# RRI201R sTiTE TERPHER PILEAE IT TEIIPE 




# BULLETIN <br> ARIZONA STATE TEACHERS COLLEGE <br> <br> CATALOGUE ISSUE <br> <br> CATALOGUE ISSUE <br> FOR THE SESSIONS OF <br> 1941-1942 AND 1942-1943 



TEMPE, ARIZONA

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"Self-government and universal education are inseparable. The one can be exercised only as the other is enjoyed. The common school, the high school, and the university, should all be established, and are worthy of your fostering care. The first duty of the legislators of a free state is to make, as for as lies in their power, education free to all its citizens as the air they breathe."-Governor John N. Goodwin in addressing the First Legislative Assembly, 'Territory of Arizona, September 30, 1864.

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## COLLEGE CALENDAR



## SPRING SEMESTER

| Registration $\qquad$ Jan. 26, 27, Mon., Tue. | $\text { Jan. 25, } 26 \text {, }$ Mon.. Tue. |
| :---: | :---: |
| Instruction Begins, Second Semester....Jan. 28, Wed. | Jan. 27, Wed. |
| Last Day of Registration for Credit......Feb. 11, Wed. | Feb. 10, Wed. |
| Mid-semester Scholarship Reports Due $\qquad$ Mar. 28, Sat. | Mar. 27, Sat. |
| Easter Vacation Apr. 3, Fri., to Apr. 7, Tue. | Apr. 23, Fri., to Apr. 27, Tue. |
| Last Day for Filing Senior Scholarship <br> Reports $\qquad$ May 16, Sat. | May 15, Sat. |
| Last Day for Scholarship Reports for <br> M.A. Candidates May 16, Sat. | May 15, Sat. |
| Last Meeting of Graduate Classes........ May 23, Sat. | May 22, Sat. |
| Baccalaureate Service.............................May 24, Sun. | May 23, Sun. |
| Commencement Exercises.......................May 27, Wed. | May 26, Wed. |
| Final Examinations................................. May 26, 27, 28, 29 | May 25, 26, 27, 28 |
| Tue. P. M., Wed., Thu., Fri. | Tue. P. M., Wed., Thu., Fr |

## SUMMER SESSION



May 31, Mon. July 3, Sat.

July 5, Mon. Aug. 7, Sat.

# CALENDAR OF FIXED EVENTS 

| 1941-42-1942-43 |  |
| :---: | :---: |
| 1941-42 | 1942-43 |
| Three-act Play $\qquad$ Oct. 16, 17 Thu., Fri. | Oct. 15, 16, Thu., Fri. |
| Homecoming Day..................................... Nov. 15, Sat. |  |
| Three-act Play $\qquad$ Dec. 4,5 , Thu., Fri. | Dec. 3, 4, Thu., Fri. |
| Miss Simpson's Recital............................Feb. 4, Wed. | Feb. 3, Wed. |
| Nominating Petitions for Student <br> Body Officers. $\qquad$ Feb. 16 to 25 , at 4 P . M. | Feb. 15 to 24 at 4 P . M. |
| Election Rally..........................................Feb. 25, Wed. | Feb. 24, Wed. |
| Primary Election of Student <br> Body Officers $\qquad$ Feb. 27, Fri. | Feb. 26, Fri. |
| General Election of Student <br> Body and A. W. S. Officers. $\qquad$ Mar. 6, Fri. | Mar. 5. Fri. |
| Parents' Day, Three-act Play and <br> Exhibition of Student Art. $\qquad$ Mar. 13, Fri. | Mar. 12, Fri. |
| High School Presidents' Day.................. Mar. 27, Fri. | Mar. 26, Fri. |
| 4-H Fair $\qquad$ April 17, 18, Fri. and Sat. | April 16, 17, Fri. and Sat. |
| Alumni Banquet.......................................April 25, Sat. | April 24, Sat. |
| Coronation of Campus King and <br> Queen $\qquad$ May 1, Fri. | April 30, Fri. |
| Honor Assembly....................................... May 22, Fri. | May 21, Fri. |
| Alumni Induction Ceremony.................. May 25, Mon. | May 24, Mon. |

## OFFICIAL DIRECTORY

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# THE COLLEGE 

## AIMS AND OBJECTIVES

The Act of the Territorial Legislature, passed March 12, 1885, creating the Territorial Normal School, set forth its objectives as follows:
"the instruction of persons, both male and female, in the art of teaching and in all the various branches that pertain to a good common school education; also, to give instruction in the mechanical arts and in husbandry and agricultural chemistry, in the fundamental law of the United States, and in what regards the rights and duties of citizens . . ." (The term, "common schools" is now held, generally, to include both elementary and secondary schools.)

The Act also set forth in the requirements for admission and elsewhere other important objectives as follows:
"Every applicant for admission shall undergo an examination in such manner as shall be prescribed by the Board, and if it shall appear that the applicant is not a person of good moral character, and will not make an apt and good teacher, such applicant shall be rejected. The Board of Education may, in their discretion, require any applicant for admission, to sign . . . a declaration of intention to follow the business of teaching . . . and provided further, that the pupil may be admitted without signing such declaration of intention on such terms as the Normal School Board may require or prescribe . . . shall exercise a watchful guardianship over the morals of the pupils..., but no religious or sectarian tests shall be applied ..."

Thus, the founders of the Normal set forth the following seven objectives: (1) The training of teachers, the chief purpose. (2) A broad curriculum, (3) Good citizenship. (4) Good ethical character. (5) Prohibition of religious or sectarian tests. (6) Selection of "apt and good" candidates. (7) Duty to train others than teachers.

Building on this wise and broad statement of purposes made by its founders, the College has, through the growth and evolution of more than fifty years, made marked changes in the emphasis placed on various objectives in order to meet the needs of a modern age. Present-day objectives are indicated in the paragraphs which follow.

Teacher Training. Arizona State Teachers College has as its chief purpose the education of teachers for the elementary and secondary schools of Arizona. To the highest extent possible, Arizona has a right to demand that all pupils in the State shall be taught by teachers possessing high mentality, a broad background of general education, high ideals of citizenship, thorough scholarship, vigorous health, fine professional training and spirit, proven skill in the art of teaching, wholesome personality, culture and efficiency in socal relations, and sound character.

General Education. Believing that training for teaching or any other profession should have a broad cultural base giving the student a knowledge and an appreciative understanding of various phases of human relations so essential in this complex machine age, the College attempts to care for these needs by requiring that all freshmen and sophomores give a fair portion of their time to the background or socalled cultural courses. The major and minor requirements set up by the College give students an opportunity to extend this cultural background.

Teacher Selection. The college seeks to attract young men and women possessing high native ability and the other essential high qualities listed above. By a system of guidance the college aims to graduate as teachers only those who give promise of the greatest success.

Good Citizenship. High ideals of citizenship and an understanding of and loyalty to the principles of American Democracy are fundamental to all teachers. The college, through its instruction as well as its organization and methods used, including curricular, extra-curricular, and social activities, attempts to inculcate these ideals.

Scholarship. If communities are to be led to continuously higher goals, then their teachers must possess a broad and thorough scholarship far beyond the $3-R$ type. This the college strives to develop.

Vigorous Health. The formation of habits making for good health and the development of sound bodies is the aim of the health and physical education program. The aim of the college is to send out physically fit teachers who know how to build up the health standards in their communities.

Professional Skill. A high professional spirit is developed through instruction in the philosophy and principles underlying good teaching, through conferences with teachers and students individually, and in groups, and through observation and practice teaching. The college aims to supply schools with those teachers only who, in one of the campus training schools, or in the Phoenix schools, have demonstrated genuine skill in teaching.

Social Efficiency. A teacher's success depends largely on his being human. He must know how to meet on equal terms each student and each parent in his community. The college aims to plan its club work, its social activities, its committee and group work of all kinds so that each student may develop to the fullest extent possible for him.

Other Professions. The College recognizes its duty to train a limited number of young people who wish to follow professions other than teach-
ing. Since the college is already giving these background courses for its teachers, it can easily care for the needs of those wishing preprofessional work in various fields.

College Extension. The college accepts its responsibility for giving in-service help to teachers. This is done through evening courses given on the campus and in neighboring cities, correspondence courses, summer sessions, conferences on the campus and elsewhere, published bulletins, radio service, placement bureau, alumni organizations in various parts of the state, school visitation, and speaker and consultant service.

Sound Character. All the other objectives are subsidiary to the building in individuals of sound ethical character. The building of a sane philosophy of life is primary; a philosophy of education, though vital, is secondary. The college by every means at its command seeks to keep constantly before its teachers and students the idea that character and service to others are the highest aims of education and the noblest ideals of life.

## HISTORY

An act of the Thirteenth Legislative Assembly of the Territory of Arizona approved March 12, 1885, made provision for the establishment at Tempe of a Normal School for the instruction and training of prospective teachers. The Normal began on February 8, 1886, with thirty-one in attendance. The first class of five members graduated in June, 1887. At that time the entire institution was housed in the northwest room of a single four-room, 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 Legis-
lature 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.

## ACCREDITATION OF THE COLLEGE

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 ranked in class "A" by the American Association of Teachers Colleges. These affiliations give our students the same privileges in respect to transfer of credits and other advantages enjoyed by the largest universities and colleges.

## THE COLLEGE SETTING

## LOCATION

Tempe is an ideal location for a teachers' college. It is a town of pleasant homes, numbering about 3,000 residents, and is situated in the center of Salt River Valley, the wealthiest and most productive irrigated district in the United Statez. While enjoying freedom from many of the disavantages and distractions of a larger city, yet this community is within easy reach, by autor '․ile or by hourly motor bus, of Phoenix, the Capital and largest cit-- of the state. Four transcontinental highway systems, $60,70,80$, and 89 , are routed past the college campus, and the principal state highways feed through this route. The Southern Pacific main line gives direct communication east ano west, and connects at Phoenix with the Santa Fe line serving the northern part of the state.

The Climate at the moderate altitude of 1,100 feet is ideal during the entire school year. Snow is a novelty 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.

Papago Park. 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 walk of the campus. Here one finds such ideal spots for hikers and picnics as the Elfin hills, Hole-in-the-Rock, View Point a chain of artificial lakes, and the large natural amphitheater.

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. Also within easy driving distance are found places of scenic and historical interest such as The Apache Trail, Boyce Thompson Arboretum, Roosevelt, Mormon Flat, and other dams, Canyon, Apache and other Iakes, Hieroglyphic Canyon, Casa Grande Prehistoric Ruins, Pueblo Grande, and the Superior highway with copper mines adjacent.

The municipal swimming pool, one of the finest in Arizona, is located in a park a 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, the giant power plant near Tempe, the accessibility of irrigation projects, the dosert flora, and copper mines offer unusual advantages for eysursions in connection with many of the college courses.

## CAMPUS

The setting of the College is exceptionally attractive. The campus comprises eighty-five 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, paved drives, and a profusion of trees, shrubs and flowers. The twenty-five 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. Portıons 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 well kept tennis courts of concrete, scrcened basketball courts, and fields for speedball, volleyball, and women's baseball, archery and golf.

The athletic field occupies the southeastern ten acres of the campus. The football field and the baseball diamond are maintained in excellent condition. A modern lighting system permits the use of the field for evening games and for pageantry productions. The enlarged stadium now seats from 9,000 to 10,000 spectators.

A tract of thirty-five acres within a mile of the campus is equipped as a model farm, and affords 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 College Avenue is a more recent group of buildings in cream-colored pressed brick, the tone of which blends harmoniously with the landscape. The dominant notes in this late group are
the Arts Building and Matthews Library, with their imposing lines and dignified proportions.

During the last few years an extensive building and remodeling program has made the campus second to none in the Southwest. The buildings now under construction are the Nursery School and Home Management House just north of the Lyceum Building; a women's dormitory just west of West Hall; a men's dormitory just west of Goodwin Stadium; and the addition to Goodwin Stadium.

Old Main. The early traditions of the days of Tempe Normal School cluster about Old Main with its three stories of ivy-covered brick. Erected in 1894, it was the scene of nearly all student activities. Now, it is devoted chiefly to classrooms for 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. It seats 1,000 persons. Its forty-foot stage and modern equipment permit the staging of dramatic work of high order. The south end of the building houses a well equipped radio studio.

The College Bookstore, conveniently located in the basement of the Arts Building, is kept well 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 Spanish-Colonial style with open corridors or colonnades enclosing an attractive patio. The classrooms, furniture, apparatus, and equipment are in keeping with a modern, progressive school system.

The Dining Hall is in a central location, southeast of the Training School, and is conveniently reached from all dormitories. The building is thoroughly mode $n$ in sanitation, lighting, ventilation, and general arrangement. A modified cafeteria or buffet system, as well as a modern milk and sandwich counter, assure students well-balanced and attractive meals. The dining room is under the direct supervision of a trained dietitian, and a trained matron.

The Infirmary, located in a quiet section of the campus, is a fireproof 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.

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.

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 of steal and concrete construction faced with cream brick and thoroughly fire-proof. The entire upper floor is occupied by the library and reading rooms. The main floor contains administration offices and a number of classrooms. A modern refrigeration system of air-conditioning maintains the proper temperature on even the hottest days.

The Men's Gymnasium is located at the north side of the athletic field. The floor space is ample for basketball and other public events, as well as for the regular activity work in physical education. A gallery is provided for spectators.

The B. B. Moeur Activity Building was named in honor of the late Governor B. B. Moeur who served longer than any other man on the Board of Education. The building serves both as a center for women's physical activities and a center for the social activities of the student body. This building, one of the newest on the campus, represents a new style in college architecture.

Goodwin Stadium And Industrial Arts Building. This building was named after Garficld Goodwin, an early graduate of the Territorial Normal School. This fire-proof structure now has a seating capacity of 4,000 , and with the addition now under construction on the east side of the field, will seat from 9,000 to 10,000 people. The building fronts on College Avenue, and houses the shops of the industrial arts department.

The Lyceum Building, located just north of Matthews Hall, is one of the most artistic buildings on the campus. The main floor contains a small auditorium and stage, making an ideal place for the meeting of small groups. The south addition contains a lovely reception room with fireplace, with other rooms and a kitchen nearby. The basement conlains a fine large room for student and faculty club rooms.

Carrie Matthews Hall for women is a thoroughly modern structure of concrete faced with cream pressed brick. Each sleeping porch accomodates four young women; that is, one sleeping bay to every two rooms.

North, South, and West Hall. These three halls, located just south of Matthews Library, accommodate from 75 to 100 girls in each. The
halls are joined making an attractive quadrangle facing College Averue. The equipment meets the most modern standards.

Alpha, East, and Olive Hall. Alpha and East halls accommodate, respectively, 60 and 125 young men. They are located east of College Avenue and southward from Old Main. Olive Hall, a very satisfactory structure, is rented for the accommodation of about thirty-five young men.

Heating Plant. All buildings on the campus are heated by steam from a central heating plant located south of the dining hall. This building conforms, in architectural features, with the other buildings of the eastern group. One of the three boilers supplies hot water under pressure to all buildings.

## 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 1941, the association now numbers about 5470 active members, the majority of whom reside in the state of Arizona. Through efficient organization, the Alumni Association has become a potent force in promoting the welfare of the college.

Endowment Fund. Desiring to extend to others the benefits of a college education, the association raised a ten thousand dollar fund for the assistance of worthy students. Under the leadership of "The Father of the Endowment Fund," Clarence M. Paddock, '03, and Leona Haulot, '02, Sccretary, this fund has grown beyond expectations and now amounts to nearly $\$ 20,000.00$. In the years since the establishment of this fund, over 400 students have practically owed their graduation to timely assistance received from this source. The association aims to keep the principal intact, using the interest only for student assistance; therefore loans are made 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 Association offers a number of awards to outstanding students. These are described in the section of the catalogue headed "Awards and Prizes."

Regional Alumni Banquets. A series of regional banquets was conducted as a feature of the celebration of the Golden Jubilee of the College in 1935. A number of these are being continued as annual or biennial events.

Annual Reception. The annual reception and banquet of the association is held on the evening of Alumni Day, giving all members an opportunity to renew old friendships and to pledge anew their loyalty to their Alma Mater. The dates for the next receptions and banquets are April 25, 1942, and April 24, 1943.

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 association. Members are urged to assist in keeping this register up to date by forwarding to the office of the Alumni Association, Thomas Lillico, Secretary, a notice of each change in name or postoffice address.

## 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 special 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.

In addition, the college offers its services to teachers and communities through radio service, speaker and consultant service, visual aids bureau, school visitations, published bulletins, and other means.

## EXTENSION CLASSES

Extension classes are given by regular members of the college faculty in the cities or towns within easy reach of the College. By taking advantage of courses thus offered, teachers are enabled to accumulate the credits needed for the renewal of certificates or for the completion of requirements for the degree. These courses carry either two or three hours of credit, and are identical in every respect with the corresponding courses offered in the regular session.

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

The fee for all extension courses is $\$ 5.00$ per semester hour, plus $\$ 1.00$ per student for use of library, and is payable at the time of registration. For further information concerning extension courses, write 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 enrollment in the regular sessions.

Persons desiring to enroll for correspondence courses will write to the Correspondence Division for an cnrollment blank and a copy of the Bulletin which gives a list of the courses offered. 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 fee for all correspondence is $\$ 5.50$ per semester hour of credit carried. Enrollment between May 15 and September 15 carries an additional fee of $\$ 2.00$ per course.

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

No student may enroll for correspondence courses during the time that he is registered for courses in residence, either at this college or at any other institution. No student doing resident work may enroll for an extension class without the approval of the Executive Council. All inquiries concerning correspondence courses should be addressed to the Office of the Registrar.

## VISUAL AIDS SERVICE

The college maintains a visual aids library of over two thousand glass slides which is circulated to the elementary schools of the vicinity for postage costs. The library was begun two years ago and during that time has grown steadily. Accessions of mounted still pictures and museum pieces are constantly being added, and in the near future will be serviced for use in the elementary schools. The library makes possible an acquaintance with the various visual aids materials for prospective teachers. For further information concerning the library write to Alfred Thomas, Director of Visual Aids Library.

