# ARIZONA STATE TEACHERS COLLEGE 

AT TEMPE

## BULLETIN

## CATALOGUE ISSUE FOR THE SESSION OF 1939-1940



## TEMPE, ARIZONA



# BULLETIN <br> ARIZONA STATE TEACHERS COLLEGE 

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1939-1940


TEMPE, ARIZONA

## COLLEGE CALENDAR

## 1939-1940 <br> FALL SEMESTER, 1939

First Faculty Meeting 7:30 P. M., Monday, Sept. 4
Assembly of Freshmen, Freshman Week, $9: 00$ A. M., Tuesday, Sept. 5RegistrationThursday, Friday, and Saturday, Sept. 7, 8, 9
Instruction begins Monday, Sept. 11
Mid-semester scholarship reports due. Thursday, Nov. 9
Homecoming Day ..... Saturday, Nov. 18
Thanksgiving recess. Wednesday noon, Nov. 29 to Sunday, Dec. 3
Christmas vacation Saturday, Dec. 16 to Tuesday, Jan. 2, 1940
Final examinations
Monday, Tuesday, Wednesday, Thursday, Jan. 22, 23, 24, ..... 25
Last day of fall semester Friday, Jan. 26
SPRING SEMESTER, 1940
Registration Monday, Tuesday, Jan. 29, 30
Instruction begins, second semester ..... Wednesday, Jan. 31
Spring vacation Friday, Mar. 22 to Tuesday, Mar. 26
Mid-semester scholarship reports due ..... Friday, Mar. 29
Alumni Banquet Saturday, Apr. 27
Last day for filing senior scholarship reports. ..... Friday, May 17
Honor Assembly ..... Friday, May 24
Last meeting of graduate classes ..... Saturday, May 25
Baccalaureate Service ..... Sunday, May 26
Alumni Induction Ceremony ..... Monday, May 27
Commencement Exercises ..... Tuesday, May 28
Final examinations....Wednesday, Thursday, Friday, May 29, 30, 31
SUMMER SESSION, 1940
Summer session begins. Registration Monday, June 3
First summer term ends Saturday, July 6
Second summer term opens. Registration ..... Monday, July 8
Summer session ends Saturday, Aug. 10
Registration, fall semester, 1940Thursday, Friday, Saturday, Sept. 12, 13, 14
Note: Dates for vacations are both inclusive.

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## OFFICIAL DIRECTORY

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## OFFICERS OF ADMINISTRATION

Grady Gammage, Ll.D. - - - - - President of the College J. O. Grrmes, Ph.D. - - - - Dean and Director of Extension F. M. Irish, B.A. - - - - - - - - - - - Registrar

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Mrs. Robert R. Krause - - - - - - Matron, Dining Hall Edward Bertelsen - - Superintendent of Buildings and Grounds

# COLLEGE FACULTY 

1939-1940

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

John R. Allen, M.A. - - Director of Men; Head Resident, East Hall; Instructor in Physical Education B.A., A.s.t.c., Flagstaff; M.A., University of Southern California

Merle Ansberry, M.A., Ph.D. Associate Professor of Speech and Debate A.B., M.A., University of California; Ph.D., Jniversity of Wisconsin

Bess Barkley, B.A. - - - . . . - . - - - Instructor in Music B.A., University of Arizona

George Monroe Bateman, M.S., Ph.D. - - - Professor of Chemistry; Head of the Department B.S., Utah State Agricultural College; M.S., Ph.D., Cornell University

Mildred Margaret Blair, M.A. - - - - - - - Dean of Women; Assistant Professor of English B.A., Oberlin College; M.A., Claremont Colleges

Esther L. Brewer, M.A. - - - - Instructor in Home Management and Nursery School
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Arnold Bullock, Mus.B. - . - - - - - - - Instructor in Music Mus.B., Yale University
Samuel Burkhard, M.A., Ph.D. - - - - Professor of Education; Head of the Department B.A., Goshen College; M.A., Columbia University; Ph.D., New York University

Fernand Catrelain, A.M., Docteur de l'Université - - - - Professor of the French Language; Head of the Department
A.M., Baylor University; Doctorate, Besancon, France

Lola Ellsworth, M.A. - - - - - - Instructor in Home Eiconomics B.S., Brigham Young University; M.A., Teachers College, Columbia University

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# TEACHER TRAINING FACULTY <br> 1939-1940 

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Verling W. Marshall, B.A. Teacher Training; Fifth and Sixth Grades. Eighth Street School
B.A., Colorado State Teachers College
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B.S., M.A., Ohto State University
Helen C. Roberts - - . - . - . - - Principal, Eighth Street School;
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Dorothy F. Robinson, M.A. - . - . Teacher Training; Fourth Grade, Campus Training School B.A., M.A., University of Southern Callforna
Ella L. Roll, M.A. - - - . - - Principal, Campus Training School; Teacher Training, Eighth GradeB.A., M.A., Stanford University
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Howard Preston Woolum, M.A. - - - - - - Teacher Training;

## THE COLLEGE

## PURPOSE AND OBJECTIVES


#### 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.

Departmental advisers exercise a close supervision over the study programs of students. For the personal problems of individual students, there is a system of guidance through the offices of the Dean of the College and of the Dean of Women.

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.

Through the five-year curriculum, facilities are provided whereby students may carry their studies beyond the bachelor's degree, to qualify for the master's degree and for secondary certification.

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.

In March, 1937, an act of the Thirteenth Legislature authorized the College to grant the advanced degree of Master of Arts in Education. This degree was conferred for the first time on May 31, 1938.

## 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 motor 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 innumer-

able 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 flood 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 Arts Building, with its imposing lines and dignified proportions.

During the past two years an extensive building program has been carried out. All buildings have been thoroughly repaired and renovated and several have been remodeled. The addition to the library building has doubled its capacity. A new housing 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 houses the shops, laboratories, and classrooms of the industrial arts department. An addition to the men's gymnasium has greatly increased the floor space for showers, dressing rooms, and lockers. A new central heating plant has been erected and service lines have been reconstructed. Farm buildings have been removed to the new college farm a mile south of the campus. A new women's athletic field has been developed and the new women's building houses the women's gymnasium, classrooms for women's health education, and a social center 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.

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 and agriculture 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 College Bookstore, conveniently located in the basement of the Arts 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. There are classrooms for the kindergarten, the elementary grades and the junior high school; a music room, art room, assembly room, and a cafeteria. 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 scientifically 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 six to seven hundred students are served at each meal.

The Infirmary is located in a quiet section of the campus, and is a fixe-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 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 installation of a system of air conditioning of the latest type maintains an equable temperature in the entire building at all seasons.

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.

The Women's Gymnasium, located south of the women's dormitories, represents a new departure in college building being constructed of adobe, a material well suited to the climate. Panels of ornamental brick work adorn the facade. The main hall, 68 by 100 feet, serves as gymnasium and social recreation hall. Classrooms are provided for theory work in physical and health education, and there are commodious shower and dressing rooms with ample locker space. Special rooms are set aside for the accommodation of off-campus women. This building is designed to serve not only as a gymnasium but as a social center for the activities of student body groups.

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. 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, one sleeping bay to every two rooms. One of the most attractive features of this building is the large and well lighted recreation room.

South Hall and North Hall, both for women, are situated in the west half of the campus. Each 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, 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

During the few months in the year when artificial heat is required, 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 carries all electric wiring of the lighting, telephone and power systems under-ground. 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 1939 , the association now numbers 4,926 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 300 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.

Alumni Awards. Desiring to give recognition to high scholastic achievement and to promote high scholarship standards in the College, the Alumni Association offers a number of awards to outstanding students.

The Alumni Plaque hangs in a prominent place in Matthews Library. On this plaque is inscribed each year the name of a senior who is chosen as being outstanding for scholarship and other meritorious achievement.

Scholarships. Four fifty-dollar scholarships are offered each year to graduating high school seniors. These scholarships will apply toward the expenses of the recipients during their freshman year in the College.

The C. M. Paddock Fellowship is awarded each year to a graduate student selected under conditions to be determined by the administration of the College.

The High School Cup is to be awarded annually to that Arizona high school whose graduates, enrolling in the College, attain the highest scholarship average as based on a group of three representative students.

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.

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 27, 1940.

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:

THOMAS B. LILLICO<br>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, except that extension course credits will not apply toward the degree of Master of Arts in Education.

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.

For further information concerning extension courses, write to J. O. Grimes, Director of Extension.

## 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 Correspondence Study for an enrolment blank and a copy of the Bulletin of the Correspondence Division. When this enrollment blank, properly filled out and accompanied by remittance to cover the fee, is received by the correspondence 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. Neither extension courses nor correspondence courses are 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 standards committee.

All inquiries concerning correspondence courses should be addressed to Dr. Charles Wexler, Director of Correspondence Study.

## EVENING AND SATURDAY CLASSES ON THE CAMPUS

The department of education offers a number of classes in the evening and on Saturday forenoon. These courses are offerings of the regular curriculum and carry two units each of resident credit. The classes meet for two hours, once a week and are available to teachers in service and to others who find it more convenient to carry evening courses.

## 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, except that graduate students may enroll for not more than five hours per term.

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 J. O. Grimes, The Director of the Summer Session.

## 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. 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 superintendens, 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 class-
rooms. 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.

## PLACEMENT OF COMMERCE STUDENTS

The Department of Commerce maintains its own bureau of employment with two offices, one at the College and one in Phoenix. One of the staff members, Mr. E. J. Hilkert is directly in charge of this phase of activity.

Students who desire the assistance of this bureau must make both written and personal application. A service of collecting references and recommendations for those students who axe enrolled in the bureau is offered in connection with its placement work. Qualified students are introduced to prospective employers in various fields of industry. To those students who have been unable to make a choice of their life work, the bureau offers advice with information about vocations and help in decideding upon a career.

The campus office of the bureau is in the Department of Commerce, located on the third floor of the Arts Building.

## THE TRAINING SCHOOLS

## 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. In addition to the primary grades, one, two, and three, the kindergarten offers a program for four and five-year-old children, including, for the five-year-olds, a well designed reading readiness program. 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 musical ability are afforded an opportunity to play in the 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. There are active $4-\mathrm{H}$ clubs in both the fourth and fifth grades.

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; dramatics; 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 4-H Club work. 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 extra-curricular 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 college bus, 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 21,000 volumes and about 4,000 bound volumes of periodicals. In addition, there are some 6,000 public documents not catalogued. 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 241 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.

A grant from the Carnegie Corporation of New York makes it possible for the library not only to build up its various departments, but to add many books for cultural reading.

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.

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 (or registration fee) of $\$ 36.00$ 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 under 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 $\$ 22.50$ 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 the student has become a qualified registered elector.

Textbooks. 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 arts building. As the bookstore is operated at a very small overhead cost, the students enjoy 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 students will provide themselves with the gymnasium suit especially designed for students enrolling in P. E. 101-102; 103-104; 111-112. This suit must be purchased at the college bookstore and costs approximately $\$ 4.00$.

Board and Room. The fee for board on the campus and dormitory room is $\$ 26.00$ 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 ( $\$ 18.00$ per semester) ........................................ $\$ 36.00$
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........................................................................ 4.00
Board and room (9 months) ...................................................... 234.00
$\$ 308.00$
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 $\$ 80$ or $\$ 85$ 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. The application for the degree is due November 15 of the college year in which the bachelor's degree is expected. An additional fee of $\$ 5.00$ is required of every applicant whose application is filed later than January 1 of the year in which the degree is expected.

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.

Degree in Absentia. A student who is granted permission to receive a degree in absentia shall pay an additional fee of $\$ 5.00$.

## 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.

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.

Preregistration Slip. Before receiving registration materials at registration for either semester, every old student must present a preregistration slip properly filled out with the study program and signed by the adviser. For failure to be provided with this slip, an old student shall be required to pay a fee of $\$ 1.00$ in addition to the regular registration fee. An old student is one who was enrolled in the semester last preceding the registration.

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 roinstated 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.

Fees for the Aptitude Test. Students failing to take the required aptitude tests at the time designated, will be charged a fee of $\$ 1.00$ for each test missed.

Fees for Physical Examination. Excepting a nominal charge for X-ray when found necessary, no fee is required if the examinations are taken at the regular time set during registration week. Those taking the examinations later will be charged the regular fee.

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 FOR TRANSCRIPTS 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 Dean of 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-fourth 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 in this college the State of Arizona 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 nor applications approved for graduation until all accounts have been paid, or satisfactory arrangements mado 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.

## 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 studen 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.

## AWARDS AND PRIZES

The Moeur Medal. This prize, offered by Mrs. B. B. Moeur of Tempe, in memory of her husband, the late 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, in memory of her son, the late Dr. John 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.

Kappa Delta Pi, national honor society in education, each year makes two awards for superior scholarship. Twenty-five dollars is given to the student completing the lower division with the highest cumulative index for at least sixty units of work taken at Tempe.

The Kappa Delta Pi Pin is awarded each year to the graduating senior attaining the highest scholarship index for at least thirty semester hour units of work taken during the senior year at Tempe.

The Will H. Robinson Award. A gift of twenty-five dollars is awarded to a selected freshman student at the beginning of the second semester in each year. This award is made in memory of


WEST HALI, WOMEN'S DORMTORY

Will H. Robinson, and is based on scholarship achievement during the first semester, weighted with the number of hours the student may have been working for pay.

The C. M. Paddock Fellowship is awarded each year to a graduate student selected under conditions to be determined by the administration of the College.

The Commerce Club Award, in the form of a trophy, is presented annually to the graduating senior who has rendered the most outstanding service to the Commerce Club, to the Commerce Department, and to the College as a whole; who has a strong personality; who has demonstrated leadership in campus activities; who has an average index of 3.00 or better in commercial subjects, and a high average in general scholarship; and who has contributed most during his college years toward the advancement of business in general.

The Pleiades Plaque is awarded at the end of each semester by Pleiades, women's honorary service group, to the hall having the highest collective scholarship index. Off-campus men and of campus women are considered as two of the competing groups. This is an undergraduate award. The plaque may be retained by the group winning it three times in succession.

The Pleiades Freshman Award is presented at the close of each year, to the most outstanding woman of the Freshman class.

Alpha Mu Gamma Award. The Alpha Mu Gamma honorary fraternity offers each year an award to a graduating student selected for excellence in the study of foreign languages.

Alumni Association Awards. The Alumni Association offers a limited number of awards and scholarships which are described on another page.

The Gibbons Good Citizenship Awards. Each year, Mr. M. L. Gibbons of Mesa offers two cash prizes of twenty-five dollars each. These are awarded at commencement time to two members of the senior class, a man and a woman, who stand highest on a prescribed scale, as rated under prescribed regulations, by a selected committee of faculty members on the bases of character, leadership, scholarship, and promise of future contributions to society.

Quaid Scholarship in Applied Piano. A full scholarship in applied piano for the year 1939-1940 will be given to the freshman student who stands highest in piano sight-reading, repertoire and general musicianship. Examinations will be held Friday morning of Freshman week.

## 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. For convenience in administration, each semester is divided into two half-semesters, or "quarters," of nine 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. Fach regular 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 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.
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 standards 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 mark 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, given and removed under conditions specified below.

W, Course dropped in the regular manner. See regulation below.

A mark of incomplete in any course is given only where work is unfinished because of sickness or other conditions beyond the control of the student. Negligence is never accepted as a reason for giving a grade of Inc.

The student receiving a mark of Inc. must make up the work in the manner prescribed by the instructor not later than the close of the next following quarter (half-semester), otherwise the mark automatically becomes an E.

A mark of $\mathbf{W}$ is given when a student drops a course before the close of the first half of any semester. It is given also when a student drops a course at the close of the first half-semester or later, provided his work is rated by the instructor as passing.

If the instructor rates the student's work as unsatisfactory, a mark of E will be given when a course is dropped at mid-semester or later.

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.

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.

Eligibility for Extra-Curricular Activities. No one is eligible for public appearance in any extra-curricular actitity unless he is
a bona fide student, carrying at least twelve semester hours of work, and has passed at least ten semester hours of work for the last preceding half-semester or semester of residence, with an index of at least 1.50. The term, extra-curricular activities, includes all student body officers, all class and organization officers, and all forms of public appearance, such as music, debate, and dramatics. Students on probation may be denied participation in activities even though their scholarship is satisfactory for the time being. Students holding offices automatically vacate them permanently when they fail to attain these standards. Before participation in any activity, the student and the sponsor of the activity concerned are responsible for obtaining a certificate of eligibility from the dean of the college.

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 half-semester or in any semester, fails to receive a passing mark in more than fifty per cent of the hours for which he is registered, shall be placed automatically on the dean's "E-list." Students on the E-list at midsemester are dropped from college for the balance of that semester. Those on the E-list at the close of a semester are disqualified for the next succeeding semester. In exceptional cases, where mitigating circumstances are deemed sufficient, a student may be reinstated on vote of the Advisory Committee. Any disqualified student has the right to be heard by this committee after making written application to the dean of the college. A student who is disqualified a second time can be reinstated only by vote of the Advisory 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

The only penalties for absence from classes are those the student brings upon himself because of the instruction missed. The instructor will drop a student from class, and will send a drop card to the registrar's office whenever, in his opinion, the student
has missed sufficient work that continuation in the course seems to be of questionable value to the student or to the class.

Instructors will permit students to make up tests and other work missed only when the absence was from a cause beyond the control of the student. No excuses of any kind are granted by the College. The instructor is the sole judge.

A record of attendance is kept in the registrar's office. Each instructor files a weekly report of the attendance in each of his classes.

## CONDUCT OF STUDENTS

It is the policy of the College to give students the largest degree of liberty consistent with good work and orderly conduct. Both within and without the College, students are expected to show such respect for good order, morality, personal honor, and the rights of others as good citizenship demands. Failure in these matters or neglect of academic duties will be considered sufficient cause for removal from the college.

The authority of the College is exercised over all students individually with respect to personal conduct, and over all student groups or organizations bearing the name of the College, or representing or purporting to represent the College in any student enterprises, to the extent necessary to safeguard the good name and well-being of the College. Any proposed enterprises by such students or organizations must receive the official sanction of the College before announcements are made of such enterprises.

The use or possession by students of intoxicating, malt, or spirituous liquors of any kind whatsoever is prohibited on the Campus or at any other place where such use may reflect on the good name and reputation of the College.

The College assumes that the act of registering as a student implies full acceptance of these standards of conduct.

## 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. This provision does not apply to the special kindergarten-primary curriculum, nor to the optional elementary curriculum.

Scholarship Requirement. In order that a student may be eligible for graduation from any four-year curriculum, his general scholarship index must meet the standard prescribed by the faculty.

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.

Constitution Examinations. Before receiving the bachelor's degree, the candidate must have on file evidence of satisfactory grades in the examinations for Federal and Arizona Constitutions. The course in Pol. Sci. 100 satisfies this requirement.

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. Any application for the bachelor's degree which is filed later than January 1 of the year in which graduation is expected, will be subject to an additional fee of $\$ 5.00$. Candidates who fail to file application punctually may 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 cach 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 :nust 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.

Degree in Absentia. A student who is granted permission to receive a degree in absentia shall be required to pay an additional fee of $\$ 5.00$ for this privilege.

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 required 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.

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, or by the head resident of East Hall who is adviser for off-campus men, 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 twenty-five or thirty dollars per month.

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

## MEDICAL CARE

Physical Examination. A physical examination by a college physician is required of all students before registering for the first semester attended each year. This includes the general physical examination, tuberculosis, and other special examinations. If taken at the regular hours set by the college during registration week, no fee is charged, excepting a small charge for X-ray if required. If taken later, the regular fees for such examinations are charged. A physical examination followed by conferences with the health counselor may be required prior to beginning practice teaching, just before graduation, or at any other time necessary. Students who fail to meet reasonable health standards may be denied admission to the college, practice teaching, or a teaching credential.

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.

Absence due to Illness. A student who has been absent from classes because of illness must receive written permission from the Director of Health Service at the infirmary before being readmitted to classes. This requirement is designed as a precaution for the protection of the student body against possible infection, and will be rigidly enforced.

Staying in dormitory when ill instead of reporting to the infirmary will subject the student to a fine to be assessed by the dean of the college according to the circumstances.

## 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.

Associated Women Students. Every girl regularly enrolled in the College is a member of the Associated Women Students. The purpose of this organization is to promote a general feeling of good will and unity among the women students; to support student activities; and to work for the welfare of the College as a whole.

The governing body of the Associated Women Students, with the dean of women as sponsor, is composed of a president, a vicepresident, a secretary, a treasurer, the presidents of the four women's dormitories, and a representative from each of the organized women's societies on the campus.

A conference of the various Associated Women Students organizations, including Flagstaff Teachers College, the University, Phoenix Junior College, Gila Junior College, and Tempe Teachers College, is held annually to discuss the problems of the several institutions and to further friendly relations among the schools.

The president of the A. W. S. represents the organization at the national biennial conventions and at sectional conferences.

The Combined Council of Women's Halls is made up of six members from each of the women's dormitories, of whom four are house officers and two of whom are elected from the dormitory at large. The dean of women is an ex-officio member. This council makes recommendations to the administration of the College concerning regulations which govern the living standards in the halls. The executive council in each of the halls is responsible for the enforcement of the regulations adopted and approved, subject at all times to the approval of the head resident in charge and to the dean of women.

## 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

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 personality 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 achievement 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, piano, violin, the brass and woodwind instruments, 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 1936-1937, 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. The Sahuaro, Arizona State Teachers College yearbook, will be published again in 1939-1940. Profusely illustrated after the manner of such college publications, it becomes 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 is 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 Pi 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 education are eligible for membership.

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.

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.

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. Membership is open to any girl with a major or a minor in home economics who attains a specified scholarship index.
$\mathbf{P i}$ Omega $\mathbf{P i}$ is a national honor society for commerce majors who are interested in becoming teachers of commercial subjects. It aims to create, promote, and encourage interest and scholarship in commerce. Membership is restricted to commerce majors who have completed fifteen hours in commerce and education with a superior rating.

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.

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.

Los Hidalgos del Desierto constitute a club whose parpose 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.

Pi Gamma Mu, national honorary social science fraternity, established its Arizona Beta Chapter at Tempe College in 1939. Its membership is strictly limited to social science majors with high scholastic ranking and to juniors and seniors. The object of Pi Gamma Mu is to extend recognition to scholastic attainment in the social sciences.

Alpha Psi Omega, Delta Lambda Cast, national honorary dramatic society, 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.

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.

Mu Rho Alpha is a professional music fraternity, the purpose 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.

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 $4-\mathrm{H}$ clubs in the various communities of the state may become members of the $4-\mathrm{H}$ 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 $4-\mathrm{F}$ leaders in the field, and by other persons vitally interested in the club program.

Executive officers of the annual 4-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.

The Aggie Club. This club was organized in November, 1937 to promote the interests of agricultural education in the College. The activities include short talks and discussions by prominent agricultural leaders and farm sponsors. Membership is open to all majors and minors in agriculture. Meetings are held bi-monthly.

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 asso-
ciation 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.

The Commerce Club is an organization of the students who are majoring in some phase of Commerce. The club is designed to serve both those who plan to teach and those who intend to enter the business world. Membership is based on interest in commercial work and scholarship.

## SOCIAL ORGANIZATIONS

Believing that college life is incomplete unless ample opportunity 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 pienics, 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 literary 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 friendli-
ness 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
Delta Theta
Kappa Kappa Alpha
Lambda Kappa
Philomathian

Pi Alpha Gamma<br>Phi Beta Epsilon<br>Phi Lambda Nu<br>Zeta Sigma

An Inter-Sorority Council, composed of the president and the sponsor from each sorority, with the dean of women as counselor, regulates the affairs of the individual sororities in general according to the provisions of the constitution of the central council.

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<br>Pi Delta Sigma

Tau Sigma Phi<br>Mu Sigma Chi

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 Club was organized March 23, 1932, as an honorary service club. Its membership is limited to thirteen 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.

Off-Campus Women's Society. A large and active organization of all women students not living in college dormitories provides a variety of social events and social contacts for all offcampus women, including dinners, teas, pienics, and formal parties.

This organization maintains an attractive, modern, wellequipped study and rest room in the new Women's Activity Building, furnished with study tables, easy chairs, day-beds, lockers, books, and magazines. A kitchenette available to off-campus women adjoins these rooms.

## 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 Church at work among its students in the State College. In the atmosphere of "a home away from home", it offers special Sunday services and class meetings, and a weekly commuters' cooperative luncheon. The organization of National Wesley Players is under the direction of the Foundation and other activities are fostered with the objective of providing a program of activities and Christian education which will supplement the education offered by the state in a field in which the college is limited by the organic law of the land. The institution exists to create for its members a wholesome religious atmosphere and to provide abundant opportunities for self-expression in religious activities. Although intended primarily for Methodist students, yet the Foundation extends to any student who may be interested 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.

The Religious Conference is composed of representatives of all major faiths among the students enrolled in the Teachers College. The purpose of the conference is to provide definite college courses in religious education and to foster cooperation among the different religious groups without compromising the particular belief of any.

The conference includes in its membership two Baptists, one member of the Christian church, one Congregationalist, one Mormon, two Jews, two Methodists, one Catholic, one Episcopalian, and one Presbyterian. Provision is made for the inclusion of representatives of other faiths upon application.

Courses given under the auspices of the conference have been approved for college credit provided the student is regularly registered as a student in the college. No fee is charged for these courses to any registered student of the college. Others may enroll in the courses as auditors upon the payment of a nominal class fee to assist in defraying the expenses of the program.

## COURSES IN RELIGIOUS EDUCATION OFFERED BY THE RELIGIOUS CONFERENCE 1939-1940

Comparative Religions. This course deals with the great ethnic faiths of mankind; Confucianism, Zoroastrianism, Buddhism, Hinduism, and early Judaism.

Dr. Robert Scott Calder.
First semester, 1 hour a week. Time to be arranged.
1 unit.
Comparative Religions. Continuation of the first semester course in a consideration of later Judaism, Mohammedanism, and Christianity.

