie Roe
John Stuart Rouse
LaRoy DeVar Saline
Glenn M. Schafer
Velma Irene Schuler
Herman H. Schweikart
May Louise Shiffer
Eula L. Smith
Turner T. Smith
Genevieve Soper
Julla Mae Stidham
Evelyn Tomlinson
Willa Gail Turner
John Vomocil
Ivan S. Wade
Katherine Louise Wagenseil
George Vincent Wager
Mary George Washington
Evelyn Weaver
Ralph Weller
Dorothy Lucille Wilcox.
Della Ann Willis
Mary-Elizabeth Wilson
Anna Ruth Woolard
Jessie May Wright

## August 31, 1937

Evangeline L. Armijo<br>Bonnie Fane Armstrong Elizabeth Caroline Borcherding Brookie Bellamy Brown<br>Dorothy A. Brown<br>Robert LL. Buntz<br>Louis J. Charlebois<br>Florence Eva Cisney<br>Clara Fretz Clements<br>J. Elmer Collins<br>Nancy Mary Cooley<br>Ruth Imelda Cummings<br>Elizabeth Foudy<br>*Michael B. Giorsetti<br>Gertrude Greenhill<br>Robert Olberg Harpham<br>Vera Foster Helfinstine<br>Alice Vivian Hopkins<br>Dorothy Catherine Irish<br>Joseph David Island<br>Isabel Jenkin<br>Rogers Wallace Johnson<br>Dörothy Elizabeth Jones<br>Madeline Lenox

Lorenzo K. Lisonbee
Doris Louise Lyons
Winona Marsh
Gladys A. Mitchell
Joseph William Moore
Rella Niccum
Sara B. Ortega
Afton Clark Peterson
Alline Bethea Phillips
Esther Frances Randail
Elsie Drake Reynolds
Walter Pyne Sertic
Robert Lee Silyey
Howard Russell Simons
Cecille M. Skousen
Hugh 0 . Summers
Ellen Evelyn Surrett
Nancy Edna Taylor
Aubrey A. Thompson
Eldard Wayman Underdown
Dorothy M. Van Zante
Carolyn Irene Wade
Eleanor R. Wallingford
Catherine Hall Weaver

# HONORS 

## BACHELOR OF ARTS IN EDUCATION

## WITH HIGH DISTINCTION

Adda Jane Giroux
Gerald I. Harrison

Ronnie James Harwood Bertha Kendrick

## WITH DISTINCTION

Lettie Houdyshell Bond Charles Austin Burkhard
Lois Genevieve Carlton
Aaron Conrad Gerrish
Evalyn Lavinia Laine
Naomi Horne Nelson
Helen Marjorie Rhue
Velma Irene Schuler
Genevieve Soper
John Vomocil
Mary Elizabeth Wilson

KAPPA DELTA PL AWARD
Bertha Kendrick

MOEUR MEDAL.
Adda Jane Giroux

MOEUR PIN
Genevieve Carlton

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[^0]:    NOTE: Dates given for vacations are both inclusive.

[^1]:    Mr.
    Third year, second semester, four hours a week.
    2 units.

[^2]:    Mr. Neeb.
    Third year, first semester, one lecture, laboratory, six hours a week.

[^3]:    Mr. Neeb.
    Second year, second semester, laboratory, six hours a week. 3 units.

[^4]:    Mr. Lavik.
    Third year, first semester, three hours a week.
    3 units,

[^5]:    Mr. Mortensen.
    Second semester, two lectures,
    six laboratory hours per week.

[^6]:    *If the applicant has had undergraduate credit in this course it may not be repeated for credit on this certificate, nor may such undergraduate credit be so applied.