## 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 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 extending the class period an equivalent time, it is possible for a student to earn as much as six semester hours of credit per term, or twelve semester hours for the full period of the summer session.

Full residence credit is given. In three full summer sessions, the residence requirement may be satisfied, and a full year's work may be completed.

Admission to the Summer Session. In general, applicants for admission are 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.

Graduate Stady. 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 Ioss 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. A library fee of $\$ 1.00$ per term 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.

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 SERVICE

## 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, 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. Enrollment must be renewed each year if help is desired after graduation. These records consist of (1) student practice teaching records, (2) recommendations from faculty members who are familiar with the student's academic work. (3) reports of supervisors and critics on the quality of work done in directed teaching, and (4) scholarship ratings. The record also includes personality ratings and a photograph. Copies of these records are sent out upon application to superintendents, principals, or trustees, or they can be examined and reviewed by them when they visit the Placement Office.

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

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

Requests for Teachers to fill positions, reports of vacancies, and all other correspondence relative to placement should be addressed to I. D. Payne, Director of Placement.

## PLACEMENT IN BUSINESS

The Department of Commerce maintains a bureau of employment for non-teaching positions with two offices, one at the College and one in Phoenix. One of the staff members, Mr. E. J. Hilkert, is in charge of this bureau.

Students who desire the assistance of the bureau must make both written and personal application. References and recommendations for those students who are enrolled in the bureau are collected. Qualified students are introduced to prospective employers in various fields of industry. The bureau offers advice with information about vocations.

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

## TEACHER TRAINING

## Under Direction of Mr. Payne

Each candidate for the bachelor's degree desiring an elementary certificate must teach one-half of each day for a semester. For this, ten semester hours of credit are given. The College has available four distinct schools for the training of student teachers. In addition, many students do practice teaching in the Phoenix schools. Each of these presents its own particular type of problems, so that the institution is enabled to provide special training for all the different types of teaching, from the nursery to the twelfth grade inclusive. All these schools are organized and maintained as regular public schools, and class conditions parallel as nearly as possible those in the other public schools of the state.

The Campus Elementary School includes a kindergarten, and grades one to five inclusive. A well-designed reading readiness program is carried on in the kindergarten. In the primary grades special attention is given to the social development of children. The intermediate grades are treated as a unil for auditorium work, music, play, and athletics. Special features are the school orchestra; clubs for nature study, science literature, etc.; Camp Fire; Boy Scouts; and 4-H Clubs.

Campus Junior High School, consisting of grades six, seven and eight, is administered as a separate unit although it is housed with the Campus Elementary School. Its purpose is to supply the growing demand for trained junior high school teachers. The junior high school idea is carried out by means of a flexible program, departmentalized work, a limited number of electives, and a program of work adopted to individual differences in abulies, needs and interests. Besides the traditional subjects, there are courses in physical education, supervised play, and athletics; home economics; woodwork, forge work, and sheet metal; general science; typing; dramatics; practical art; and music. Special features are glee clubs, orchestra, 4-H Clubs, Camp Fire, and Boy Scouts.

Eighth Street School is conducted for the purpose of giving prospective teachers experience with Spanish-American children. The school comprises grades one to eight, inclusive. 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. Opportunity is offered for glee club, orchestra, and Boy Scout work.

Rural School, two miles south of Tempe, is operated by the College in cooperation with the district board for the preparation of teachers for
the rural schools of Arizona. This six room school is under the direction of a trained supervisor. Student teachers are furnished transportation on the college buses. Every effort is made to keep the conditions typical of rural situations elsewhere, so the student teacher may learn to meet actual rural problems.

Tempe Grammer School. A limited number of students do practice teaching in the city schools under the supervision of the director of training schools and the regular teachers. The equipment and the program are similar to those of the other schools.

Phoenix City Schools. Student teaching may be done in some of the elementary schools by students interested in certain special types of teaching.

Phoenix High Schools. Students preparing to teach in secondary sehools may do their practice teaching in Phoenix Union High School, under the guidance of the supervisor of high school teaching, the director of teacher training of the College, and the head of the department in which the teaching is done.

## THE COLLEGE LIBRARY

MATTHEWS LIBRARY. The library occupies the entire upper floor of the Matthews Library and Administration Building. The general reading room accommodates 200 persons, and the reference room seats an additional hundred students. The stack room has an ultimate capacity of 86,000 volumes. The library now contains 26,400 books, approximately 4,300 bound volumes of periodicals, and 7,500 public documents. The Iibrary receives the outstanding current publications of the federal and state governments, as well as 300 general educational and technical periodicals. The subscription list also includes a number of the leading newspapers of the country and most of the daily and weekly newspapers of the state. Among features worth noting are the James Lee Felton Memorial Room, given over to a browsing collection for general reading; the special collection on Arizona and Southwest; and the collection maintained by the Carnegie Endowment for International Peace for the International Relations Club.

Fees. There is a library fee of $\$ 2.00$ per semester for each college student. A deposit of $\$ 2.00$ is required of all persons not directly connected with the college, who wish to use the librar- . 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. 'L'his collection contains about 4,500 carefully selected juvenile books covering all types of literature. 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, selected student teachers are given the opportunity for experience and instruction in school library practice. This work carries the same credit as other directed teaching.

## FEES, DEPOSITTS, AND EXPENSES

In the fee schedule printed hereafter, regular fees are those paid by all students. Special fees are those paid under the conditions indicated. Deposits are made to cover certain contingencies. All or part of the deposit may be returned depending upon the charges incurred by the student.

## REGULAR FEES

The following fees are paid by each student entering the college:
Activities Fee ( $\$ 23.00$ per semester) . $\$ 46.00$
No tuition fee is charged residents of Arizona. The activities fee (or registration fee) is used in part for the costs of registration, college annual, State Press, health service, assembly programs, and other student activities. Ten dollars of the fee is budgeted by the Associated student Council for extra-curricular activities, such as athletics, student publications, music, dramatics, and student recreation.

Graduate studonts carrying not more than five hours of work have the option of paying the regular fee, or a fee of $\$ 13.00$ which gives no student activities benefits.

Undergraduate students carrying only one class win be charged a fee of $\$ 10.00$ which gives no student activity benefits.

Library Fee ( $\$ 2.00$ per semester) ........................................................................ $\$ 4.00$
This fee pays only a small part of the cost of magazines, periodicals, and replacements incidental to student use of the library.


#### Abstract

Breakage Deposit $\$ 5.00$ This deposit will be refunded at the close of the year, or upon authorized withdrawal from the college after making deductions for Ioss or injury to the dormitory, library, or other property, or for other charges incurred by the student. If at any time, the charges against a student should exceed his deposit, his registration will be canceled uniess the account is paid within a reasonable period of time. Graduate students are exempt from the breakage deposit.


Gymnasium and Infirmary Fee ( $\$ 1.50$ per semester) ..... $\$ 3.00$

This fee is used to provide supplies for the infirmary and gym
nasiums. Wach student is entitled to the use of these facilities and
supplies, including towel service at the gymnasium. Graduate stu
dents are exempt from this fee if they do not make use of the gym
nasium or infirmary facilities.

Test Fee (first semester only)........................................................................... $\$ 0.50$

## SPECIAL FEES

The following fees are paid by students under the conditions indicated.

Non-resident Tuition Fee ( $\$ 22.50$ per semester) $\$ 45.00$
Every non-resident student pays this fee. 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: (1) 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. (2) If over twenty-one years of age, that bona fide residence in the state of Arizona has been established for at least one year. A student cannot establish residence for the purpose of attending college. The constitution of Arizona reads as follows: "FOR THE PURPOSE OF VOT" ING, NO PERSON SHALL BE DEEMED TO HAVE GAINED OR LOST A RESIDENCE . . . WHILE A STUDENT AT ANY INSTITUTION OF LEARNING'".
Transcript Fee ..... $\$ 1.00$

A student is entitled to one transcript of his record without charge. For each additional transcript a fee of $\$ 1.00$ is charged. ficial transcripts 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 request. At registration $t i m$ : at mid-year, and at the clase of the college year, unavoidable delays are likely to occur, THEREFORE REQUFSTS FOR TRANSCRIPTS SHOULD BE FILED WELL IN ADVANCE OF THESE TIMES.
Auditor's Fees.
Same as regular students
A student registered as an auditor in any course will not receive credit for the course under any circumstances. Ordinarily students carrying a full Ioad will not be permitted to audit additional courses.

## Laboratory Fees

See course descriptions
Fees are collected each semester to cover the cost of materials in certain courses. With few exceptions, these fees ar 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. The student must. prissent a receipt showing payment of the laboratory fee before the instructor will enter his name on the class role.

Gymnasium Outfit......................................................................................................... $\$ 4.00$
Required of all students enrolling in P. E. 101, 102, 103, 104, 111 and 112. The suits are obtained at the College Bookstore.

Class Reinstatements...........................................................................................................................
A student who has been dropped from a class on account of irregular attendance, indifference, or any other cause may be reinstated by the Executive Council if, in its opinion, the circumstances warrant such action.
Special Examination Fee........................................................................................ $\$ 1.00$
When, because of absence. or for any reason, it becomes nec-
essary for a student to request a special examination in any course,
a fee of $\$ 1.00$ will be required for this special privilege.
Every candidate for the bachelor's degree must make application for graduation on the prescribed form supplied by the office of the registrar. The application is due on November 15 of the college year in which the degree is expected. In order to receive consideration, the application must be accompanied by the graduation fee. The graduation fee is $\$ 10.00$ if paid on or before November 15. After that date, the fee is $\$ 15.00$. Candidates for the master's degree pay the fee immediatiy following admission to candidacy. A student who is granted permission to receive a degree in absentia shall pay an additional fee of $\$ 7.50$.
Pre-registration Fee.................................................................................................. $\$ 1.00$
Each student enrolled the preceding semester who fails to present a pre-registration card at registration is charged this fee.
X-ray Fee $\$ 1.00$
All students are required to take the X-ray on entering each year. Non-resident graduate students taking Saturday or night classes only are exempt from this fee.
Cap and Gown Rental Fee ..... \$1.50 - \$4.50The rental fee for the bachelor's cap and gown for the baccalaur-eate and commencement exercises is $\$ 1.50$. For the master's degreethe fee is $\$ 2.25$ for cap and gown, and $\$ 2.25$ for the hood.
LATE FEES
Late Registration ..... $\$ 5.00$
All students registering after the dates specified for registration in the catalogue pay this fee.
Late Class Cards ..... $\$ 1.00$
This fee is charged each student who fails to return his signed class card to the registrar's office within ten days from the begin- ning of the semester.
Late Change of Program ..... $\$ 0.50$
After the close of the first week of a semester, this fee is re- quired for making a change in the program as arranged on the stu- dent's registration card.
Late Aptitude Tests .....  $0.50-\$ 2.00$
Students taking the aptitude tests after the regular registration days will be charged fifty cents for each test required.
Late Medical Examination ..... $\$ 3.00$Fee is charged beginning the first day following the regular re-gistration days.
Late X-ray ..... $\$ 1.00 \mathrm{up}$
This fee is charged all students who fail to take the X-ray at the time set by the College, making the total cost from $\$ 2.00$ up.
DEPOSITSDeposits are required of those students wishing certain privileges orservices. The deposits are returnable less any charges which may havebeen incurred during the term of the service being rendered.
Locker Key Deposit .....  $\$ 1.00$Keys are obtained at the business office, and the fee will be re_funded when the key is returned there.
Laboratory Deposits, ..... None
Deductions for materials destroyed or lost will be taken from the breakage deposit.
Transcript Deposit .....  $\$ 1.00$
This deposit must be made by each new student whose trans- cript of record from high school or college previously attended is not on file in the registrar's office on the date of registration. The de- posit will be refunded upon presentation by the student, within thirty days from the date of registration, of a statement from the regis- trar's office that the transcript has been filed.
Breakage Deposit .....  $\$ 5.00$
See description under regular fees.

## GENERAL EXPENSES

Board and Room ..... $\$ 26.50$
This fee for board in the college dining hall, and dormitory room Is for a 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 ents. 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 absences. No student will be permitted to room in a dormitory unless he is boarding in the college hall.
Board
$\$ 20.50$
Students rooming outside of dormitories may obtain board only. at this rate for a four-week month. payable in advance on a date set by the business office. Allowances and refunds are made on the same basis as for dormitory students.
Single Room Charge (extra) $\$ 2.00$

This extra charge per month is made when onc parson is given the
exclusive use of a room. Ordinarily, two students share a room.

$\qquad$
This is 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 They receive twenty meals.
Meals for Guests ..... \$0.25

This charge is made per moal for guests entertained at the col
lege đining hall.
Textbooks ..... $\$ 20.00$ up
The necessary outlay for books and stationery varies from $\$ 0.00$ to $\$ 30$ per year The college bock 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 orerhead cost the students enjoy the adrantage of a considerable saving in this important item of expense.

## Off-Campus Board and Room.

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 Counselor of Women, and they must agree to observe all regulations adopted for the gorernment of off-campus women.
General Summary. The following summary includes the fees and minimum expenses incurred by a student living in a dormitory for one college year:
Activities fee ( 23.00 per semester) ..... $\$ 46.00$
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) ..... 238.50

## PAYMENT AND REFUND OF FEES

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

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

Refunds. 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 fee.

Certain laboratory fees may bc 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.

## ASSISTANCE TO STUDENTS

## LOAN FUNDS

The College is anxious to be of service in assisting worthy students in every way possible. A number of organizations have loan funds for this purpose. The college keeps a list of these in the office of the Dean of the College and will lend all aid possible to students who desire loans.

Alumni Endowment Fund. Full details are given in the section entitled, "The Alumni Association."
D. A. R. Loan Fund. 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.

Arizona Federation of Women's Clubs Loan Fund. This fund is supported by various women's clubs composing the State Federation of Women's Clubs.

The Methodist Loan Fund. This fund may be drawn upon by A.S.T.C. Methodist students who meet the requirements.

Other Loan Funds. From year to year other loan funds are available. Students interested in loans should make application at the office of the Dean of the College.

## 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 expenses for board and room. 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 business office for the usual blank forms on which to make application.

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

1. Evidence of all-round worthy citizenship and character.
2. Ability to do college work of average grade or better.
3. Special ability in some particular field.
4. Evidence of leadership and vocational success.
5. Ability to do well such work as may be assigned.
6. Evidence of genuine economic need.
7. Preference is given to residents of Arizona.

Students carrying a full-time job will be asked to carry less than the regular load of 16 hours of college work unless their previous scholastic records and their aptitude tests are sufficiently high to warrent it.

## SCHOLARSHIPS, 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 to the graduate of the standard teachers' curriculum who attains the highest standing in academic work during the four years immediately preceding graduation.

The Moeur Pin, given each year by Mrs. B. B. Moeur, in memory of her son, the late Dr. John Moeur, is awarded to the graduate of the standard teachers' curriculum ranking second under the conditions prescribed for the awarding of the Moeur $\mathbb{M e d a l}$.

Kappa Delta Pi, national honor society in education, each year, makes an award of twenty-five dollars to the student completing the lower division with the highest cumulative index for at least sixty semester hours 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 sixty semester hours of work taken during the junior and senior years at Tempe.

The Will H. Robinson Award. A gift of twenty-five dollars is awarded to a freshman student at the beginning of the second semester each year. This award is in memory of Will H. Robinson, and is based on scholarship during the first semester, weighted with the number of hours the student works for pay.

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 for scholarship and other meritorious achievement.


#### Abstract

Alumni Scholarships. Four fifty-dollar scholarships are awarded annually at the beginning of the senior year to students who are outstanding in ability and service to 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 Schoel Cup is awarded annually by the Alumni Association to that Arizona high school whose graduates, enrolled in the College, attain the highest scholastic average based on honor points. No high school will be considered unless it has three or more students enrolled.

The Pleiades Plaque is awarded at the end of each semester by Pleiades to the hall having the highest collective scholarship index. Offcampus men and off-campus women are considered as two of the groups. This is an undergraduate award. The group winning it three times in succession retains the plaque.

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

Freshman Scholarships. Several scholarships are awarded by the College each year to graduating high school seniors. These scholarships pay the registration and laboratory fees during the freshman year amounting to more than fifty dollars.

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

Arthur Edward Harvey Scholarship in Applied Music. A full scholarship in applied piano is given each year by Hazel Harvey Quaid to the freshman who stands highest in piano sight-reading, repertoire and general musicianship. Examination by appointment during freshman week.

Delta Theta Sigma Scholarship. Delta Theta Sigma Sorority will present annually a fifty dollar scholarship to the outstanding girl graduate of Phoenix Union Colored High School.

The Commerce Club presents annually a trophy to a graduating senior for high scholarship. personality, and service.

The Robert R. Krause Award. An award of $\$ 25.00$ is given to the student ranking highest in a comprehensive examination in the Biological and Chemical Sciences. The examination is held on the last Saturday of April annually.

## ADMINISTRATION

## CHANGES IN REGULATIONS

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. Each semester is divided into two half-semesters, or "quarters".
2. The unit of credit is the semester-hour which represents one fifty-minute hour in class per week for one semester supplemented by two hours of outside preparation such as text or reference reading, note book preparation, or laboratory work. In laboratory work requiring no outside preparation, three hours per week are required.
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. Experienced teachers may be permitted to substitute academic credit for part of the student teaching requirement, if satisfactory evidence of successful teaching experience is presented. In no case may more than five semester hours of credit be substituted. Credit for student teaching taken in other accredited colleges will be accepted as partial fulfillment of the student teaching requirement.