Dr. Robert Scott Calder.
Second semester, 1 hour a week. Time to be arranged. 1 unit.
The Logic of Christian Faith. God, His existence, creatorship, attributes, qualities of character, names, revelation of Himself.

Rev, W. G. Downing.
First semester, 1 hour a week. Time to be arranged. 1 unit.
The Logic of Christian Faith. Man, his relation to God as a creature, as a soul. God's love for man. The place of Jesus in God's plan.

The Story of the Old Testament. Designed to cover the actual material in the Old Testament with sufficient background to make the story clear.

Rev. Philip K. Swartz.
First semester, 1 hour a week. Time to be arranged. 1 unit.
The Story of the New Testament. Designed to cover the story of the New Testament with sufficient background material to make the story clear.

Rev. Norman W. Taylor.
Second semester, 1 hour a week. Time to be arranged. 1 unit.
Scholastic Philosophy. The make-up of man; his mind and soul; the freedom of his will; his relationship to God.

Rev. Arthur Gramer.
First semester, 1 hour a week. Time to be arranged. 1 unit.
Scholastic Philosophy. A continuation of the first semester course.
Rev. Arthur Gramer.
Second semester, 1 hour a week. Time to be arranged. 1 unit.
Our Religious Cultures and Their Contribution to American Civilization. A seminar for upper classmen and graduate students, taught by a panel composed of a Catholic priest, one Protestant minister from each of two leading denominations, a Jewish rabbi and a Mormon teacher. The five teachers will meet one hour each week during the year, 1939-1940 to prepare the course, which will be offered to students in September, 1940. The first semester will be devoted to the contributions of the five teachers of the course. The second semester will cover reading in one's own faith under the guidance of one of the five instructors.

For enrollment in any one of these courses the student will apply to the instructor at a time and place to be announced. Students who are regularly registered in the college may transfer the credit upon satisfactory completion of the course with the approval of the instructor.

## 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 Civics .............................................--...... 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 AND MEDICAL EXAMINATION

A physical examination by a college physician is required of all students before registering for the first semester attended each year. This includes the general physical examination, tuberculosis, and other special examinations. If taken at the regular hours set by the college during registration week, no fee is charged, excepting a small charge for X-ray if required. If taken later, the regular fees for such examinations are charged. A physical examination followed by conferences with the health counselor may be required prior to beginning practice teaching, just before graduation, or at any other time necessary. Students who fail to meet reasonable health standards may be denied admission to the college, practice teaching, or a teaching credential.

## COLLEGE APTITUDE TEST

All new students are required to take the college aptitude tests before registering. No charge is made if the tests are taken at the hours designated during registration week. If taken later, a fee of one dollar for each test will be added to the registration fee.

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 a degree, or teaching credentials only when deficiencies in entrance requirements have been satisfactorily removed, as determined by the Standards Committee.
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 bachelor's 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 bachelor's degree provided a reasonable proportion is distinctly of upper division grade.

Experienced teachers who become candidates for the bachelor's 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 one of the curriculums as printed on pages 70 to 76 of this catalog. 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 taken in a junior college 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 lower division curriculums on pages 71 to 76 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 7, 8, and 9, 1939.
For the second semester, January 29 and $30,1940$.
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 5, 1939. 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. During this week the aptitude tests are given.

Sophomores, juniors, seniors and graduates 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. New students must take the aptitude tests and all students must take the physical examination before registering.

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, in the office of the registrar, the official transcript of the high school record, also an application for admission on the prescribed form. Blanks for filing these papers are supplied by the office of the registrar upon request in person or by mail. They should be filed by June 15, if possible.

Failure to report previous enrollment. A student who fails to report previous registration or enrollment at another college may thereby be subject to cancellation of his registration.

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. A student whose previous work shows a low scholarship index, or one who is carrying a heavy load of outside work will be required to reduce the load carried.

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.

## DEGREES, CURRICULUMS, AND CERTIFICATION

The course work of this institution is organized into three divisions-lower, upper, and graduate. The lower division consists of the freshman and sophomore years; the upper division the junior and senior years; and the graduate division the fifth year. Students are classified according to the amount of credit earned as follows: lower division, freshmen, those who have acquired less than thirty-two semester hours; sophomores, those with thirty-two or more, but less than sixty-two, semester hours; upper division, juniors, those with sixty-two or more, but less than ninety-six hours, seniors, those with ninety-six semester hours; graduate students, those holding a Bachelor's degree from Arizona State Teachers College at Tempe or other recognized institution.

## CURRICULUMS

All freshmen and sophomores are required to take the lower division curriculum. This curriculum is designed to provide a broad cultural background of general education. When the work of the lower division is completed, a student elects one of five curriculums - the kindergarten-primary curriculum, the standard curriculum, the optional elementary curriculum, the secondary curriculum, or the special curriculum.

By referring to the department of major interest in this bulletin, students may find useful descriptions of the standard curriculum, or the special curriculum, adapted for majors in that department.

## LOWER DIVISION CURRICULUM

| FRESHMAN YEAR |  |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| Eng. 101 Composition...............--3 | Engl. 102 Comp............................ 3 |
| Science .-............................. 3 or 4 | Science -...-...........-.-................. 3 or 4 |
| *Hygiene -----.--......................---- 2 | *Art 110 Pub. Sch. Art....--------2 |
|  | P. E. Activity ----.......................... 0.5 |
| Major (or elective)........... 3 or 4 | Major (or elective)..................... 3 |
| Elective .-..--....----------.................... 3 | 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........... 3 | *S. Sci. 100 Const. Govt....-....-------3 |
| Social Studies ............................. 3 |  |
| P. E. Activity........-------1........--- 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) 16.5 | (17.5) $\overline{16.5}$ |

Starred Courses. Sections are arranged for the starred courses in such a way that half of the group take the course during the first semester and half in the second semester.

Social Studies. In the sophomore year, three units of social studies are required each semester. The courses are to be selected from the following:

Hist. 101. 102, Modern Furope; Hist. 103, 104, American Pol. and
Social History; Econ. 131, 132, Principles of Economics.
Science. The selection for the science courses in the freshman year should be determined by the interests and needs of the individual student. The following combinations are recommended for the different majors:

| Science Courses Units | Majors |
| :---: | :---: |
| Gen. Sci. 100 and 110....... 6 sem. hrs. | Art, commerce, Engl. foreign lang |
|  | kndgn-prim., music, soc. studies. |
| Chem. 110, Physics 110...6 sem. hrs. | Agriculture, geography, biology, |
|  | industrial arts, physical educa- |
|  | tion, elementary sciences. |
| Biol. 130 and 140.............. 8 sem, hrs. | Elementary science, geography, |
|  | biology. |
| Chem. 111 and 112.......... 8 sem. hrs. | Industrial arts, mathematics, pre |

Major. Major is the term applied to a line of work or a sequence of courses selected from one department, or a departmental group, which constitutes the student's more prominent in. terest. It represents the student's intensive preparation in a special field. A major consists of not less than 24 semester hours. Each candidate for the Bachelor's degree is required to complete a satisfactory major in a field of learning other than education.

Minors. A minor consists of not less than 15 semester hours selected from a field of learning different from that from which the major is chosen. It represents a secondary field of interest. In addition to the major required of each candidate for a Bachelor's degree, a minor, also must be chosen.

Fields in which Majors are Offered. Majors, as well as minors, may be selected in any of the fields of learning suggested below:

| Art | Agriculture | Social Science |
| :--- | :--- | :--- |
| Commerce | English | Elementary Science |
| Home Eiconomics | Industrial Arts | Geography |
| Mathematics | Music | Foreign Languages |
| Physical Science | Physical Education | Biological Science |

Time for Beginning the Major. Whenever possible, work should begin on the major in the freshman year and it must be chosen no later than the beginning of the sophomore year. The major should be planned carefully under the guidance of the head of the department in which it is selected.

## UPPER DIVISION CURRICULUMS

Choosing a Curriculum in Upper Division. It is not necessary for a student to choose the curriculum which he intends to follow in the upper division until the end of the sophomore year; nevertheless a student should anticipate as far as possible the choice which will be made later in order that the major and minor requirements in the upper divisions may be satisfied. Students who later elect the secondary curriculum, or the special curriculum, may choose an elective in the freshman year to replace Art 110.

## STANDARD CURRICULUM

| FRESHMAN YEAR |  |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| Eng. 101 Composition................ 3 | Engl. 102 Composition................ 3 |
| Science .--7.-.---................. 3 or 4 | Science ........................... 3 or 4 |
| *Hyglene ...-...........................-.... 2 | *Art 110 Pub. Sch. Art............... 2 |
| P. E. Activity........................... 0.5 | P. E. Activity |
| Major (or elective)........... 3 or 4 | Major (or elective)..................... 3 |
|  | Elective .................................. |
| 16.5 | 16.5 |


| SOPHOMORE YEAR |  |  |
| :---: | :---: | :---: |
|  | First Semester Units | Second Semester Units |
| *Psych. | 100 Gen. Psych.....-....... 3 | *Educ. 120 Sociology |
| ${ }^{*}$ Geog. | 100 Elem. of Geog....---3 | *S. Sei. 100 Const. Govt............. 3 |
| Social | Studies -....-.................... ${ }^{3}$ | Social Studies .......................... 3 |
| $\stackrel{\text { P. E. }}{ }$ |  | P. E. Activity ................................. 0.5 |
| Major | -................. 4 or 3 | Major --......................... 4 or 3 |
|  | (17.5) 16.5 | (17.5) $\overline{16.5}$ |
| JUNIOR YEAR |  |  |


| First Semester | Units | Second Semester Units |
| :---: | :---: | :---: |
| * Psych. 200 Educ. Meas | -... 3 | * Wduc. 210 Teaching Reading--.- 2 |
| *Education Elective .... | -... 2 | -Education Elective ...............-... 3 |
| Major --.--....................... | .... 6 | Directed Teaching .................... 10 |
| Minor or elective......... |  | or <br> Major, minor, and elective........ 10 |
|  | 15 |  |
|  |  | 15 |

SENIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Gduc. 230 Elem. Curr. Techn.... 2 | *Educ. 250 Phil. of Ed................. 3 |
| Major ...........-.......................---- 3 | Major, minor, and elective....... 13 |
| Directed Teaching ...................... 10 |  |
| or | 16 |

For explanation of starred courses, for elections permitted in required science and social science, and for instructions concerning majors and minors, see preceding page.

Curriculum Requirements. Students electing this curriculum are required to select a major of not fewer than 24 units and a minor of not fewer than 15 units in fields other than education.

Graduation and Certification. With the completion of the work of the standard curriculum a student is granted the degree of Bachelor of Arts in Education and is entitled to certification for the elementary schools in the state of Arizona.

## SPECIFIC REQUIREMENTS OF THE STANDARD CURRICULUM

For the convenience of students desiring to check progress, the specific requirements of the Standard Curriculum are grouped below. This outline should be used for checking the program of studies at the beginning of each semester to insure punctual fulfillment of requirements.

All students are enjoined to preserve carefully the semester report cards as a history of progress toward the degree. These cards are to be presented to the departmental adviser each time the student registers. Binders to fit the cards may be obtained at the college bookstore.

Students entering the college with advanced credit from other institutions will find this outline useful in adjusting their advanced credit to the requirements of the standard curriculum. With a leeway of 20 to 30 units as shown by the outline, it is usually possible to adjust previous credits to this curriculum without loss.

## REQUIRED COURSES

| Education Courses Units | Units |
| :---: | :---: |
| General Psychology .................. 3 | Physical Activity Courses ........... 2 |
| Sociology .-.......................... | English Composition --......... |
| Educational Measurements ...... ${ }^{3}$ | Constitutional Government ...--... 3 |
| Teaching of Reading ................ 2 | Cultural Courses |
| Education elective -aturne.......... 5 | Public School Art .................. 2 |
| Elementary Curriculum .......... ${ }_{2}^{2}$ | Hygiene ---a |
| Philosophy of Education ...-...... ${ }^{3}$ | Elements of Geography ....- |
| Directed Teaching .-........-.......... 10 | Total cultural courses .....--- 7 |
| Total Education ................... 31 <br> Science Courses ........... (8 or) 6 | Total specified units. |
| Select one of the combinations | Major (Minimum 24 units) |
| listed on page 72 | Minor (Minimum 15 units) ...... 15 |
| Social Studies ............................. 6 | Second Minor (Optional) ........ 15 |
| Select one of the combinations | Elective |
|  | Total for B.A. degree........... 126 |

It is suggested that this outline be copied and preserved along with the semester report cards for ready reference.

## THE KINDERGARTEN-PRIMARY CURRICULUM

Leading to Kindergarten-Primary or Kindergarten-Elementary Certification

## FRESHMAN YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Engl. 101 Composition .............. ${ }_{3}^{3}$ | Engl. 102 Composition .-...-(4 or) ${ }^{3}$ |
| *Hygiene | *Art 110 Publ. Sch. Art |
| P.E. Activity ....-...-...........-........-0.5 | P.E. Activity ............................. 0.5 |
| Electives .......................... ( 7 or) 8 | Electives .......................... (7 or) |
| 16.5 | 16.5 |

## SOPHOMORE YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Psych. 100 Gen. Psychology ...... 3 | *Educ. 120 Sociology ................... 3 |
| *Geog. 100 Elem. of Geog. ........... 3 | *S. Sci. 100 Const. Govt. ............. 3 |
| Social Studies ..................---.......... 3 | Social Studies ...---....-.-................. 3 |
| P.E. Activity .............................. 0.5 | P.E. Activity .............................-- 0.5 |
| Electives ...................-................--- 7 | Etectives ...........................-----...... 7 |
| 16.5 | 16.5 |
| JUNIOR | YEAR |
| FIrst Semester Units | Second Semester Units |
| Educ. 207 Lit. for Kgn-Prim. .... 3 | Educ. 212 Play Education ......... 3 |
| Educ. 209 Kgn-Prim. Curric. .... 3 | Educ. 206 Constr. \& Play Mat... 3 |
| Educ. 210 Teaching of Reading. 2 | *I. Art 230 Kgn-Prim. |
| G. Sci. 232 Nature Study . .......... 3 | Wood Work ...........-----........ 3 |
| Mus. 200 Kgn-Prim. Music .--..... 2 | *Psych. 233 Child Psychology --.... 3 |
| Psych. 200 Educ. Meas. ............... 3 | *Related elective ........................... 3 |
| 16 | 15 |

## SENIOR YEAR


*Starred courses in the junior year alternate for half of the students with Educ. 260 (Teaching) in the senior year.
Note: This curriculum does not require a major or minor.
Students desiring the Kindergarten-Primary Certfficate must follow Kindergarten-Primary Curriculum with practice teaching assignments in Kindergarten and in grades 1, 2, or 3. Students desiring the Kindergarten-Elementary Certificate must follow the KindergartenPrimary Curriculum with practice teaching assignments in kindergerten and in grades 4, 5, 6, 7, or 8, plus Educ. 230 Elementary Curriculum.
Students in quailfying for the Kindergarten-Primary or Kindergarten-Elementary Certificates must show proficiency in piano accompaniment and in sight reading and singing to meet needs of kindergarten-primary children. It is recommended that students who need piano lessons begin them in the freshman year.

A student completing this curriculum will receeve the degree of Bachelor of Arts in Education and will be eligible for the Kindergarten-Primary or the Kindergarten-Elementary Certification (as indicated above) in the State of Arizona.

## SECONDARY CURRICULUM

The secondary curriculum is of three years* duration beginning with the junior year. It is especially designed for students who are looking forward to high school teaching. The master's degree and secondary certification may be obtained through this curriculum.


## SENIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Educ. 250 Phil. of Educ............ 3 | Educ. 260 Directed Teaching... 5 |
| Educ. 225 H. Sch. Meth. Sem... 3 | Electives ...-.......------.-.--.........--- 11 |
| Electives ..........---..........---........ 10 | $\overline{16}$ |
| 16 |  |



Major and Minor. In addition to the courses prescribed above, this curriculum must include a major of twenty-four semester hours and at least one minor of fifteen hours (students are strongly advised to include a second minor of fifteen hours) to be chosen in the fields shown below :

Social Studies English
Physical Science Bjological Scjence
Mathematics
Modern Language

Physical Education
Home Economics
Commerce
Music
Art
Industrial Arts

## OPTIONAL ELEMENTARY CURRICULUM

A limited number of students will be admitted to this curriculum. Like the standard curriculum, this curriculum leads to the Bachelor of Arts in Education and certification in the elementary schools. The major and minor requirements prevailing in most curriculums are not required of students who elect this curriculum.

A student completing this curriculum will be granted the degree of Bachelor of Arts in Education and will be eligible for the elementary certificate in the State of Arizona. A student electing this curriculum is warned that should secondary certification be desired later, or should a Master of Arts degree in some subject-matter area be sought, considerable penalty in the nature of loss of time likely will ensue.

## FRESHMAN YEAR

| FIrst Semester | Units |  | Second Semester |
| ---: | :---: | ---: | :--- |$\quad$ Units

## SOPHOMORE YEAR

| First Semester | Untts | Second Semester |  |
| ---: | :--- | ---: | :--- | Units

## JUNIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Music 100 Fundamentals of M. 2 | I.E. 252 Scouting (3) or |
| *Eng. 110 Elem. Speech --........... 2 | P.E. 260 Camp Fire (1)......... 1 or 3 |
| *Educ. 207 Lit, for the Grades .... 3 | *Educ. 210 Teaching of Reading 2 |
| *Psych. 200 Measurements ..-...... 3 | *Educ. 260 Directed 'leaching ... 10 |
| Elective --..........................---.-......... 5 | Electives .-............-............... 2 or 3 |
| 15 | 15 or 16 |


| SENIOR YEAR |  |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| * Art 200 Elem. School Art ........... 2 | G. Sci. 232 No ture Study ..........- 2 |
| *Eng. 240 Children's Dram .-....... 3 | Hist. 208 Am. Cuit. Hist. ............ 3 |
| * Biol. 120 Hurnan Phys. | H.E. 202 Prob. of Consurner ........ 3 |
| * Hist. 110 Ariz and S. W. ........... 3 | *Educ 230 Fl. Curr. \& Tech. ...... 2 |
| *Educ. 250 Phil. of Ed. -..--........... 3 | Electives ....................................... 5 |
| Electives .-............................--...... 2 |  |
| 16 | 15 |

Note: Starred courses may be taken either semester.

## SPECIAL CURRICULUM

Students taking this curriculum should select their majors and electives to meet the requirements in the field of their special interest. Faculty advisers will guide the student in the selection of courses for the various professional fields. This curriculum leads to the degree of Bachelor of Arts in Education but not to any type of certification. If elementary or secondary certification is desired, the student must be prepared to spend additional time.

## FRESHMAN YEAR



## SOPHOMORE YEAR

| First Semester | Units | Second Semester |
| :--- | :--- | :--- | Units

## JUNIOR YEAR

| Flrst Semester | Units |  | Second Semester |
| :---: | :---: | :---: | :---: |$\quad$ Units

## SENIOR YEAR

| First Semester | Units | Second Semester | Units |
| :---: | :---: | :---: | :---: |
| Educ. or Psych. elective | . 3 | Educ. or Psych. Elective | 3 |
| Major, minor, or electives | .. 12 | Major, minor, or electives | 12 |
|  | 15 |  | 15 |

## 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 preprofessional 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 Compos | 3 units each semester |
| :---: | :---: |
| Foreign Language | 4 units each semester |
| Science, Biological or Physical. | 3 units each semester |
| History or Economics | 3 units each semester |
| athematics | 3 units each semest |

## 16

## SOPHOMORE YEAR



## 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.

## DEGREES CONFERRED

At the satisfactory completion of the upper division work in any curriculum a student is granted the degree of Bachelor of Arts in Education. At the completion of the fifth year in the secondary curriculum a student is entitled to the degree of Master of Arts in Education. The Master of Arts in Education also may be obtained by an appropriately chosen year's work following any other curriculum. College graduates with successful teaching experience are not required to follow any rigid course during the fifth year of study but will have a program adjusted to their own needs and interests. (For further details see description of the Division of Graduate Study.)

## 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 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 taken under the auspices of this college.

The foregoing requirements apply to candidates for the degree of Bachelor of Arts in Education. For residence requirements for graduate students see description of Division of Graduate Study.

ALPHA HALL, MEN'S DORMITORY

## GRADUATE STUDY

## PURPOSE OF THE GRADUATE PROGRAM

The purpose of the graduate program is to serve students who desire the Master of Arts in Education as well as students who do not intend to become candidates for this degree. Provisions have been made for graduate training leading to the degree of Master of Arts in Education for those interested in (1) the administration and supervision of public schools; (2) high school teaching; (3) elementary school teaching; and (4) educational pursuits other than public school teaching. The curriculum requirements are not rigid, since it is hoped to build a suitable program for each student in the light of his needs and interests.

The graduate program departs radically from the undergraduate program in that emphasis is placed upon the ability to find, organize, and evaluate evidence on a topic in the specialized field attempted, rather than about the ability to recall information and the basic skills so characteristic of the undergraduate level. To this end, graduate students will be expected to recognize in the period of graduate study an opportanity for advanced study and research as free as possible from restrictions and specific requirements.

The Master of Arts degree is conferred as a result of the completion of the five-year secondary curriculum or as a result of the completion of an appropriately chosen year's work following graduation from any other curriculum.

## GRADUATE CREDIT FOR UNDERGRADUATES

An undergraduate student who has attained senior standing with an excess of credits may register for a sufficient number of units of graduate courses to complete his program. After attaining graduate standing, he then may apply for graduate credit for these courses to the Graduate Council through the Director of Graduate Study.

## ADMISSION TO GRADUATE STUDY

A college graduate holding a bachelor's degree from Arizona State Teachers College or from another accredited college, may be admitted to graduate study. A graduate of a non-recognized institution may be admitted tentatively to the work of the graduate division. However, the residence requirement for the master's degree
usually will be lengthened, the amount depending upon the institution concerned and the quality of work done by the individual student during the first semester of residence.

A graduate student bringing credit from another institution must file with the registrar an official transcript of his previous college credit.

Admission to graduate study does not imply admission to candidacy for the master's degree. The mere accumulation of credit does not confer upon a student any right to claim admission to candidacy.

## ADMISSION TO CANDIDACY

Before being admitted to candidacy a graduate student must give evidence of superior scholarship, or ability to do independent thinking, and of ability to undertake investigation in his chosen field in a scientific manner. For admission to candidacy a graduate student shall submit a petition signed by his advisory committee of graduate study not later than the middle of the semester in which the degree is sought. Students who are expecting to complete work for the master's degree during a summer session must submit a petition not later than the end of the first week of the term in which the degree is sought. Admission to candidacy will not be granted until the student's advisory committee certifies that the student has chosen a suitable topic for his thesis and has made sufficient progress in the investigation to indicate that a satisfactory thesis is a reasonable expectation by the date when the master's degree is anticipated.

## REQUIREMENTS FOR THE MASTER'S DEGREE

Residence. The student is required to complete a full year's work, excepting thesis, in residence at this institution. In case one student takes part or all of his work in summer sessions, the equivalent of a year's work is required. Under certain limitations a graduate student at this institution may receive residence credit for work done elsewhere. To receive this residence credit, the student must make arrangements in advance with the director of graduate study.

Time Limit. Graduate work necessary for meeting the residence requirement must not date back further than six years from the time the master's degree is conferred. The graduate council may grant an extension of time upon the recommendation of the adviser and the approval of the director of graduate study.

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

Undergraduate Courses. Certain upper division undergraduate courses shall be accepted for graduate credit. In order to be counted for graduate credit the instructor in the course will demand a higher quality of work or additional work with or without reducing the requirements made of undergraduate students.

Quality. No credit shall be received for graduate courses unless the grade is $C$ or better. Furthermore, a candidate for the master's degree shall receive an average grade of $B$ in the thirty semester hours' work required for the master's degree.

Adviser. Upon nomination by the student, the Director of Graduate Study will appoint one member of the faculty to act as adviser in the arranging of the student's program and the preparation of his thesis. In addition, one or more other members of the faculty will be appointed to assist the adviser with the student's program, thesis, and examinations. Pending the appointment of an adviser, the Director of Graduate Study will serve as a temporary adviser until such time as a student is ready to nominate his permanent adviser.

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

Ordinarily a candidate for the master's degree will write his thesis on a topic having educational implications, but where a candidate's record and total preparation indicate he has ample professional preparation and background for an effective worker in his field, a topic may be chosen of a more specialized nature.

The student will bring his thesis to his adviser for final approval not later than April 15. Upon the approval of the adviser and other members of the student's committee, a copy of the student's thesis shall be submitted to the graduate council through the director of graduate study. Two copies of the thesis prepared according to specifications, shall be deposited in the college library. One of these copies shall be the original typed copy and the second may be a carbon copy of the original. Both copies shall bear the signed approval of the student's adviser.

Final Examinations. The candidate shall pass a final written examination as well as a final oral examination. The written examination shall not be given until after the submission of the thesis and the oral examination shall not be given until after the student has passed the necessary written examination.

## 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.

Upper Division Courses for Graduate Credit. Upper division courses for which graduate credit may be allowed are indicated by appending to the number of the course the letter " $g$ ". When such courses are taken for graduate credit the instructor ordinarily will demand work of superior quality and additional amount.

# DEPARTMENT OF AGRICULTURE 

## JUDD (Head of the Department), OSTRANDER, MORTENSEN, PHILLIPS

The Department of Agriculture is organized to give those students who plan to teach in rural communities a knowledge of the problems confronting agriculture in order that they can better serve the pupils and the community. It also serves those students interested in agriculture but who are unable to attend college elsewhere, by providing 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.

Many of these courses are listed as prerequisites for appointment in various biological survey, soil and game conservation, and other federal projects.

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, may 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.

## VOCATIONAL TRAINING FOR OUT-OF-SCHOOL YOUTH

The National Youth Administration, in conjunction with the Arizona State Teachers College and the State Vocational Education Department, provides part time employment for youths of ages 18 to 24 inclusive, to encourage their efforts toward education and training.

The Agriculture Resident Project, located on the college farm, provides adequate housing facilities for 50 to 60 youths. These students will be given 60 hours of instruction and 60 hours of related training each month.

Each youth will find opportunity to gain experience in a number of different vocations related to agriculture. A course so arranged may turn out to be a finding course, and the student may choose to continue in agriculture, to specialize in some field of agriculture, or to work toward some other type of vocation.

High school graduation is not required for entrance into these courses and the courses do not carry college credit.

## STANDARD CURRICULUM WITH A MAJOR IN AGRICULTURE

## FRESHMAN YERR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Engt. 101 Composition ............... 3 | Engl. 102 Composition |
| Chem. 110 Gen. Chem. | Chem. 112 Gen. Chemistry .---...... 4 |
| (or Chem, 111) ......................... 4 | *Biol 140 Zoology ...............------- 4 |
| ${ }^{\text {B Biol. } 130}$ Botany | Agric. 108 Plant Industry ........ 4 |
| Agric. 107 Animal Industry ....... 4 | P.E. Activity ................................ 0.5 |
| P.E. Activity .--............................. 0.5 | 5.5 |
| 15.5 |  |

## SOPHOMORE YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| PPsych. 100 Gen. Psychology ...... 3 | *Educ. 120 Sociology .................... 3 |
| Geog. 100 Elem. of Geography - 3 | Phys. 110 Applied Physics .-....... 4 |
| Biol. 133 Plant Anatomy ........... 4 | Biol. 204 Genetics ....................... 3 |
| Agric. 125 Prin. Horticulture .-... 2 | Biol. 214 Plant Physiology ......... 4 |
| Biol. 203 Bacteriology ............... 4 | Art 110 Publ. Sch. Art ................ 2 |
| P.E. Activity ......................----------....- 0.5 | P.E. Activity .................................. 0.5 |
| 16.5 | 16.5 |

## JUNIOR YEAR

| First semetter Units | Second Semester Units |
| :---: | :---: |
| Psych. 200 Educ. Meas. ............... 3 | Educ. 230 Elem. Curric. ............. 2 |
| Educ, elective ............................. 2 | Educ. elective .--.-........................ 3 |
| Astic. 205 Animal Nutr. | Educ. 260 Practice Teaching -.. 10 |
| or Agric. 211 Plant Ecology .... 3 |  |
| Agric. 143 Soils ........................... 3 | Soclal Science ........................... 3 |
| Agric. 217 Anim. Breeding | Elective .---....................--...-...... 8 |
| or Agric. 210 Veg. Crops ........ 3 <br> Hygiene $\qquad$ 3 2 |  |
| 16 | (16 or) 15 |
| SEN | ERR |
| First Semester Units | Second Semester Units |
| Educ. 210 Teaching of Reading 2 | Educ. 250 Philos. Educ. ............. 3 |
| Agric. elective ........................... 3 | Agric. 208 Farm Management |
| Educ. 260 Practice Teaching .-.. 10 | or Agric. 216 Plant Breed. --- 3 |
| or | Chem. 180 Org. Chem. .............. 4 |
| Social Science .........-................ 3 | S. Scl. 100 Const. Govt. .............. 3 |
| Elective ...................----......................... 8 | Social Science .............................. 3 |
| (16 or) 15 | 16 |

# CURRICULUM IN AGRICULTURE 

## Designed for Those Who Plan to Transfer to an Agricultural College After One, Two, or Three Years

FIRST YEAR


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, $\$ 1.00$.

Ostrander.
First year, first semester, four hours lecture, or its equivalent
in laboratory and field work.
4 units.
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, $\$ 2.00$.

[^1]4 units.

114 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, $\$ 1.00$. Alternates with Agric. 116. Given, 1939-1940.

Ostrander.
Second year, second 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. Alternates with Agric. 114; not given in 1939-1940.

Ostrander.
Second semester, three hours of lecture or its equivalent in field work.

3 units.
125 Principles of Horticulture. The general principles of plant propagation. Nursery practices in the production of fruit and ornamental stock. Planting and care of orchards and home grounds. Prerequisite: General Botany. Laboratory fee, $\$ 1.00$.

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, $\$ 1.00$.

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.
Agric. 130 General College Botany. (See Biology 130.)
Agric. 133 Plant Anatomy. (See Biology 130.)
Agric. 140 General Zoology. (See Biology 140.)
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. By special arrangement, a student may register for 4 hours credit and do extra work.

This plan is offered to assist those who plan to transfer later to the University of Arizona.
Prerequisite: one course in college chemistry.
Laboratory fee, $\$ 2.00$.
Judd.
Third year, first semester, two lectures and three hours laboratory 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. Class fee, $\$ 2.00$.

Judd.
Second semester, three lectures per week.
Agric. 203 General Bacteriology. (See Biology 203.)
Agric. 204 and 204A. Genetics. (See Biology 204 and 204A.)
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.
Class fee, $\$ 2.00$. Offered in 1939-40 and alternate years.
Judd.
Third year, first semester, three iectures 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. Class fee, $\$ 2.00$.

Offered in 1939-40 and altemate years.
Third year, second semester, three lectures per week.
3 units.
212 Vegetable Crops. (Plant propagation, orcharding, and vegetable gardening.) Fundamental principles and methods of plant propagation, including fruits and vegetables; methods of planting and managing the home orchard; planning, planting, and operating the vegetable garden with special reference to the needs of the home; study of the commercial crops with reference to soils and climatic requirements.

Practice. Propagation of plants from seed, cuttings, and buds.

Planning, planting, pruning, and general care of home garden and orchard. Laboratory fee, $\$ 2.00$.

Phillips.
Second semester, two lectures and one three-hour laboratory
per week.
Agric. 213. Plant Ecology. Origin and development of vegetation and measurements in the field of the factors of environment with applications to agriculture, forestry, grazing, and general crop production. Prerequisite: Biol. 130.
Laboratory fee, \$2.00.
(Not offered, 1939-40.)
Judd.
First semester, 3 lectures and one laboratory period per week. 4 units. Agric. 214 Plant Physiology. (See Biology 214.)
Agric. 216 Plant Breeding. The principles and practices of plant breeding; technique and improvements by selection and hybridization. Prerequisites: botany, plant industry, and genetics. Class fee, $\$ 2.00$.
(Not offered, 1939-40.)
Judd.
Second semester, three lectures a week.
3 units.
Agric. 219 Animal Breeding. The principles of genetics are applied to the problems and techniques of animal breeding. Includes the study of pedigrees, line-breeding, inbreeding, out-cross, hybridization, and breeding indices.
Prerequisites: Zoology and genetics.
Ostrander.
First semester, three lectures per week. 3 units.
Agric. 222 General Entomology. (See Biology 222.)
Agric. 224 Animal Ecology. (See Biology 224.)
Agric. 235. Advanced Fruit and Vegetable Production. Modern and recent developments in the production of fruits and vegetables for the market; forcing plants for early market, with attention to subtropical fruits such as citrus fruits, figs, olives, and dates; distribution, commercial importance, and history.
Practice. Practical truck farming and orchard work, from planting to marketing.
Laboratory fee, $\$ 2.00$.
Phillips.
First semester, two lectures and one three-hour laboratory period per week.

3 units.
Agric. 242-g Special Problems or Advanced Laboratory. Students desiring to do advanced laboratory work, or to make a special study of any particular problem, will make a complete study of available literature on the problem, under the supervision of the instructor, and will write a thesis.

## DEPARTMENT OF ART

## KLOSTER (Head of the Department), MOOERS, HARTER

The Department of Art offers a major and a minor in the following fields: Art Education, Fine and Decorative Arts, and Commercial Art. The work of this Department is designed to meet the needs of three groups of students.

1. The major in Art Education is planned for those who wish to teach or supervise art in the public schools.
2. Students who wish to take a major in Art but who plan to enter some other field than teaching may select either fine and decorative arts or commercial art depending on their interests.
3. The third group of students includes those who wish to take art courses for their own enjoyment or as an aid for classroom teaching and school club work.

## MAJORS AND MINORS

Students majoring in Art will select courses to make a total of 30 units, exclusive of directed teaching. At least 12 units must be in the upper division.

The Major in Art Education: The following courses are required, other courses to complete the major may be selected according to the individual interests.


The Major in Fine and Decorative Arts: The following courses are required, other courses to complete the major may be selected according to the individual's interests.
Art 102 Drawing and Perspective ..... 2
Life Drawing. ..... 3
Art 105 Color and Design ..... 2
Art 106 Creative Design. ..... 2
Art 120 Allied Cralts ..... 2
Art 114 Water Color ..... 2
Art 205 Textile Printing. ..... 2
Art 206 Sculpture ..... 2
Art 215 Art History ..... 3
Art 228 Oil Painting ..... 3
Art 203 Advanced Life Drawing ..... 3

The Major in Commercial Art: The following courses are required; other courses may be selected to complete the major according to individual interests.


The Minor in Art: Students majoring in other fields may elect a minor in Art Education, Fine and Decorative Arts, or Commercial Art. The minimum requirement for a minor in Art is 15 units: 8 units from the lower division and 7 units from the upper division.
Suggested courses for a minor in Art Education ..... Units
Art 102 Drawing and Perspective (or) ..... 2
Art 105 Color and Design ..... 2
Art 120 Allied Crafts. ..... 3
Art 107, 108 Demonstration and Obs. of Teaching (required) ..... 4
Art 200 Elementary School Art ..... 2
Art 205 Textile Printing ..... 2
Art 215 Art History ..... 3
Suggested courses for a minor in Fine and Decorative Arts ..... Units
Art 102 Drawing and Perspective ..... 2
Art 10 Color and Design (or) ..... 2
Art 106 Creative Design ..... 2
Art 115 Clay Modeling (or) ..... 2
Art 120 Allied Crafts. ..... 3
Art 205 Textile Printing ..... 2
Art 206 Sculpture ..... $\stackrel{2}{3}$
Art 215 Art History
Suggested courses for a minor in Commercial Art Units
Art 102 Drawing and Perspective ..... 2
Art 105 Color and Design ..... 2
Art 103 Life Drawing
3
2
2
Art 121 Lettering (required)
Art 203 Advanced Lettering ..... 2
Art 201 Advertising Design (required) ..... 2
Art 221 Advanced Life Drawing (or) ..... 3
Art 215 Art History ..... 3

## TYPE CURRICULUM FOR STUDENTS MAJORING IN ART EDUCATION



| SENTOR YEAR |  |
| :---: | :---: |
| *Educ. 250 Phil. of Educ. ............. 3 | *Educ. 230 Curric. Techn. ........-- 2 |
| Directed Teaching .-...........-.-.-...... 10 | *Educ. 210 Teaching of Reading 2 |
| or the following group: | Minor and Elective ...................... 9 |
| Minor and Elective -............ 8 | Art Elective .................................... 3 |
| Art 200 Elem. Sch. Art $\qquad$ 2 |  |
| Art Elective .................................. 3 |  |
| 16 | 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. Men who do not plan to teach may substitute Art 121 Lettering for Art 110. Women who do not plan to teach may substitute Art 100 Everyday Art for Art 110. Art 121 and Art 100 may be taken in addition to Art 110 if desired.
Note 4. Students majoring in Art Education may select additional courses from the following: Art 106 Creative Design. Art 114 Water Color, Art 121 Lettering, Art 206 Sculpture, Art 228 Oil Painting, Art 214 Advanced Water Color, Art 221 Life Drawing, Art 220 Advanced Crafts.
This type curriculum in Art Education may serve as a guide in planning a program for a major in Fine and Decorative Arts and in Commercial Art.

## 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.

Mooers.
First year, either semester, two 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.

Kloster.
First year, second semester, two hours a week. 2 units.
103 Life Drawing. A study of the basic construction of the human figure with emphasis on solidity and proportion.
Laboratory fee, $\$ 1.50$.
Kloster or Harter.
First year, first semester, six hours a week. 3 units.
105 Color and Design. The scientific basis of color; the properties of color; combination producing harmony; design and color.
Laboratory fee, 50 cents.
Kloster.
First year, first semester, two hours a week. 2 units.
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, $\$ 1.00$.

Kloster.
First year, second semester, two hours a week.
2 units.
107, 108 Demonstration and Observation Teaching. A two semester course required of all art education majors and minors, to be taken before directed teaching.

Mooers.
Second year, both semesters, two hours a week.
4 units.
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. Laboratory fee, 50 cents.

Mooers.
First year, either semester, four hours a week. 2 units.
With the consent of the head of the department, Art 100 Everyday Art may be substituted for Art 110 as the general art requirement.

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.

Kloster or Harter.
Second year, second semestr, four hours a week. 2 units.
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, $\$ 3.00$.
Kloster.
Second year, first semester, four hours a week. 2 units.
120 Allied Crafts. A laboratory course dealing with special problems in leather, metal, weaving, and toy-making or marionettes.
Laboratory fee, $\$ 3.50$.
Mooers.
Second year, one semester, six hours a week.
3 unist.
121 Lettering. Fundamentals of construction, spacing, and arrangement of basic Roman and Gothic letters. Modern uses of lettering. A required course for commercial art majors.
Laboratory fee, $\$ 1.00$.
Harter.
Second year, first semester, four hours a week.
2 units.
122 Commercial Art. An introductory course. Problems identical with those solved by the professional commercial artists.
Prerequisite: Art 121.
Harter.
First or second year, second semester, four bours a week. 2 units.
200 Elementary School Art. Consideration of problems, methods of presentation on the elementary school level, and special techniques. Emphasis on the analysis of courses of study in art, and experience in developing a course of study.
Prerequisites: Art 107, 108, 110.
Laboratory fee, 50 cents.
Mooers.
Third year, either semester, two hours a week.
2 units.


201 Advanced Advertising Design. An analysis of the design problems peculiar to the various types of advertising; labels, poster, direct mail, window and counter display, magazine, and newspaper advertising. Problems identical with those given the professional advertising designer.

Harter.
Third year, first semester, four hours a week. 2 units.
202 Survey of Advertising Art. A thorough general description of all phases of advertising production including advertising agency procedure, typography, reproduction processes, printing, lithography. Visits to local business concerns and studies.

Harter.
Third or fourth year, second semester, four hours a week. 2 units.
203 Advanced Lettering. A continuation of Art 121 with emphasis on arrangement and spacing.
Laboratory fee, $\$ 1.00$.
Harter.
Third or fourth year, first semester, four hours a week. 2 units.
204 Costume Design. Fashion design, including costumes and millinery, sketching, and fashion prediction.
Prerequisites: Art 103, 105.
Mooers.
Third or four year, second semester, four hours a week. 2 units.
205 Textile Printing. A laboratory course in reproduction methods of hand printing on textiles. Design, color, and craftsmanship are stressed. Laboratory fee, $\$ 3.50$.

Kloster.
Third or fourth year, first semester, four hours a week. 2 units.
206 Sculpture. Modeling in the round and in relief, carving, casting, applying patines. Prerequisite: Art 103.
Laboratory fee, $\$ 4.00$.
Kloster.
Third or fourth year, second semester, four hours a week. 2 units.
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.

Kloster or Harter.
Third or fourth year, second semester, four hours a week. 2 units,
214 Advanced Water Color. Continuation of Art 114 with more advanced problems.
Laboratory fee, $\$ 1.00$.
Harter or Kloster.
Third or fourth year, second semester, four hours a week. 2 units.

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.

Kloster.
Third or fourth year, first semester, three hours a week. 3 units.
218 Advanced Commercial Art. The student is permitted to specialize in any particular field of commercial art which interests him. Prerequisites: Art 103, 105, 121, and 201, or equivalents.

Harter.
Third or fourth year, second semester, six hours a week. 3 units.
220 Advanced Crafts. A continuation of Art 120 Allied Crafts with the opportunity to do special problems in leather, silver, pewter, or copper.
Prerequisite: Art 120.
Laboratory fee, \$3.50.
Mooers.
Third or fourth year, either semester, six hours a week. 3 units,
221 Advanced Life Drawing. Advanced life drawing with more detailed study of anatomy and construction. Emphasis upon detailed structure of heads, hands, and feet, as well as full figure. Quick sketch and memory sketch as well as longer poses. Various mediums. Laboratory fee, $\$ 2.00$.

Kloster or Harter.
Third or fourth year, first semester, six hours a week. 3 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.

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

Kloster.
Third or fourth year, second semester, one hour a week. 1 unft.
228 Oil Painting. Sketching excursions as well as indoor painting; landscape, still life, and figure. Emphasis on interpretations of the local scene.
Prerequisites: Art 102, 103, 114.
Kloster.
Third or fourth year, second semester, six hours a week. 3 unitn.

230 Humorous Illustration. Cartoons and humorous drawings; magazine, comic strip, editorial cartoons.
Prerequisite: Art 103 or equivalent.
Harter.
Third or fourth year, one semester, four hours a week. 2 units.
306 Special Problems in Sculpture. Deals particularly with individual problems in carving and casting.
Prerequisite: Art 206.
Laboratory fee, $\$ 4.00$.
Kloster.
Fourth year, second semester, four hours a week.
2 units.
328 Special Problems in Oil Painting. Open to special students upon request.

Kloster.
Fourth year, second semester, six hours a week.
3 units.

## DEPARTMENT OF COMMERCE

## MASTELLER (Head of the Department), HILKERT, JACKSON

The Department of Commerce offers courses in the following fields: Accounting and Business Law, Business Administration, Merchandising, Secretarial Science, and preparation for the Special Commerce Teaching Certificate. The work in this department is designed to meet the needs of three groups of students.

1. The great majority of commerce students are in the first group. They are those who desire to follow the four year curriculum of the Ccllege as a preparation for a business career and therefore are not interested in teacher certification. Such students may major in Accounting, Business Administration, Merchandising, or Secretarial Science, and many minor in any other of these four fields. These students are not required to do practice teaching, but must complete the required courses in psychology, sociology, science, social studies, freshman English, constitutional government, prescribed cultural courses, physical activity courses, and twelve units of education electives.
2. Those who wish to obtain the special commerce teaching certificate. This certificate entitles the holder to teach commercial subjects in the secondary schools of this state without the usual year of graduate study which is required for secondary certification. Students in this group may pursue the Standard Four Year Type Curriculum for Special Certification in Commerce, or they may elect one of the four specialized commerce majors. In the latter case, the student is urged to choose a minor from one of the other specialized fields of commerce. Not less than thirty semester hours of commerce courses must be included, and five of the required ten units of practice teaching must be done in the commerce department of a high school. No student will be given a commerce practice teaching assignment in a high school who has not given satisfactory evidence of teaching skill and knowledge in accounting, shorthand, typing, business law, and such other subjects as are usually taught in the commerce department of the high school. Completion of the course in commercial teaching methods or its equivalent is a prerequisite to the practice teaching.
3. Those students who wish to qualify for the Arizona Elementary Certificate with a major in commerce. These students may elect their major in either of the four specialized fields of commerce. They must meet, also, all other requirements for teacher certification as presented elsewhere in this catalogue.

## MAJORS AND MINORS IN COMMERCE

Twenty-four to thirty units in Accounting, Business Administration, Merchandising, or Secretarial Science will be accepted as a major in these fields. Not less than thirty units are required for a major in the curriculum for the Special Commerce Certificate. Fifteen units in any one of these specialized fields of commerce will constitute a minor.

The student should designate the major as Accounting, Business Administration, Merchandising, Secretarial Science, or Special Commerce Certificate, and not merely as "Commerce". Those who desire to attain the special commerce certificate must fulfill all requirements of the standard curriculum and they should be guided throughout the course by an adviser from the commerce department. The student may choose both his major and his minor within the four specialized fields of commerce.

In order to insure satisfactory completion of the major, the student must plan his entire program in advance with the advice and approval of his commerce adviser. He must preserve his semester cards as a record of progress; and, before making application for graduation, he must file in the office of the registrar a complete outline of his major with the signed approval of his commerce adviser.

## BUREAU OF COMMERCIAL EMPLOYMENT

The Department of Commerce maintains its own bureau of employment with two offices, one at the college and one in Phoenix. One of the staff members, E. J. Hilkert, is directly in charge of this phase of activity.

All students who desire the assistance of this bureau must make both written and personal application, A service of collecting references and recommendations for those students who are enrolled in the bureau is offered in connection with its placement
work. Introductions to prospective employers in various fields of industry are also given. Advice such as information about vocations and help in deciding upon a career are offered to those students who have been unable to make a choice of their life work.

## DIVISIONAL ADVISERS

In its attempt to meet the changing needs of business, the department has recognized the need for specialization. In view of this fact students are encouraged to go to the adviser within the department who best understands the conditions in that field. The advisers and their fields of interest are listed below.

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Accounting. pre-legal, and irregular students, Hilkert.
Merchandising and selling, Jackson.
Secretarial science, Masteller.
Business administration, Jackson.
Teacher training, Masteller and Staff.
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## GUIDANCE

The Department of Commerce makes every effort to determine the interests and capacities of its students. Diagnostic testing, interest testing, aptitude testing, and interviews are all utilized at the earliest opportunity in order to evaluate the student and to select the most effective course of study.

## CERTIFIED PUBLIC ACCOUNTANTS

The courses in accountancy are designed to prepare students for the examination required under the laws of the State of Arizona for the issuance of a Certified Public Accountant's certificate. Examinations are held in May and November of each year at Phoenix. These examinations are similar to those held at the same time in other states.

# STANDARD FOUR YEAR TYPE CURRICULUM FOR SPECIAL CERTIFICATION IN COMMERCE 



Note: This Standard Four Year Type Curriculum is designed for a limited number of commerce majors. Students who follow this curriculum may teach commerce subjects only in the high school, but they may also teach commerce subjects in the elementary grades.

## SPECIAL CURRICULUM WITH EMPHASIS IN ACCOUNTING

| FRESHMAN YEAR |  |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| Com. 101 Elem. Acetg............... 4 | Com. 102 Elem. Acctg......-....... 4 |
| Com. 127 Survey of Business.... $\frac{1}{1}$ | Com. 128 Survey of Business... 1 |
| Gen. Science 100...--..................- 3 | Gen. Science 110........................ 3 |
| P. E. 100 Hygiene ------....------- 2 | Engl. 102 Composition...---.-...... 3 |
| Engl. 101 Composition.............. 3 | Physical Activity ...............-...... 0.5 |
| Physical Activity ----.........-....... 0.5 | Electives .-......................................... 5 |
| Com. 141 Bus. Math. -------------2 |  |
| 15.5 | 16.5 |



| JUNIOR YEAR |  |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| Com. 203 Advanced Acctg. ...... 3 | Com. 204 Advanced Acctg. ..... 3 |
| Com. 103 Soc. Secur. | Com. 210 Income Tax Acctg. |
| \& Payroll Acctg. -------.......--- 3 | Federal and State .....------....... 3 |
| Com. 205 Business Law .......... 3 | Com. 206 Business Law ............. 3 |
| Psych, 100 Gen. Psychology.... 3 | Educ. 120 Sociology ................ 3 |
| Elective 4 | Elective .-.-.-...........................-----...- 3 |

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## SENIOR YEAR



Note 1. Students in this curriculum are encouraged to take the Education courses titled, Statistical Method and Advanced Statistics.

Note 2. Students taking this curriculum are urged to take Typing, Shorthand, and other related courses at the earliest opportunity.

# SPECIAL CURRICULUM WITH EMPHASIS IN MERCHANDISING* 

| FRESHMAN YEAR |  |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| Com. 101 Elem. Acctg. ............ 4 | Com. 102 Elem. Acetg. ............. 4 |
| Com. 127 Survey of Business.... $\frac{1}{8}$ | Com. 128 Survey of Business.... 1 |
| Gen. Science 100 ......................... 3 | Gen. Science 110 ......................-- 3 |
| Engl. 101 Composition.-----........ 3 | Engl. 102 Composition -............. 3 |
| Elective in Social Science........ ${ }^{3}$ | Elective in Social Science....... 3 |
| P. E. 100 Hygiene....................... 2 | Elective in Art ....-....--................ 2 |
| Physical Activity ........-.............. 0.5 | Physical Actirity .-....-............... 0.5 |
| 16.5 | 16.5 |
| SOPHOMORE YEAR |  |
| First Semester Units | Second Semester Units |
| Com, 131 Prin, Economics...-.- 3 | Com. 132 Prin. Fconomics ....... 3 |
| Com. 105 Marketing .................. 3 | Com. 106 Marketing .................... 3 |
| Psych. 100 Gen. Psychology...... 3 | Educ. 120 Sociology................-- 3 |
| Geog. 100 Elem. of Geog............ 3 | Pol. Sci. 100 Const. Gor.---....... 3 |
| Elective ....................................... 3 | Geog. 101 Econ. Geography....... 3 |
| Physical Activity .......-.............. 0.5 | Physical Activity ........----......... 0.0 |
| 15.5 | 15.5 |

## JUNIOR YEAR

First Semester Units
Com. 215 Business Organ. or
Com. 205 Business Law (1) 3
Com. 232 Prin. Advert. ................ 3
Educ. Elective (2) ....
3
3
3
Electives and Minor........................... 8

Second Semester Units
Com. 216 Business Organ. or
Com. 206 Business Law (1) 3
Educ. EIectives (2) ........................ 6
Electives and Minor......................... 8
17

## SENIOR YERR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Com. 227 Retail Merchndsng... 3 | Com. 228 Credits and Collec..... 3 |
| Com. 229 Field Work in | Educ. Elective (2) .................. 3 |
| Merchandising (3) ............. 1 | Geog. 21.8 Gcos. of Trade |
| Educ. Elective (2) .................... 3 | Centers ................................... 3 |
| Electives and Minor ..-................. 9 | Electives and Minor........................ 7 |
| 16 | 16 |

[^2]
# TYPE CURRICULUM WITH EMPHASIS IN SECRETARIAL SCIENCE 

| FRESFMMAN YEAR |  |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| Com. 101 Elem. Acctg. .......... 4 | Com. 102 Elem. Acctg. .......... 4 |
| Com. 127 Survey of Business.-. 1 | Com. 128 Survey of Business.-- 1 |
| Sei. 100 Intro. to Phy. Sci.-.---3 | Sci. 110 Biology ...................---- 3 |
| Engl. 101 Composition ------------3 |  |
| P. E. 100 Hygiene......--------1..... 2 | Elective in Art ............................ 2 |
| Elective --..--..........-----------......... 3 | Elective --....-.-.---..-.-................. 3 |
| Physical Activity ..................... 0.5 | Physical Activity ..........-.......-. 0.5 |
| 16.5 | 16.5 |

## SOPHOMORE YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Com. 131 Prin. Economics......-- 3 | Com. 132 Prin. Economics.......... 3 |
| English Elective .......................- 3 | English Elective .-...................... 3 |
| Psych. 100 Gen. Psychology....... 3 | Educ, 120 Sociology..................... 3 |
| Com. 113 Shorthand 1 .............. 3 | Com. 114 Shorthand 2 .............. 3 |
| Geog. 100 Elem. of Geog.....----- 3 | Soc. Sci. 100 Const. Govt.......... 3 |
| Physical Activity -.-...........------- 0.5 | Physical Activity ...-.............-... 0.5 |
| 15.5 | 15.5 |

## JUNIOR YEAR

| First Semester | Units |  | Second Semester |
| :--- | :--- | :--- | :--- | Units

## SENIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Com. 233 Adv. Bus. Corres........ 3 | Com. 234 Office Machines......... 2 |
| Com. 237 Intro. to Mimeo......... 1 | Com. 232 Prin. of Advertising-- 3 |
| Educ. Elective* ........................ 3 | Educ. Elective* ......................... ${ }^{\text {E }}$ |
| Electives and Minor.......---------. 10 | Electives and Minor-.-.-........... |
| 17 | 17 |

*In selecting the Education Elective, students are encouraged to take the two courses, Statistical Method and Advanced Statistics.