## PROGRAM OF STUDIES

1. The Normal Student Program or normal load is sixteen hours each semester. The minimum load for a student regularly enrolled in any curriculum is twelve hours. By special action of the Standards Committee, a student may be permitted to carry a lighter load for one semester, otherwise one who is carying less than the minimum load will be registered as an irregular or unclassified student.
2. Excess Load. In no case will a student be given more than $161 / 2$ hours without permission of the Standards Committee. In general, such permission is granted only to those who have a point score of 3.00 or better for the preceding semester. 'Ine excess load must not be placed on the student's card at registration. Written petitions must be made for overloads.
3. During the semester in which a student is enrolled for student teaching, the maximum load shall be sixteen semester hours.
4. Students carrying a full-time job will be asked to carry less than the regular load of 16 hours of college work unless their previous scholastic records and their aptitude tests are high. Ordinarily, an index of 3.00 is required.
5. Upper Division Requirements. 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.
6. Extension Courses. Not more than one-fourtn 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.
7. 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 otrice of the registrar. No credit will be allowed for work in any course unless the student is regularly enrolled in the manner here prescribed.
8. 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 are presented the usual class card for admission to classes, but the card will be marked "not for credit."
9. Procedure for Dropping Courses. A student who. after regulary 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.
10. 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 his freshman advisor, or a member of the department in which the student has chosen his major. This faculty member thus becomes the student's advisor throughout the last three years, or the entire period of his attendance. A copy of the student's scholastic report will be mailed to parents at the close of each semester. 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.

## MARKING SYSTEM

In order to determine the scholarship standing of students, the instructor, as a rule, assigns a score-point 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 rccord 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.

Courses Dropped. A mark of W or E is given when a student drops a course prior to the time of the final semester examination.

Repeating Courses Failed. No student shall be permitted to attempt to raise a grade of $\mathbf{E}$ to a passing grade without regularly enrolling again ir the course, and no student, while repeating such course, shall. carry
more than a normal load except under very special circumstances. Both the $E$ and the new grade remain a part of the student's permanent record.

Change of Grade. A grade once recorded in the registrar's office may not be changed except where a faculty member certifies that a clerical error has been made.

Honor Points (quality points) are assigned to the various grade marks as follows: A, 4 points per semester hour; B, 3 points; C, 2 points; D, 1 point; and E, 0 point.

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

The Dean's E-List. All students who, at mid-semester or other marking period, receive grades of $\mathbf{E}$ in five or more semester hours of work, or have an average index of 1.50 or less in the subjects they are carrying, are placed automatically on the Dean's E-List. Warning notices shall be sent at mid-semester both to parents and to the student.

The Probation List. All students who at the close of any quarter (half semester), or at the close of any semester, fail to receive passing marks in fifty percent of the semester hours for which they are registered on the third Monday of a given semester shall be placed automatically on the probation list. In addition, all students, even though passing in more than fifty percent of their work, who fail to receive an average scholarship index of 1.00 points are placed automatically on the probation list. In computing such indices, marks of $W$ are not counted.

Disqualification. All students whose names are on the probation list at the close of any semester are disqualified for the next succeeding semester. Students disqualified at the close of the second semester are not eligible to attend summer session or the following semester. In exceptional cases, where mitigating circumstances are deemed sufficient, a student may be reinstated by a vote of the Advisory Committee. Any disqualified student has a right to be heard by this committee after making written application to the Dean of the College.

## SCHOLARSHIP STANDARDS

Eligibility For Athletic Competition. The student's eligibility to enter intercollegiate athletic competition 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 college organization 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.

## GRADUATION AND DEGREES

Degrees Conferred. At the satisfactory completion of the work prescribed in any four-year curriculum a student is granted the degree of Bachelor of Arts in Education. At the completion of 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 appropriately chosen work following any other curriculum. The minimum time for completion of the master's degree is one year. For further details see description of the Division of Graduate Study.

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

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

Major and Minor. Every candidate for 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 Requirements. In order that a student may be eligible for graduation for any four-year curriculum, his cumulative index must be 1.75 for all work taken after September 1, 1941, or for all work taken during his college career.

Residence Requirements. A minimum of one year in residence as a regular student is required of every candidate for the bachelor's aegree, 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 arplication for graduatioh 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 apphcation must be accompanied by the prescribed graduation fee. Blank forms for the application may be obtained at the office of the registrar. Candidates who fail to file application punctually may be schedaled for graduation at a later date.

Commencement Exercises. In order to receive a degree, the candidate must be present in person at the commencement exercises in the prescribed academic costume. Exceptions to this rule shall be made only in extreme cases and upon petition to the President of the College and the payment of the $\$ 7.50$ fee for a degree taken in absentia.

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: (1) College obligations; (2) Student body obligations; (3) Library obligations.

## 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.

No excuses for absence from class are granted either by the administration or by instructors. The student alone assumes full responsibility for all absences.

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 or on account of activities assigned by the college. The instructor is the sole judge of the validity of the reasons given for absence.

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.

## STUDENT LIFE AND WELFARE

## LIVING ARRANGEMENTS

Dormitories. There are four women's dormitories. These are North Hall, South Hall, West Hall, and Matthews Hall. The Men's dormitories are Alpha Hall, East Hall, and Olive Hall. A new men's hall and a new women's hall are now under construction.

No single college influence may contribute more vitally to the development of the personality and character of a student than that of hall life. Here the problems of living together must be definitely faced, re-
sulting in an experience which may be invaluable to every college man or woman. The dormitories are so managed and equipped 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 special circumstances are they permitted to live cutside 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 Counselor 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, and chairs. Sleeping porches in all dormitories are in use the year around. Except on permission granted by the college nurse, students are not permitted to sleep in their rooms.

In each women's hall limited kitchenette privileges are provided. No cooking of any sort is permitted in individual rooms of either the boys' or the girls' halls. Laundry rooms furnished with hot and cold water and ironing boards are available for the laundering of personal belongings.

Vocal or instrumental music is not practiced in any of the halls. Arrangement for such work can be made through the music department. Young women may be absent from dormitories overnight only if the parent sends special written permission directly to the head resident and if the head resident approves.

Personal Equipment. The following list is the minimum with which students should be equipped when entering a dormitory:
Blankets and comforts
for a single bed.
4 sheets.
2 pillow slips.
4 bath towels.
4 hand towels.
Dresser scarf.
Iron and Ironing board
(if wanted)

Hot water bottle (women)
A warm dressing gown (women).

A bath robe (men).
Soft soled slippers. without heels.
A study lamp.

All linens should be clearly marked with the name of the student. For information regarding rates, fees. deposits. and refunds in all dormitories. see statement under the heading. "Fees. Deposits, and Expenses."

Dormitory Room Reservations. Rooms will be reserved only on receipt of the $\$ 5.00$ breakage deposit by the Business Office. Should the student decide not to enter college, the deposit will be refunded if the Business Office is notified not later than September first. It is expect-
ed that sach girl who enters the dormitory intends to spend a full semester there, and preference will be given to students whose parents sign a statement of such intention. There will be no refund of the $\$ 3.00$ social fee to a girl leaving during the semester. While hall preference may be stated, it is understood that all hall assignments must be made by the Counselor of Women.

Care of Halls. The college attempts to furnish comfortable and artistic living conditions for dormitory students. Students are expected to cooperate by kceping them so. Should any injury, beyond the usual wear, occur to the decorations and furniture of a room, the cost of redecoration or repair will be charged to the occupants of the room.

Off Campus Housin-. Rooms are available in the homes of Tempe to men or women who do not desire accommodations in college dormitories. All women students desiring to live off-campus must report to the Counselor of Women before making arrangements for living quarters. They must select from the approved list and must then file their address in the Counselor's office. These rooms are approved by the Counselor of Women, or by the Director of Men who is advisor for off-campus men, and are the only rooms which registered students may use as residence. during the period of attendance at the college.

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 cooperate cheerfully with the college management; or in case the student, without first registering with the Counselor of Women, takes up residence off the college campus.

Individual room rents with two people sharing a room range from $\$ 7.50$ to $\$ 10.00$ per month. Students who live off-campus may board in the college dining hall for $\$ 20.50$ per month. Occasionally board may be secured off campus, with the approval of the Counselor of Women at a higher rate. The College does not arrange to collect rents nor to stipulate prices for off-campus accommodations.

## MEDICAL SERVICES

Physical Examination. Before registering for the first semester attended each year, a physical examination by a college physician is required of all students excepting non-resident graduate students taking a part load on Saturdays or in night classes. This incluaes the general physical examination, tuberculosis, and other special examinations. 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 ilmess which require a physician's advice. In such case, 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. In case of serious or protracted ilness, 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 the services of any physician unless authorized in advance by the college nurse.

Absence due to lllness. 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 dormitories when ill instead of reporting to the infirmary will be considered sufficient reason for denying such students the privilege of living in the dormitories.

## EXTRA-CURRICULAR ACTIVITIES

## STUDENT PARTICIPATION IN GOVERNMENT

Associated Students. Every student on the campus is automatically a member of the Associated Student Body. 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, and customs, and for promoting the intellectual, moral, and social welfare of all students in a truly democratic manner.

In order to carry out this program of participation, delegated powers are centralized in the Student Body Council. This is composed of 21 members representing various groups, such as college classes, off-cam-
pus groups, dormitories, etc. The officers are elected by the student body.

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, and to work for the welfare of the College as a whole.

The governing body of the Associated Women Students, with the Counselor of Women as sponsor, is composed of a president, a vice-president, 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.

The Residence Council of Women's Halls is made up on representatives from each of the women's dormitories. The Counselor of Women is an ex-officio member. This council makes recommendations to the administration of the College concerning regulations which govern we living standards in the halls and makes and carries out all regulations of hall life.

## ATHLETICS

Men's Athletics. The College is a member of the Border Inter-Collegiate 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 afford opportunities for contact with the University and with the other college of the state.

Athletic Fields. On the campus, there are two well appointed athletic fields which provide space for two 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.

Activity Building. The addition of the new B. B. Moeur Activity Building has made possible wide extensions in the facilities for physical education and activity work for women. A more comprehensive program with greater expanded facilities for health eaucation, dancing, and outdoor sports on the well-equipped grounds adjoining is now possible.

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

Intercollegiate Eligibility. Eligibility to enter intercollegiate athletic competition is determined according to the rules of the Border-Intercollegiate Conference.

## 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 toumament 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 ofıered for the best original orations on International Peace. Representatives of the college in oratory are sent to all state and interstate speech touraments.

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

1. To produce one-act and three-act plays of an unusually high caliber.
2. To train students to direct plays and to develop skills in all branches of production work: costuming, lighting, make-up, scene design, scenery painting, set construction, and theater management.
3. To build cultural appreciations and artistic discriminations in the field of drama.
4. To provide projects for the character development and the personality readjustment of as many individual students as can be reach-
ed by the facilities described above without detriment to the high quality of work presented.
5. To train students to become effective workers in school, club, community, and church theatricals. Students should register with Miss Simpson early in the semester for work in dramatics.

Radio Workshop. The object of the Radio Workshop is to train students in the skills and appreciations of the radio field. To this end the workshop produces a fifteen-minute drama once each week over Phoenix radio stations. All students interested are urged to take auditions and register for service in this phase of work.

## 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.

## JOURNALISM

The State Press. Under the auspices of the Associated Students, there is published, weekly throughout the year, a seven-column, fourpage newspaper. Originating years ago as The Tempe Normal Student, the paper was named The Collegian when the institution became a teacher's college. At the beginning of the academic year 1936-1937, the name was again changed to the Arizona State Press.

This college weekly serves as a record of current events of campus life. It is used as a laboratory for students in classes in journalism. The journalism instructor serves as adviser, but both the editor and the business manager are appointed by the Publications Board. The experience gained in this activity has a definite educational value, and staff positions are highly prized by students. A semester's subscription to the publication is included in the activitics fee.

The Sahuaro. The Sahuaro is the yearbook of Arizona State Teachers College. Profusely illustrated, 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, and is 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.

## DEPARTMENTAL AND SERVICE ORGANIZATIONS

Kappa Delta $\mathbf{P i}$ is a national honor society fostering high professional and scholastic standards, and recognizing outstanding service in the field of education.

The International Relations Club is an organization of students majoring in the social studies. Its purpose is to create an interest in national and international affairs.

Lambda Delta Lambda is a national honor society for those interested in the teaching of science. Its aim is to promote interest in the study of chemistry and physics in teachers' colleges.

Sigma Tau Delta is a national honor society restricted to English majors of high scholastic rating. Every member is expected to contribute original work in some field of creative writing.

Beta Chi is composed of girls whose major interest is in home economics. The organization is affiliated with the National Home Economics Association, and with the state organization.

Pi Omega Pi is a national honor society for commerce majors interested in becoming teachers of commercial subjects. It aims to create and promote interest and scholarship in commerce.

The Geographic Society is made up of students who excel in geography, general scholarship, and character.

Gamma Theta Upsilon is a national professional geographic fraternity.

Pan American League constitutes a club which promotes friendly relations among those interested in things Spanish.

Alpha Mu Gamma is a national honorary fraternity for students of foreign languages.

The Pasteur Scientific Society affords opportunities for student activity in the biological and physical sciences.

National Society of Wesley Players furthers social life through dramatics, and promotes an intelligent program of religious drama in the Methodist Church.

Pi Gamma Mu, a national honorary social science fraternity. Extends recognition to scholastic attainment in the social sciences.

Alpha Psi Omega, national honorary dramatic society, is open to those who acquire twenty points in dramatics.

Pi Kappa Delta, national honorary forensic society, is open to those who place in intercollegiate debate or oratory.

Association of Childhood Education, student branch of the national organization. Promotes the interests of kindergarten-primary and kindergarten-elementary education.

Theta Chi Epsilon, an honorary art fraternity, aims to develop a genuine appreciation for art and enrich the esthetic experience of its members.

Mu Rho Alpha, a professional music fraternity, aims to recognize and develop musical ability; to encourage an appreciation of good music; and to maintain high scholarship.

The Pleiades, an honorary service club composed of twelve women of junior and senior class standing rating high in leadership, achievement integrity, dependability, and personality.

Collegiate 4-H Leaders Club is open to students preparing for leadership in $4-\mathrm{H}$ clubs. This is said to be the only club of its kind in the United States.

The Aggie Club. This club, open to all majors and minors in agriculture, promotes the interest of agricultural education.

Women's Athletic Association. The Women's Athletic Association cooperates with the department of physical education in furthering opportunities for a wide variety of activities.

The "A" Club, an honorary club limited to junior or senior women. Promotes physical efficiency and health, scholarship, service, and women's athletics.

The commerce Club is an organization of students majoring in Commerce. The club serves those who plan to teach and those who intend to enter business.

Sigma Pi Sigma is a local honorary accounting society, stressing originality, scholarship, and sociability.

The Rlue Key is a national honorary fraternity composed of men students of junior and senior class standing ranking high in leadership in various fields of college activity.

Los Conquistadores has as its purpese the promotion of the welfare of the Spanish-speaking students on the campus. Membership is open only to those of Spanish lineage.

Off-Campus Women's Society. An organization of all women students not living in college dormitories provides a variety of social events and social contacts for all off-campus women.

## 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. Membership in these groups is 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 pienics, bridge parties, dances, dinners, and trips into the scenic regions of Arizona.

The outstanding aim of all these organizations is the promotion of the highest standards of manhood and womanhood on the campus.by maintaining the spirit of friendliness and good fellowship, furthering the highest qualities of social personality, and by assuming a willingness to advance the best interests of the College at all times. A student, in order to be invited to membership, must have a scholarship index of 2.00 or better at the close of the semester preceding the date of invitation.

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

Chi Sigma<br>Delta Theta<br>Kappa Kappa Alpha<br>Lambda Kappa

Phi Beta Epsilon<br>Phi Lambda Nu<br>Philomathian<br>Pi Alpha Gamma

## Zeta Sigma

Fraternities. Five 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.

Delta Kappa<br>Lambda Phi Sigma<br>Mu Sigma Chi<br>Pi Delta Sigma

## Tau Sigma Phi

An Inter-Sorority Council, composed of the president and the sponsor from each sorority, with the Counselor of Women regulates the affairs of the individual sororities in general accordance to the provisions of the constitution of the council.

The Inter-Fraternity Council is composed of the presidents of the various fraternities. The Dean of the College and the sponsors act as advisers.

## RELIGIOUS ORGANIZATIONS

The Newman Club, an organization open to all Catholic students has for its objectives the special welfare of its members and the general welfare of the College. The club is affiliated with the American Federation of Catholic Clubs.

The Wesley Foundation is the Methodist Church at work among its students. It aims to provide wholesome religious atmosphere and opportunity for self-cxpression in religious activities.

The Pilgrim Fellowship represents the national organization of young people of the Congregational Christian Churches. It promotes the social, intellectual, and religious development of college students.

The Churches of Tempe extend a welcome to students, and most of them maintain specific organizations 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.

The Religious Council is a group of students representing various religious viewpoints-all creeds and denominations. The aim of the organization is to promote a higher type of religious living on the campus, and those college activities connected with it.

The Religious Conference, an organization of ministers and lay members of the various churches, provides college courses in religion, and promotes good will and cooperation among the religious groups.

Credits for courses taken with the religious conference may be accepted by the college for credit by transfer on the same basis as credits are accepted from institutions of higher learning that meet the standards set up by the college.

No such credits will be accepted if the hours taken under the religious conference added to the college load makes an overload for the student requesting transfer of credit.

## ADMISSION TO THE COLLEGE

## GENERAL QUALIFICATIONS

Every person admitted as a student of the State Teachers College 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 transcript of record and 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 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.

## ALTERNATIVE QUALIFICATIONS

1. Teachers. Teachers holding valid eredentials 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.

Students from other colleges with unsatisfactory scholarship or conduct records will not be admitted. Students who are disqualified in another college or university will not be admitted until such disqualification is removed.

## ADMISSION FROM JUNIOR COLLEGES

Junior college students who intend to transfer to Arizona State Teachers College at the end of the first year or upon completion of the second year, will do well to plan the program of studies to conform as nearly as practicable to the outline of the Standard Curriculum or one of the other curriculums printed in the section headed, Curriculums, Degrees, and Certification. A major and a minor should be selected not later than 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 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 at Tempe cannot be accepted for credit from a junior college.

Examination of the lower division courses printed in the Standard Curriculum 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 will find no difficulty in transferring and adjusting his credits toward the degree.

## CONDITIONAL ADMISSION

Students making a very low rating on scholastic and entrance tests will be assigned to special faculty advisers. Some of these students will be asked to carry a light load, and special guidance techniques will be used with them in order to overcome the deficiencies, if possible. In other cases, the students may be persuaded that it will be to their best. interests to enter some other field of work.