Note 1. Com. 205, 206, Business Law is recommended for all students majoring in this curriculum.
Note 2. Students are encouraged to take work in Commercial Spanish in their elective courses.

Note 3. Minors are recommended in English, Social Science, or in another field of Commerce.

# TYPE CURRICULUM WITH EMPHASIS IN BUSINESS ADMINISTRATION 



| JUNIOR YEAR |  |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| Com. 215 Business Organ.......... 3 | Com. 216 Business Organ.......... 3 |
| Pol. Sci. 100 Const. Govt.......... 3 | Educ. Elective *-....................... 3 |
| Educ. Elective* .......................... 3 | Com. 232 Prin. of Adv. ............ 3 |
| Electives and Minor....-.............. 6 | Electives and Minor.................... 6 |
| 15 | 15 |


*The student is encouraged to select the courses, Statistical Method and Advanced Statistics, as Elective Education courses.
Note 1. Students are economically more fitted for work if they elect Typing and Shorthand as soon as possible in this curriculum.
Note 2. Students taking this curriculum are encouraged to minor in one of the other branches of Commerce.

## ACCOUNTING AND BUSINESS LAW

Com. 101, 102. Elementary Accounting. 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; adjustment and closing of the ledger; balance sheets; profit and loss statements, and the more common type of business reports. The balance sheet method of approach is used. No previous knowledge of bookkeeping is required. This course is strongly advised for all pre-professional students and required of all majors in the commerce department.

## Jackson. <br> First and second semesters. Lecture three hours a week. <br> laboratory two hours a week. <br> 4 units each semester

103. Social Security and Pay-roll Accounting. This course covers all the social security and pay-roll accounting procedure of the average business from the application for employment and subsequent time cards to the employer's periodic government reports. Both the legal and the accounting requirements of social security legislation is studied with respect to taxes, benefits payable, merit ratings, personnel control, personnel and compensation records, unemployment insurance, time keeping and pay-roll records. Text: Social Security Accounting, by Charles R. Hadley Company.
(Not offered in 1939-1940)
Hilkert.
First semester. Lecture three hours a week. Problems and practice assignments.

3 units
141. Business Mathematics. Instruction and practice in the fundamental operations; interest; discount; ratios; and related topics. Required of Accounting and Secretarial Science majors.

Jackson.
First semester, two hours a week.
2 units.
142. Mathematics of Accounting. A study of annuities; debt amortization; bond valuation; and the algebraic equations used in income tax and consolidated balance sheet problems. Emphasis is placed on the practical application rather than the derivation of principles and formulas. Required of Accounting majors.

Jackson.
Second semester, two hours a week.
2 units.
201, 202. Intermediate Accounting. 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. Prerequisite: Elementary Accounting or the equivalent. Required of all prospective commerce teachers.

Hilkert.
First and second semesters. Lecture three hours a week and problems.

3 units each semester.
203, 204. Advanced Accounting. 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: Elementary Accounting or the equivalent.

Hilkert.
First and second semesters. Lecture ihree 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, cases, and projects.
Required of all accounting and merchandising majors and of prospective commercial teachers.

Hilkert.
First and second semesters.
Lecture, three hours a week.
3 units each semester.
208. Cost Accounting. A study of the theory of Cost Accounting and the various cost find systems including specific order costs, process costs, standard costs, and estimating costs. The business routine, as well as the cost accounting procedure, is studied. Preparation of the various cost statements and reports. The combined lecture and case method is used. Prerequisite: Elementary Accounting or the equivalent.

Hilkert.
First semester. Lecture three hours a week. Problems and practice set.

3 units.
207. Auditing Theory and Practice. Fundamental principles of audit practice and procedure, the verification of the balance sheet and the profit and loss items; the preparation of working sheets, and the compilation of audit reports. The combined lecture and case method is used. Prerequisite: Elementary Accounting or the equivalent.
(Not offered in 1938-39)
Hilkert.
Second semester. Lecture three hours a week, and cases. 3 units.
210. Income Tax - Federal and State. A study of the Federal and State Income Tax Laws and training in the preparation of various income tax returns, including returns for corporations, partnerships, individuals, estates and trusts. The combined lecture and case method is used. Prerequisite: Elementary Accounting or the equivalent.
(Not offered in 1939-1940.)
Hilkert.
Second semester. Lecture three hours a week, and cases. 3 units.
211, 212. Seminar in Accounting. In the senior year the student is permitted to select the special field of accounting in which he is most interested, such as chain store accounting, General Motors system of accounting for automobile dealers, public accounting. Individual training, study, and research is provided in the field of specialization selected by the student. Available only to Accounting Majors in their senior year.

[^3]2 units.

## MERCHANDISING

Geography 101. Economic Geography. See Department of Sciences.

Com. 105, 106. Marketing and Distribution. A general but critical survey of the field of marketing. Consumer demand in relation to the marketing machinery. Functions, methods, policies, marketing costs, and problems of the farmer, manufacturer, wholesaler, commission merchant, broker, retailer, and other middlemen. Emphasis on principles, trends, and policies in relation to marketing efficiency. This is a prerequisite to all other courses in merchandising.

Jackson.
Lecture, three hours a week.
131, 132 Principles of Economics. See Business Administration. 215, 216 Business Organization and Administration. See Business Administration.

227 Retail Merchandising. A consideration of the organization and management of retail establishments; store locations; store organizations; buying; receiving; stockkeeping; inventories; sales systems; store policies; services; deliveries; expenses and profits; personal problems, and retail accounting. The viewpoint of the store owner or manager is emphasized.

228 Credits and Collections. A course for the business manager. It includes the advantages and disadvantages of credit sales. Credit and collection practices and policies of the manufacturer, wholesaler, and retailer are discussed and evaluated. Attention is also given to the sales aspect of the credit department as well as an evaluation of different forms of consumer credit.
Prerequisites: Commerce 101, 102; Commerce 104, 105.
Jackson.
Second semester, three hours a week.
3 units.
229, 231 Field Work in Merchandising. Students majoring in marketing are permitted to do actual work for credit. The student must secure a position that meets the approval of the instructor. A series of reports will be made by the student on the work done. The amount of credit granted will depend on the nature of the position as well as on the reports that are handed in from time to time.
Prerequisite: Senior standing, a major in marketing, and permission of the instructor.

Jackson.
Credit, one to four hours. 1 to 4 units.
232 Principles of Advertising. Advertising in relation to marketing and general business. Advertising organization, science of advertising, copy, layout, typography, engraving, advertising strategy, advertising media, economics of advertising. The view point of the business manager is emphasized.

Jackson.
Second semester, three hours a week. 3 units.

## SECRETARIAL SCIENCE

110. Techniques in 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. Laboratory fee, $\$ 1.00$.

Masteller.
Either 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, $\$ 1.00$.

Masteller.
First and second semesters. Lecture three hours a week; laboratory one hour.

3 units.

120 Projects in 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, $\$ 1.00$.

Masteller.
Either semester, daily. 2 units.
233 Advanced Business Correspondence. 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. Much practice is given in creative writing in business correspondence.

Masteller.
First semester, two hours a week. 2 units.
234 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 machines, filing systems, the mimeograph, dictaphone, and other types of modern office equipment. Offered only to upper division students, preferably to scnior and graduate students.
Prerequisites: Commerce 101, 102 ; Commerce 113, 114, 235; Commerce 110,120 ; or their equivalent. Laboratory fee, $\$ 2.00$.

Masteller.
Second semester, four hours a week. Additional laboratory work assigned.

2 units.
235 Shorthand 3, Advanced. A study of advanced dictation and transcription. Thorough review of the principles of Gregg Shorthand. Specialized dictation and transcription from various fields of business. The functional method utilized throughout.
Prerequisite: Commerce 113, 114. Laboratory fee, $\$ 1.00$.
Masteller.
First semester, four hours a week. 3 units.
236 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 215, 216; Commerce 110; Commerce 113, 114, 235 ; or their equivalent.
Laboratory fee, \$2.00.

237 Introduction to Mimeographing. A practical course in the use of the mimeograph for office use but also the production of school annuals, newspapers, rosters, announcements, etc. The technique for using the mimeoscope, styli, lettering guides, shading plates and color work will also be emphasized.
Prerequisite: two semesters typing; upper division standing. Class limited to fifteen. Laboratory fee, $\$ 2.00$.

Both semesters, two hours a week.
1 unit.
251, 252 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 215, 216; Commerce 101, 102; Commerce 113, 114; Typing 1 or its equivalent; Commerce 205, 206.

Masteller.
Lecture, two hours a week; laboratory work. 2 units.

## BUSINESS ADMINISTRATION

127, 128 Survey of Business. Required of all first year students who elect commerce as their major. The members of the staff will analyze various vocational opportunities and explain the advantages and disadvantages of each. Students will be tested vocationally and guidance will be given. Outside speakers from the business world will be brought in frequently to discuss opportunities that prevail.

Staff members.
First and second semesters, one hour a week.
1 unit.
131, 132 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. This course (two semesters) may be applied to meet the requirement of six units in social studies.

First and second semesters, three hours a week.
3 units each semester.

Com. 253 Applied Economics. To follow and supplement Com. 131 Principles of Economics, and is designed especially to show the extent to which these principles have been applied successfully in the growth and development of the great business institutions of our time. Open to sophomores, juniors, and seniors. Prerequisite: Com. 131.

First semester, three hours a week.
3 units.
215, 216 Business Organization and Administration. A practical study of the basic forms of business organizations and types of management. An attempt is made to analyze the psychological qualities involved in management. Significant trends in modern business are noted. Latest methods involved in scientific management are thoroughly studied and applied. This course is limited to junior and senior students.

217 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.

218 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. Offered in summer session. Prerequisite: Econ. 131, 132; or Com. 215, 216.

Lecture, three hours a week.
3 units.
219 Labor Problems. Recent legislation in Congress embodied in Section 7a 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 prospect for the future relation of labor and capital.
Prerequisite: Econ. 131, 132; or Com. 215, 216.

220 Investments. A practical course for the business manager as well as for the individual with an investment problem. It includes an analysis and evaluation of the securities offered by national, state and municipal governments; public utilities; railroads; industrial concerns; banks; insurance companies; investment trusts; realty companies; and holding companies. Consideration is also given to a study of business cycles, currency problems and governmental action in their relation to the position of the investor. Prerequisite: Commerce 101, 102, 131 and 132.

Second semester, three hours a week. 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 propaganda are kept clearly in mind.

## DEPARTMENT OF EDUCATION

BURKHARD (Head of the Department), PAYNE, GRIMES, WERT, NETZER, SKINNER, MCKEMY, ROLL, HAULOT, LYND, ANDERSON, CALLOWAY, ROBERTS, ROBINSON, CHASE, MARSHALL, EBEL, PEARLMAN, STEVERSON, ROWLANDS, ALLEN, JOHNSON, WOOLUM, HILL

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

Units
Psych. 100 General Psychology ..... 3
Educ. 120 Sociology ..... 3
Psych. 200 Educational Measurements ..... 3
Educ. 210 Teaching Reading and Languageor
Educ. 210-K Teaching of Primary Reading ..... 2
Educ. 230 Elementary Curriculum and Techniques ..... 2
Elective in Education or Psychology ..... 4
Educ. 250 Philosophy of Education ..... 3
Educ. 260 Directed Teaching ..... 10

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 course in educational measurements must be completed before the student may register for the course in curriculum and techniques. Philosophy of education is open only to seniors, except by special permission of the head of the department.

Directed Teaching. All students observe model teaching and teach in the training schools for a half day session each day during one full semester in the third year. The observation of model teaching alternates with the student teaching throughout the semester, so that student teachers may immediately apply observed methods. All student teaching is done from carefully prepared lesson plans under the supervision of training teachers.

A knowledge of school law and techniques of school management is required. Regular class and discussion periods parallel the student teaching.

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.

## 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
Educ. 207 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

## 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.

[^4]210 The Teaching of Reading. For those intending to teach in grades above the third. A brief study of the principles and methods involved in determining reading readiness and the initial process of learning to read. The major emphasis is placed on acquiring 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 the reading program to individual differences. Provision for remedial training.

Netzer.
Either semester, two hours a week.
2 units.
210-K The Teaching of Primary Reading. To be taken only by those intending to teach in the primary grades. The emphasis is placed on reading readiness and methods of teaching beginning reading.

## Netzer.

 Either semester, two hours a week.2 units.
211 -g. 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.

Payne.
Third or fourth year, three hours a week.
3 units.
214-g. 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 in 1939-1940.)

216-g. 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.

Burkhard.
Third or fourth year, three hours a week.
2 units.
220-g. 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.

Payne.
Third year, either semester, three hours a week. 2 units.
$\mathbf{2 2 2 - g}$. Teaching in the Secondary School. Considers the activities of secondary school teachers with an intensive study of the responsibilities of the teacher.

Wert.
Second semester, two hours per 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.
(Not offered in 1939-1940.)
Wert.
First semester, three hours a week. 3 units.
224. Secondary Curriculum. The curriculum of progressive junior and senior high schools constitutes a major basis of this course. Secondary programs are evaluated in the light of the various points of view in psychology and educational philosophy.

Wert.
Two hours per week. 2 units.
225. High School Methods Seminar. Students meet in groups according to major field of teaching interest.

Wert.
Hours to be arranged. 2 units.
226-g. Safety Education. For teachers and prospective teachers of safety education in the public schools-objectives; teaching material available; methods of teaching; lesson planning; testing for safe drivers; teaching automobile driving; and integration with present school programs.
(Not offered in 1939-1940.)
Wert.
Second semester, two hours a week.
2 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.

Netzer.
Third year, either semester, two hours a week. 2 units.
232-g. Educational and Vocational Guidance. The need, objectives, prevailing practices, and the administration of guidance programs with special emphasis on the development of an adequate guidance program.

Skinner.
Second semester, two hours a week.
2 units.
233-g. Visual Aids in Education. A discussion of the principles upon which visual education should be established. An examination and evaluation of the latest materals and methods. Whenever possible demonstrations are given and the actual use of visual aids shown in units of work.

Payne.
First semester, two hours a week. 2 undts.
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.

Lynd.
Third or fourth year, three hours a week.
3 units.
241 -g. 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.


THE COLLEGE CAMPUS FROM THE NORTH

242-g. 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 1939-1940.)
Burkhard.
Second semester, two hours a week.
2 units.
245-g. 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.
(Not offered in 1939-1940.)
Wert.
First semester, three hours a week.
3 units.
270. 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.

Allen.
Either semester, two hours a wek.
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.
Burkhard.
Fourth year, either semester, three hours a week. 3 units.
260. Observation and Directed Teaching. All third 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 student 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.
Third year, one semester-one-half day five days a week.
either semester.
10 units.

280 Introduction to Case Work. An introductory study of present day case work practice. Various case work procedures are discussed including social study, evaluation, treatment plan, use of community resources. Discussions are based on case materials drawn from agencies operating in the case work field.
Prerequisite: Educ. 120 Sociology or equivalent.
Allen.
Either semester, two hours a week.
2 units.

## KINDERGARTEN-PRIMARY COURSES

Educ. 207. 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 children's illustrators are given careful study.

Pearlman.
First year, first semester, three hours a week.
3 units.
Educ. 212. 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.

## Pearlman.

Second year, second semester, three hours a week. 3 units.
Educ. 206. 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, $\$ 1.50$.
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.

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

Courses designated with numbers from 300 up usually carry two units of credit. However, with the permission of the instructor, the credit may be extended to four units. The arrangement for the credit value must be made at the time of registration.
303. 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.

Payne.
Second semester, iwo hours a week.
2 units.
305. 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.

Burkhard.
2 units.
306. Character Education. Deals with the problems of educating for citizenship. Character education finds its setting in the implications of social theories and social ideals. The course will deal with a study of the control of the environment as a means to the growth of desirable character.
(Not offered in 1939-1940.)
Burkhard.
2 units.
311. 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.
(Not offered in 1939-1940.)
312. New Developments in Elementary Curriculum. A systematic study of each of the traditional subjects of the elementary curriculum in the light of recent research and present-day thought of authorities in the separate fields with an attempt to point out how the elementary curriculum can be better adapted to the child.
(Not offered in 1939-1940.)

## Netzer.

2 units.
313. Principles and Practices of the Progressive School. Designed to develop understanding and appreciation for the best and the accepted current practices of the Progressive School. A study of the formal conservative, and progressive practices in terms of the teacher, child, subject matter, method, discipline, and drill.

Pearlman.
2 units.
315. The Administration of Secondary Education. Designed for administrators and teachers who wish to fit themselves for administrative positions. Administrative procedures are considered concerning organization, finance, public relations, pupil personnel, teaching staff, and non-teaching personnel.
(Not offered in 1939-1940.) 2 units.
316. Supervision in the Secondary Schools. Designed for principals and supervisors as well as for experienced teachers who wish to prepare for positions involving supervision. Emphasis is placed upon the encouragement and guidance of teachers in their creative attempts to provide suitable teaching activities for secondary school youth.
(Not offered in 1939-1940.)
2 units.
317 General Education. An introductory study of this contemporary movement in high schools and junior colleges. The objectives, practices, and techniques of evaluation used in survey courses and other types of general education.
wert.
First semester, two to four units.
318. Extra-Curricular Activities. The activities that have grown up in junior and senior high school but not yet included in the regular curriculum. Types of activities, their function and importance, and their relationship to the regular school program. The problem of including activities in the regular curriculum.
(Not offered in 1939-1940.)
Payne.
2 units.
320. School Counseling. Aims to integrate the information, principles, and techniques of occupations, guidance, tests, mental hygiene, and psychology, into an effective guidance program. Considers the relation of each teacher to the guidance program and school counselor. Actual guidance problems constitute an im-
portant part of the course. Since the school counselor has to deal with educational, vocational, mental, moral, and social problems, this course is of interest to all who have responsibilities in directing human learning and living.

Skinner.
2 units.
325. Preparation of Theses. This course includes a survey of the indexes and other library facilities available for locating published educational information; choosing a thesis problem; collection of data; and writing the thesis.

2 units.
326. Research Methods. Types of research employed in education and social studies, together with techniques appropriate for each type. The survey and controlled experiment will be emphasized. Netzer.

2 units.
330. Current Educational Experiments. This course considers the unique innovations now being undertaken in elementary, secondary, and college education. Particular emphasis is laid upon the application of each of these programs to the improvement of the public schools.
(Not offered in 1939-1940.)
Wert.
2 units.
333. Contemporary Educators. This course is designed to familiarize the student with the outstanding educators of the present day and with the contribution each is making to educational progress.
(Not offered in 1939-1940.)
Wert.
2 units.
335. Adult Education. A general survey of the field of adult education, including its history, objectives, and methods. The developments considered include public schools, university extension, public libraries, parent education, worker education, correspondence courses, radio, motion pictures.
(Not offered in 1939-1940.)
2 units.
336. Higher Education. This course is designed for public school teachers, administrators and guidance officers in order to provide a more adequate background in the guidance of college-bound youth in the public schools.

Wert.
Second semester, two hours a week. 2 units.
337. School Finance. Methods and problems of financing public education with major emphasis on Arizona practice.
(Not offered in 1939-1940.)
2 units.
390. Individual Problems. Designed to meet the needs of those students wishing to investigate a problem of their own in any field of Education or Psychology. Credit and hours to be arranged.

# DEPARTMENT OF ENGLISH AND SPEECH 

## MYERS (Head of the Department), ANSBERRY, BLAIR, JEWETT, PHCHER, SCHILLING, SIMPSON, SOUTHERN

## GENERAL REQUIREMENT

The freshman course in composition is required of all regular students. It may not be counted toward the major nor the minor.

## REQUIREMENTS FOR THE MAJOR IN ENGLISH

a. Thirty units in English, fifteen of which must be in upper division courses. The Elements of Speech, Survey of Literature, reading courses, and History of the English Language are required. The remaining units may be chosen from any of the courses offered by the department.
b. A respectable command of the English language and a reasonable familiarity with the field of English literature and with the most important bibliographical and other tools. A comprehensive examination will be taken in the senior year. Students are given a reading list as a basis of preparation for this examination. For the first four semesters they will take a one hour reading course carrying credit but no grade, in which they will read most of the longer works on this list. The sophomore survey of literature will cover most of the shorter works besides providing an introduction to the study of types and the development of literary movement. With these courses as a foundation, students will be expected to plan their upper division work so as to fill in any obvious gaps in their preparation. The sophomore textbook is a combined anthology and history of English literature which the student would do well to keep throughout his college course. In addition, he should have a good dictionary, a grammar, a short history of England.
c. An average grade of C or better in all English courses and in the comprehensive examination. No student whose work in English falls below a $C$ average for more than one semestex will be allowed to continue as an English major.

English majors who take a minor in speech must take a second minor in some other field. All English majors are expected to take some work in speech, and are advised to elect some courses in foreign languages.

## TYPE CURRICULUM FOR ENGLISH MAJORS

| FRESHMAN YEAR |  |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| Engl. 101 Composition ..-............ 3 | Engl. 102 Composition ................ 3 |
| *G. Sci. 100 Introd. Physics ------3 | *G. Sci. 110 Biology ........-........... 3 |
| Hist. 105 English Hist. .............. 3 | Hist. 106 English Hist. .-............ 3 |
| Minor or elective .---...............----- 4 | Minor or elective ......................... 4 |
| *Engl, 110 Speech ......-................. 2 | *Hygiene ....................................... 2 |
| Engl. 103 Reading course .-.--------1 | Engl. 104 Reading course .--........ 1 |
| P.E. Activity ..........................--. 0.5 | P.E, Activity .............................. 0.5 |
| 16.5 | 16.5 |
| SOPHOMORE YEAR |  |
| First Semester Units | Second Semester Units |
| *Psych. 100 Gen. Psychology - --.. 3 | *Educ. 120 Sociology ................... 3 |
| *Geog. 100 Elem. of Geog. ----------3 | *S. Sci. 100 Const. Govt. .............. 3 |
| Minor or elective .-............-........... 5 | Minor or elective ........................- 5 |
| P.E. Activity .........................----- 0.5 | P.E. Activity ..............................- 0.5 |
| Engl. 151 Survey ...............----..... 3 | Engl. 152 Survey .......-.--..........---- 3 |
| Engl. 105 Reading course .-----..... 1 | Engl, 106 Reading course .-......... 1 |
| 15.5 | 15.5 |
| JUNIOR YEAR |  |
| First Semester Units | Second Semester Units |
| *Psych. 200 Educ. Meas. --........... 3 | Directed Teaching .-.----.........----- 10 |
| PEducation elective ..................... 2 | or |
| Art 110 Publ. Sch. Art .-..........--- 2 | Educ. 230 Elem. Curric. ---------2 |
| Minor or elective ..................-.-.-. 5 | Minor or elective ..................-- 8 - 3 |
| English, upper div. lit, ............... 3 | English elective ..............-............- 3 |
| 15 | 16 |
| SENIOR XEAR |  |
| First Semester Units | Second Semester Units |
| Directed Teaching ...................... 10 | *Educ. 210 Teaching of Reading 2 |
| Or | *Education elective ..................... 3 |
| Educ. 230 Elem. Curric. .-........ 2 | Minor or elective ....................... 5 |
| Minor or elective .aduc | *English, upper div. elective ...... 3 |
| Fangl. 253 Hist, of Lang. $\qquad$ 3 | Engl. 254 Hist. of Lang. ............. 3 |
| 16 | 16 |

Note 1. The starred courses may be taken either semester.
Note 2. Students with a fair knowledge of English history may choose another social science course in place of S. Sci. 105, 106.

Note 3. Students who prefer laboratory courses in science may substitute them for G. Sct. 100 and 110.
Note 4. English majors following the secondary or special curriculum should confer with the head of the department about modifications of this curriculum.

## MINORS

The minor in English requires fifteen units beyond freshman composition, including the Survey of Literature and six hours of upper-division work.

The minor in Speech requires fifteen units, and may be taken with dramatic or non-dramatic emphasis. Typical programs are shown below. They may be modified by arrangement with the Speech instructors.

## Speech minor with dramatic emphasis:

## Units

110 Elements of Speech _-..................................................................................... 2
121 Dramatic Interpretation ...................................................................................................... 2
122 Acting …................................................................................................................................................ 2


240 Children's Dramatics ................................................................................... 3

$\overline{18}$
Speech minor with non-dramatic emphasis:
110 .
121 Dramatic Interpretation ..................................................................................................................................................



220 Public Speaking .................................................................................................. 2

16

## DESCRIPTION OF COURSES IN ENGLISH

Note: Courses not offered in 1939-1940 will be offered in 1940-1941.

## COMPOSITION AND GRAMMAR

101, 102. First Year English. Mechanics and organization of compositions. Intensive and extensive reading. Elementary research methods.

Myers, Blair, Jewett, Pilcher, Schilling, Southern.
First year, two semesters, three hours a week.
128. Advanced Composition. Not primarily a course in creative writing. For students who wish further training in the organization and expression of ideas.

Jewett.
Second semester, two hours a week.
2 units.
130. Journalism - News Writing and Reporting. A general introduction to the field of journalism. Prerequisite to other courses in journalism. Laboratory fee, \$1.00.
(Not offered in 1939-1940.)
Southern.
First year, either semester, three hours a week.
3 units.
140. Journalism - Copy Reading and Editing. Prerequisite: English 130. Laboratory fee, $\$ 1.00$. (Not offered in 1939-1940.)

Southern.
Either semester, three hours a week.
3 units.
150. Practical Journalism. Admission only by consent of instructor. Assignments, hours, and units of credit by arrangement.

Jewett. Hours and credit to be arranged,
155. Advanced 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 discussed and compared.

Pilcher.
First semester, three hours a wrek.
3 units.
234. Creative Writing. Training in various forms of imaginative writing. Admission by approval of instructor. English 128 is normally a prerequisite.

Jewett.
Second semester, two hours a week. 2 units.

## SPEECH AND DRAMATICS

110 Elements of Speech. An introductory course designed to give the student an understanding of the fundamentals of voice and speech. Such instruction as is essential for the establishment of good speech habits is given in the anatomy and physiology of normal speech, minor defects of speech, and phonetics.

## Ansberry.

First year, either semester, two 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.

Simpson.
First year, either semester, two hours a week.
2 units,
122 Acting. A study of the techniques of acting, with exercises to develop them. Students will be cast in plays when possible. Prerequisites: English 110 and 121.

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.

[^5]3 units.
127. Argumentation and Debate. A study of the principles of argumentation as illustrated in debate. Essential to students expecting to engage in intercollegiate debate.

Ansberry.
First semester, two hours a week. 2 units.
170. Radio Speech 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.

Simpson.
Either semester, two hours a week. 2 units.
220. Public Speaking. A course in the organization and delivery of various types of speeches, with emphasis on those types which occur most often in everyday life.

Ansberry.
Second semester, two hours a week. 2 units.
227 Intercollegiate Debating. Preparation for and participation in intercollegiate debates. Credit is given only to those who have completed the basic course in Argumentation and Debate and is awarded at the end of the second semester.
Prerequisite: Engl. 127.
Ansberry.
First semester, two hours a week. 1-2 units.
235. Stage Directing. Theory and practice in the directing of plays under faculty supervision. Prerequisites: English 110, 121, 122,123 , and consent of the instructor.

Simpson.
Third year, either semester, two hours a week.
with laboratory to be arranged with the instructor. 3 units.
240. Children's Dramatics. Theory and practice in dramatics for grade school children. Prerequisite: English 123.

Simpson.
Fourth year, either semester, two lectures and three laboratory periods a week.

3 units.
258. Speech Correction. An introduction to the principles of speech correction designed primarily for prospective teachers in the elementary schools. Practical instruction is given in the recognition and treatment of the common defects of speech which occur among school children. The importance of the elementary school teacher in a program of speech improvement is stressed. A clinic in which students with defective speech may secure assistance is conducted in connection with this course.
259. Speech Correction. Practice in the application of the principles of speech rehabilitation.
Frerequisite: Engl. 258.
Ansberry.
First semester. 1-3 units.

## LITERATURE AND LANGUAGE

103, 104, 105, 106. Reading courses. Four semesters of directed reading. Required of all English majors in the first two years.

Myers and Jewett.
One hour a week. One unit each semester.
4 units.
Educ. 207 Children's Literature. This course is offered by the department of education, but may be counted toward the English major.

Educ. 225 High School Methods Seminar. Methods of teaching English in the junior and senior high school. A suggestive education elective for English majors.

Hours to be arranged 2 units.
151, 152 Survey of English Literature. Required of all sophomore English majors.

Schilling.
Second year, two semesters, three hours a week. 6 units.
153, 154 World Literature. Selections from the great literature of the world in translation. Lectures on the cultural background out of which the writings grew. Not open to English majors.

Myers.
Two semesters, three hours a week. 6 units.
201, 202. History of the Novel. The origins of prose fiction, the novel in England and America, with some attention to significant examples of foreign literature. Analysis of typical examples and reading of outside assignments.

Pilcher.
Two semesters. Three hours a week.
6 units.
203. History of the Drama. The English drama from the Middle Ages to the present, together with selective examples of foreign influences. Reading of representative plays of each period.

Schilling.
First semester, three hours a week. 2 units.
205, 206. Shakespeare. Critical study of ten plays. An introduction to various problems of Shakespearean scholarship.

Myers.
Two semesters, three hours a week.
6 units.

207, 208. Nineteenth Century Prose. The leading prose writers of England, with readings of their most significant works and study of their influences. The first semester deals with the Romantic generation-Lamb, DeQuincey, Hazlitt; the second semester deals with the Victorian.

Pilcher.
Two semesters, three hours a week. 6 units.
211, 212. Nineteenth Century Poetry. The first semester deals with the Romantic period, the second with the Victorian.
(Not offered in 1939-1940.)
Pilcher.
Two semesters, three hours a week. 6 units.
213. Modern Fiction. A study of the modern novel beginning with Meredith. No text, fee, $\$ 1.00$.
(Not offered in 1939-1940.)
Pilcher.
First semester, three hours a week.
3 units.
214. Contemporary American Fiction. A study of the most important contemporary writers; 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 1939-1940.)
Pilcher.
Second semester, three hours a week. 3 units.
216 Contemporary Poetry. English and American poetry of the twentieth century; techniques, aims, and significance.
(Not offered in 1939-1940.)
Myers.
Second semester, three hours a week.
3 units.
217. Modern Drama. The chief dramatic writers of the generation preceding the World War. Readings from representative plays in Dickinson's second series of modern dramas. Study of the theater as influenced by the national school of the period.
(Not offered in 1939-1940.)
Sehilling.
First scmester, three hours a week.
3 units.
218. Contemporary American Drama. A study of the American Drama since the World War, with special attention to experimental techniques.
(Not offered in 1939-1940.)
Schilling.
Second semester, three hours a week.
3 units.
221, 222. American Literature. A review of the national period of American literature. A study of the New England movement; transcendentalism; modern realism. Wide readings in the works of the leading poets and essayists.

Schilling.
Two semesters, three hours a week.
6 units.
223. Milton. The life of Milton, his relation to the Iiterary and social background of his period, and textual study of his chief works. (Not offered in 1939-1940.)
Pilcher.
First semester, three hours a week.
224. Pope. The life of Pope, his relation to the literary and social backgrounds of his period, and textual study of his chief works.
(Not offered in 1939-1940.)
Pilcher.
Second semester, three hours a week.
3 units.
226. 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.

Schilling.
Second semester, three hours a week. 3 units.
244. Chaucer. A study of Chaucer's poetry, language, and intellectual background.
(Not offered in 1939-1940.)
Myers.
Second semester, three hours a week. 3 units.
253, 254. History of the English Language. English from AngloSaxon times to the present. Readings in Old and Middle English. The development of the English syntax and vocabulary. Required of all English majors.

Myers.
Fourth year, two semesters, three hours a week.
390. Individual Problems. Open to graduates only.

Credit and hours to be arranged.

# DEPARTMENT OF HOME ECONOMICS 

## RANNELLS (Head of the Department), ELLSWORTH, BREWER

This department offers training in home economics designed to meet the needs of students of three groups: first, those who wish to teach in this field at the elementary or junior high school level; second, those who wish to meet the requirements for SmithHughes certification; and third, 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 select courses to make a total of 26 to 30 units, exclusive of 5 units in practice teaching. In the list below, courses marked with a star (*) are required of each major; other home economics courses to complete the major may be selected according to the wishes of the individual student. In addition to these departmental requirements all majors will elect the following courses in science: Chem. 110 Essentials of General Chemistry, Chem. 180 Organic Chemistry, and Biol. 120 Human Physiology.
Lower Division Courses ..... Units
*101 Elementary Nutrition ..... 3
*102 Clothing Selection ..... 3
104 Family Health ..... 2
*105 Applied Food Principles ..... 3
*108 Clothing Construction ..... 3
*109 Home Management ..... 3
110 Household Equipment ..... 3
Upper Division Courses ..... Units
*202 Problems of the Consumer ..... 2
*203 Child Development ..... 3
206 Food for the Family ..... 3
*207 Nursery School Education ..... 3
*208 Home Economics Education ..... 3
209 The Family ..... 3
*210 Directed Tcaching in Home Economics ..... 5
211 Advanced Clothing ..... 3
212 Advanced Nutrition ..... 3
214 Home Management House ..... 3
216 Home Furnishings ..... 3

## THE MAJOR IN HOME ECONOMICS Leading to smith-hughes certification

Those who elect to prepare for Smith-Hughes certification will select courses to make a total of 36 to 40 units, exclusive of the units required in practice teaching.

This preparation includes:
(a) A Bachelor's degree in a four year course covering all phases of homemaking, including preparation for the teaching of homemaking.
(b) Not less than 130 semester hours of credit.
(c) Related subjects that are accepted include chemistry, bacteriology, physics, biology, physiology, hygiene, sociology, and art, amounting to twenty-six hours.
(d) Eighteen semester hours minimum in psychology and education.
(e) Five semester hours of supervised practice teaching in homemaking.
(f) General academic courses and electives to make up the total of 130 semester hours.

In the list below, courses marked with a star (*) are required, other home economics courses to complete the major may be elected.
Lower Division Courses ..... Units

* 101 Elementary Nulrition ..... 3
*102 Clothing Selection ..... 3
*104 Family Health ..... 2
*105 Applied Food Princibles ..... 3
*108 Clothing Construction ..... 3
* 109 Horne Management ..... 3
110 Household Equipment ..... 3
Upper Division Courses ..... Units
202 Froblems of the Consumer ..... 2
*203 Child Development ..... 3
206 Food for the Family ..... 3
*207 Nursery School Education ..... 3
- 208 Home Economics Education ..... 3
209 The Family ..... 3
*210 Directed Teaching ..... 5
211 Advanced Clothing ..... 5
3
3
212 Advanced Nutrition ..... 3
*214 Home Management House ..... 3
216 Home Furnishings ..... 3


## 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 STUDENTS MAJORING IN HOME ECONOMICS

| FRESHMAN YEAR |  |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| Engl. 101 Composition ---.......... 3 | Engl. 102 Composition $\qquad$ 3 |
| Social Studies (Note 2)............. 3 | Social Studies $\qquad$ 3 |
| *P. E. 100 Hygiene...-.................. 2 | Biol, 120 Physiology .................. 3 |
| $\mathrm{P}^{\mathbf{P}}$ E. Activity ............................ 0.5 | *Art 100 Publ. Sch. Art......------... 2 |
| Elective ${ }^{\text {E............................ } 5}$ | P. E. Activity ............................ 0.5 |
| H. Ec. 101 Elem. Nutri. .-.-....... 3 | Elective ${ }^{\text {E }}$ - Cloth |
| 16.5 | H. Ec. 102 Cloth. Selec. ........... 3 |
|  | 16.5 |



JUNIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Psych. 200 Educ. Meas. ........... 3 | Directed Teaching .................... 10 |
| *Educ. 230 Elem. Curric. \& Tech. 2 | H. Ec. 216 Home Furnishings - 3 |
| H. Ec. 202 Probs. of Cons. ......... 3 |  |
| H. Ec. 203 Child Devel. ............... 3 | H. Ec. 207 Nurs. Sch. Educ. - 3 |
| H. Ec. 208 Home Econ. Educ. .- 3 | Educ. 210 Teaching Reading ${ }_{2}$ |
| nor or electi | H. Ec. 206 Food for Family .... 3 |
|  | Minor or elective |
| 16 | (16 or) 13 |

## SENIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Directed Teaching ..................... 10 | Educ. 250 Phil. of Educ. ............. 3 |
| H. Economics elective -.............. 3 | Education elective .............-........ 2 |
| F. Or Fc. 207 Nurs. Sch. Educ. -- 3 |  |
| Education elective ....-.-......... 3 | H. Ec. 214 Home Man. House .... 3 |
| Educ. 210 Teaching Reading 2 |  |
| H. Ec. 206 Food for Family .-.- 3 |  |
| Minor or elective .................--... 5 | Minor or elective ......................... 8 |
| (16 or) 13 | 16 |



THE COLLEGE BAND

## 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.

Rannells.
First year, first semester, three hours a week.
3 units.
H. Ec. 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 occasion.
Fee, twenty-five cents.
Ellsworth.
First year, second semester, three hours a week. 3 units.
104. 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.

Rannells.
Second year, second semester, two hours a week. 2 units.
105. Applied Food Principles. A study of general principles of cookery and the nutritive facts involved. Open only to majors in the department. Fee $\$ 3.00$.

Rannells.
Second year, first semester, six hours a week.
3 units.
106. Food Preparation and Meal Service. A consideration of the fundamental processes involved in food cookery, meal planning and table service with special emphasis given to the practical aspects.

Designed especially for non-major students interested in foods work. Fee $\$ 3.00$.

Rannells.
First or second year, first semester, six hours a week. 3 units.
107. Fundamentals of Clothing Construction. A course designed to offer to non-major students some experience in the practical aspects of clothing selection and construction.

Ellsworth.
Second year, second 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 design with due regard to suitability and cost. Open only to major students.

Ellsworth.
First or second year, second semester, six hours a wek. 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 in the future family. Open to junior and senior men and women.

Ellsworth.
Third or fourth year, second semester, three hours a week. 3 units.
210. Directed Teaching. Opportunity is offered to teach home economics one quarter to training school pupils under the supervision of the department of home economics.

Ellsworth.
Third or fourth year, either semester, every afternoon. 5 units.
211. Advanced Clothing. This course offers experience in wool and silk construction problems; advanced fitting problems, and a further study of good style and design. Opportunity is also offered for making and assembling illustrative material for the teaching of clothing.
Prerequisites: H. Fc. 102 and 108.
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, $\$ 1.00$.
Fourth year, second semester, five hours a week. 3 units.
214. Home Management House. An opportunity is offered for students to live in a family-sized dwelling for a six week period and have the chance of carrying on all the duties involved in homemaking. Open only to senior home economics majors.
Prerequisites: H. Ec. 104, 109, 203, 206.
Fee, $\$ 5.00$ and board and room at the regular college rate.
Brewer.
Fourth year, second semester.
3 units.
109. 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 $\$ 1.00$.
Brewer.
Second year, first semester, three hours a week. $\mathbf{3}$ units.
110. Household Equipment. The business of selecting and using all types of household equipment is studied in detail.

Rannells.
Second year, second semester, three hours a week. 3 units.
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 home equipment. Also a consideration of the part played by advertising, retail stores, and government agencies in influencing and protecting the consumer.

Ellsworth.
Third year, first semester, two hours a week. 2 units.
203. Child Development. A study of the physical, mental, emotional and social development of the pre-school aged child. Special emphasis is placed on habit formation and the correction of common behavior problems.

Brewer.
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. Open only to majors in the department.
Prerequisites: H. Ec. 101 and 105.
Fee, $\$ 3.00$.
Rannells.
Third year, second semester, six hours.
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, or Educ. 233.
Fee, \$1.00.
Brewer.
Third or fourth year, either 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 used in the teaching of this field, as well as an evaluation of available teaching aids.
Fee, $\$ 1.00$.
Ellsworth.
Third year, first semester, three hours a week. 3 units.
216 Home Furnishing. A study of the home and its furnishings, dealing with the selection, combination, and arrangement of furniture; color schemes; choice of wall finishes, floor coverings, draperies, and accessories.
Fee, fifty cents.
Rannells.
Third year, second semester.
3 units.

## DEPARTMENT OF INDUSTRIAL ARTS

## NEEB (Head of the Department), NAY, 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 successful 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
BUILDING 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.


30

## 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 Mitking ..... 3
Descriptive Geometry ..... 3
Advanced Cabinet Making ..... 3
SOPHOMORE YEAR
Wood Turning ..... 3
Mechanism ..... 3
Machine Shop Practice ..... 3
Job Analysis ..... 3
JUNIOR AND SENIOR YEARS
Auto Ignition ..... 6
Electrical Construction ..... 6
Direct Current Electricity ..... 6
Supervision and Administration of Industrial Arts ..... 3

## INDUSTRIAL ARTS MINORS

## MiNORS FOR STUDENTS NOT MAJORING IN THE INDUSTRIAL ARTS DEPARTMENT

## ARCHITECTURAL DRAWING MINOR

Units
105. Architectural Drawing ..... 3
106. Architectural Drawing ..... 3
201. Architectural Drawing ..... 3
202. Architectural Drawing ..... 3
211. Job Analysis ..... 2
212. Curriculum Making ..... 2
MECHANICAL DRAWING MINOR
313. Engineering Drawing ..... 3
114a or 114b Descriptive Geometry ..... 3
155. Elementary Mechanism ..... 3
156. Machine Design ..... 3
211. Job Analysis ..... 2
212. Curriculum Making ..... ${ }_{2}$
WOODWORKING MINOR
121. Flementary Cabinet Making ..... 3
122. Advanced Cabinet Jaking ..... 3
207. Carpentry ..... 3
208. Carpentry ..... 3
211. Job Analysis ..... 2
212. Curriculum Making ..... 2
217. Stair Building ..... 3
MECHANICS MINOR
111. Machine Shop Practice ..... 3
112. Machine Shop Practice ..... 3
164. Pattern Making ..... 3
160. Sheet Metal ..... 3
211. Job Analysis ..... 2
212. Curriculum Making ..... 216
ELECTRICAL MINOR
100. Elementary Electricity ..... 3
101. Auto Ignition ..... 3
102. Auto Ignition ..... 3
154. Electrical Toy Const. ..... 3
203. D. C. Electricity ..... 3
203a. D. C. Machinery ..... 3
211. Job Analysis ..... 2
212. Curriculum Making ..... 2
RADIO MINOR
115. Principles of Radio ..... 3
116. Radio Transmission ..... 3
215. Radio Receiving (equipment, design, and constr.) ..... 3

211. Job Analysis ..... | 2 |
| :--- |
| 2 |
212. Curriculum

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

| FRESHMAN YEAR |  |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| Engl. 101 Composition...-........... 3 | Engl. 102 Composition.-----........ 3 |
| Chem. 111 Inor. Chem......------4 | Chem. 112 Inorg. Chem............. |
| *Eiecrive ..................................... 2 | * Art 100 Publ. Sch. Art......-n.... |
| * Hygiene | *Elective |
| P. E. Activity. 121 Wood Work | P. E. Activity .................... 0.5 |
| I. Art 121 Wood Work $\qquad$ 3 | I. Art 122 Adv. Cab. Mkg.-.i... ${ }_{3}$ |
| 17.5 | 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. Ser. 100 Const. Govt. .-.-...... 3 |
| Social Studies (See Note 2).... 3 | Social Studles (See Note 2).... 3 |
| P. W. Activity....-.-...................-0.5 | P. E. Activity...-........................ 0.5 |
| Math. 107 Algebra...................... 3 | Math. 120 Trig, ........................... 3 |
| I. Art 164 Pat: Mkg. | I. Art 207 Mill Work |
| Forge ..... Art 163 Turning.................................. 3 | Or 1. Art 105 Arch. Draw 3 <br> Sheet Metal |
| 18.5 | 18.5 |

## JUNIOR YEAR

| First Samester Units | Second Semester Units |
| :---: | :---: |
| *Education Elective.................... 3 | *Psych. 200 Educ. Meas......--- 3 |
| 'Educ. 210 Tchng. of Reading 2 | *Education elective $\qquad$ $\stackrel{2}{10}$ |
|  | Directed Teaching --..---...-.......... 10 <br> Or the following group: |
| Phys. 111 Gen. Physics.............. 4 | \{Phys. 112 Gen. Physics.... $\left.{ }_{3}\right\}$ |
| 1. Art 208 Carpentry.........-... 3 | $\{1$. Art 218 Steel Square.... 3 3 |
| I. Art 154 Electr. Constr........ 3 | A. Art Housewiring -........-3] 2 |
| Job Analysis....----..... $\frac{2}{17}$ | 212 Curric. Makg....------ $\frac{2}{17}$ |

## SENIOR YEAR

| First Semester [!nits | Second Semester Units |
| :---: | :---: |
| *Educ. 230 El. Curric. Techn..... 2 Directed Teaching........................... 10 Or | *Educ. 250 Phil. of Educ........... 3 |
|  | Elective and Minor----............... 10 |
|  | Or the following group: |
| Elective and Minor...............-. 10 | [Phys. 112 Gen. Physics.... 4] |
|  | 1. Art 218 Steel Square.... 3 $\}$ |
| 1. Art 217 Stair Bldg............... 3 | [I. Art Housewiring......... 3] <br> 1. Art 302 Supv. and Adm. |
| 15 | 16 |

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. Men may substitute Art 121 Lettering in place of Art 110

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

## FRESHMAN YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Engl. 101 Composition..-........--. 3 | Engl. 102 Composition.....-......... 3 |
| Chem. 111 Inorg. Chem............. 4 | Chem. 112 Inorg. Chern............- 4 |
| *Elcetive ........................................ 2 | -Art 110 Publ. School Art.-..-----2 |
| "Hygiene ........................................ 2 | *Elective .........-.............................. 2 |
| P. E. Activity .-.....................-... 0.5 |  |
| 1. Art 101 Auto Ign.............---3 | 1. Art 102 Auto Ign................... 3 |
| Mech. or Arch. Drawing ........... 3 | Sh. Metal or Forge................... 3 |
| 17.5 | 17.5 |

## SOPHOMORE YEAR

| First Semester Enits | Second Semezter 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. E. Activity..........................- 0.5 |
| Math. 107 Algebra-------............. 3 |  |
| 1. Art 153 Elem. Elec............... 3 | I. 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 Units | Second Semester Units |
| :---: | :---: |
| *Education Flective......-............. 3 | *Psych. 200 Educ, Meas............. 3 |
| *Educ. 210 Teachg. of Readng. 2 | *Education elective ........................... ${ }^{2}$ <br> Directed Teaching.-.-.-....................... 10 |
| Phys, 111 Gen. Physics.............. 4 | Or the following group: <br> $\{$ Phys, 112 Gen. Physics..... 4$\}$ |
|  |  |
| 1. Art 211 Job Analysis............ 2 | I. Art 212 Curric. Making $-\cdots-\frac{2}{17}$ |
| SENIOR YEAR |  |
| First Semester Units | Second Semester Units |
| *Educ. 230 Elem, Curric. Techn. 2 | - Educ. 250 Thil. of Educ..................................................... ${ }^{3}$ Or the following group: |
| Directed Teaching........................................ 10 Or Elective.............. <br> I. Art 251 A. C. Electricity.... | $\{1.4$ Art 204a D. C. Mach....- 3 3 |
|  | (1. Art 216 Radio...-.-...........- 3) |
|  | 1. Art 252 A. C. Machines..--..... 3 |
| 15 | 16 |

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: IFist. 101, 102; 103, 104; and Econ. 131, 132.
Note 3. Men may substitute Art 121 Lettering in place of Art 110.

WOMEN'S ACTIVITY BLILDING

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



JUNIOR YEAR

|  |  | St Semester | Units |  | Second Semester | Units |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| *Psych. <br> *Educat | 200 | Educ. Meas. | ---3 | * Education | n Elective....... | 3 |
|  | *Education <br> I. Art 101 |  | Auto Ignition |  | *Educ. 210 | 0 Tch. of Readi | 2 |
|  |  |  | Directed Teaching.-.-.--............. 10 |
| 1. Art Ar Art 208 Carpentry <br> Or I. Art 207 Mill Work........ 3 |  |  |  | Or th | he following gro |  |
|  |  |  |  | $\left\{\begin{array}{l}\text { I. Art } 102 \text { Auto Ignition } \\ \text { Or 1. Art } 154 \text { Elec. Cons. } \\ \text { Or 1. Art } 164 \text { Patt. Mkg.. } 3\end{array}\right.$ |  |  |
| Or I <br> l. Art <br> I. Art <br> l. Art | 111 | Machine Shop............ 3 |  |  |  |  |
|  | 160 | Sheet Metal................ 3Job Analysis.......... |  |  |  |  |
|  | 211 |  |  |  |  | 1. Art | 112 Machine Sh |  |
| l. Art |  |  | 16 | li. Art | 208 Carpentry... | 2) |
|  |  |  |  |  |  | ) 15 |
|  |  |  | SENI | EAR |  |  |

First Semester Units
Educ. 230 El. Curric. Techn.-... 2
Directed Teaching............................ 10 Or
Minor and Elective. .10
I. Art 115 Radio............................. 3

Second Semester Units
*Educ. 250 Phil. of Educ.............. 3
Elective ...................................................... 10
Or the following group:
(I. Art 102 Auto Ignition Or 1. Art 154 Elec. Cons. Or 1. Art 164 Patt. Mkg... 3

1. Art 112 Machlne Shop.... 3
I. Art 208 Carpentry.
(1. Art 212 Curric. Mkg.
2. Art 116 Radio................................ 3

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. Men may substitute Art 121 Lettering in place of Art 110.

## 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.

Stewart.
First semester, three hours lecture a week.
Six hours preparation.

## 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.

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

3 units.
202. Architectural Drawing. Consists of a series of problems involving a study of the principles of architectural composition. Laboratory fee, $\$ 2.00$.
Prerequisite: I. Art 201.
Neeb.
Third year, second semester, one lecture, laboratory, six hours a week.
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, $\$ 2.00$.

Stewart.
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.
Stewart.
First year, 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.
Neeb.
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.

Neeb.
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.

[^6]
## WOODWORR

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, $\$ 2.00$.

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, $\$ 2.00$.