## TESTS REQUIRED FOR ADMISSION

Before registering, for the first time, all undergraduate students are required to take four aptitude tests. A charge of fifty cents is made if taken at the time specified on the regular ragistration days. If taken later, a fee of fifty cents per test is charged.

The aptitude scores are used for many purposes. They may be important in helping a student determine whether he should become a teacher or enter some other profession. They may determine whether a student may carry more than the average load of 16 hours, or be asked to carry a light load. They may help decide whether or not a student should take certain courses, or be placed on the college employment list. They may also be of much help in giving students guidance in various personal and social situations.

## REQUIRED PHYSICAL EXAMINATIONS

Before registering for the first semester attended each year, a physical examination by a college physician is required of all students, excepting those part-time graduate students living off-campus who are taking Saturday or night classes only. This includes the general physical examination, tuberculosis, X-ray, and other medical examinations. If taken before noon of the last day of registration prior to the beginning of class work, no charge is made except a fee of $\$ 1.00$ for X-ray. 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.

## 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 11, 12, and 13, 1941, and September 10, 11, and 12, 1942.

For the second semester, January 26, and 27, 1942, and January 25, and 26, 1943.

Summer session students register on the first day of each five-week 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 9, 1941 and September 8, 1942. 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 advisor who becomes the permanent counselor of the group for the duration of ine fresnman year. During this week, the aptitude tests are given.

Sophomores, juniors, seniors and graduates may register on any 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 their pre-registration slips to the advisor every time they register. Students who fail to observe this regulation will be charged an extra fee of one dollar. New students must take the aptitude tests, and all students must take the physical examinations before registering.

All stucents 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 oraer 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.

Registration Permits. Students must present a registration permit
signed by the Dean of the College showing that all physical and aptitude tests have been taken.

Transcripts of Record. Transcripts of high school and previous college record must be on file with the registrar before stucents are permitted to register. Transcripts should be in the registrar's office at least thirty days in advance of registration. In addition to the high school transcript, freshmen must make out an application for admission on a form obtained from the office of the registrar.

Transfers from Other Institutions. A statement of honorable dismissal must accompany all transcripts from other colleges. Students having a scholastic or other disqualification from another college or university will not be registered during the period of such disqualification. Failure to report previous college enrollment is sufficient cause for refusing credit for any work taken.

Graduate Students register on the regular registration days at the beginning of each semester or summer term. Initial graduate registration during the academic year is contingent upon the receipt and approval of transcripts of all work completed in other institutions.

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 scmester will, in every case, be conditioned upon reduction of the student's study load. No registration for credit will be mace later than Monday of the third week of the semester. Late registrants pay extra fees for medical examinations, X-rays, and aptitude tests.

Student Load. The normal load is sixteen hours each semester. A student may not carry more than sixteen and a half hours without petitioning the Standards Committce. The excess load must not be placed on the student's registration card. It will be added after the committee approves it. Approval will depend chiefly upon the student's previous scholarship index.

The minimum study load for a student regularly enrolled in any curriculum is twelve hours. 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 Courses. 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 cntered 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 fo: filing.

## THE GRADUATE DIVISION

## THE GRADUATE PROGRAM

Organization: In March, 1937, an Act of the Thirteenth Legislature authorized the Arizona State Teachers Colleges to grant the advanced degree of Master of Arts in Education. A program of graduate work has been offered at the Arizona State Teachers College, Tempe, since the 1937 summer session.

The Graduate Council is responsible for the development and forulation of general policies and for the approval of procedures essential to the organization and administration of the graduate program. The members of the Council are appointed by the President of the College. The Director of Graduate Study acts as chairman of the Graduate Council and is directly responsible for the administration of its policies and program. The Committee on the Graduate Offering is responsible to the Graduate Council for the development, supervision, appraisal, and approval of courses that shall constitute the graduate offering. This Committee includes the Heads of the Departments of the College and the Director of Graduate Study as chairman.

Purpose: The program of graduate work at the Arizona State Teachers College, Tempe, has for its primary purpose the preparation of professionally competent teachers and other educational workers.

The interests, needs, abilities, and purposes of each student are utilized in organizing a unified and balanced program of work directed toward the realization of a definite and worthy educational objective. Programs of graduate work leading to the degree of Master of Arts in Education are provided for students who have as a central purpose preparation for (1) primary, elementary, or secondary teaching, (2) administration and supervision of elementary or secondary schools, (3) special educational services such as remedial reading and student personnel and guidance work, or (4) educational pursuits other than public school work.

High scholarship and professional competency are required in one or more of these areas. Students whose major purpose is preparation for teaching, particularly at the secondary school level, will be expected to include in their programs such courses in fields other than education as may be essential for the development of competency in a major teaching field.

The degree of Master of Arts in Education is conferred upon the
satisfactory completion of the five-year secondary curriculum or upon the completion of an appropriately chosen program of at least thirtysemester hours of graduate work following graduation from any other curriculum.

The graduate program is designed to serve not only the needs of students who desire the degree of Master of Arts in Education, but to meet the needs of students who may wish to continue their professional preparation, meet certification requirements, or broaden their education without reference to the requirements for a degree.

## ADMISSION TO GRADUATE STUDY

Admission: A student who has received the bachelor's degree, or its equivalent, from an accredited college or university, may be admitted to graduate study at the Arizona State Teachers College, Tempe, provided transcripts of his college record and of graduate work done elsewhere show clearly that he is able to pursue graduate work with profit to himself and to the college.

More specifically, the following criteria may be employed in determining an applicant's eligibility for admission to graduate study:

1. A bachelor's degree from an approved institution.
2. An acceptable scholastic average in undergraduate work.
3. High scholarship in any graduate work done elsewhere.
4. An undergraduate program showing breadth of content as a whole, and a satisfactory concentration in a special field.

Transcripts of undergraduate and of graduate work done elsewhere should be sent to the office of the Registrar well in advance of initial registration. Students who fail to file transcripts of work done elsewhere prior to registration run the risk of not being permitted to register.

Students admitted to graduate study are classified as regular or special. Students who file with the Registrar a formal Application for Admission to Graduate Study in which they declare their intention of entering upon a program of graduate study with a view to meeting the requirements for the master's degree are classified as regular graduate students upon acceptance of the Application and approval of transcripts. Graduate students who do not plan to meet the requirements for the master's degree need not file a formal Application for Admission to Graduate Study. They must, however, furnish transcripts of any college work done elscwhere if they enroll during the academic year. Such students are classified as special graduate students. They may enroll
in any graduate course for which they have sufficient preparation. A special student may have his classification changed to regular by satisfying admission requirements. Credit earned while classified as a special graduate student may be applied toward the requirements for the master's degree only upon the approval of the Director of Graduate Study.

Admission to graduate study does not imply admission to candidacy for the master's degree.

Registration: Graduate students register on the regular registration days at the beginning of each semester or summer term. Registration dates are shown in the calendar. Initial graduate registration during the academic year is contingent upon the receipt and approval of transcripts of all work completed in other institutions.

Course Load: Graduate students may not register for more than sixteen semester hours of course work, inclusive of thesis, in any one semester, nor for more than six semester hours, inclusive of thesis, in a single summer term.

Students employed part time may not register for a full course load. In-service teachers, employed full time, are permitted a maximum course load, inclusive of thesis, of five semester hours of work in any one semester.

Exceptions to these regulations must have the approval of the Di rector of Graduate Study.

Advisement: The Director of Graduate Study is general adviser to all graduate students until a graduate advisory committee has been appointed.

Students who enter upon a program of graduate study at the beginning of either semester of the regular academic year shall request the appointment of a special advisory committee before the middle of the first semester of residence. Students who enter upon a program of study at the beginning of either term of the summer session shall request the appointment of a special advisory committee before the end of the first summer term of residence.

## ADMISSION TO CANDIDACY

Admission to graduate study does not imply admission to candidacy for a master's degree. Admission to candidacy for the degree of Master of Arts in Education is contingent upon the recommendation of the student's advisory committee and the approval of the Graduate Council.

Before bring accepted as a candidate for the degree of Master of Arts in Education, a student will be expected to have:

1. Given evidence of personal and professional fitness to become a candidate for a professional degree in Education.
2. Attainsd a satisfactory level of competence as a teacher through pre-service or in-service teaching experience.
3. Selecte a balanced program of graduate work directed toward the realization if a definite and worthy objective.
4. Demonstrated ability to do satisfaciory and creditable work at the graduate level.
5. Selected a suitable thesis problem.
6. Shown promise of ability to do critical thinking and of ability to carry forward an original and independent study or investigation.

Before filing an Application for Admission to Candidacy, students may be required to take certain general qualifying examinations. Advisers may arrange with the Director of Graduate Study for the administration of special qualifying examinations, oral or written, to individual students before recommending them for admission to candidacy.

Each student shall file with the Director of Graduate Study an Application for Admission to Candidacy for the master's degree not later that four calendar months prior to the end of the semester or summer term in which he expects to complete the requirements for the degree, but not until he has completed at least twelve semester hours of graduate credit, inclusive of current registration, at the Arizona State Teachers College, Tempe.

## REQUIREMENTS FOR THE MASTER'S DEGREE

Program of Course Work: The degree of Master of Arts in Education may be conforred upon a student who, having been accepted as a candidate for the degree, completes with high credit the program of work which accompanicd his application for admission to candidacy. This program shall include a minimum of thirty semester hours of advanced work inclusive of course work, individual problems, and thesis, so planned as to meet with the approval of the student's advisory committee and the Graduate Council.

Prerequisites: Graduate students who intend to become candidates for the degree of Master of Arts in Education are required to present a minimum of twenty-four semester hours of undergraduate credit in Education and related courses.

Graduate work in both education and academic courses presupposes
certain undergraduate course prerequisites or an equivalent background acquired through experience. In general the student will be expected to have completed twenty-four semester hours of credit, or the equivalent, in a given field before enrolling in graduate courses in the same or closely related field. Fifteen semester hours of credit, or the equivalent, in a given field is the usual prerequisite for graduate credit in approved upper division courses in the same or closely related fields.

Residence: Candidates for the master's degree are required to complete a full program of twenty-six hours of graduate course work ( four semester hours for thesis excepted) in residence at this institution. This requirement is designed to assure for most students a minimum of residence study of two semesters or five summer terms.

Graduate Credit Earned During Senior Year: A senior student, regularly enrolled at Arizona State Teachers College, Tempe, who is within twelve semester hours of completing the requirements for the bachelor's degree, may register for a sufficient number of hours in approved upper division courses to complete his semester or term program.

Transfer of Graduate Credit Earned Elsewhere: Under certain circumstances, a student who holds a bachelor's degree from the Arizona State Teachers College, Tempe, and who has taken graduate work at some other approved institution, may arrange to transfer as many as six semester hours of credit to be applied toward the requirements for the degree of Master of Arts in Education.

Graduate Credit in Extension Courses: A maximum of six-semester hours of credit earned in approved graduate extension courses may be applied toward the requirements for the master's degree.

Graduate Credit for Summer Work: Graduate courses are offered during both terms of the summer session. All of the course requirements for the master's degree may be completed in summer residence. A maximum of six semester hours of graduate credit may be earned in a single summer term.

Time Limit: Graduate work, to be acceptable for credit toward the requirements for the master's degree, must be completed within a period of five years preceding the date on which the degree is conferred.

Course Grades and Credit: The college grading system-A, B. C, D, E, and Inc. is used to report quality of credit in graduate course work. The fwenty-six semester hours of graduate credit (exclusive of thesis) accepted in fulfillment of the requirements for the master's degree shall average not lower than "B" grade. Course work, other than thesis, re-
ported "Incomplete" must be completed within a year of the official ending of the course.

Thesis: A thesis is required in partial fulfillment of the requirements for the degree of Master of Arts in Education. The thesis may count for not more than four semester hours of graduate credit.

In the selection of a suitable thesis problem, the student shall be guided by his adviser. The student's adviser shall assist the student in the selection of a problem, inspect and approve the preliminary and final drafts of the thesis, and exercise general supervision over matters pertaining to the organization, development, and preparation of the study in final form.

On or before May 1, the student shall deliver to the office of the Director of Graduate Study:

1. Two typed copies (the original and first carbon) of his complete thesis, approved and signed by his adviser.
2. Two typed copies of an abstract of his thesis approved and signed by his adviser.
3. A receipt from the Business Office for a $\$ 5.00$ deposit covering the cost of binding the two copies of his thesis.

The Director of Graduate Study will countersign the receipt covering the cost of binding to indicate that the two copies of the thesis have been accepted for binding.

The two bound copies of the student's thesis shall be deposited in the college library.

Final Examination: Candidates for the degree of Master of Arts in Education are required to pass final written and oral examinations. Upon final approval and signature of the student's thesis, the adviser will arrange with the student dates for the examinations.

The written examination is prepared, administered, and evaluated by the student's adviser. The written examination, after being evaluated by the adviser, is filed in the office of the Director of Graduate Study.

The oral examination is conducted by a committec of three consisting of the student's adviser, his committeeman, and a member appointed by the Director of Graduate Study.

Application for Graduation: Following admission to candidacy for the master's degree, and not later than April 1, the student shall pay a graduation fee of $\$ 10.00$ at the Business Office of the College and shall
file an application for graduation at the office of the Registrar. Blanks for this purpose may be obtained at the office of the Registrar.

Conferring the Master's Degree: Candidates for the degree of Master of Arts in Education are required to be present at the commencement exercises in the prescribed academic costume. Exceptions to this regulation shall be granted only upon petition to the Director of Graduate Study and the President of the College.

## THE GRADUATE OFFERING

Approved Graduate Courses: Courses which have been approved for graduate credit by the Committee on the Graduate Offering and the Graduate Council constitute the graduate offering. Descriptions of these courses will be found in the departmental offerings in this catalogue.

Courses open only to graduate students are numbered 300 and above. Candidates for the degree of Master of Arts in Education are required to present at least fifteen semester hours of credit, inclusive of thesis, in graduate courses numbered 300 and above.

Courses numbered 200-299 followed by "g" are approved upper division courses which may be taken for graduate credit. Not to exceed fifteen semester hours of graduate credit in approved upper division courses will be accepted toward the requirements for the master's degree.

A special type of graduate work is provided through Individual Problem courses in the several departments of the college. Individual Problem courses carry the number 390 in each department. Ordinarily not more than six semester hours of credit in Individual Problem courses will be accepted in partial fulfillment of the requirements for the master's degree.

## CURRICULUMS, DEGREES, AND CERTIFICATION

## CLASSIFICATION OF STUDENTS

Students are classified according to the amount of credit earned as follows: Freshmen, those who have acquired less than thirty-two semester hours; sophomores, those with thirty-two or more, but less than six-ty-four semester hours; juniors, those with sixty-four or more, but less than ninety-six hours; seniors, those with ninety-six semester hours or more; graduate students, those holding a bachelor's degree from Arizona State Teachers College at Tempe or other recognized institutions.

## CURRICULUMS

The course work of this institution is organized into three divisionslower, 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. Each student elects one of the five curriculums-the standard, the kindergarten-primary, the optional elementary, the secondary, or the special curriculum. With the exception of Public School Art and Geography in certain curriculums, all students must take the lower division studies as indicated for the freshman and sophomore years of the Standard Curriculum. This requirement is made so that all students may have a broad cultural background of general education.

By referring to the department of major interest in this bulletin, the student will find descriptions of the sequences of studies needed to complete the major or minor in the department or field desired. ane special requirements for majors and minors are also given there. In addition to his major and minor, the student must meet all the requirements of his chosen curriculum. The outlines of these curriculums are given on the succeeding pages.

## STANDARD CURRICULUM

## FRESHMAN YEAR

| First Semester Hous | Second Semester Hours |
| :---: | :---: |
| Eng. 101 Composition ....... 3 | Eng. 102 Composition ........ 3 |
| Science ................ 3 or 4 | Science . ............. 3 or 4 |
| *Hygierte . . . . . . . . . . . . . . . . . . 2 | *Art 110 Pub. Sch. Art . . . . . 2 |
| P. E. Activity . . . . . . . . . . . . . $0 . \overline{5}$ | P. E, Activity . . . . . . . . . . 0.5 |
| Or. 101 Orientation .......... 2 | Or. 102 Orientation ......... 2 |
| Major, minor, or elective .... 5 | Major, minor, or elective .... 5 |
| 16.5 | 16.5 |

## SOPHOMORE YEAR



## SENIOR YEAR



16

## 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.

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 hours as shown by the outline, it is usually possible to adjust previous credits to this curriculum without loss.


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

## AIDS IN INTERPRETING CURRICULUMS

In interpreting the Standard and the other curriculums, students should read carefully and observe strictly the following instructions:

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

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

Hist. 101, 102, Modern Europe; Hist. 103, 104, American Pol. and Social History; Econ. 131, 132, Principles of Economics.

Science Choices. 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:

| Courses | Hours | Majors |
| :---: | :---: | :---: |
| Gen Sci. 100 and 110 or | 6 | Art, Com., Engl., For. Lang., |
| Math 110 and Gen. Sci. | $110 \ldots 6$ | Kgn-prim., Mus., Soc. Studies |
| Chem. 110, Physies 110 | 6 | Agric., Geog., Biol, Ind. Arts, Phys. Educ., Elem. Sci. |
| Chem. 110 and 180 | 8 | Home Economics. |
| Biol. 130 and 140 | 8 | Elem. Sci., Geog., Biol. |
| Chem. 111 and 112 | 8 | Ind. Arts, Math., Pre-professional |

P. E. Activity. Two semester hours in Physical Education Activity courses are required of all students. One hour of Sports Survey is required of all men in the Freshman year. Girls must take one hour of Sport Activity and one hour of Dance Activity.

Major and Minor Required. A major and a minor are required in the standard, secondary, and special curriculums. Both the major and the minor must be in fields other than education.

Major. Major is the term applied to a sequence of courses selected from one department, or closely related departments or fields, which constitutes the student's more prominent interest. Departments may require not less than 24 nor more than 30 semester hours for the major,
but students may take a greater number by using some of their electives for this purpose.

Candidates for the elementary certificate should select courses for the major in more than one division of a department. Candidates for the secondary certificate or those taking the special curriculum may confine the major to one division of a department.