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 cabinct making. Fee, \$2.00.

Nay.
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, $\$ 2.00$.

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

Neeb.
Second year, second semester, laboratory, six hours a week. 3 units.
163. Wood Turning. Drills in spindle, face plate, and chuck work, together with practice in finishing and polishing.

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.
Neeb.
Second year, second semester, six hours a week.
3 units.
260. Advanced Wood Turning. Instruction in all kinds of builtup, segmented, and jointed projects.
Prerequisite: I. Art 163.
Laboratory fee, $\$ 2.00$.
Neeb.
Either semester, six hours a week.
3 units.
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, $\$ 2.00$.
Neeb.
Third year. first semester, one lecture, six hours laboratory a week.

$$
3 \text { units. }
$$

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, $\$ 2.00$.
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, $\$ 2.00$.
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 shect metal. Fee, $\$ 2.00$.

Neeb.
Second semester, six hours laboratory a week. 3 units,
230-a Woodwork. Designed to meet the needs of special students and students following the kindergarten-primary curriculum. Fundamental tool processes; design and construction of small projects
for the home and school; study of materials and their adaptation to constructive uses.
Laboratory fee, $\$ 2.00$.
Nay.
Either semester, five hours a week, 3 units.
230-b Woodwork. A continuation of I. Art 230-a with some machine work. Home mechanics problems are studied along with advanced design and construction of wood projects.
Prerequisite: I. Art 230-a, (Formerly I. Art 120.)
Nay.
Either semester, five hours a week. 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, $\$ 2.00$.

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, $\$ 2.00$.
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, $\$ 2.00$.
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, $\$ 2.00$.

[^7]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, $\$ 2.00$.
Nay.
Second semester, second year, slx hours laboratory. 3 unita.
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, $\$ 2.00$.
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, $\$ 2.00$.
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, $\$ 2.00$.
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, $\$ 2.00$.

[^8]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.
Prerequisite: I. Art 154.
Laboratory fee, $\$ 3.00$.
Stewart.
First year, first semester, two hours lecture, four hours laboratory.
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, $\$ 3.00$.
Stewart.
First year, secosd 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.
Prerequisite: I. Arts 165, Shop Math 20.
Laboratory fee, $\$ 2.00$.
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.
Stewart.
First semester, three hours a week.
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, $\$ 2.00$.
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.
Prerequisite: I. Art 116.
Laboratory fee, $\$ 3.00$.
Stewart.
Second year, first semester, two hours lecture, four hours laboratory.

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

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.
Prerequisite: Enrollment in I. Art 251.
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.

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.

Neeb.
Second year, second semester, two two-hour periods a week. 2 units.
220. Leadership. Open to junior and senior students who excel in workmanship, and who desire an opportunity to develop ability in organization and leadership. Students before enrolling in this course must have the approval of the head of the department.

Neeb.
Either semester. $1 / 2$ unit.
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, $\$ 2.00$.

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 211.
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 unfts.
390. Individual Problems. Designed to meet the needs of those graduate students specializing in the industrial arts who wish to investigate a problem of their own. In all cases the problem must be approved by the head of the department.

Neeb.
Either semester. Hours and credit to be arranged.
Students may undertake graduate work in Industrial Arts leading to the Master of Arts degree in Education. Six units in education are required, the remaining requirements in credit hours may be taken in the industrial arts courses, or in such other courses in the group numbered two hundred and up, as approved by the head of the department and the director of graduate study.

# DEPARTMENT OF FOREIGN LANGUAGES 

## CATTELAIN (Head of the Department), WILSON

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 Romance languages also can be earned by combining French and Spanish. Students interested in such a major should consult the head of the department. A minor may be elected in the German language.

Students working toward the master's degree and having earned a sufficient number of undergraduate credits in French or Spanish may find it to their advantage to complete a graduate minor in these subjects.

Thirty semester hours of credit are required for the major in foreign languages. Students majoring in Spanish are strongly advised to select French as a minor. English and social science also are acceptable as minors for students majoring in the foreign language field. A major in Romance languages can be arranged by taking a minor in French and a minor in Spanish.

Since no college or university accepts transfer of credit for less than a full year of a foreign language, students are cautioned against dropping a language after but one semester.

## TYPE CURRICULUM FOR STUDENTS MAJORING IN FOREIGN LANGUAGES



## JUNIOR YEAR

| St Semester Units | Second Semester Unit |
| :---: | :---: |
| *Educational Elective........-----3 | * Psych. 200 Educ. Meas. .-.-.---...... ${ }^{3}$ |
| *Educ. 210 Tchng. of Reading 2 |  |
|  | Directed Teaching ........................... 10 |
| Elective or Minor Fren. 103 Interm. French ----.......... ${ }_{3}$ |  |
| Fren. 103 Interm. French .-.-....... 3 | Or the following group: |
| Span. 201 Contemporary. | $\left\{\begin{array}{l}\text { Fren. } 202 \text { Classics.......-.... } \\ \text { Span. } 202 \\ \text { Span. } 204 \text { Literature.... }\end{array}\right\}$ |
| 16 | (16 or) 17 |
| SENIOR YEAR |  |
| First Semester Units | Second Semester <br> *Tduc. 250 Phil. of Educ...-- -- <br> Elective or Minor. $\qquad$ 3 3 9 |
| ${ }^{\bullet}$ Educ. 230 El. Curr. Techn....-- ${ }^{2}$ |  |
| irected Teaching...................... 10 |  |
| Or |  |
| Ginor and Elective..........-- 10 | Or the following group:$\left\{\begin{array}{l}\text { Fren. 201 Fren. Civilzn.... } \\ \text { Span. } 202 \text { Classics........... } \\ \text { Span. } 204 \text { Literature........ }\end{array}\right\}$ |
| an. 203 Literature...............-3 |  |
| -15 |  |

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 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 121 Lettering in place of Art 110.

## SPANISH LANGUAGE AND LITERATURE LOWER DIVISION COURSES

Spanish 101. Elementary Spanish. Designed to give the beginnet 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.

Wilson.
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.

Wilson.
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.
Wilson.
First semester, four hours a week.
3 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.
Wilson.
Second semester, four hours a week.
3 units.
151 Commercial Spanish. Designed to teach the elementary terms of business in whe Spanish language together with practical exercises. One year or more of Spanish is a prerequisite.

Cattelain.
First semester, two hours a week. 2 units.
152 Commercial Spanish. Deals with the different methods of writing business letters in Spanish; making invoices; bills of lading; other business papers.
Prerequisite: Span. 151.
Cattelain.
Second semester, two hours a week.
2 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.
207, 208 Nineteenth Century Spanish. The first semester includes a study of Romanticism in the theatre, the novel, and the poetry. The sccond semester emphasizes the "costumbristo" movement and the regional novel.

[^9]6 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.
222. Modern Spanish Poetry. An interpretation of selections from the writings of Ruben Dario and subsequent poets.

Wilson.
Second semester, three hours a week. 3 units.
224. Hispanic American Prose. A study of the outstanding novelists and essayists.

Wilson.
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

## FRENCH

French 101 Elementary French. For beginners. Self expression and oral drill are practiced throughout the course. The scientific method of pronounciation is emphasized. Text: Introduction to French Grammar, Ball-Meylan-Ball.

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. Text: same as for French 101, plus an easy French reader. Prerequisite: French 101 or one year of high school French.

Cattelain.
Second semester, four hours a week. 4 units.
103 Intermediate French. A grammar review, followed by a fast reading course. Texts: Barton and Sifich's New French Review Grammar, a French play or a French Short Story Book. Prerequisite: French 102, or equivalent.

204 French Civilization. A condensed review of French history, French literature, French system of education, and French arts, sculpture, and music.
Text: Petite Histoire de la Civilisation Francaise, or equivalent. Prerequisite: French 103, or equivalent.

Cattelain.
Second semester, three hours a week. 3 units.

## GERMAN

German 101 Elementary German. For beginners. The aim is to teach the principles of the German language and pronunciation. Students having previous training in German are advised not to register for this course, but to proceed at once to German 102.
Text: Beginning German, Schinnerer.
Cattelain.
First semester, four hours a week. 4 units.
102 Elementary German. A continuation of German 101. Oral and written exercises are increased in amount and progressive difficulty. Reading of easy German works.
Text: Continuing German, Schinnerer.
Cattelain.
Second semester, four hours a week.
4 units.
103 Intermediate German. A reading course with composition exercises.
Texts: In Deutschland, Alexis.
Prerequisite: German 102, or equivalent.
Cattelain.
First semester, three hours a week. 3 units.

202 German Literature. Reading of modern German works from present day writers.
Prerequisite: German 103, or equivalent.
Cattelain.
Second semester, three hours a week. 3 units.

# DEPARTMENT OF MATHEMATICS 

## WEXLER, Head of the Department

People study mathematics, first, because it is fun (except for those poorly prepared in the elementary subjects); secondly, because it is absolutely necessary in scientific work of any kind; the physical sciences, even the biological sciences, engineering, economics, insurance, finance, philosophy, and logic; thirdly, because the fundamental ideas of higher mathematics are the foundation of our modern civilization; and fourthly, because it is as important for the cultured person to have acquaintance with these great ideas and the men who conceived them as it is to know something about music, philosophy, art, and literature.

However, mathematics is a hard subject-not only does it require time and effort, but also ability to concentrate and to think straight, imagination, and originality.

The minor in mathematics consists of five semesters' work in mathematics, including advanced calculus. Transfers who are minoring in mathematics must take at least two semesters of mathematics at Tempe.

The major in mathematics must include Math. 241 and 242 Theory of Functions, and at least one unit in Math. 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 advanced calculus.

A student majoring in mathematics is advised to include in his program courses in physical science, French, or German. In physical science the student finds important application of his mathematics, while many books and papers are written in French and German.

The following curriculum 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 | Units | Second Semester | Units |
| Engl. 101 Composition | ----3 | Fngl. 102 Composition | --... 3 |
| Elective ........................ | ... 2 | *Art 110 Publ. School Art | ..... 2 |
| * P.E. 100 Hygiene .-.--. | -. 2 | Elective ..................... | - 2 |
| French or German .-. | .. 4 | French or German .- | ... 4 |
| P.E. Activity .............. | -. 0.5 | P.E. Activity ......... | . 0.5 |
| Math. 111 First Year M | .... 4 | Math. 112 First Year Math | .. 4 |
|  | 15.5 |  | 15.5 |

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 Elem. of Geog. ........... 3 |
| Social Studies (See Note 2) ........ 3 | Social Studies (See Note 2) ...... 3 |
| French or German ---................... 4 | French or German .-................... 4 |
| P. R. Activity ................................ 0.5 | P.E. Activity .-.......-..................... 0.5 |
| Math. 113 Second Year Math. .... 4 | Math. 114 Second Year Math. .... 4 |
| 17.5 | 17.5 |


| TUNIOR YEAR |  |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| *Education Elective ...................... 3 | *Psych. 200 Educ. Meas. .-............. 3 |
| *Educ. 210 Teaching of Reading 2 | * Education elective ...................... 2 |
| Phys. 111 College Physics ........ 4 | Phys. 112 College Physics ......... 4 |
| Minor or elective ........................- 3 | Minor or elective ......................... 3 |
| Math. 232 Adv. Calculus ................ 4 | Math. 250 Spec. Topics in Math. 4 |
| 16 | 16 |


| SENIOR YEAR |  |  |
| :---: | :---: | :---: |
| First Semester | Units | Second Semester Units |
| *Educ. 230 El. Curric. Techn, | .... 2 | *Educ. 250 Phil. of Educ. .............. 3 |
| Directed Teaching .............. | ..... 10 | Minor or elective ........................ 7 |
| Math. 241 Theory of Funct. | . 3 | Math. 250 Thesis Wk. in Math. |
|  | 15 |  |

The fifth year in the Secondary Curriculum should include one or two advanced courses in mathematics each semester.

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 learring other than mathematics or education.
Note 4. Men may substitute Art 121 Lettering 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

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

Wexler.
Five hours a week throughout the year.
8 units.
Math. 113, 114. Second Year Mathematics. Includes Differential and Integral Calculus, and further work in Analytic Geometry. A year's course, but credit may be given for either semester, by special permission.
Prerequisite: Math. 112.
Wexler.
Five hours a week throughout the year. 8 units,
221 Advanced Calculus. Includes Multiple Integration, Partial Differentiation, Line Integrals, Applications, and other topics as far as time allows.
Prerequisite: Math. 114.
Wexler.
First semester, five hours a week. 4 units
224 Special Topics in Mathematics. Subject matter will vary from year to year, but will be connected with the teaching of high school mathematics.
Prerequisite: Math. 114.
Wexler.
Second semester, five hours a week. 4 units.

## FOR SENIORS AND GRADUATES

Not all of the following courses are offered in any one year.

## 241 Theory of Functions of Real Variables.

Prerequisite: Math. 232 and grades above average in previous mathematics courses.

Wexler.
First semester, five hours a week. 4 units.
242 Theory of Functions of a Complex Variable. Prerequisite: Math. 241.

Wexler.
Second semester, five hours a week. 4 units.

250 Thesis Work in Mathematics. May be taken more than once for credit.
Required of all mathematics majors.
Wexier.
Either semester, hours to be arranged. 1 or 2 units.
301 Theory of Numbers.
Wexler.
First semester, four hours a week. 3 units.
302 Theory of Finite Groups.
Wexler.
Second semester, four hours a week. 3 units.
311 Differential Geometry.
Wexler.
First semester, four hours a week. 3 units.

## 312 Projective Geometry.

Wexler.
Second semester, four hours a week.
3 units.

# DEPARTMENT OF MUSIC 

## HARELSON (Head of the Department), BARKLEY, HARGISS, TATA, QUAID, LYON, BULLOCK

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, a minimum of one year of class instrumental instruction is required of all music majors. A second year of instrumental instruction is provided for in the music curriculum and will be required of students not majoring in violin or other orchestral instrument.

Two years of applied voice are required of music majors, of which one year may be in class voice, and one year of private instruction.

Satisfaction of the requirement for graduation in all forms of applied music will be determined on the basis of proficiency in performance, rather than on the number of lessons which have been taken.

Students who are able to meet the specified 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 a minimum of thirty semester hours of work in this field, with a maximum of fifty-three hours acceptable for graduation, a suitable selection and an appropriate sequence of courses is indicated in the type curriculum outlined
for music majors. Substitutions and adjustments to adapt this curriculum to the needs of individual students may be made subject to the advice and with the approval of the head of the department.

## THE MINOR IN MUSIC

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

## SUGGESTED SEQUENCE FOR THE MINOR IN VOCAL MUSIC

Units
Mus. 100 Fundamentals ........................................................................................ 2
Mus. 102 Advanced Sight Singing and Ear Training........................ 2
Mus. 109 Music Appreciation ................................................................................ 2


Glee Club, Band, or Orchestra_-................................................................... 3
Total ...................................................................................................... 15

## SUGGESTED SEQUENCE FOR THE MINOR IN INSTRUMENTAL MUSIC

Mus. 100 Fundamentals ..... 2
Mus. 102 Advanced Sight Singing and Ear Training ..... 2
Mus. 109 Music Appreciation ..... 2
Mus. 103 Harmony I ..... 3
Mus. 207 Instrumentation and Conducting ..... 3
Band or Orchestra ..... 3
Total ..... 15
MUSIC FEES
PIANO--Per semester
Two private lessons a week (half hour) ..... $\$ 36.00$
One private lesson a week (half hour) ..... 27.00( $\$ 25.00$ if paid in advance.)
Class lessons, four in a class (one hour) ..... 10.00
( $\$ 9.00$ if paid in advance)
Class lessons, two in a class (one hour) ..... 13.50
( $\$ 12.50$ if paid in advance.)
Class piano methods ..... 18.00
VOICE-
Two private lessons a week (hall hour) ..... 27.00
One private lesson a week (half hour) ..... 13.50
Two class Iessons a week (one hour) ..... no fee
Class lessons in voice are restricted to music majors and minors.
VIOLIN-One private lesson a week (one hour)27.00
VIOLONCELLO-
Two private lessons a week (half hour) ..... 27.00
One private lesson a week (half hour) ..... 13.50
BAND AND ORCHESTRA INSTRUMPNTS
Two private lessons a week (half hour) ..... 27.00
One private lesson a week (half hour) ..... 13.50

## TYPE CURRICULUM FOR STUDENTS MAJORING IN MUSIC



## 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 music majors and minors.
102. Advanced Sight Singing and Ear Training. Further development of music reading with special attention to aural recognition and writing. Required of music majors and minors.
Prerequisite: Music 100, or equivalent.
Harelson.
First year, second semester, two hours a week. 2 units.
103. Harmony I. The study of scale forms, intervals, all triads and their inversions in major and minor keys; harmonization of given parts and simple composition of original examples in fourpart harmony, both close arid open spacing being employed.
Prerequisite: Music 102 or equivalent.
Tata.
Second year, first semester, three hours a week.
3 units.
104. Harmony II. A continuation of Harmony I. The study of regular and irregular resolutions of the dominant, diminished, and secondary seventh chords and their inversions; unessential notes; modulations, harmonization of given parts and composition of original examples in four- and three-part harmony. Required of all music majors.
Prerequisite: Music 103 or equivalent.
Tata.
Second year, second semester, three hours a week. 3 units.
105, 106. Applied Music-Voice. Voice building for beginners. Attention is given to resonance, breath support, diction, and interpretation. Required of music majors unless excused by the head of the department.

Harelson.
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 music majors unless excused by the head of the department.
Prerequisite: Music 105, 106 or equivalent.
Harelson.
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 student and to the prospective teacher of music. Required of music majors.

[^10]2 units.

111, 112 Class Voice Lessons. For students interested in voice with little or no previous training. The work includes: (1) principles of voice training, breathing, resonance, dictions; (2) study of songs as a means of establishing principles; (3) vocal performance and criticism.

Barkley.
Either semester, 2 lessons a week. 1 unit.
113, 114 Piano-Private Instruction. Courses are arranged according to the needs of the student. Each student is requierd to play before the music faculty once during each semester. Advanced students play in recital at least once during the semester.

Quaid.
Bullock.
Any year, either semester, one or two lessons a week
1 or 2 units each semester
115, 116 Piano-Private Instruction. Second year.
121, 122 Class Piano Lessons. (For music majors or minors, first year.) Study of the elements of piano; keyboard technique, scales, chords, intervals, ornamentation, sight-reading of simple folk songs and studies, Straebog, and others. Second semester, Bach, Czerny, Burgmueller, piano literature, community song accompaniment.

Quaid.
First semester, 2 lessons a week. 1 unit.
Second semester, 1 lesson a week. 1 unit.
123, 124 Class Piano Lessons. (For music majors and minors, second year.) Study of more advanced keyboard technique. Sight reading and improvisation of accompaniments; memorization of simple repertoire, Heller and Czerny. Second semester, continuation.

Quaid.
Both semesters, 1 Iesson a weck.
1 unit.
125, 126 Class Piano Lessons. (For the Kindergarten-Primary majors). Study of elements of keyboard technique, sight-reading of folk song material in all keys. Second semester varied accompaniments, improvisation of simple accompaniments, kindergartenprimary rhythms.

[^11]First semester, 2 lessons a week. 1 unit.
1 unit.
127, 128 Class Piano Lessons. (For the Kindergarten-Primary major, second year). Further study of rhythms and types of music suitable to kindergarten-primary, technique necessary to fluency. Second semester, continuation.

143, 144 Keyboard Harmony. This course includes harmonization of melodies both from the soprano and the bass; improvisation and transposition at the keyboard. Open to all qualified students. Required of music majors.
Prerequisite: Music 100, 102 and the ability to read at sight music of hymn-tune difficulty.

Builock.
Second year, both semesters, 2 hours a week. 1 unit.
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.

Harelson.
Any year, either semester, four hours a wreek unless otherwise arranged.

1 unit.
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 bencfit of public appearance in the midwinter and spring.

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

1 unit.
155, 156 Class Instruction in Violin. Open to beginners only. Affords the opportunity for study of the fundamentals in violin and ensemble-playing. Required of music majors.

Tata.
Either semester, two hours a week. 1 unit.
161, 162 Class Instrumental Instruction. Brass, reed, and percussion instruments. Students sufficiently proficient are admitted to the beginners' orchestra, college band, or college orchestra. Required of all music majors.

Lyon.
Either semester, two hours a week. 1 unit each semester.
163, 164 Beginner's 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 beginner's orchestra. Application for enrollment should be made to the director.
Prerequisite: Mus. 161, 162, or equivalent.
(Not offered in 1939-40.)

## Lyon.

Either semester, two hours a week.
1 unit.

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.
Lyon.
Either semester, five hours a week, unless otherwise arranged. 1 unit.
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.
Lyon.
Either semester, five hours a week, unless otherwise arranged. 1 unit.
171, 172 Violin-Private Instruction. The study of violin technique and of works by representative classical and modern composers. Graded according to the needs of the individual student.

Tata.
Either semester, one lesson a week. 1 unit.
173, 174 Violin-Private Instruction. Second year.
Tata.
Either semester, one lesson a week.
1 unit.
181, 182 Violoncello-Private Instruction. The study of cello technique and of works by representative classical and modern composers, graded according to the needs of the individual pupil.

Hargiss.
Either semester, two lessons a week.
1 unit.
187, 188 Band and Orchestra Instruments-Private Instruction, Students with or without previous training may elect this course. Instruction is adapted to the needs of the individual student.

Lyon.
Either semester, two lessons a week.
1 unit.

## UPPER DIVISION COURSES

Mus. 201 Harmony 111. Continuation of Harmony I and II. Includes modulations, chromatic harmony, secondary sevenths, altered chords, analysis and free composition.
Prerequisite: Mus. 104 or equivalent.
Tata.
Third year, first semester, three hours a week. 3 units.
202 Literature and History of Music. A cultural course dealing with the various epochs in the development of music from primitive to modern times. Required of all music majors.
Prerequisite: Mus. 109 or equivalent.
Tata.
Fourth year, second semester, three hours a week. 3 units.
203, 204 Class Piano Methods. Designed for the teacher of piano class work in elementary grades and the junior or senior high schools. Many piano courses are examined and discussed. The Oxford Course is used in observation and practice teaching classes. Prerequisite: Ability to play piano music of fourth grade difficulty. Fees, $\$ 18.00$ per semester plus price of materials.

Quaid.
Third year, both semesters, one bour a week. 2 units.
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. Prerequisites: Glee Club and theory courses of first three years, or equivalent.

Harelson.
Third 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.
Harelson.
Third year, second semester, two hours a week.
1 unit.
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 substi-
tution. Required of music majors unless registered for Mus. 205. Prerequisites: band or orchestra, and theory courses of the first three years, or equivalent.

Lyon.
Third year, first semester, three hours a week.
3 units.
211 Music Education-Primary and Intermediate Grades. The study of the methods and materials used in the elementary grade music program. For music majors and minors.
Prerequisite: A knowledge of music fundamentals and elementary sight singing, and ability to sing and to play the piano.

Hargiss.
Third year, first semester, three hours a week. 3 units.
212 Music Education in Junior and Senior High School. The study of the musical activities in the upper grades or junior high school and the senior high school. Survey of problems, methods, materials, rehearsal techniques, and practice in conducting. For music majors. May be elected by minors with permission of instructor.

Hargiss.
Third year, sccond 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.
(Not offered in 1939-1940.)
Hargiss.
Fourth year, second semester, three hours a week. 2 units.
233, 234 Piano-Private Instruction. Third year.
235, 236 Piano-Private Instruction. Fourth year.
$\mathbf{2 5 0}$ Music in Kindergarten and Primary Grades. Includes study of the child voice, integration of music into classroom activities, methods used in presenting rote songs, rhythmic activities, listening, creating and the beginning of music reading.
Prerequisite: A knowledge of music fundamentals, and ability to play simple accompaniments and to sing simple children's songs.

Hargiss.
Third year, either semester, 2 hours a week. 2 units.
271, 272 Violin-Private Instruction. Third year.

273, 274 Violin-Private Instruction. Fourth year. Tata.

1 unit.
284-g Counterpoint. A comprehensive review of all unessential notes in harmony. The work is devoted to the specific details of contrapuntal discipline as revealed in the two and three-part inventions of Bach.
Prerequisite: Music 201.
(Not offered in 1939-1940.)
Tata.
Third or fourth year, second semester, 3 hours a week. 3 units.
288-g Composition. Analysis and practical application of harmony as applied to the smaller formal designs and methods of structural treatment in musical composition.
Prerequisite: Music 201.
Tata.
Third or fourth year, second semester, 3 hours a week. 3 units.
292-g Form and Analysis. The intimate study of various musical forms with emphasis on the development and application of the sonata form to the symphony and chamber music. Admission by permission of instructor.

Tata.
Second semester, three hours a week. 3 units.

## DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION

LAVIK (Head of the Department), POMEROY, STEVERSON, ALLEN, HOWELL MURPHY (Director for Women), WOOD, GILLANDERS
The department of Health and 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 in health and physical education.

## ATHLETICS FOR MEN

Opportunity is provided for all men to take part in intramural and in intercollegiate athletics. The intramural program is being expanded each year and is growing in popularity and
interest. Participation in intercollegiate athletics is subject to the eligibility rules of the Border Faculty Athletic Conference. Other schools included in the Border Conference are: University of Arizona, Arizona State Teachers College at Flagstaff, New Mexico State College, University of New Mexico, Texas Technological College, and Texas College of Mines. Athletic relations are enjoyed also, with members of the Rocky Mountain Conference, the Far West Conference, and the Southern California Conference.

## FEES AND DEPOSITS

A deposit of one dollar is required for the use of a combination lock. Twenty-five cents of this deposit is retained as rent when the lock is returned in good condition. A towel deposit of $\$ 1.50$ is charged of which $\$ 1.00$ is retained as a laundry fee per semester.

## ATHLETICS FOR WOMEN

The Department of Physical Education for women offers a broad instructional program of athletic activities, and with the cooperation of the Woman's Athletic Association, sponsors an extensive intramural program of dance and sports for all women students.