Minor. A minor consists of not less than 15 semester hours of work in one department. No department may require more than 15 hours for a minor. Of course, a student may elect more if he desires. Candidates for the elementary certificate must take the required minor in a department other than that in which the major is chosen, however a second minor may be taken in the major department or field, if desired. Candidates seeking the secondary certificate may take a minor in a different division of the department from which the major is chosen, but they are advised not to do so since most teachers placed in Arizona Hign Schools must teach in two or more departments.

As a general rule the courses required in the core curriculum will not be counted toward the major or minor.

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

| Agriculture | Industrial Arts | Elementary Science |
| :--- | :--- | :--- |
| Art | Mathematics | Geography |
| Commerce | Music | Physical Science |
| English | Physical Education | Psychology |
| Foreign Language | Biological Science | Social Science |

Time for Beginning the Major. The major must be chosen not later than the beginning of the second year. For certain curricula, work on the major should begin in the freshman year. For other curricula and for certain students, it may be advantageous to begin work on the major at 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.

Choosing a Curriculum. It is not necessary for a student to choose the curriculum which he intends to follow 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 may be satisfied.

Admission to Student Teaching. Before being admitted to Student teaching, students must pass a test on the subjects taught in the elementary schools.

Graduation and Certification. With the completion of the work of the standard, the kindergarten-primary and the optional elementary 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. The completion of the secondary curriculum entitles the graduate to teach in the high schools of Arizona.

## THE KINDERGARTEN-PRIMARY CURRICULUM

Leading to Kindergarten-Primary or Kindergarten-Elementary ceritfication.

## FRESHMAN YEAR

| First Semester Hours | Second Semester Hours |
| :---: | :---: |
| Engl. 101 Composition ....... 3 | Engl. 102 Composition ....... 3 |
| Science . . . . . . . . . . . . . . 4 or 3 | Science .............. 4 or 3 |
| *Hygeine . . . . . . . . . . . . . . . . . . 2 | *Art 110 Publ. Sch. Art . . . . . ${ }^{\text {c }}$ |
| P. E. Activity . . . . . . . . . . . . 0.5 | P. E. Activity . . . . . . . . . . . 0.5. |
| Or, 101 Orientation ........... 2 | Or. 102 Orientation ........... 2 |
| Electives ............... 5 or 6 | Electives ................ 5 or 6 |
| 16.5 | 16.5 |

SOPHOMORE YEAR


## JUNIOR YEAR

| First Semester Hours | Second Semester Hours |
| :---: | :---: |
| Educ. 206 Const. \& Play .... 3 | Educ. 208 Early Childhd. Educ. 2 |
| Educ. 212 Ilay Education .... 3 | Educ. 209 Kgn-Prim. Curric.. ลิ |
| Educ. 210 'I'eaching of Reading 2 | Educ. 207 Lit. of Kgn.-Prim.. |
| G. Sci. 232 Nature Study ..... 3 | *I, Art 230 Kgn.-Prim. |
| Mus. 250 Kgn.-Prim. Music .. 2 | Wood Work .......... 2 |
| Psych. 200 Educ. Meas. ....... 3 | *Psych. 233 Child Psychology . 3 |
| 16 |  |

## SENIOR YEAR



Note: This curriculum does not require a major or minor.
Students desiring the Kindergarten-Primary Certificate must follow Kinder-
garten-Primary Curriculum with practice teaching in Kindergarten and in grades 1, 2, or 3 . Students desiring the Kindergarten-Elementary Certificate must follow the Kindergarten-Primary Curriculum with practice teaching assignments in kindergarten and in grades 4, 5, 6, 7, and 8, plus Educ. 230, Elementary Curriculum.

Students qualifying for the Kindergarten-Primary or the KindergartenElementary certificates must show proficiency in piano accompaniment and pass the piano tests. They must also show proficiency in sight-reading and singing to meet the needs of young children. It is recommended that students needing piano lessons begin them in the freshman year. Music 125, 126, 127 , and 128 are offered to help the student meet the requirements of the plano test.

A student completing this curriculum will receive the degree of Bachelor of Arts in Education, and will be eligible for the Kindergarten-Primary or the Kindergarten-Elementary certificate in the state of Arizona.

## SECONDARY CURRICULUM

The secondary curriculum is planned as a three year sequence beginning with the junior year. It is designed for students who are looking forward to high school teaching. The requirements for the master's degree and secondary certification may be met through the curriculum.

## FRESHMAN YEAR



## SOPHOMORE YEAR



## JUNIOR YEAR

| First Semester Hours | Second Semester Hours |
| :---: | :---: |
| $\dagger$ Psych. 213 Educ. Psych ..... 3 | Psych. 200 Educ. Meas. |
| $\dagger$ Educ. 215 Secondary Educ. .. 3 | $\dagger$ Educ. 232 Introd. to Guidance. . 2 |
| Major, minor, or elective ... 10 | Major, minor, or elective .....11 |
| 16 | 16 |

## SENIOR YEAR

|  | First Semester | Hours |
| :---: | :---: | :---: |
| *Educ. 250 Phil. of Ed. or |  |  |
| Educ. 211 Hist. of Ed, ......... 3 |  |  |
| Educ. 288 Meth. in Jr. \& Sr. <br> High School ............. 3 |  |  |
|  |  |  |
| [aj | minor, |  |

Second Semester Hours *Educ. 260 Directed Teaching 5 Major, minor, or elective ......11 16
Major, minor, or elective ......... 10

## GRADUATE YEAR

| First Semester Hours | Second Semester | Hours |
| :---: | :---: | :---: |
| * Educ. 300 Thesis Prep. ......... ${ }^{2}$ | *Thesis |  |
| Electives ........................ 13 | Electives | 11 |
| 15 |  | 15 |
| *Thase courses may be taken either semester. |  |  |
| These courses are offered only once during the academic year and shouldbe taken in the semester in which they appear on the printed class schedule. |  |  |

Major and Minor. In addition to the courses prescribed above, this curriculum must include a major of at least 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 | Physical Education |
| :--- | :--- |
| English | Home Economics |
| Physical Science | Commerce |
| Biological Science | Music |
| Mathematics | Art |
| Modern Language | Industrial Arts |

## OPTIONAL ELEMENTARY CURRICULUM

This curriculum is designed to meet the needs of those who wish to meet the requirements for the Bachelor of Arts degree in Education without having to meet the requirements for majors and minors found in the curriculums listed elsewhere. Upon completion of the folloming curriculum the student will be eligible for the elementary teacher's certificate in the State of Arizona. The student electing to follow this curriculum should note that loss of time is likely to ensue in the event that he decides at a later time to qualify for the secondary teacher's certificate in Arizona. Loss of time is also likely to take place if the Master of Arts degree is sought.

The intent of this curriculum is to permit the student to elect freely from the entire course offerings for the purpose of securing an introduction to many fields of knowledge pertinent to elementary school instruction. The head of the Department of Education will advise students who choose to follow the optional curriculum.

## FRESHMAN YEAR

| First Semester Hours | Second Semester Hours |
| :---: | :---: |
| Engl. 101 Composition ....... 3 | Eng. 101 Composition ........ 3 |
| Science . . . . . . . . . . . . . 3 or 4 | Science . . . . . . . . . . . 3 or 4 |
| *Hygiene . . . . . . . . . . . . . . . . . 2 | P. E. Activity ................ 0.5 |
| P. E. Activity .............. 0.5 | Art 110 Public School Art .... 2 |
| Or. 101 Orientation ........... ${ }^{\text {a }}$ | Or. 102 Orientation ............ 2 |
| Major, minor, or elective 4 or 5 | Major, minor, or elective ...... ${ }^{\text {a }}$ |

## SOPHOMORE YEAR



## JUNIOR YEAR



## SENIOR YEAR



## SPECIAL CURRICULUM

This curriculum is designed for the student interested in professions other than teaching and leads to the degree of Bachelor of Arts in Education, but not to any type of certification. If elementary or secondary certification is desired, additional time must be spent. The major and electives to be taken with this curriculum will depend on the special interest of the student, which may include pre-medicine, science, commerce, or other fields. Faculty advisers will guide the student in the selection of courses for the various professional fields. Each student is required to complete 18 hours in education and psychology.

## FRESHMAN YEAR

| First Semester | Hours |
| :---: | :---: |
| Engl. 101 Composition ........ 3 |  |
| Science or Mathematies | 4 |
| *Hygiene |  |
| P. E. Activity | 0.5 |
| Or. 101 Orientation | 2 |
| Major, minor, or elective |  |

Second Semester Hours
Engl. 102 Composition ....... 3
Science or Mathematics ...... 4
P. E. Activity ................. 0.5

Or. 102 Orientation ............ 2
Major, minor, or elective ..... 7

## SOPHOMORE YEAR

|  | First Semester | Hours | Second Semester | Hours |
| :---: | :---: | :---: | :---: | :---: |
| * Psych. | 100 Elem. Psych | .. 3 | *P. E. 190 Playground |  |
| Social | Studies | ... ${ }^{3}$ | Leadership ... | 2 |
| P. E. | Activity .... | . 0.5 | Soclal Studies . | 3 |
| Major, | minor, or electiv | . 10 | *Soc. Sci. 100 Const. Go | 3 |
|  |  | 16.5 | P. E. Actlvity ...... | 0.5 |
|  |  |  |  |  |
|  |  |  |  | 16.5 |

## JUNIOR YEAR

| First Semester | Hours | Second Semester | Hours |
| :---: | :---: | :---: | :---: |
| Education elective | 3 | Education elective ... | 6 |
| Major, minor, or elective | 13 | Major, minor, or elective | 10 |
|  | 16 |  | 16 |

## SENIOR YEAR

| First Semester | He ${ }^{\text {l }}$ | Second Semester | Hours |
| :---: | :---: | :---: | :---: |
| Education elective ............. 3 |  | Education elective | 3 |
| Major, minor, or elective | 13 | Major, minor, or elective | 13 |
|  | 16 |  | 16 |

## PREPROFESSIONAL COURSES

For students interested in professions other than teaching, or in two or more years of general college work for cultural purposes, special curriculums are recommended.

Such students should consult their faculty advisers after determining their ultimate objectives and the colleges or universities to which they will transfer later. Courses will be chosen to fit their needs and interests. The curriculum suggested hereafter for the freshman and sophomore years is an example of a good program fitting the needs outlined above. Variations should be made to meet the special requirements, such as are necessary for pre-engineering, pre-legal, pre-medieal, and pre-dental needs.

Freshman Year. English, 6 hours; Foreign Language, 8 hours; Science, 6 hours; Social Sciences, 6 hours; Mathematics, 6 hours.

Sophomore Year. English, 6 hours; Foreign Language, 8 hours; Science or Mathematics, 6 hours; Social Science, 6 hours; Elective, 6 hours.

Students interested in agriculture should see the description under the Department of Agriculture and should have a conference with the head of the department.

## DESCRIPTION OF COLLEGE COURSES

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. Certain upper division courses may be taken for graduate credit. A list of these courses is given in the graduate bulletin. When carried for graduate credit, the letter " g " is placed after the number of the course. Students wishing upper division courses for graduate credit must indicate this at the time of registration.

Courses Not Offered Certain Years. Since this catalog covers two years, it is impossible to indicate accurately which courses will not be offered each year. Students should, therefore, ask for the schedule of classes printed early each year.

## COURSES IN ORIENTATION

Or. 101 Orientation To A College Education. Designed to promote a rich and purposeful entrance into college life and to develop the skills that increase the possibility of success in college work. Required of all first year students. First semester, one lecture and one discussion period each week. Lecture at 4:00, Tuesday. Discussion sections at 1:00, 2:00, 3:00, and 4:00, Thursday. Credit, 2 hours.

Carrier and Staff.
Or. 102 Orientation To A College Education Required of all freshmen. A continuation of Orientation 101. Second semester. Days and hours the same as for Or. 101. Credit, 2 hours.

Carrier and Staff.

## DEPARTMENT OF AGRICULTURE

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

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 provides a broad foundation for those students who, later, wish to study in specialized fields of agriculture in other institutions. 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. They also meet the needs of students who plan to go directly into the various fields of productive and applied agriculture.

4-H Club Leaders. Students majoring in another department may qualify also as teachers of elementary science and agriculture and as 4-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 south of the campus, on a thirty-five acre tract with a modern farm home, new dairy buildings and equipment and a modern hog unit. A selected herd of registered dairy cows supplies 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.

## SEQUENCES IN AGRICULTURE

First and Second Year. First Semester: *Biol. 130, 140, *Agri. 107, *Chem. 111, Biol. 203, Agric. 125, I. A. 108. Second Semester: *Biol. 140, or 130, *Agri. 108, *Chem. 112, *Chem. 180, Agri. 116, 114, 126.

Third and Fourth Year. First Semester: Biol. 133, Agric. 185, 143, 213, 219. Second Semester: Biol. 134, Agric. 186, 246, Biol. 204, Agric 144, 222, 224, 216.
*Courses starred are foundation courses. Students not wishing the
regular curriculum in agriculture, yet desiring a major or a minor in it may select courses under the guidance of the head of the department. The major consists of a minimum of 24 hours.

## COURSES IN AGRICULTURE

Agric. 107 Animal Industry. A study of farm animals, their breed history, management, feeding, judging, and marketing. In the first half of the semester, emphasis is laid on sheep and beef cattle. The remaining time is devoted to general problems of dairying, swine, and poultry culture. Fee, $\$ 1.00$. First year, first semester, four hours lecture, or its equivalent in laboratory and field work. Credit, 4 hours.

Ostrander.
108 Plant Industry. A brief survey of Agriculture in general. Topics studied are: the development of permanent agriculture; basic principles of plant growth and improvement; factors involved in profitable crop production; leading crop plants and producing areas; cultural methods; harvesting, storing, and marketing of field crops. Fee, $\$ 2.00$. First year, second semester, three lectures and three hours of laboratory or field work per week. Credit, 4 hours.

Mortensen.
Ind. Arts 108 Farm Mechanics. Designed to meet the needs of students of agriculture and farm management. See description under Industrial Arts. Fee, $\$ 2.00$. Second year, first semester, 9 hours laboratory. Credit, 3 hours.

114 Dairy Husbandry. A study of dairy farm management; methods of feeding, breeding and herd improvement; pedigree and other methods of animal selection; calf raising and dairy equipment; and the more common dairy cow diseases. Fee, $\$ 1.00$. Second year, second semester, three hours of lecture or its equivalent in dairy survey and field work. Credit, 3 hours.

Ostrander.
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. Second semester, three hours of lecture or its equivalent in field work. Credit, 3 hours.

Ostrander.
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: Biol. 130. Fee, $\$ 1.00$. Second year, first semester, one lecture and three hours of laboratory or field work per week. Credit, 2 hours. Mortensen

126 Practical Horticulture. A continuation of Agri. 125 with em-
phasis upon ornamental trees and shrubs, flowering plants, and landscaping. Prerequisite: Agric. 125. Fee, $\$ 1.00$. Second year, second semester, one lecture and three hours of laboratory or field work per week. Credit, 2 hours.

Mortensen
Biol. 130 General College Botany. See description under Biology.
Biol. 133 Plant Anatomy. See description under Biology.
Biol. 134 Plant Physiology. See description under Biology.
Biol. 140 General Zoology. See description under Biology.
143 Soils. The formation, classification, and properties of soils; the relation of the properties of soils to crop production; cultural practices in soil conservation. By special arrangement, a student may do extra work and earn 4 hours. Prerequisite: One course in college chemistry. Fee, $\$ 2.00$. Third year, first semester, two lectures and three hours laboratory work per week. Credit, 3 hours. Judd.

144 Irrigation Principles and Practices, A continuation of Agric. 143. Brief history of irrigation; present extent and importance; water relations of crop plants; water measurements; and methods of application, conservation and use of irrigation water. Prerequisite: Agric. 143. Fee, $\$ 2.00$. Second semester, three lectures per week. Credit, 3 hours.

Judd.
185 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. Fee, $\$ 2.00$. Third year, first semester, three lectures per week. Credit, 3 hours. Offered in 19411942 and alternate years.

Judd.
186 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. Fee, $\$ 2.00$. Third year, second semester, three lectures per week. Credit, 3 hours. Offered in 1941-1942 and alternate years.

Judd.
Biol. 203 General Bacteriology. See description under Biology.
Biol. 204, 204A Genetics. See description under Biology.
213-g Plant Ecology. Origin and development of vegetation and measurements in the field of the factors of environment with applica-
tions to agriculture, forestry, grazing, and general crop production. Prerequisite: Biol. 130. Fee, $\$ 2.00$. First semester, 3 lectures and one laboratory period per week. Credit, 4 hours. Offered 1942-1943 and alternate years.

Judd.
216-g Plant Breeding. The principles and practices of plant breeding; technique and improvements by selection and hybridization Prerequisites: Agric. 108 and Biol. 130, 204. Fee, $\$ 2.00$. Second semester, three lectures a week. Credit, 3 hours. Offered 1942-1943 and alternate years

Judd.
219-g 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: Biol. 140, 204. First semester, three lectures per week. Credit, 3 hours. Offered 1942-1943 and alternate years.

Ostrander.
Biol. 222 General Entomology. See description under Biology.
Biol. 224 Animal Ecology. See description under Biology.
Agric. 242 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 report. Credit, 1 or more hours.

Staff.
246 Range Management. Development of the range industry; grazing regions; production and utilization of range forage; range improvement; range reconnaissance and management plans; the principal range plants of Arizona; and field trips in cooperation with the U. S. Forest Service. Prerequisites: Biol. 130 and Agric. 107. Fee, $\$ 5.00$. Second semester, two lectures and one three-hour laboratory period per week. Credit, 3 hours. Offered in 1941-1942 and alternate years.

Judd.
390 Individual Problems. Designed to meet the needs of those students wishing to investigate a problem of their own in Agriculture. Time and credit to be arranged.

Staff.

# DEPARTMENT OF ART 

## KLOSTER (Head of the Department), HARTER, CAILLIET, WALSH

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 field other 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 to classroom teaching and school club work.

## MAJORS AND MINORS

Excepting the General Major, all majors in Art require 30 semester hours excluding Public School Art, and at least 12 hours must be in upper division courses. All minors require fifteen semester hours excluding Public School Art.