Sport days and Play days with the University of Arizona and Phoenix Junior College afford opportunity for seasonal game contact. Telegraphic tournaments in archery, state and city tournaments in Tennis and Golf also are entered during the year.

## MAJORS AND MINORS

The department offers a four year curriculum leading to a major in health and physical education. Before a major can be started, however, there are certain core curriculum requirements to be met. These are listed as follows:


The subjects listed above, since they are required of all students, cannot be applied toward a major or a minor. Participation in varsity athletics may be substituted for the second year of required Physical Education activity but Sports Survey is required of all men students even if they are participating in freshman athletics. For women students majoring or minoring in Health and Physical Education, it is required that four units of activity credit be completed. These units should be as follows:

1 unit dance activities
1 unit major sports activities
1 unit individual or dual sport activities
1 unit elective
The minimum departmental requirement for a major is 24 units and for a minor, 15 units. The following courses are required for a major in health and physical education.

The following courses are required for a minor in health and physical education:

Biol. 120 Human Physiology ............................................................................. 3
P.F. 161 The Dance in Education (Required of women)...................... 2
P.E. 162 Techniques of Dancing (Required of wromen)........................ 2
P.E. 175, 176 Demonstration and Observation Teaching-.................... 4
P.E. 215. 216 Techniques of Physical Education........................................ 4

I'E. 217, 218 Coaching Major Sports (Required of men)....................... 4
Biol. 231 Human Anatomy ….............................................................................. 3
P.E. $236-\mathrm{g}$ Organization and Administration of Physical Ed........... 3
P.E. Activity (third and fourth years).......................................................... 2

For the minor in Health Education, the following courses are required:


## GRADUATE COURSES

The following courses will be offered for graduate credit:

Units

P.E. 335 Problems in Physical Education............................................................. 3
P.E. 336 Seminar in Physical Education.............................................................................................

In addition, graduate credit may be given for Physical Education 251, Kinesiology; Physical Education 235, Organization and Administration of Health Education; and Physical Education 236, Organization and Administration of Physical Education.

# TYPE CURRICULUM FOR STUDENTS MAJORING IN PHYSICAL EDUCATION 



## JUNIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Psych. 200 Educ. Meas.............-3 | Directed Teaching ..................... 10 |
| *Educ. 210 Teaching Reading.-.-2 | Or the following group: |
| Minor and elective (wm.) .-..... 6 | *Ed elective ............................. 5 |
| Minor and elective (men) ---. 4 | Minor and elective --....-------- 5 |
| P.E. 215 Tech. of Phys. Ed..... 2 | Minor or elective (wm.).......... 4 |
| P.E. 217 Coaching (men) ........ 2 | Minor or elective (men) ......--- 2 |
| P.E. 251 Kinesiology .............. 3 | P.E. 216 Tech. of Phys. Ed.... 2 |
| P.E. Activity .-.-........................ 0.5 | P.E. 218 Coaching (men).......... 2 |
| 16.5 | P.E. Activity .-............................ 0.5 |

## SENIOR YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Ed 230 El. Curric. Tech. $-\ldots-\ldots-{ }^{2}$ | *Ed 250 Phil. of Ed..................... 3 |
| Directed Teaching ......-.............. 10 | Elective and minor .................... 5 |
| or | Or the following group: |
| Minor and electlve ........-...... 10 | *Ed Elective --.......................... 5 |
| P.E. 235 Org. and Admin. of |  |
| Health Education ..------------3 | P.E. 236 Org. Admin. P. Ed... 3 |
| P.E. Activity................................ 0.5 | P.E. Activity .........................-...... 0.5 |
| 15.5 | 16.5 |

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 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 from the following courses: P.E. 167 First Aid; P.E. 170 Camp Fire Leadership; P.E. 172 Scout Leadership; P.E. 185 Principles of Health Education; P.E. 232 Social Recreation Leadership; P.E. 207-208 Coaching (women); Engl. 124 Pageantry.
THE DESERT FASCINATES

# DESCRIPTION OF COURSES IN HEALTH AND PHYSICAL EDUCATION 

## ACTIVITY COURSES FOR MEN

P. E. 107, 108 Sports Survey. Instruction in individual and team sports. Required of all men in the freshman year. Participation in varsity or freshman athletics may not be substituted.

Pomeroy.
First year, two semesters, two hours a week. $1 / 2$ unit each semester.
P. E. 111, 112 Athletics. Open to men who are accepted as candidates for varsity or freshman teams representing the college.

Staff.
Second year, or following, two semesters, five hours a week.
$1 / 2$ unit each semester.
P. E. 115, 116 Minor Sports. A continuation of P. E. 107, 108 with greater emphasis placed upon individual skill. The course includes such sports as golf, tennis, swimming, handball, volleyball, badminton, shuffleboard, deck tennis, hiking. Not limited to physical education majors.
Fee, fifty cents.
Staff.
Second year, two semesters, two hours a week. $1 / 2$ unit each semester.

## 125-126. Boxing.

Allen.
Second year or following, two semesters,
two hours a week. $\quad 1 / 2$ unit each semester.

## 127-128. Wrestling.

Allen.
Second year or following, two semesters, two hours a week.
$1 / 2$ unit each semester.

## THEORY COURSES FOR MEN

172. Fundamentals of Scouting. The philosophy of Scouting organization and practices. Actual practice in Scoutcraft and individual advancement. Opportunity for leadership in the Ira D. Payne Training School Scout Troop. Completion of the course entitles participants to receive Elements of Scoutmastership Certificates, Parts I and II.

Steverson.
Second or third year, first semester, three hours a week. 3 units.
217-218. Coaching (Men). Theory and technique of major sports. These include football, basketball, track and baseball. Required of all men who major in health and physical education.

Staff.
Third or fourth year, two semesters, three hours a week. 2 units.
256. Advanced Scouting. Principles of Scout and Cub leadership, and specialization courses in scouting. Successful completion of the course entitles participants to receive Principles of Scout and Cub Leadership Certificates Parts I and II and Specialization Certificates earned.
Prerequisites: Fundamentals of Scouting, P.E. 172 or possession of Elements of Scoutmastership Certificates Parts I and II.

Steverson and Roosevelt Council, Inc., Staff.
Third or fourth year, second semester, three hours a week. 3 units.

## ACTIVITY COURSES FOR WOMEN

Two semester hours of activity courses are required of all women during their freshman and sophomore years. One unit must be elected from the sport activities, the other unit from the dance activities. Not more than one-half unit in Beginning Social Dance may be applied toward this requirement.

101 Sports Survey. Badminton, volleyball, and basketball.
Staff.
First semester, iwo hours a week. $1 / 2$ unit.
102 Sports Survey. Speedball, softball, track, and minor team games. Staff.
Second semester, two hours a week. $1 / 2$ unit.

## 103, 104 Athletics.

Staff.
Both semesters, four hours a week. $1 / 2$ unit each semester.
105, 106 Restricted Physical Education.
Staff.
Two semesters, two hours a week. $1 / 2$ unit each semester.

## THEORY COURSES FOR WOMEN

207-208. Coaching. Theory and technique of major and minor sports. Participating and officiating in games.

Murphy.
Third or fourth year, two hours a week, two semesters.

2 units each semester.
170. 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 receiving 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 follows
closely the enlargement and improvement of the program as outlined in the new manual of 1937. (By special arrangement with the instructor, this course may be open to sophomores or to special students.)

Anderson.
Third or fourth year, either semester, one hour a week. 1 unit.

## ACTIVITY AND THEORY COURSES (COURSES OPEN TO BOTH MEN AND WOMEN)

110-a. Tap and Clog. (Beginning) Elementary techniques; simple routines.

Gillanders.
Either semester, two hours a week. $1 / 2$ unit.
110-b Advanced Tap and Clog. Advanced techniques and routines. Prerequisite: P.E. 110-a.

Gillanders.
Either semester, two hours a week. $\quad 1 / 2$ unit.
170 Folk and Character Dance. A study of authentic dances suitable for elementary grades and high schools.

Wood.
Either semester, two hours a week. $1 / 2$ unit.
120 Golf. Beginning and advanced sections.
Fee, fifty cents.
Pomeroy, 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.

Steverson.
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.
Fee, beginners, $\$ 1.00$; advanced sections, fifty cents.
Wood.
Either semester, two hours a week.
1/2 unit.
150-a Social Dancing. Beginning course in the fundamentals of this type of dancing. (Not more than one semester accepted for required physical education credit.)

Gillanders.
Either semester, two hours a week.
1/2 unit.
150-b Advanced Social Dancing. Advanced steps and combinations; practices in current steps.

Gillanders.
Either semester, two hours a week.
1/2 unit.

## 180-a Beginning Modern Dance.

Gillanders.
Either semester, two hours a week. $1 / 2$ unit.

## 180-b Advanced Modern Dance.

Prerequisite: P.E. 180-a.
Gillanders.
Either semester, two hours a week. $1 / 2$ unit.
161. Dance in Education. History and philosophy of the Dance. Educational values of folk, tap, social and modern dancing. Dance composition and rhythmic analysis. Required of all women majors and minors.
Prerequisite: P.E. 117; 110.
Fee, fifty cents.
Gillanders.
Second year, first semester, three hours a week. 2 units.
162. Techniques of Dancing. Method of teaching folk, tap, social and creative dancing. Problems in dance production-costume-organization. Graded programs in Dance for elementary and high schools. Required of all women majors and minors.
Prerequisite: P.E. 161.
Wood.
Second year, second semester, three hours a week. 2 units.
190 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.

Steverson.
Second year, first semester, one hour a week.
1 unit.
185. Principles of Health Education. History and principles of School Health Education. Interpretation of aims and objectives of School Health Education, also consideration of health maintenance and health attitudes.
Required of all students minoring in Health Education.
Murphy.
Second year, first semester, three hours a week. 3 units.
109 Introduction to Physical Education. An orientation and guidance course. Required of all freshman students majoring in physical education.

Staff.
First year, first semester.
$1 / 2$ unit.
175, 176 Demonstration and Observation Teaching. Required of major students prior to student teaching.

Staff.
Second year, both semesters. Two units each semester.
4 units.

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. Staff.
Third year, two semesters, three hours a week. 2 units each semester.
230. Social Recreation Leadership. The principles and technique of Leadership in social-recreation activities for the home, school and community. Opportunity for promoting, organizing and directing social games, social mixers, community singing, hikes and outings, recreational dramatics, stunts, home evenings and family play.

Steverson.
Third or fourth year, two hours a week. 2 units.
235.g. Organization and Administration of Health Education. Organization of education for health. The areas of health service, health instruction and physical education are shown in their relationships to each other and to the general educational scheme in schools and communities of different sizes. Required of minors in health education and majors in health and physical education.

[^12]236-g. Organization and Administration of Physical Education. A study of the organization, administration, and supervision of the physical education program in elementary and high schools.

[^13]251-g. Applied Anatomy and Kinesiology. Origins, insertions, and actions of muscles with considerable emphasis upon postural problems.
Prerequisite: Biol. 231, Human Anatomy.
Pomeroy.
Third year, first semester, three hours a week. 3 units.
Biol. 120. Human Physiology.
Irish.
Second year, first semester, three hours a week. 3 units.
Biol. 231. Human Anatomy.
Laboratory fee, $\$ 2.00$.
Irish.
Second year, first semester, three hours a week. 3 units.
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.
335. Problems in Health and Physical Education. Readings, investigations and reports on current problems in Health and Physical Education.
Fee, $\$ 1.00$.
Murphy, Lavik.
Fifth year, first semester, three hours a week.
3 units.
336. Seminar in Health and Physical Education. Study of practices and procedures in the various areas of Health and Physical Education.
Fee, \$1.00.
Murphy, Lavik.
Fifth year, second semester, three hours a week 3 units.
354. Physiology of Exercise. The effects of exercises upon bodily functions.
Prerequisite: Biol. 120, Human Physiology.
Lavik.
Fifth year, second semester, three hours a week. 3 units.

# DEPARTMENT OF PSYCHOLOGY 

## GRIMES (Head of the Depariment), BURKHARD, SKINNER, WERT

The major in Psychology shall consist of not less than twentyfour semester hours of work in this field. The minor shall consist of not less than fifteen hours. The courses to constitute the major or the minor will be selected to meet the needs of the individual student subject to the approval of the head of the department.

The course, Psych. 200, which is required of all regular students, may be counted toward the major in psychology, but Psych. 100 may not be so counted.

## DESCRIPTION OF COURSES

Psych. 100. Elementary 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.

Grimes, Skinner.
Second year, either semestor, three hours a week. 3 units.
200. Educational Measurements. Deals with the philosophy, interpretation, and construction of tests of intelligence, achievement, aptitude, interest, attitude, and other personality traits. Some practice is provided in the construction by the students of simple tests suiteble for use in the public school. Statistical techniques useful in the interpretation of test scores are considered.
Prerequisite: Psych. 100.
Wert.
Third year, either semester, three hours a week. 3 units.
211-g. Statistical Methods. Elementary methods of collection, analysis, and interpretation of data in the fields of education, sociology, and economics. Includes the presentation of data in tables and graphs, averages, index numbers, variability, sampling theory, and simple methods of correlation.
Prerequisite: Psych. 100.
Wert.
First. semester, two hours a week.
2 units.
212-g. Advanced Statistics. Includes further methods of correlation, regression, analysis of trend, curve fitting, and partial and
multiple correlation. Practical applications are made to education, sociology, and economics.
Prerequisite: Psych. 211-g.
Wert.
Second semester, two hours a week. 2 units.
208.g. Abnormal Psychology and Mental Hygiene. A brief study of the more prevalent types of insanity. Some consideration is given to mental deficiency. The interaction of the psychological and environmental factors determining the well-being of the school child, with special reference to the origin, development, treatment, and prevention of variant behavior problems of children.
Prerequisite: Psych. 100.
Skinner.
Second semester, three hours a week.
3 units.
213-g. Educational Psychology. Based on the information, principles, and experimental findings of psychology. A study of original nature, the learning process, laws of learning and habit formation, and economical principles of learning.
Prerequisite: Psych. 100.
Skinner.
First semester, three hours a week.
3 units.
214-g. Applied Psychology. An application of psychological principles in business, industry, medicine, law and personnel. Consideration is given to social and vocational problems. Factors making for personal efficiency are analyzed. Important vocational and personality tests are studied.
Prerequisite: Psychology 100.
Skinner.
Second semester, three hours a week.
3 units.
224-g. Clinical Psychology. A survey of clinical work on diagnosis and adjustment of problem children. The more important intelligence, performance, and achievement tests are analyzed and demonstrated. Educational and other adjustment problems are diagnosed and appropriate remedial measures are suggested. Individual testing.
Prerequisite: Psych. 100 and 200.
Fee, $\$ 1.00$.
Skinner.
Second semester, two hours a week.
2 units.
225-g. Social Psychology. Advanced 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 edu-
cation, industry, commerce, and social organization are analyzed in the light of modern psychology.
Prerequisite: Psych. 100.
Burkhard.
First semester, three hours a week. 3 units.
231-g. Psychology of Adolescence. A presentation of 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: Psych. 100.

Skinner.
First semester, two hours a week. 2 units.
234. 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 years of age is especially emphasized. Designed to meet the needs of those planning to teach in the kindergarten, primary, or intermediate grades.
Prerequisite: Psych. 100.
Skinner.
Second semester, three hours a week. 3 units.
$\mathbf{2 4 1 - g .}$ Psychological Problems and Research. Designed for upper class and graduate students who wish to become acquainted with psychological methods of research and the results of important investigations. The student is expected to carry out some individual research project, preferably in line with his interests. Credit determined by amount of work done.
Prerequisite: Psychology 100 and 200.
Skinner.
First semester, two hours a week. 2 or 3 units.
308. Learning and Individual Differences. A study of the nature of learning and individual differences. Various theories of learning are considered.
Prerequisite: at least two courses in psychology.
Skinner.
Second semester. 2 units.
313. Advanced Educational Psychology. A critical survey of the experimental literature of psychology with special emphasis on applications to the problems of teaching, administration, and super. vision.
Prerequisite: at least two courses in psychology.
(Not offered in 1939-1940.)
332. Psychology and Education of Exceptional Children. Presents the psychological principles most essential for the understanding and education of exceptional children. Considers the education and training of children suffering from the most common forms of defects. Emphasis is placed upon children handicapped by mental and physical defect. Consideration is given to the education of gifted children.
Prerequisite: Psych. 100.
Skinner.
First semester, Saturdays. 2 unfts.
333. Personnel Techniques and Problems. Psychological principles as applied to student personnel are presented. Some consideration is given to personnel in business and industry. Emphasis is placed on the personnel techniques and problems with which the counselor, the social worker, or the supervisor are faced.
Prerequisite: Psych. 100.
(Not offered in 1939-1940.)
Skinner.
First semester.
2 units.

## DEPARTMENT OF SCIENCES

## BATEMAN (Head of the Departmeni), IRISH, OSTRANDER, HOOVER, WATSON, MORTENSEN

The department of sciences offers courses in the following fields: Biology, Chemistry, Geography, General Science, Geology and Physics. 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) Elementary Science
(c) Geography
(b) Biological Sciences
(d) Physical Sciences

To complete a major, twenty-four hours, (twelve hours of which must be upper division) must be completed in one of the above fields.

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 advised to take Biology 130-140, Chemistry 111-112, Physics 111-112, to insure a broad foundation, and then emphasize the field of their choice. Physical and biological science majors should elect courses in French or German and in mathematics if they plan to work toward graduate degrees.

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.

During their senior year all science majors are advised to make arrangements with their departmental adviser to obtain experience in the handling of equipment and operation of laboratories and stockrooms.

## 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 edu. cation, geography, foreign languages.

Physical sciences: Mathematics, biology, industrial arts, foreign languages, physical education.

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.

# TYPE CURRICULUM FOR THE ELEMENTARY CERTIFICATE WITH A MAJOR IN SCIENCE 

## FRESHMAN YEAR



## SOPHOMORE YEAR



## SENIOA YEAR

| First Semester | Snits | Second Semester |
| :--- | :--- | :--- | Units

## TYPE CURRICULUM FOR THE MAJOR IN GEOGRAPHY

## FRESHMAN YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Engl. 101 Composition............--- 3 | Eng1. 102 Composition............... 3 |
| Social Studies ......----------........ 3 | Social Studies .-.......................... 3 |
| Chem. 110 or Biol. 130.---------- 4 | *Art 100 Publ. Sch. Art.............. 2 |
| *P.E. 100 Hygiene......................... 2 | Phys. 110 or Biol. 140................. 4 |
| Elective .....-............................................ 4 | *Geog. 100 Elem. of Geog............. 3 |
| P.E. Activity................................ 0.5 | Elective ....................................... 1 |
| $\underline{16.5}$ | P.E. Activity...--.-.......-----............ 0.5 |

## SOPHOMORE YEAR



## TYPE CURRICULUM WITH MAJOR IN BIOLOGICAL SCIENCE

FRESHMAN YEAR

| First Semester | Units | Second Semester |
| :--- | :---: | :--- | Units

## SOPHOMORE YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| * Educ. 120 Sociology...................... 3 | *Psych. 100 Gen. Psych............-- 3 |
| *S. Sci. 100 Const. Govt............... 3 | * Minor or elective........................ 3 |
| Foreign language ....................... 4 | Foreign language ....................... |
| P.E. Activity ................................ 0.5 | P.E. Activity |
| Minor or elective..................------ 3 | Chem. 112 or Phys. 110. |
| Chem. 110 or 111......................... 4 | Bjol. 120 Physlology.............. |
| 17.5 | 17.6 |



## PHYSICAL SCIENCE MAJOR-TYPE CURRICULUM FOR STUDENTS CONCENTRATING IN CHEMISTRY

| FRESHMAN YEAR |  |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| Fingl. 101 Composition............... 3 | Engl, 102 Composition.............. 3 |
| Chem. 111 Gen. Chem............... 4 | Chem. 112 Gen. Chem................. 4 |
| Math. 111 Fresh. Math............... 4 | Math. 112 Fresh. Math............... 4 |
| Econ. 131 Prin. of Ec. -----------3 | Econ. 132 Prin. of Ec.............-- 3 |
| $\mathrm{F}^{\prime}$.E. 100 Hygiene ....................... 2 | Geog. 100 Elem. of Geog............ 3 |
| P.E. Activity ............--...........---- 0.5 | P.E. Activity ........................------ 0.5 |
| 16.5 | 17.5 |

SOPHOMORE YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Psych. 100 Gen. Psych............... 3 | Educ. 120 Sociology.................... 3 |
| Phys, 111 Gen. Physics.............. 4 | S. Sci. 100 Const. Goyt............... 3 |
| Chem. 131 Qual. Analy............... 4 | Phys. 112 Gen. Physics................ 4 |
| Biol. 130 Botany | Biol. 140 Zoology |
| Elective ..........-............................ 2 | Art 100 Publ. Sch. Art................ 2 |
| P.E. Activity................................ 0.5 | P.E. Activity.........................---------..- 0.5 |
| 17.5 | 16.5 |



| First Semester Units | Second Semester Units |
| :---: | :---: |
| Directed Teaching ...................... 10 | Educ. 230 Curric. Techn. ....... 2 |
| or | Educ. 250 Philos, of Educ........ 3 |
| \{Psych. 200 Measurement 3\} | Chem. 212 Organic Chem............ 4 |
| \{ Minor or elective............. 7 \} | Major and minor.............-----....... 8 |
| Educ. Elective ............................ 2 | Major and minor...............--- |
| Chem. 211 Organic Chem,........... 4 | 17 |

# PHYSICAL SCIENCE MAJOR - TYPE CURRICULUM FOR STUDENTS CONCENTRATING IN PHYSICS 



## COURSES IN GENERAL SCIENCE

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. Physics and chemistry are emphasized. This course is open to all students. Fee $\$ 1.00$ to defray cost of lecture demonstrations.

Watson.
Either semester, three lecture periods per week.
3 units.
110. Educational Biology. A brief survey of the scope of Biology and of the theories of the origin and development of life on the earth. A study of the characteristics of living matter and of the fundamental structures of plants and animals. The student gets a general understanding of the manner in which plants and animals feed, grow, reproduce and develop. Accepted on science requirements for Primary and Elementary Certificates. Not open to students who have had, or who expect to take Biology 130 and 140.
Laboratory fee, $\$ 2.00$.
Mortensen.
First year, either semester; two lectures and one two hour laboratory 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-curricular 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, $\$ 1.00$.
Ostrander.
Second year, second semoster, two hours lecture
and four hours of project and field work. 3 units.
121. Elementary Photography. Light and its behavior; lenses. Camera construction and performance. Exposures. Developing. Printing. Enlargement. Making of lantern slides. Copying. Intensification. Composition. The course will be suited to the needs of the amatcur, or the teacher who wishes to make use of photography as an aid to his teaching.
Prerequisite: Physics 112 or Chemistry 112.
Laboratory fee, $\$ 3.50$.
Watson.
First semester, one lecture period. Three hours per week.
232. Elementary Science. (Nature Study) A combination "con. tent-methods" course emphasizing the development of an integrated science program in each grade from the kindergarten through the junior high school. Stress is laid on the aims and methods used in selecting, organizing and presenting nature study units on the different grade levels of the elementary school. Lectures, class discussions, library reports, field observations and class outings.
Prerequisite: at least six units of college science.
Laboratory fee, $\$ 1.00$.

## 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, fifty cents.
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.

Hoover.
Either semester, one hour a week until completed. No credit.
102. 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.

Hoover.
Second 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 regions to production, industries and cultural forms. Prerequisite: Geog. 100.
(Offered in 1940-1941.)
Hoover.
First semester. Three recitation-lecture periods. 3 units.
202. Regional Geography. Regions of the world delimited on the basis of climate and other physical 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.
(Offered in 1940-1941.)
Prerequisite: Geog. 100.
Fee, fifty cents.
Hoover.
Second semester, three recitation-lecture periods a week. 3 units.
203. Geography of Europe. Natural regions and political divisions compared. An investigation of the geographical backgrounds neces-
sary for the interpretation of major economic, social, and political problems.
(Offered in 1939-1940.)
Prerequisite: Geog. 100.
Fee, fifty cents.
Hoover.
Three recitation-lecture periods a week. 3 units.
$206-\mathrm{g}$. 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.
(Offered in 1939-1940.)
Hoover.
Second semester. Three lecture-recitation periods a week. 3 units.
214-g. 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.
Hoover.
Credit $1 / 2$ to 3 units, depending upon the amount of work covered.
217-g. 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.
(Offered in 1939-1940.)
Fee, fifty cents.
Hoover.
First semester, two hours a week. 2 units.
222-g. 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, $\$ 2.00$.
(Offered in 1939-1940.)
Hoover.
Second semester, two to three hours recitation-lecture and four hours laboratory per week.

## COURSES IN GEOLOGY

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, $\$ 3.00$.
Hoover.
First semester. Three hours recitation-lecture two hours laboratory and a minimum totgl of eighteen hours of field work.

4 units.
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, $\$ 1.00$.
Hoover.
Second semester. Three rectation-lecture periods together with laboratory assignments.

3 units.

## THE BIOLOGICAL SCIENCES

Note. Biology 130 and 140. Botany and Zoology constitute a one-year course in college biology. This course is the foundation for all work in science and in agriculture. It is required of all science and agriculture majors and is accepted as meeting science requirements of majors in other departments.
130. General College Botany. A course in elementary botany, designed to give a broad survey of the plant kingdom. The make-up of a typical flowering plant is studied in some detail, as regards its structure and physiology, after which special 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 studied in some detail.
Laboratory fee, $\$ 2.00$.
Mortensen.
Either 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.
Laboratory fee, \$3.00.
Ostrander.
Either semester, three hours lecture, three hours of laboratory a week.
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. Irish.
Either scmester, three hours a week.
3 units.
133 Plant Anatomy. The morphology of plant cells, tissues, and of the tissue system. A study of prepared slides and fresh materials in the laboratory. Required for the majors in biological science and in agriculture.
Prerequisite: Biol. 130.
Laboratory fee, $\$ 2.00$.
Judd.
Two hours lecture and six hours laboratory per week. 4 units.
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, $\$ 4.00$.
Ostrander.
First semester. Two lectures and three
two-hour laboratory periods per week.
4 units.
$204-\mathrm{g}$. 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 equivalent.
Ostrander.
Second semester. Three hours lecture per week. 3 units.
204A-g. 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.
Ostrander.
Second semester. 1 or 2 units.
211-g Plant Ecology. Origin and development of vegetation, and measurements in the field of factors of the environment, with applications to agriculture, forestry, grazing, and general crop production.
Prerequisite: Biol. 130.
Laboratory fee, $\$ 2.00$.
(Offered in 1940-1941.)
Judd.
Three lectures and one laboratory period per week. 4 units.