Major and Minor in Art Education. The following courses are required for the major: $102,103,105,106,107,108,115,120,200,215$. The remaining hours may be selected according to the individual's interests. For the minor, it is suggested that the courses be selected from the following: 102, 105, 107, 108, 120, 200, 215.

Major and Minor in Fine and Decorative Arts. The following courses are required: $102,103,105,106,114,120,203,206,215,228$. The remaining hours may be selected according to the individual's interests. For the minor, the following courses are suggested: 102, 105, 106, 115, 120, 206, 215.

Major and Minor in Commercial Art. The following courses are required: $102,103,105,106,121,122,201,203,220,221$. The remaining hours may be selected according to the student's interest. Courses for this minor are selected from the following: 102, 103, 105, 121, 201, 203, 215, 221.

General Major in Art. This major is planned for those desiring a general background in Art. It consists of 24 hours selected to fit the
needs of the student. The courses for the minor are also selected to meet the needs and interests of the student.

Laboratory Requirements. All laboratory courses are planned to require three hours work per week for each s $\epsilon$ mester hour earned.

## DESCRIPTION OF COURSES IN ART

Art 100 Personality and Environment. Considers personality and figure analysis-a study of line, color and fabric in dress; home decoration, table and flower arrangement. May be substituted for Art 110 with consent of the head of the department. Fee, $\$ 1.50$. First year, twice a week. Credit, 2 hours.

Kloster.
102 Drawing and Perspective. Principles in elliptical., parallel and angular perspective with relation to creative composition. Fee, 50 cents First year, second semester, four hours a week. Credit, 2 hours. Kloster.

103 Life Drawing. A study of the basic construction of the human figure with emphasis on solidity and proportion. Fee, $\$ 2.00$. First year, each semester. Credit, 2 or 3 hours.

Harter.
105 Color and Design. The scientific basis of color, the properties of color and combinations producing harmony. Fee, \$1.00. First year, first semester, four times a week. Credit, 2 hours. Kloster.

106 Creative Design. A modern approach to the field of design. Designing from the volume, surface enrichment of forms, a study of texture, creative pattern in rugs, drapery, wall paper, and dress prints. Fee, $\$ 1.00$. First year, second semester, four hours a week. Credit, 2 hours.

Kloster.
107, 108 Demonstration and Observation Teaching. Required of all art education majors and minors. To be taken before directed teaching. Fee, 50 cents. Second year, both semesters, two hours a week. Credit, 2 hours each.

Cailliet.
110 Public School Art. General art requirement. A course for teachers emphasizing tools and procedures, art principles and modern ways of directing art activities. Art 100 or 121 may be substituted for 110 with approval of the head of the department. Fee, $\$ 1.00$. Second year, either semester, four times a week. Credit, 2 hours. Cailliet.

114 Water Color. Painting in opaque and transparent water color. Landscape, still life, and figure. Prerequisites for art majors: Art 102, 103 Fee, $\$ 1.00$. Second year, second semester, four hours a week. Credit, 2 hours.

Harter:

115 Clay Modeling. Modeling is an art medium which has universal appeal. Fun may be had in modeling amusing, serene, or grave figurines. An introduction to pottery using hand processes in building, Glazing and firing. Fee, $\$ 4.00$. Second year, first semester, four hours a week. Credit, 2 hours.

Kloster.
120 Allied Crafts. A laboratory course dealing with special problems in leather, metal, weaving, and toy making or marionettes. Fee, $\$ 4.00$. Second year, either semester, six hours a week. Credit, 3 hours. Cailliet.

121 Lettering. Fundamentals of construction, spacing and arrangement of basic Roman and Gothic letters. Modern uses of lettering. Required for commercial art majors. Fee, $\$ 1.00$. Second year, each semester, four hours a week. Credit, 2 hours.

Harter.
122. Commercial Art. An introductory course. Problems identical with those solved by professional commercial artists. Prerequisite: Art 121. Fee, 50 cents. First or second year, second semester, four hours a week, Credit, 2 hours

Harter.
200 Art Curriculum and Supervision. Art problems and methods for elementary and high schools; the relationship of the art supervisor to principal, art teacher, and classroom teacher; analysis and planning of art courses of study. Prerequisites: Art 107, 108, 110. Fee, 50 cents. Fourth year, one semester, two hours a week. Credit, 2 hours.

Kloster.
201 Advertising Design. An analysis of 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. F'ee, 50 cents. Third year, first semester, four hours a week. Credit, 2 hours.

Harter.
202 Survey of Advertising Art. A thorough description of all phases of advertising production including advertising agency procedure, typography, reproduction processes, printing, lithography. Visits to local business concerns and studios. Fee, 50 cents. Third or fourth year, second semester, four hours a week. Credit, 2 hours. Harter.

203-a Advanced Lettering. A continuation of Art 121 with emphasis on arrangement and spacing. Fee, $\$ 1.00$. Third or fourth year, first semester, four hours a week. Credit, 2 hours.

Harter.
203- $\mathrm{b}^{\prime}$ Advanced Lettering. Special problems. Recommended only to those having professional interest in lettering. Fee, $\$ 1.00$. Third or fourth year, first semester, four times a week. Credit, 2 hours. Harter.

204 Costume Design. Fashion rendering; historic and folk costume; sketching; fashion prediction and creation. A survey of manufacturers, retailers, designers and illustrators of fashion. Prerequisites: Art 103, 105. Fee, 50 cents. Third year, second semester, four hours a week. Credit, 2 hours.

Kloster.
205 Textile Printing. A laboratory course in methods of hand printing on textiles. Design, color, and craftsmanship are stressed. Fee, $\$ 4.00$. Third or fourth year, first semester, four hours a week. Credit, 2 hours.

Kloster.
206-g Sculpture. Modeling in the round and in relief casting and mold-making, carving, applying finish. Prerequisites: Art 103, 115. Fee, $\$ 4.00$. Third or fourth year, second semester, four hours a week. Credit, 2 hours.

Kloster.
208 Industrial Design. Advanced design from present-day industrial and commercial angles. Includes modern packaging. Renderings and models. Prerequisites: Art 105, 106, 121. Fee, $\$ 1.00$. Third or fourth year, second semester, four hours a week. Credit, 2 hours. Harter.

214 Advenced Water Color. Continuation of Art 114 with more advanced problems. Fee, $\$ 1.00$. Third or fourth year, second semester, four hours a week. Credit, 2 hours.

Harter.
215 Art History. A comprehensive survey of art emphasizing the manner in which art reflects and interprets a people and a period. Fee, 50 cents. Third or fourth year, first semester, three hours a week. Credit, 3 hours.

Kloster.
217 Advanced Clay Modeling. Progressive problems in modeling. The student may elect work in pottery using the wheel or in ceramic sculpture. Special study in the preparation of glazes. Prerequisite: Art 115. Fee, $\$ 4.00$. Third or fourth year, first semester, four hours a week. Credit, 2 hours.

Kloster.
218 Advanced Commercial Art. The student may specialize in any field of commercial art which interests him. Prerequisites: Art 103, 105, 121, 201, or equivalents. Third or fourth year, second semester, four hours a week. Credit, 2 hours.

Harter.
220 Advanced Crafts. A continuation of Art 120 with opportunity to do special problems in leather, silver, pewter, or copper. Prerequisite: Art 120. Fee, $\$ 4.00$. Third or fourth year, either semester, six hours. Credit, 3 hours.

Cailiet.
221 Advanced Life Drawing. Emphasizing detailed structure of heads, hands, and feet, as well as full figure. Quiek sketch and mem-
ory sketch as well as longer poses. Various mediums. Fee, $\$ 2.00$. Third or fourth year, first semester, six hours. Credit, 3 hours.

Harter.
226-g Contemporary Art. Surveys contemporary art in America and abroad emphasizing the aims and tendencies in expression with a study of the major artists and their accompltshments. Open to senior students. Third or fourth year, second semester, two hours a week. Credit, 1 hour.

Kloster.
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. Fee, $\$ 1.00$. Third or fourth year, either semester, six hours a week. Credit, 3 hours.

Harter.
230. Humorous nlustrations. Cartoons and humorous drawings. Magazine, comic strip, editorial cartoons. Prerequisite: Art 103 or equivalent. Fee, 50 cents. Third or fourth year, one semester, four times a week. Credit, 2 hours.

Harter.
231. Indian Art. A study of the arts of the North American Indians with emphasis upon the Indians of the Southwest. The first semester will deal exclusively with the cultures of the prehistoric groups. Third or fourth year, first semester, two hours a week. Credit, 2 hours.

Walsh.
232. Indian Art. A continuation of Art 231 stressing the development of Indian art after 1540. Influences having a bearing upon Indian art during historic and modern times. Construction of glass slides to illustrate the Indian arts. Third or fourth year, second semester, two hours a week. Credit, 2 hours.

Walsh.
238. Advanced Oil Painting. Continuation of Art 228. Preparation of canvas and gesso grounds, and a study of techniques. Fourth year, second semester, six hours a week. Credit, 3 hours. Harter.

240-g Interior Design. A study of modern housing, coordinated planning in decorating the small house with emphasis upon modern ways of achieving a feeling for space. Renderings of floor plans, elevations, and interior sketches. The construction of miniature models to scale. Fee, $\$ 1.00$. Third or fourth year, six hours a week. Credit, 3 hours. Kloster.

390 Individual Problems. Open to graduates only. Meets the needs of students wishing to explore and experiment in various creative art fields; or to investigate special problems in art education. Credit and hours to be arranged.

Staff.

## DEPARTMENT OF COMMERCE

## SWANSON (Head of the Department), HLLKERT, GREENE, THOMAS

The Department of Commerce offers courses to meet the needs of four groups of students: (1) Those preparing for business as a career. (2) Those preparing to teach commerce or business subjects in public secondary schools. (3) Those preparing for elementary certification and desiring to take certain commerce courses. (4) Those pursuing selfdefined objectives and registered as special or irregular students.

Students preparing for business careers may choose courses for majors and minors to fit their special interests in Accounting, General Business and Economics, Merchandising, or Secretarial Science. If graduation and a degree is sought, they must meet general and core-curriculum requirements for graduation from the institution as well as the requirements of the particular curriculum selected.

Students preparing to teach commerce or business subjects in secondary schools will complete requirements either for the Arizona Secondary Certificate or for the Arizona Special Certificate in Commerce. Completion of these requirements will include the commerce courses that comprise the secondary commercial teacher training major as set up by the faculty of the Department of Commerce.

The Arizona Secondary Certificate calls for a fifth year of study. Students preparing for this certificate should plan a five-year program of study under the guidance of the head of the department, and with the joint-guidance of the head of the department and the Director of Graduate Study if the Master's degree is desired.

The Arizona Special Certificate in Commerce may be obtained in four years. It entitles the holder to teach commerce subjects only. Students preparing for this certification should plan their four-year program of study under the guidance of the head of the department.

Some students preparing for regular elementary certification choose a major in commerce. These students should be particularly careful in their selection of courses. It is intended that such students will take the General Business and Economics major with such modifications as may be approved by the head of the commerce department and the edueational adviser. This curriculum emphasizes general business courses and allows for considerable flexibility. Also, it should be kept in mind that if elementary certification is sought-either the regular elementary certificate or the Special Certificate in Commerce-the minor must be in another department.

Special and irregular students, who for economic or other reasons wish to pursue personal and self-defined objectives through taking only a few courses or a specialized sequence of courses offered in the commerce department, will be given guidance and help in accordance with their interests and objectives. To efficiently serve students in terms of their declared needs is one of the announced purposes of the commerce department. Of course, it should be understood that if such special or irregular students later decide to pursue graduation and a degree, they must be prepared to meet and satisfy all general and core-curriculum requirements for graduation from the institution as well as the requirements of the particular curriculum selected.

## MAJORS AND MINORS

A major in the commerce department consists of 24 to 30 semester hours, depending upon the curriculum selected. A minor consists of 15 semester hours. All declared majors and minors must be approved by the individual student's adviser and cleared through the head of the department.

Students pursuing a major in the commerce department are expected to include Commerce 127, Survey of Business (a departmental orientation course), in their first registration for a program of study that includes commerce courses. At least three semester hours in Principles of Economics also is required in all commerce majors.

FOR BUSINESS PURSUITS. Students primarily interested in training for business careers may major in Accounting, Secretarial Science, Merchandising, or General Business and Economics. The first three named are technical and specialized curriculums, while the fourth is a general-type curriculum allowing considerable flexibility and designed to meet the needs of the students who simply desire general business training. A business student majoring in any one of these four fields may declare his minor in any of the others. It is possible, in other words, for a student not desiring elementary certification to major in Accounting and minor in Secretarial Science. Probably most of these students will select and follow the "Special Curriculum" (described in the section of the catalogue given over to Degrees, Curriculums, and Certification) since no student teaching and only 18 semester hours of education and psychology are required. This curriculum leads to the degree of Bachelor of Arts in Education, but not to any type of teacher certification. If a teacher's certificate is later desired, the student must be prepared to complete all requirements of the teacher training curriculum he selects.

It is possible for a student who is interested in one of these specialized business curriculums to complete at the same time the requirements
for the secondary commercial teacher training major. If he will seek the continued guidance of the teacher training adviser, he can accomplish this two-fold objective through careful use of electives and through taking a few extra courses.
(1) The Accounting Major requires a minimum of 30 semester hours in accounting courses. Required courses: Com. 101-102 (or equivalent), 142, 201-202, 203-204; and such other courses as the adviser in accounting may require. All accounting majors are required to take Principles of Economics (Com. 131-132) and Business Law (Com. 205-206); these courses may be included in the minor, in the electives, or in meeting the required 6 semester hours in social studies.

The Accounting Minor requires a minimum of 15 semester hours, including Com. 101-102, 142, 201-202.
(2) The Secretarial Science Major requires a minimum of 28 semester hours in the commerce department, including 15 semester hours in secretarial science courses. Required courses: Secretarial Science, 15 hours, Com. 110 (or equivalent training), 113-114 (or equivalent training), 120, 233, 234, 235, 236; Accounting, 6 hours, Com. 101-102; General Business and Economics, 6 hours, Com. 131, 205 (or equivalent).

The Secretarial Science Minor requires a minimum of 15 semester hours, including Com. 110 (or equivalent training), 113-114 (or equivalent training), 120, 235, 236.
(3) The Merchandising Major requires a minimum of 28 semester hours in the commerce department, including 12 semester hours in merchandising courses. Required courses: Merchandising, 12 hours, Com. 105, 106, 227, 232; Accounting, 6 hours, Com. 101-102, 141 (or equivalent training); General Business and Economics, 6 hours, Com. 131-132 (or єquivalent), 205.

The Merchandising Minor requires a minimum of 15 semester hours, including Com. 105, 106, 227.
(4) The General Business and Economics Major requires a minimum of 24 semester hours in the commerce department, including 12 semester hours in general business and economics courses. Recuired courses: General Business and Economics, 12 hours, including Com. 131-132, 205 (or equivalent), 215; Accounting, 6 hours, Com. 101-102.

The General Business and Economics Minor requires a minimum of 15 semester hours in the commerce department, including 9 semester hours in general business and economics courses. Required courses: Com. 131-132.

FOR SECONDARY TEACHING. Students primarily interested in teaching commerce or business subjects in public secondary schools will complete requirements for the Secondary Commercial Training Major. Both groups of commercial teacher training students-those pursuing the Arizona Special Certificate in Commerce and those pursuing the Arizona Secondary Certificate-must meet these minimum requirements. Prospective Arizona commercial teachers, as well as their prospective employers will find that their interests and needs have been given careful consideration in setting up the minimum requirements for this major. Attention has been given to factors of breadth of training, specific teaching power, and employability as related to Arizona public high schools.

No student will be recommended for a commerce student teaching assignment who has not given satisfactory evidence of teaching skill and knowledge in bookkeeping, typewriting, shorthand, business law, and such other subjects as are usually taught in Arizona secondary schools. Completion of one semester's work in commercial teaching methods is prerequisite to a commerce student teaching assignment.

The Secondary Commercial Teacher Training Major requires a minimum of 30 semester hours in the commerce department and 4 semester hours in professional commercial teacher training courses. Required courses: Secondary Commercial Teacher Training, 4 hours, Com. 251-252; Accounting, 12 hours, Com. 101-102, 201-202; Secretarial Science, 9 hours, Com. 113-114 (or equivalent training), 120, 235, 236; Merchandising, 3 hours, Com. 105 or 106; General Business and Economics, 6 hours, Com. 131-132 (or equivalent), 205.

The Secondary Commercial Teacher Training Minor requires a minimum of 15 semester hours in the commerce department, including a carefully-selected sequence of courses (minimum of 9 hours) in any one of the areas of emphasis: Accounting, Secretarial Science, Merchandising, or General Business and Economics.

## ADVISERS AND GUIDANCE

A sincere effort is made to determine the interests, aptitudes, and needs of all sturdents who take course work in the commerce department. Standardized tests of various types, as well as interviews, are utilized in this effort. The classwork in certain courses (Survey of Business, for instance), the programs of organization meetings, the bringing in of guest speakers, the regular office hours of faculty members-all contribute to the accomplishment of our vocational guidance and counseling objectives.

Department advisers are as follows: Accounting and pre-legal, Hil-
kert; Secretarial, Swanson; Merchandising, Swanson and Hilkert; General Business and Economics, Greene; Special and Irregular students, Swanson and Hilkert; Secondary Commercial Teacher Training, Swanson.

## COMMERCIAL EMPLOYMENT BUREAU

The Department maintains an employment service for students who desire either vacation, part-time, or regular employment with business firms. One of the staff members, E. J. Hilkert, who also has an office in Phoenix ( 401 Title and Trust Building), is in charge of this employment service.

Students desiring the help of the Commercial Employment Bureau must make both written and personal application. Students are given suggestions and advice about various kinds of business employment. References are collected, and interviews are arranged with prospective employers including professional men as well as employers in business and industrial organizations.

## 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 given in May and November of each year by the Arizona State Board of Accountancy. These examinations are similar to those held at the same time in other states. Further information may be obtained by consulting Mr. Hilkert, who is the adviser in accounting.