213-g Plant Breeding. The principles and practice of plant breeding, technique, and improvements by selection and hybridization. Prerequisites: Botany, plant industry, and genetics.
Laboratory fee, \$2.00.
(Not offered, 1939-1940.)
Judd.
Three lectures a week.
3 units.
214-g. 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, $\$ 3.00$.
Judd.
Second semester, two lectures, six laboratory hours per week.

4 units.
219 Animal Breeding. The principles of genetics are applied to the problems and techniques of animal breeding. Includes the study of pedigrees, line-breeding, in-breeding, out-cross, hybridization, and breeding indices.
Prerequisites: Zoology and genetics.
Ostrander.
First semester, three lectures a week.
3 units.
222.g. 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. Alternates with Biol. 224.
(Offered, 1939-1940.)
Prerequisite: G. Sci. 110 or its equivalent.
Laboratory fee; $\$ 1.00$.
Ostrander. Second semester, two hours lecture and one two-hour period of Iaboratory and field work per week.

3 units.
223-g. 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. Alternates with Biol. 225. (Offered, 1939-1940.)
Prerequisite: Biol. 112 and 120.
Laboratory fee, $\$ 5.00$.
Ostrander.
First semester, two hours lecture, two three-hour laboratory periods a week.

4 units.
224-g. 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.
Alternates with Biol. 222.
(Offered, 1940-1941.)
Ostrander.
Second semester, three lectures a week. 3 units.
$\mathbf{2 2 5 - g}$. 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.
Laboratory fee, $\$ 5.00$. Alternates with Biol. 223.
(Offered, 1940-1941.)
Ostrander.
First semester, one hour lecture and two three-hour laboratory periods per week.

3 units.
Note. When Biol. 225 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, $\$ 2.00$.
Irish.
First semester, three hours a week. 3 units.
240-g. 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.

Ostrander.
Hours and credits by arrangement with the instructor.
390. Research. Problems of Science Teaching. Research on problems of biology with special emphasis on science teaching. Open to graduate students majoring in the biological sciences.

Time and credit to be arranged.

## THE PHYSICAL SCIENCES

## CHEMISTRY

110. Introductory College Chemistry. Deals with the fundamental facts and theorics of general chemistry. Especially adapted to the needs of students who have had no high school chemistry. With the approval of the instructor, students who successfully complete this course, may register for Chem. 112 during the second semester. Laboratory fee, $\$ 4.00$ and breakage deposit, $\$ 2.00$.
111. General College Chemistry. Similar to Chem. 110 but for students who have had high school chemistry.
Laboratory fee, $\$ 4.00$ and breakage deposit, $\$ 2.00$.
Bateman and assistants.
First semester, three recitation-lecture periods and three hours of laboratory per week.

4 units.

## 112. General College Chemistry. A continuation of Chemistry 111.

 Laboratory fee, \$4.00.Bateman and assistants. First semester, three recitation-lecture periods and three hours of laboratory per week.

4 units.
131. Qualitative Analysis. A systematic 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, $\$ 2.00$.
Bateman and assistants.
First semester, two lecture-recitation periods and six or more hours of laboratory per week.

4 units
180. Elementary Organic Chemistry. A brief survey of the compounds of carbon, including the representative groups of the aliphatic and aromatic series. Adapted to the needs of students of home economics and agriculture and biology.
Laboratory fee, $\$ 5.00$ and breakage deposit, $\$ 2.00$.

201, 202. Theoretical Chemistry and Quantitative Analysis. During the first semester, a survey is made of such subjects as the molecular theory, structure of matter, equilibrium, colloids and electrochemistry. Quantitative experiments are included in the laboratory to illustrate the above principles. The second semester includes general quantitative analysis with emphasis on the theory.
Prerequisite: Physics 112, Chem. 131. (Offered in 1939-1940.)
Laboratory fee, $\$ 5.00$. Alternates with Chem. 211, 212.
Bateman. Both semesters, two lectures and six or more hours of laboratory per week.

4 units.
$211-\mathrm{g}, 212 \mathrm{~g}$, 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. Alternates with Chem. 201, 202.
(Offered in 1940-41.)
Prerequisite: Chem. 131, 202 or equivalent.
Laboratory fee, \$5.00. Breakage deposit, \$2.00.
Bateman.
Both semesters, three lectures and three or more
hours of laboratory each week.
4 units.
260-g. 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.
Alternates with Chem. 282.
(Offered, 1939-40.)
Prerequisite: Chem. 180 or 211, or equivalent.
Fee, $\$ 5.00$. Breakage deposit, $\$ 2.00$.
Bateman.
Second year, first semester, three lecture-recitations and one three-hour laboratory period per week.

4 units.
270-g. Advanced Quantitative Analysis. Special methods of analysis such as water, food, ore, rock, steel, urine. Time and credit to be arranged.
Prerequisites: Chem. 112, 202, and 212; Physics 112.
Bateman.
Hours to be arranged.
282-g. 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. Alternates with Chem. 260.
Prerequisites: Biol. 120, Chem. 180 or 211. Offered, 1940-41. Laboratory fee, $\$ 4.00$. Breakage deposit, $\$ 2.00$.

Bateman.
Second semester. Three lectures and three hours of laboratory per week.

4 units.
291-g, 292-g. 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. 202; Phys. 112; Calculus.
(Not offered in 1939-40.)
Laboratory fee, $\$ 5.00$ and breakage deposit.
390. Research-Problems of Science Teaching. Research on problems of chemistry with special emphasis on science teaching. Open to graduate students majoring in the physical sciences.

Time and credit to be arranged.

## 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 systr,ns, air conditioning, home lighting, refrigeration, and electrical appliances. Neither high school physics nor college mathematics is required.
Laboratory fee, $\$ 3.00$.
Watson.
First year, second semester, three lecture-recitation periods and three hours of laboratory per week.

4 units.
Physics 111, 112. General College Physics. A detailed lecture 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.
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.
(Not offered in 1939-40.)
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, $\$ 1.00$.
(Not offered in 1939-40.)
Watson.
Second semester, three hours a week.
3 units.
201-g. Mechanics and Heat. A more advanced presentation of mechanics and heat than is given in general physics. Calculus is used in the development of the subject matter.
Prerequisites: Phys. 112; calculus. (Not offered in 1939-40.)
202.g. Electricity and Magnetism. An advanced and detailed treatment of the theory of electricity and magnetism. Electrostatics, magnetism, direct and alternating current theory, electromagnetic waves, including radio.
Prerequisites: Phys. 112; calculus. (Not offered in 1939-40.)
Watson.
Second semester, three lectures per week.
3 units.
204.g. Optics. A more advanced presentation of geometrical and physical optics. Reflection, refraction, lenses, image formation, wave properties of light, interference, diffraction, polarization, spectroscopy, relation of light waves to matter.
Prerequisites: Phys. 112; calculus. (Not offered in 1939-40.)
Watson.
Second semester, three lectures per week. 3 units.
241-g. 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-rays 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: Phys. 112; calculus.

Watson.
First semester, three lectures per week. 3 units.
251-g, 252.g Principles of Mathematical Physics. An advanced course dealing with the methods used in the mathematical treatment of physical problems. Vector analysis and differential equations are introduced and used throughout.
Prerequisites: Phys. 111, 112. Differential and integral calculus.
Watson.
Two semesters, four hours a week. 4 units each semester.
390. Research-Problems of Science Teaching. Research on problems of physics with special emphasis on science teaching. Open to graduate students majoring in the physical sciences.

Time and credit to be arranged.

## DEPARTMENT OF SOCIAL STUDIES

## WYLLYS (Head of the Department), TILDEN, HORTON

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 gen. eral curriculum requirement.

Eighteen units of the major should be in lower division courses selected from among the following departmental offerings: Hist. 101-102; 103-104; 105-106; 107-108; 111; 113; 114; 116; or Political Science 101; 102; 103; 104.

The remaining twelve units may be elected from the following courses: Hist. 202; 203; 204; 205; 206; 207; 208; 209; 210; 212; or Pol. Sci. 201; 202; 203; 204; 205; 206.

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, 131-132, Principles of Economics, will be accepted as electives in Social Studies.

On pages 205 and 206 will be found a suggestive arrangement of such a major as described above. Courses in the studies acceptable toward the major are listed 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 or minor 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

## SOPHOMORE YEAR

| First Semester Units | Second Semester Units |
| :---: | :---: |
| *Educ. 120 Sociology ..................... 3 | *Psych. 100 Elem. Psychology.... 3 |
| *Pol. Sci. 100 Const. Govt............ 3 | *Geog. 100 EI. of Geog..........---...... 3 |
| Elective ------................-.-.-.......... 4 |  |
| P.E. Activity -------.............................. 0.5 |  |
| Hist. 101 Farly Mod. Fur, or | Higt. 102 Eur. Since 1815 or |
| Fist. 103 U.S. to 1865.--........ 3 | Hist. 104 U.S. Since 1865....... 3 |
| Social Studies ...................---..... 3 | Social 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 coltege | Sci. 102, 104, or any of college |
| req. not chosen above. | req. not chosen above. |

16.5
16.5

## JUNIOR YEAR



## SENIOR YEAR

| First Semester | Units | Second Semester |
| :---: | :---: | :---: | Units

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.

## 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.
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.
Required of all students majoring in the department.
Wyllys.
Second semester, threc hours a week.
3 units.
103. United States History to 1865. In this course, 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, dip-
lomatic incidents are used to make clear the growth of our unwritten constitution and national life.
Required of all students majoring in the department.
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.
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.

Tilden.
First semester, three hours a week.
3 units.
106. History of England Since 1603. A survey of the political, economic and social development of England and the British Empire from 1603 to the present time.

Tilden.
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.
(Not given in 1939-1940.)

> Tilden.

First semester, three hours a week. 3 units.
108. History of Rome. A brief survey of Roman and ancient Italian history. 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. (Not given in 1939-1940.)

Tilden.
Second semester, three hours a week.
3 units.
111. History of the Southwest to 1865. To understand the condition and the 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. The purpose of this course is to provide some familiarity with the historical background of Southwestern states before the Civil War.

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.

Tilden.
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 North America, and of the American Revolution is included.

Tilden.
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.

Wyllys.
Second semester, three hours a week.
3 units.
202. History of the Far East. This advanced course takes up the early as well as the modern history of China, Central Asia, Malaysia, 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.
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 especially 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.
Wyllys.
First semester, three hours a week. 3 units.
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 economic factors are given most attention, and the advance of the frontier line is traced from about 1763 to 1890 .
(Not offered in 1939-1940.)
Open to upper division students only.
Prerequisite: History 103, 104 or equivalent.
Wyllys.
Second semester, three hours a week. 3 units.
205. The Period of the French Revolution and Napoleon. The certtral 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.
Wyllys.
First semester, three hours a week.
3 units.
206. Contemporary Europe. Beginning with a brief survey of the period of 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.
Open to upper division students only.
Prerequisite: History 101, 102 or equivalent.
Tilden.
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 cssential for students choosing this course.
(Not offered in 1939-1940.)
Open to upper division students only.
Prerequisite: Hist. 103, 104, or equivalent.
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: Pol. Sci. 100, History 103, 104 or equivalent.
Tilden.
Second semester, three hours a week.
3 units.
209. Economic History of the United States. A general survey of the economic development of the United States from the period of the Confederation to the present. Emphasis is placed on the Economic Revolution and the development of our modern industrial society. Open to upper division students only.
Prerequisites: Hist. 103, 104, or equivalent.
Tilden.
First semester, three hours a week.
3 units.
210. Renaissance and Reformation. An advanced course dealing with the antecedents and development of the Renaissance in Italy, together with its political, economic, 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 16th century.
Open to upper division students only.
Prerequisites: Hist. 108, 113 or equivalent.
Tilden.
First semester, three hours a week.
3 units.
212. Teaching the Social Studies. An advanced course dealing with methods of teaching history and political science. Conducted on the project method, with observation and reports. Includes some study of historiography-the literature and writing of history.
Open to senior students only.
Prerequisites: Hist. 101-102; 103-104; Pol. Sci. 100.
Wyllys.
Second semester, two hours a week.
2 units.
300. Seminar in History. Offered as graduate work, if demand is sufficient.

Wyllys.
Either semester, hours to be arranged. 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. 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 during their first semester.

Tilden, Horton.
Either semester, three hours a week. 3 units.
101. Introduction to Political Science. The fundamental principles of government. Discussion of sovereignty, legislation, and the origins of the state.

Horton.
First semester, three hours a week.
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.

Horton.
Second semester, three hours a week. 3 units.
103. Municipal Government. The methods of city government and comparisons of the leading types of city admiistration.

Horton.
First semester, three hours a week. 3 units.
104. American Political Parties. This course sketches the formation of the two major political 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 philosophies. A dozen or more important third parties come in for notice. Party movements are directed by outstanding political leaders. The survey includes a study of outstanding party leaders.

Horton.
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.
Horton.
First semester, three hours a week. 3 units.
202. Public Administration. Discussion of the methods of administration as commonly practiced in the United States. Analyses of public finance, taxation budgets, etc. (Not offered in 1939-1940.) Open to upper division students only.
Prerequisite: Political Science 100.
Horton.
Second semester, three hours a week.
3 units.
203. World Politics in the Pacific. The quest of World Empires has extended far into the Pacific. Natural resources, population problems, markets, military and naval bases, économic imperialism, political ideologies, cultural forces, major social trends in the Pacific area will be discussed in this course.
Open to upper division students only.
Prerequisites: Hist. 101-102; or equivalent; Pol. Sci. 100.
Horton.
First semester, three hours a week. 3 units.
204. 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. Fundamental natural, biological and social resources will be considered.
Open to upper division students only.
Prerequisite: Political Science 100.
Horton.
Second semester, three hours a week.
3 units.
206. Contemporary Political Thought. A critical study of political thought from the French Revolution to the present. Special attention is given to political theories which form the bases of modern governments and parties.
Open to upper division students only.
Prerequisite: Political Science 100.
Horton.
Second semester, three hours a week.
3 units.
300. Seminar in Political Science. Offered as graduate work, if demand is sufficient.

Horton.
Either semester,
2 units.

## STATISTICS

## SUMMARY OF REGISTRATION, 1938-1939

## College

Resident Students Regular Session

|  | Freshmen | sophomores | Juniors | Seniors | Graduate | Irregular | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Men | 335 | 109 | 134 | 98 | 56 | 9 | 741 |
| Women | 233 | 84 | 148 | 134 | 47 | 6 | 652 |
| Total | 568 | 193 | 282 | 232 | 103 | 15 | 1393 |

## Summer Session 1938

Men 196
Women ..... 454
Total ..... 650
Extension Courses
Men ..... 113
Women ..... 210
Total ..... 323
Training Schools
Boys ..... 477
Girls ..... 497
Total ..... 974
Total Registration
In College ..... 2366
Counted more than once ..... 170
Total different students ..... 2196
In Training Schools. ..... 974
GRAND TOTAL ..... 3170
SUMMARY OF GRADUATES, 1939
Prior to 1939 ..... 4677
Class of 1939 , B. A. degree ..... 229
M. A. degree ..... 20

# BACHELOR OF ARTS IN EDUCATION 

## January 27, 1939

William Berkenbosch
Floyd W. Brown
Elizabeth Edna Bugbee
Francis Patrick Clevenger
Wilmirth Cline
Fsther Viola Den Hartog
Justin B. Evans
Mary Jean Gibson
Ernest Gardner Goodloe
Clayton E. Halfin
Emerson J. Harvey
Alberta Nichols Hauskens
Ruth Essabel Holcomb

Margarette McNeil
Ora Fay Marquess
Reta Emmaline Montgomery
Lillian M. Morria
Mary E. Moser
Melvin Levon Owens
Marcianna Marie Rios
Mrs. Mary Ehizabeth Ruppenthal
Margaret Felen Smith
Margaret Strembel
Paul Albert' Trimble
Fred Afton Whiting
Donald Arthur Yager

## BACHELOR OF ARTS IN EDUCATION

## May 30, 1939

Gilbert Myron Allred Jeana Allred Mary Ellzabeth Bailey
Ella Louise Bartol Hilbert Joseph Brady Afton Brown Loree Jane Brown
Karl Woodruff Burk
Marie Moegelin Burnett
Curtis Burns
Verda A. Byrne
John B. Caceletto
Theodora Q. Carman
Naomi Virginia Carpenter
Sarah Frances Cavness
Anna Roberta Cheney
Charles P. Clark
Clara Clark
Anna Wade Cline

- Robert E. Colfora

Ruth Rhea Cooley
Mary Catherine Cooper
Nina Ethelyn Cooper
Helen Creasman
Emma Catherine Crocker
Robert C. Crump
Gertrude Adeline Daugherty
Madoc Wynn Davies
Marcella Drexler

- Ernestine Lee Driskill Joyce Koch Dunn
Clara Peterson Fbel
Evelyn Mabel Ellingson
Mary Floise Fannin
Glenn LeRoy LeBaron,

Flora Ledbetter
Annice Lee
Octava Lee
Lois Maude Lightfoot

- Mary E. Long

Miss America Lugo
Lydia Lugo
Mary Frances McAllister
Mildred Luella McFrederick
Stella Medigovich
Allan W. Miller
Maxine Mae Miller
Nettie Lillian Miller
Hollis R. Moomaw

- Mrs. Fina Dodd Morago
(Marla Dee Morrell ${ }^{\text {And }}$ ) not on Commencomen ${ }^{\dagger}$
Lucinda Florian Mufioz Lib
Rebecca Florian Muñoz
Roberta LaFayette Nash
Glenn Channing Nicholson
Elaine Olmsted
Dorothy Marie O'Rourke
Keith Owens
- Lawrence Porry Patrick

Mr. Clyde Phillips
La Nora Amelia Piatt
Margaret Colvin Pleasant
Lilian Pole
Marie N. Ponko $\quad$ Anna Priest watad 1938
CAnna Priest Margaret FHolse Fiaber
Charles Milton Rapson
Warren Thomas Reed
ऊ4

# BACHELOR OF ARTS IN EDUCATION 

## May 30, 1939 (Continued)

, Paul Curtis Farmer<br>Thelma Geraldine Favors<br>Henry Leavenworth Fuller<br>MaIcolm Albert Garrison<br>Cora M. Gensler<br>Chlorene Brooks George<br>Ruth Ellen Gillette<br>Katherine Louise Gleim<br>Maudie Bearden Goldman<br>Katherine Greenawalt<br>- Hazel Baxter Greene<br>Roderick H. Greene<br>Donald Edwin Grimes<br>Viola Lucille Hancock<br>Weldon Walter Hastings<br>Alberta Henney<br>Margaret Smurthwaite Heywood Jessie May Hill<br>Agnes Irene Holt<br>Thomas Eddy Inman<br>- C. Virginia Irvine<br>George John Jelinek<br>Ronald Jenkin<br>Carl S. Jepsen<br>W. Earl Jones<br>Mrs. Love Jordan<br>Betty Kennedy<br>Bill Koos<br>Claudine Grace Kortsen<br>Eurah Imogene Lafferty

- Martha Keighley Reeder

Doris I. Rothery
Barbara Keith Rucker
Pauline Margery Saffell
Pauline G. Sanchez
Nellie Byrd Savoy
Nellie Anne Setka
Mildred Iveas Shaw
Guida Smith
Ruth Charlene Smith
, William J. Smith Margaret Elizabeth Spain
AnnMarie St. Claire Florence Lillian Super
Helen Martha Todd
William E. Tresnon
Alfred $\mathbf{E}$. Turner
Eugene William Wakefield
James Richard Walker
Lawrence E. Walker

- Mildred Gwendolyn Wallace

Roberta Georgia Walter
Walter Leland Ward
Dorothy Evelyn Wellington
Hugh Warren West
Ruby A. Whitehead
J. Harold Windes

Edna. V. Wohlert
Oliver Wendell Wozencraft
Mollie Dorothy Wusich

## BACHELOR OF ARTS IN EDUCATION

## August 31, 1939

John H. Adams, Jr. Hilario Trejo Alvarado
Laura Eileen Arnold
Arthur Albert Attwell
Mary Lois Benedict
Elsie Ballife Berg
Margaret Ruth Bigley
Clydine Ann Bishop
Mabel Hughes Blue
Blaine Madison Booth
Maybelle Pope Brazee
Narissa B. Canion
Trinidad C. Castaneda
John Edward Christensen
Miriam J. Clayton
Alice Eloise Colvin
Augusta T. Crozier
Blanche Curiel
Marie A. Curiel
Ellen Dobson
Clarence E. Fishburn
Zora Ellen Foutz
Vernon Donn Frederick
Joseph R. Granieri
Jennie Mary Grosso
Josephine Helen Grosso

- Lyle Hanna

Ruth Hayhurst
Jules Heller
Theron Marl Hemphill

Marvin P. Henry
Alice Mae Hibbs
Rueda Hicks
Robert Frederick Hilburn, Jr.
Louise O'Dell Horak
Rey Arnold Huber
Henry Franklin Jones
Mary Rose Kasun
Mary Cobb Lanford

- William Langmade

Esther Elizabeth Laveen
Jeanette Katherine Lindner
Ruby McCarty
Laurein McClure
Eleanor Mary Martini
Dorothy Jayne Meyer
Richard Stevens Meyer
Margaret Eunice Murphy
Harriett Newman

- Dorthy Ora Nichols

Lois Nicholson
Paul Howard Nodell
Victor B. Ortega
Ellen Lora Parry
Lois E. Poe
Jack Denver Provost
Anne A. Reilly
MaryMargaret Robichaud
Wm. S. Robichaud

- Gladys Bearden Runyan


## BACHELOR OF ARTS IN EDUCATION

## August 31, 1939 (Continued)

William John Saban
LIoraine Valiera Sawyer
Jessie Maude Scrivner
Miner-OT- Simme
Edith Ann Steger
Mary Hannah Taylor
Shirley Marie Thompson

Adah Wanita Underbrink

- Edmundo Valdez

Beverly Aurelie Vidrine Pauline Elizabeth Weir Lillian Hazel Wells Hazel Barr Wignall Aileen Lucile Whitlow Dorris Tieman

## MASTER OF ARTS IN EDUCATION

+ Omphie B. Coleman
Patrick C. Downey
Roberta Jane Fohl
Roberta Nance Hackett
+ John Jacob Hausman
+Edward S. Herzberg
Silas A. Hough
Margaret Roxy Johnson
+ Lioyd Laurits Lassen
Malcolm Frederick Miller
$\$$ Charles Orr Morris
-Lester Raymond Mullins
+ Stanley Poe
T. Owen Porter
+ Widon Hugh Railsback
Richard Taylor Swingler
Amelia Brown Thompson
${ }^{7}$ William E. Tresnon
Harvey Earl Tyson
Catherine A. Wilkinson


## SENIOR HONORS

1939

## WITH HIGH DISTINCTION

| WILLIAM BERKENBOSCH | MARGARET SMURTHWATTE HEYWOOD |
| :--- | :--- |
| ELIZABETH EDNA BUGBEE | THOMAS EDDY INMAN |
| HAZEL BAXTER GREENE | CHARLES MILTON RAPSON |

## WITH DISTINCTION

VERDA A. BYRNE RUTH RHEA COOLEY HELEN CREASMAN ESTHER VIOLA DEN HARTOG GEORGE JOHN JELINEK

FLORA LEDBETTER
L.YDIA LUGO

REBECCA FLORIAN MUNOZ
MARTHA KEIGHLEY REEDER
RUTH CHARLENE SMITH
RUBY A. WHITEHEAD

## COMMERCE AWARD

hilario trejo alvarado

## KAPPA DELTA PI AWARD

THOMAS EDDY INMAN

## M. L. GIBBONS AWARD

JANET KENDRICK
THOMAS EDDY INMAN

## MOEUR MEDAL

HELEN CREASMAN

## MOEUR PIN

RUTH CHARLENE SMITH

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[^0]:    *On leave, 1939-1940.

[^1]:    Mortensen.
    First year, second semester, three lectures and three bours of
    laboratory or field work per week.

[^2]:    *Students who follow this curriculum will not necessarily receive certification to teach. They will, however, receive the bachelor's degree in educa-
    tion if they successfully complete the curriculum.
    Note 1. Either of these two courses may be taken as a required course. It is recommended that students select the other course to be taken as an elective.

    Note 2. Courses in Education particularly recommended are, Statistical Method and Advanced Statistics.

    Note 3. Minors are recommended in Social Science, Geography, or in another phase of Commerce. Typing and Shorthand are recommended courses.

[^3]:    Hilkert and Staff.
    First or second semester. Conference hours to be arranged.
    Credit upon submission of satisfactory research report.

[^4]:    Burkhard.
    Either semester, three hours a week.
    3 units.

[^5]:    Simpson.
    Second year, first semester, two hours a week and workshop.

[^6]:    Neeb.
    Second year, second semester, one lecture, six hours laboratory each week.

[^7]:    Nay.
    First year, second semester, six hours laboratory.

[^8]:    Stewart.
    First year, second semester, two hours lecture, four hours laboratory.

[^9]:    Wilson.
    Two semesters, three hours a week.

[^10]:    Harelson.
    First year, first semester, two hours a week.

[^11]:    Quaid. Second semester, 1 lesson a week.

[^12]:    Lavik.
    Third or fourth year, first semester, three hours a week. 3 units.

[^13]:    Murphy.
    Third or fourth year, second semester, three hours a week. 3 units.