## DESCRIPTION OF COMMERCE COURSES

## ACCOUNTING

Com 101, 102 Elementary Accounting. A begipner's course in the field of bookkeeping, accounting, and business administration. Principles and theories of modern accounting procedure. Covers the entire bookkeeping cycle and preparation of the more common types of business reports. Recommended for all pre-professional students and required of all majors in the Commercial Department. Both semesters, three lectures and two hours of laboratory a week. Credit, 4 hours cach.

Greene
103 Social Security and Payroll Accounting. This course covers the entire social security and payroll accounting procedure of the average business. Both the legal and accounting requirements of social security legislation are studied with respect to taxes, benefits payable, merit ratings, personnel control, personnel and compensation records, unemployment in-
surance, time keeping, and payroll records. Prerequisite: Com. 101, 102 or equivalent. Three lectures a week and problems. Credit, 3 hours. Not offered in 1941-1942.

Hilkert
141 Business Mathematics. Instruction and practice in the fundamental operations; interest, discount, ratios, and related topics. Required of all majors in the Commerce Department who are deficient in the fundamentals of arithmetic. Twice a week. Credit, 2 hours. Not offered in 1941-1942.

Greene
142 Mathematics of Accounting. A study of annuities, debt amortization, bond price and valuation, and the alegebraic equations used in income tax and in consolidated balance sheet problems. Prerequisite: Com. 141 or equivalent. Twice a week. Credit, 2 hours. Not offered in 19411942.

Greene
201, 202 Intermediate Accounting. An intensive study of corporations and corporation accounting, tangible and intangible assets, liabilities, funds and reserves, comparative statements, analysis of working capital, miscellaneous ratios, and statement of application of funds. Both semesters, three lectures a week, and problems. Credit, 3 hours each. Hilkert.

203, 204 Advanced Accounting. Partnership organization, dissolution and liquidation. Also venture accounts, statement of affairs, receiver's accounts, home office and branch accounts, parent and subsidiary companies, consolidated balance sheets and profit and loss statements, foreign branches and subsidiaries, estates, and trusts. Prerequisite: Com. 101, 102 or equivalent. Both semesters, three lectures a week and problems. Credit, 3 hours each.

Hilkert
207 Auditing Theory and Practice. Fundamental principles of audit practice and procedure, verification of the balance sheet and the profit and loss items, preparation of working sheets, and the compilation of audit reports. Prerequisite: Com. 101, 102 or equivalent. Second semester, three lectures a week and case problems. Credit, 3 hours. Hilkert

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 estimate costs. The business routine, as well as the cost accounting procedure, is studied. Preparations of the various cost statements and reports. Prerequisite: Com. 101, 102 or equivalent. First semester, three lectures a wcek, problems and practice sets. Credit, 3 hours.

Hilkert
209 Governmental and Institutional Accounting. Application of basic accounting principles and budgetary control to various governmental
units-city, county, and state-and to public institutions. This course includes a study of funds, revenues, and expenditures. Also municipal balance sheets and annual financial reports. Prerequisite: Com. 101, 102 or equivalent. Second semester, three lectures a week and problems. Credit, 3 hours. Not offered in 1941-1942.

Hilkert
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, fiduciaries, and individuals. Prerequisite: Com. 101, 102 or equivalent. First semester, three lectures a week and cases. Credit, 3 hours. Not offered in 19411942.

## Hilkert

211g 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, automobile dealer's accounting, public accounting, etc, and to pursue individual study and research in that field. Open only to accounting majors in their senior year. First or second semester, conference hours arranged. Credit, 2 hours upon submission of satisfactory research report. Not offered in 1941-1942. Hilkert
and staff
${ }^{*}$ Note 1. A laboratory fee of 50 cents is charged for each accounting course but the maximum laboratory fee in any semester, regardless of the number of accounting courses taken, is one dollar.

Note 2. Accounting majors are urged to take Psych. 211, statistical methods, as part of the Education Department requirements.

## GENERAL BUSINESS AND ECONOMICS

Geog. 101 Economic Geography. See Department of Sciences for description. May be applied by commerce majors to meet the core-curriculum requirement in geography.

127 Survey of Business. Commerce Department orientation course. Includes survey of vocational opportunities related to business, analysis of course and curriculum offerings of the A.S. T. C. commerce department, and survey of study techniques especially appropriate for various commerce courses. Required of all commerce majors in their first registration for a program of study including commerce courses. First semester, once a week. Credit, 1 hour.

Staff
131, 132 Principles of Economics. First semester: descriptive and elementary applied economics with appropriate attention given to the implications of panaceas and reform movements. Second semester: principles of competitive organization and theory of certain non-competitive
economic organizations. Required of commerce majors. May be applied to meet the requirement of six semester hours in social studies. First and second semesters, three times a week. Credit, 3 hours each.

Greene
205, 206 Business Law. A study of the legal situations most frequently encountered in everyday life: contracts, sales, agency, partnerships, corporations, negotiable instruments, personal property, and real property; also, federal and state regulation of business. The practical application of the law is presented especially as it applies to Arizona. The origin and development of law and its social aspects are studied. At least one semester is required of all other commerce majors. Both semesters, three times a week. Credit, 3 hours each.

Hilkert
Hist. 209 Economic History of the United States. See Department of Social Studies for description. May be included in meeting course requirements for majors in the commerce department.

214g Consumer Education. Practical study of the intelligent use of modern business services. Includes critical study of the economic and social effects of advertising, modern sales methods, insurance, investment practices, and both family and personal financial management. Survey is made of available literature related to consumer education. Prerequisite: Com. 131, 132 or equivalent. Offered summers only. Credit, 2 hours.

215 Business Organization and Management. Practical study of basic forms of business organization and types of management. Prerequisites: Com. 131, 132, and junior standing. Second semester, three times a week. Credit, 3 hours.

## Greene

217 Money and Credit. Study of the function of money; monetary systems; credit functions and facilities; banking policies and practices; and the relation of money, credit, and prices to the business cycle. Prerequisites: Com. 131, 132, and junior standing. First semester, three times a week. Credit, 3 hours.

Greene
219g Labor Problems. Study of the strength and weaknesses of wageearners in modern society. Emphasis is on a factual background for a critical appraisal of tested and suggested solutions for the problems of labor and capital. Prerequisites: Com. 131, 132, and junior standing. Credit, 3 hours. Not offered in 1941-1942.

Greene
220 Investments. Analysis and evaluation of securities offered by national, state, and municipal governments; public utilities; railroads; industrial concerns; banks; insurance companies; investments trusts; etc. Consideration also given to study of business cycles. currency problems, and governmental action in their relation to the position of the investor.

Prerequisites: Com. 131, 132, and junior standing. Credit, 3 hours. Not offered in 1941-1942.

225 Current Eeonomic and Social Problems. Study of economic basis of present-day social problems; industrialization and its relation to family income and distribution; position of the government in alleviating and removing causes of social distress; programs of social reform. Prerequisites: Com. 131, 132 or equivalent, and junior standing. Offered summers only. Credit, 2 hours.

253 Applied Economics. An advanced course in economie problems. Includes individual work and discussions related to current popular and professional literature in the field. Prerequisites: Com. 131, 132 or equivalent, senior standing, and permission of instructor. Second semester, time arranged. Credit, 1, 2 hours.

Greene
390 Individual Problems in General Business and Economics. Designed to meet the needs of students desiring to investigate and study thoroughly a selected problem. Open only to graduate students. Credit and time, arranged.

Staff

## MERCHANDISING

105 Marketing and Distribution. A general and critical survey of principles, trends, and policies related to marketing efficiency. Prerequisite to all other courses in merchandising. Prerequisite: Com. 131, 132 or equivalent. First semester, three times a week. Credit, 3 hours. Not offered in 1941-1942.

Greene and Swanson
106 Salesmanship. Principles of selling, including methods of approaching prospects and demonstrating goods, the selling of ideas and services, meeting objections, inducing decisions, closing the sale. Emphasis on those basic principles of salesmanship which are applicable both to selling of merchandise and the creation of a favorable personal impression in any field of endeavor. Second semester, three times a week. Credit, 3 hours.

Swanson
226 Advertising. Principles of advertising in relation to marketing and general business management. Includes study of advertising organization and mediums, as well as advertising techniques related to copy, layout, typography, engraving, and strategy. Prerequisites: Com. 105, 106. Credit, 3 hours. Not offered in 1941-1942. Hilkert and Swanson

227 Retail Merchandising. Study of the organization and management of retail establishments. Consideration is given to store locations. store organizations, buying, receiving, stockkeeping, inventories, sales systems, store policies, services, deliveries, retail accounting, and personnel prob-
lems. Prerequisites: Com. 105, 131. Credit, 3 hours. Not offered in 1941-1942.

Swanson
228 Credits and Collections. Study and evaluation of advantages and disadvantages of credit selling. Credit and collection policies and practices of manufacturer, wholesaler, and retailer are considered. Common forms of consumer credit are given special attention. Prerequisites: Com. 101-102 or equivalent, 105, 131-132 or equivalent. Credit, 3 hours. Not offered in 1941-1942.

229 Field Work in Merchandising. Students majoring in merchandising 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. Prerequisites: Senior standing, major in merchandising, and permission of the instructor. Credit, 1, 4 hours. Not offered in 1941-1942.

## SECRETARIAL SCIENCE

110 Techniques in Typewriting. Fundamentals of touch typewriting with appropriate emphasis upon technique and elementary application. Fee, $\$ 2.00$. Both semesters, daily. Credit, 2 hours.

Thomas
113, 114 Elementary Shorthand. Principles of Gregg Shorthand are thoroughly mastered. Some dictation and transcription included in the work of the second semester. Prerequisite: Com. 110 or equivalent training. Fee, $\$ 1.00$. First and second semesters, daily. Credit, 3 hours each.

Swansen
120, 121 Projects in Typewriting. Advanced instruction in applied typewriting with emphasis upon the attainment of speed and accuracy as well as other skill requirements appropriate to production work in a modern office. Students having college credit in elementary typewriting may take only Com. 120 for credit. Prerequisite: Com. 110 or equivalent training. Fee, $\$ 2.00$. Both courses both semesters, daily. Credit, 2 hours each.

Thomas
233 Business Correspondence. A study of business writing as effectively applied in various forms of business communication. Includes some review and practice in correct English usage as applied in business writing, as well as much actual practice in writing different types of letters. Special attention is given to the planning and writing of application letters. Prerequisites: Com. 110 or equivalent training, English 101. First semester, twice a week. Credit, 2 hours.

Swanson
234 Office Machines. Survey of office machines used in various types of
business offices. Includes instruction in application, use, operation, and care of such equipment as mimeograph, gelatin duplicator, adding machine, calculator, dictating and transcribing machines, etc. Prerequisites: Com. 101-102 or equivalent, 110 or equivalent training, 113114 (unless excused). Fee, $\$ 4.00$. Enrollment limited; students must be approved by instructor and head of department. Two times a week, and four additional laboratory hours. Credit, 2 hours.

Thomas
235 Advanced Shorthand. An advanced course in Gregg Shorthand, including a thorough review of the principles of the system. Specialized dictation and transcription from various fields of business. Prerequisites: Com. 113, 114 or equivalent training. Laboratory fee, $\$ 1.00$. First semester, daily. Credit, 3 hours.

Swanson
236 Shorthand Transcription. Advanced dictation and transcription. Minimum objective, 120 words per minute. Will include certain necessary remedial work. Prerequisites: Com. 120 or equivalent, 235 or equivalent training. Fee, $\$ 1.00$. Second semester, twice a week. Credit, 2 hours.

Swanson
237 Mimeographing. An introductory course in the use of the mimeograph. Includes practical office application, and mimeograph skills and production techniques related to school annuals, papers, programs, announcements, etc. Also included are techniques related to mimeoscopes, styli, lettering guides, shading plates, and color work. Prerequisite: Com. 120 or equivalent training. Fee, $\$ 2.00$. Credit, 1 hour. Not offered in 1941-1942.

Thomas
238 Secretarial Prablems. Principles and practices of conducting a modern office from the standpoint of secretarial efficiency. Includes practice in various skills demanded in the modern office. Consideration of and effort toward the integration of the skills with the understandings, attitudes, and appreciations required of the secretarial worker in the typical business office. Minimum skill requirements must be met either prerequisite to or concurrently with the taking of this advanced course. Prerequisites: Com. 120 or equivalent training, 235. Fee, $\$ 1.00$. Second semester, three times a week. Credit, 3 hours.

Swanson.

## COMMERCIAL TEACHER TRAINING

251g, 25zg Commercial Teaching Methods. First semester: comprehensive survey of instructional methods and materials related to business subjects usually taught in Arizona public secondary schools. Second semester: critical study of business offerings in public secondary schools, including thorough consideration of the objectives and basic principles of secondary business education. For commercial teacher training ma-
jors only. Prerequisites: Com. 102, 114, 120, 205, or equivalent. First and second semester, twice a week. Credit, 2 hours each.

Swanson
351 Practicum in Secondary Business Education. Problems in organization, administration, and instruction in the field of secondary business education. Attention given to the planning and development of practical or creative projects, either group or individual. Prerequisites: Com. 251-252 and Education 215, or equivalent training and experience. For graduate students only. Registration subject to approval of instructor. Not offered until Summer Session, 1942.

Swanson
390 Individual Prablems in Commercial Teacher Training. Designed to meet the needs of students desiring to investigate and study thoroughly a selected problem related to the teaching of business subjects. Open to graduate students only. Credit and time to be arranged.

Swanson.

## DEPARTMENT OF EDUCATION

## BURKHARD (Head of the Department), PAYNE, SKINNER, RICHARDSON, EBEY, LYND, ALLEN

The purpose of the Department of Education is to provide candidates for the teaching profession with professional perspective and skill in the teshniques 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 students wishing to qualify for the elementary certificate.

## REQUIRED PROFESSIONAL COURSES

Hours
Psych. 100 Elementary Psychology ..... 3
Psych. 200 Educational Measurements ..... 3
Educ. 210 Teaching of Reading. ..... 2
Educ. 230 Elementary Curriculum and Techniques ..... 2
Ecuc. 260 Directed Teaching ..... 10
Educ. 250 Philosophy of Education ..... 3
Elective in Education or Psychology ..... 7(Sociology is rccommended as an elective.)

The prescribed courses in the department of education should be taken in the order in which they are listed above. Elementary psychology is considered a foundation course for all later work in education and psychology. Therefore, it must be taken before any other courses in education or psychology. The course in philosophy of education is open to seniors and graduate students.

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 given in regular class and discussion periods paralleling student teaching.

Students doing their directed teaching may take six hours of academic work during that part of the day not occupied with their teaching. During ine 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.

Student Teaching Test. Students will not be admitted to student teaching until they have passed a test covering the subjects taught in elementary schools.

## RURAL EDUCATION DIVISION

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 cducation.

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 courses in their program of study.

Hours
Educ. 120 Sociology.............................................................................................. 3
Econ. 131 Principles of Economics................................................................... 3
Educ. 207 Literature for the Grades............................................................... 3
Gen. Sci. 232 Nature Study................................................................................. 2
P. E. 230 Social Recreation Leadership_....................................................... 2

Educ. 240 Rural Education................................................................................. 3
Rural School Directed Teaching....................................................................... 5
Electives .................................................................................................................. 3

## KINDERGARTEN-PRIMARY DIVISION

The following professional courses are required for the kindergartenprimary curriculum:

Hours
Educ. 206 Const. and Play Materials................................................................ 3
Educ. 207 Literature for Kdgn.-Prim............................................................... 3
Educ. 208 Early Childhood Education............................................................ 2
Educ. 209 Kdgn.-Prim. Curriculum............................................................... 3
Educ. 212 Play Education for Kdgn.-Prim..................................................... 3
Ind Arts 230 Kdgn.-Prim. Woodwork........................................................... 2
Gen. Sci. 232 Nature Study.................................................................................... 3
Psych. 234 Child Psychology............................................................................... 3
Music 250 Kdgn.-Prim. Music......................................................................... 2

## DESCRIPTION OF COURSES IN EDUCATION

Educ. 120 Sociology. An introductory course in the study of human relationships, human wants, and social institutions. The aim is to discover foundations on which to base both a stable and progressive civilization. Either semester. Credit, 3 hours.

Burkhard
206 Construction and Play Materials. A laboratory course in the creative use of everyday materials as a means of developing individual expression and spontaneity. Paper, clay, textiles, wood, and construction work are used and related to the activity program and unit types of work. Fee, $\$ 1.50$. Third ycar, second semester, four times a week. Credit, 3 hours.

Ebey
208 Literature for the Kindergarten-Primary Grades. A critical study of literature suitable for children in the lower elementary school including the informational and realistic story, folk and fairy tales, modern fanciful literature and poetry. Opportunity given for experience with children. Fee, 75 cents. Third year, first semester, three times a week. Credit, 3 hours.

Johnson
208 Early Childhood Education. A course dealing with the historical and philosophical backgrounds of kindergarten-primary education. Third year, second semester, two times a week. Credit, 2 hours.

Ebey, Roll, and others
209 Kindergarten-Primary Curriculum and Techniques. A basic course in the curriculum of the kindergarten-primary grades. Emphasis is placed upon the practical application of modern curriculum thinking in the lower elementary school. Fee, 75 cents. Third year, first semester, three times a week. Credit, 3 hours.

Ebey, Roll and others

210 Teaching of Reading. A course designed to acquaint prospective teachers with the nature of the reading process and with modern methods of providing adequately for the reading needs of elementary school pupils. Fee, 75 cents. Either semester, two times a week. Credit, 2 hours.

210-K Kindergarten-Primary Teaching of Reading. A study of the objectives, materials and teaching procedures in the light of the contributions of research, survey of current practices and curriculums; class and individual projects; observations of the reading techniques and materials in the local elementary schools. Fee, 75 cents. Third year, first semester, two times a week. Credit, 2 hours.

Hill
211-g History of Education. A survey of the social life. ideas. and institutions that gave direction to western civilization. The purpose is to enable the student to gain a better understanding of the problems confronting present day society. Three times a week. Credit, 3 hours.

Payne.
212 Play Education for Kindergarten-Primary Grades. A study of the spontaneous play activities of young children with special emphasis on the utilization of these interests in plays, games and rhythms in order to bring about normal child development. There will be opportunity for working with children. Fee, 75 cents. Third year, second semester, three times a week. Credit, 3 hours.

Johnson.
214 Supervision and Administration in the Elementary School. Considers the purposes of elementary education and such specific problems as the newer type organizations and procedures; grading and promotions; use of new type examinations; ratings of teachers; discipline. Whenever possible, the problems are worked out in the training school. Three times a week. Credit, 3 hours.

Payne.
215 Secondary School. Historical development of high school; its functions, objectives, problems; relation of curriculum to social conditions; meeting needs of youth through education; articulation; curriculum organization. First semester, three times a week. Credit. 3 hours.

Jewett.
216-g Educational Sociology. A study of education in_relationship to the social institutions in which individuals gain their experiences. Summer session, 1942. Credit, 3 hours.

Burkhard.
218-g Improving Basic Reading Abilities. An advanced course in reading for pre-service and in-service teachers. Emphasis will be placed upon providing for individual differences in actual reading situations. Prcrequisite: Education 210 or equivalent. Credit, 3 hours.

Ebey.

220-g Arizona School System, Laws and Records. The organization and legal set-up of the Arizona school system is discussed with special reference to the work of the teacher and administrator. Consideration given to reports and records. Meets the requirement for the administrative certificate. Two times a week. Credit, 2 hours.

Payne.
228-g Methods of Teaching in Junior and Senior High School. Objectives of secondary education, methods of planning instructions, socialized procedures, problems of instruction, caring for individual differences, unit methods, testing procedures. Work in major field. Fourth year. Credit, 3 hours.

Jewett.
230 Slementary Curriculum and Techniques. A basic course which gives prospective teachers an understanding of the usual elementary school experiences of children and which suggests ways of providing for these experiences adequately. Third year, either semester, three times a week. Credit, 3 hours.

Ebey.
232 Introduction to Guidance. The need, objectives, prevailing practices, and the administration of guidance programs with speeial emphasis on the development of an adequate guidance program. First semester, two times a week. Credit, 2 hours.

Skinner.
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 materials and methods with demonstrations of the actual use of visual aids in units of work. First semester, two times a a week. Credit, 2 hours.

Payne.
238-g Extra-Curricular Activities. Extra-curricular problems of the junior and senior high school: home room, student government, publications, clubs, honor societies, assemblies, finances, athletics, dramatics and tech.iques of administration. Credit, 2 hours.

Jewett.
240 intaral Education. Designed to assist the rural teacher to solve the immediate problems in the school and the community. Considers varjous specific problems, met by teachers of English-speaking and non-English-speaking children. Third or fourth year, three times a week. Credit, 3 hours.

Lynd.
250-g Philosophy of Education. A critical study of social and educational theories. Designed to help the student acquire a perspective of life and its products which will enable teachers to move in the direction of giving excellent professional services to society through the school. Open to seniors and graduate students. Either semester, three times a week. Credit, 3 hours.

Burkhard.

260 Observation and Directed Teaching. All third year students observe and teach for a half day session during one full semester in one of the College training schools or in neighboring high schools under trained supervisors. Third year, one semester, one-half day, five days a week. Credit, 10 hours.

270 Juvenile Delinquency. A study of the causation of delinquency. Methods of treating the maladjusted child. Either semester, two times a week. Credit, 2 hours.

Allen.
274 Marriage and Family Relations. A consideration of facts and conditions making for better preparation for marriage, child welfare and family relations. Members of several departments of the college will contributs to the course. Given also second semester if demand warrants. First semester, Thursday $7-8$ p. m. Credit, 1 hour.

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. Second semester twice a week. Credit, 2 hours. Allen.

300 Seminar: Thesis Preparation and Research. The four principal objectives of this course are: (1) to acquaint students with the nature of the thesis, (2) to develop a reasonable familiarity with the available library resources and facilities, (3) to develop certain techniques and basic skills essential in preparing and reporting research studies, and (4) to provide an opportunity for preliminary consideration of suitable thesis problems. Required of all candidates for the master's degree. Either semester. Credit, 2 hours.

Richardson
305 Education and Social Control. A scientific study of human affairs with a view to giving a satisfactory direction to them. Social measurement and techniques for carrying on investigations will be considered. summer, 1942. Credit, 4 hours.

Burkhard.
306 Character Education. Problems of educating for citizenship are evaluated in the light of democratic ideals and conflicting social theories. The implications of environment as a means for educating for citizenship will receive attention. Summer, 1942. Credit, 2 hours.

## Burkhard.

308 The Teacher and School Organization. A course designed to acquaint teachers with the many problems of school organization affecting their efficiency-such as administrative control, tenure, salaries, and pupil personnel. Credit, 2 hours. Not offered, 1941-1942. Eb'ey.

310 Seminar: Current Educational Problems. Such topics as the following will be taken up for study in this seminar: taxation and
school finance, curriculum revision, vocational guidance, text books, child welfare, private and public school agencies, and health. The aim will be to analyze the basic assumptions which are pertinent to these problems. First semester. Credit, 2 hours.

Burkhard.
312 Modern Elementary Curriculum Development. A course especially designed for in-service elementary teachers and administrators interested in the application of modern curriculum thinking to their own situations. Much use will be made of the newly-organized curriculum library. Second semester. Credit, 2 hours.

Ebey.
313 Elementary School Organization and Administraticn. A course for prospective and in-service teachers and administrators intercsted in current best practices in organizing and administering the internal affairs of the elementary school. First semester. Credit, 2 hours. Ebey.

314 Secondary School Administration. Attention will be centercd upon the activities and responsibilities of secondary school principals as they relate to the major problems of educational leadership and internal school organization and management. Designed for the administrators and for teachers who wish to prepare for administrative positions. Second semester. Credit, 2 hours.

Richardson.
315 Public School Administration. The function of the national govvernment in public school education; state, county and local organization of public school; a comparison of administrative practices in different states. Second semester. Credit, 2 hours.

Payne.
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 are studied. Credit, 2 hours. Not offered, 1941-1942.

Skinner.
324 Practicum in Guidance and Mental Health Problems. Designed for graduates who are doing guidance work or are interested in carrying out some field or laboratory project under supervision. Class lectures, discussions, field or laboratory work, and reports. Second semester, Credit, 2 hours.

Skinner.
328 Community Relationships of the Public School. Recent trends and experiments in the functional relationship of the school to the community. Development of skills for studying a community and for building a constructive program. Relation of adult education to the school. Adjustment of the teachers to the community. Second semester. Credit, 2 hours.

Carrier.

330 Contemporary Social Movements. A critical study of current social theories in relation to the work of social reconstruction. A sociological approach to the problem of education in relation to social control in a dynamic society. Second semester. Credit, 2 hours. Burkhard.

333 Secondary School Curriculum Development. Deals with the meaning and scope of the secondary school curriculum, the resources for curriculum development, methods and techniques of revision, curriculum trends, recent experimental practices with integrated, functional, and core curriculums, and the organization and administration of curriculum development programs. First semester. Credit, 2 hours. Richardson.

336 Evaluation of Education. This course is concerned with the formulation of appropriate course objectives, the assembling of materials contributing to desired outcomes, the construction and use of tests and other evaluative devices, and the development of evaluative programs for use in practical school situations. Prerequisite: Psych. 200. Credit, 2 hours. Not offered, 1941-1942. Richardson.

340 Seminar: Improvement of Teaching in Secondary Schools. Designed for teachers who wish to improve instruction in their subject fields through the production of units of work, the revision of curriculum materials, the development of techniques for studying children or for surveying educational resources, or the review of recent research. Credit, 2 hours. Not offered, 1941-1942.

Richardson.
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.

Staff.

## DEPARTMENT OF ENGLISH AND SPEECH

## MYERS (Head of the Department) JEWETT, PILCHER, PLUMMER, 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.

## THE MAJOR AND MINOR IN ENGLISH

The Major requires: (a) Thirty hours in English (not counting freshman composition), fifteen of which must be in upper division courses. The Elements of Speech, Survey of Literature, reading courses, and the first semester of History of the English language are required. The remaining hours 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. Students are given a reading list as a basis of preparation. 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 types and the development of literary movement. With these sources 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 the English literature which the student would do well to keep throughout his college course. In addition he should have a good dictionary, a grammar, and a short history of England.
(c). An average grade of C or better in all English courses. No student whose work in English falls below a C average for more than one semester 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 department. All English majors are expected to take some work in speech, and are advised to elect some courses in foreign languages.

Required Courses. The following courses are required of those taking a major in English: Eng. 101, 102, 103, 104, 105, 106, 151, 152, 253, and Speech 110. In fulfilling the general requirements of the Standard Curriculum, the following courses in other departments are suggested: Gen. Sci. 100, 110; Hist. 105, 106.

The Minor. Requires fifteen hours beyond freshman composition, including the Survey of English Literature and six hours of upper division work.

## THE MAJOR AND MINOR IN SPEECH

The Major. Requires 24 hours and may be taken with an emphasis on either dramatics or speech correction. The following courses must be included: Sp. 110, 121, 123, 220, 257, 260 . The remaining hours are to be selected with the approval of the student's adviser.

The Minor. Requires 15 hours selected in consultation with the speech adviser. The courses required for the major are acceptable for the minor, but they may be modified for greater emphasis on either dramatics or speech correction.

## DESCRIPTION OF COURSES IN ENGLISH

## COMPOSITION AND GRAMMAR

Engl. 101, 102 First Year English. Mechanics and organization of compositions. Intensive and extensive reading. Elementary research methods. Fee, 50 cents. First year, three times a week. Credit, 3 hours.

Myers, Jewett, Pilcher, Schilling, Southern
128 Advanced Composition. Not primarily a course in creative writing. For students who wish further training in the organization and expression of ideas. Second semester, twice a week, Credit, 2 hours.

Southern
130 Introduction to Journalism. A general introduction to the field of journalism. Prerequisite to other courses in journalism. Fee, \$1.00. First year, first semester, three times a week. Credit, 3 hours.

Southern
140 Journalism-News writing and Reporting. Prerequisite: Engl. 130. Fee, $\$ 1.00$. Second semester, three times a week: Credit, 3 hours.

Southern
150 Journalism-Staff Work. Admission only by consent of instructor. Laboratory work on the State Press. Assignments, hours, and hours of credit by arrangement. Hours and credit arranged.

Southern
155 Advanced English Grammar. A study of technical grammar based upon the prose structure and idiom of the best modern writers. Etymology, word and sentence formation, and terminology are discussed. Second semester, three times a week. Credit, 3 hours.

Pilcher
234 Creative Writing. Training in various forms of imaginative writing.

Admission by approval of instructor. Engl. 128 is normally a prerequisite. Second semester, twice a week. Credit, 2 hours. Sauthern

## LITERATURE AND LANGUAGE

103, 104, 105, 106 Reading courses. Four semesters of directed reading. Required of all English majors in the first two years. Once a week. Credit, 1 hour each.

Myers and Schilling
Educ. 207 Literature for the Kindergarten-Primary Grades. Offered by the department of education. May be counted toward the English major.

151, 152 Survey of English Literature. Required of all sophomore English majors. Open to others only by consent of instructor. Second year, three times a week. Credit, 3 hours each.

Schilling
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. Two semesters, three times a week. Credit, 3 hours each.

Myers
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. Two semesters, three times a week. Credit, 3 hours each.

Pilcher
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. First semester, three times a week. Credit, 3 hours.

Schilling
205g, 206g Shakespeare. Critical study of ten plays. An introduction to various problems of Shakespearean scholarship. Two semesters, three times a week. Credit, 3 hours each.

Myers
207, 208 Nineteenth Century Prose. A study of the prose writers of England, with readings of their most significant works. The first semester deals with the Romantic generation; the second semester, with the Victorian. Two semesters, three times a week. Credit, 3 hours each.

Pilcher
211g, 212g Nineteenth Century Poetry. The first semester deals with the Romantic period, the second with the Victorian. Two semesters, three times a week. Credit, 3 hours each.

Pilcher
213 Modern Fiction. A study of the modern novel beginning with Meredith. First semester, threc times a week. Credit, 3 hours.

Pilcher
214. Contemporary Fiction. A study of important contemporary writers; their careers and distinctive traits, with particular attention to the relationship of their ideas with present day problems. Second semester, three times a week. Credit, 3 hours.

Pilcher.
216 Contemporary Poetry. English and American poetry of the twentieth century; techniques, aims, and significance. Second semester, three times a week. Credit, 3 hours.

Myers
217 Modern Drama. The chief dramatic writers of the generation preceding the World War. Reading from representative plays. Study of the theatre as influenced by the national school of the period. First semester, three times a week. Credit, 3 hours.

Schilling
218 Contemporary American Drama. A study of the American Drama since the World War, with special attention to experimental techniques. Second semester, three times a week. Credit, 3 hours.

Schilling
221, 222 American Literature. A review of the national period. A study of the New England movement, transcendentalism, and modern realism, with wide readings. Two semesters, three times a week. Credit, 3 hours each.

Schilling
223g Milton. The life of Milton, his relation to the literary and social background of his period, and textual study of his chief works. Second semester, three times a week. Credit, 3 hours.

Pilcher
224 Pope. The life of Pope, his relation to the literary and social backgrounds of his period, and textual study of his chief works. First semester, three times a week. Credit, 3 hours. Pilcher

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. Second semester, three times a week. Credit, 3 hours.

Schilling
231g Literature for Junior and Senior High School Students. A study of prose and poetry which meet the interests, desires and capabilities of the high school boy and girl. Recent literature for the adolescent will be stressed. First semester, three times a week. Credit, 3 hours. Jewett

## 232g Methods of Teaching English in the Junior and Senior High School.

 Preparation of units in high school literature and composition, methods of teaching which provide for individual differences, and construction of measurement devices will be included. Second semester, three times a week. Credit, 3 hours.Jewett

244 g Chaucer. A study of Chaucer's poetry, Ianguage, and intellectual background. First semester, three times a week. Credit, 3 hours.

Myers
253g, 254g History af the English Language. English from Anglo-Saxon times to the present. Readings in Old and Middle English. The development of the English syntax and vocabulary. Required of all English majors. Fourth year, three times a week. Credit, 3 hours each. Myers

261 Classical Background of English Literature. A study of the myths and legends of Greece and Rome and some of the works in which they appear. First semester, three times a week. Credit, 3 hours. Myers.

262g English Bibliography. Materials and methods of research in English. Second semester, three times a week. Credit, 3 hours.

Myers
390 Individual Problems. Designed to meet the needs of those students wishing to investigate a problem of their own in. English, Speech or Dramatics. Time and credit to be arranged.

Staff

## SPEECH AND DRAMATICS

Speech 110 Elements of Speech. An introductory course giving 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. Fee, 60 cents. First year, either semester, twice a week. Credit, 2 hours.

Plummer
121 Dramatie Interpretation. A study of the art of securing and presenting the intellectual and emotional content of literature. Prerequisite: Engl. 110. Fee, 50 cents. First year, either semester, twice a week. Credit, 2 hours.

Simpson
122 Acting. Credit will be given to students acting in college dramatic productions. Fee, 50 cents, Either semester, twice a week and laboratory hours. Credit, 1, 3 hours.

Simpson
123 Stage Production. A study of the fundamentals of stage design and construction, lighting, costuming, make-up, and stage management. Fee, 50 cents. Either semester, twice a week and laboratory hours. Credit, 1, 3 hours.

Simpson
124 Verse Speaking Choir. Meets as a chub might for group enjoyment of spoken poetry. Fee, 50 cents. Either semester, one lecture and 3 laboratory hours a week. Credit, 2 hours.

Simpson
127 Argumentation and Debate. The principles of argumentation as
illustrated in debate. Essential to students engaging in inter-collegiate debate. First semester, twice a week. Credit, 2 hours.

Plummer
170 Radio Appreciation. A survey in radio appreciation, acting, and writing, including laboratory practice in microphone delivery. Opportunities are given for appearance over Phoenix radio stations. Fee, 50 cents. Either semester, twice a week. Credit, 2 hours.

Simpson
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. Second semester, twice a week. Credit, 2 hours.

Plummer
227 Intercollegiate Debating. Preparation for and participation in intercollegiate debates. Credit is given only to those who have completed Speech 127 and is awarded at the end of the second semester. Prerequisite: Speech 127. First semester, twice a week. Credit, 1, 2 hours.

Plummer
235 Stage Directing. Theory and practice in the directing of plays under faculty supervision. Prerequisites: Speech 110, 121, 122, 123, and consent of the instructor. Fee, 50 cents. Third year, either semester, twice a week with laboratory. Credit, 3 hours.

Simpson
240g Children's Dramatics. Theory and practice in dramatics for grade school children. Prerequisite: Speech 123. Fee, 50 cents. Fourth year, either semester. Credit, 3 hours.

Simpson
257g Speech Correction. Detailed study of the cause and correction of such minor defects of speech as lisping, nasality, dialects, and baby talk, and such major defects as cleft palate and paralytic speech, stuttering and stammering, tongue-tie speech, speech of the deaf, and abnormal voice qualities. Clinical practice in the College Speech Correction Clinic. First semester, three hours a week, and clinical practice. Credit, 3 hours.

Plummer
258g Speech Correction... A clinical, laboratory course for intensive practice in the actual correction of speech defects. Seminar in conjunction for extensive acquaintanceship with literature in the field. Prerequisite: Speech 257. Second semester, hours to be arranged. Credit, 2, 4 hours.

Plummer.
259g Clinical Practice. Purely a laboratory course consisting of clinical practice in the College Speech Clinic. Open only to students of Speech Correction who have previously taken Speech 257 and 258 . Both semesters, hours to be arranged. Credit, 1, 3 hours.

Plummer

260 Phonetics. A practical study of phonetics, including the phonetic symbols, the production, the general characteristics and the application of the sounds of American speech in the acquisition and teaching of good pronunciation. Second semester, once a week. Credit, 1 hour.

Plummer

## DEPARTMENT OF FOREIGN LANGUAGES

## CATTELAIN (Head of the Department), WILSON

For the year 1941-1942 the offerings in the department will be limited to Latin, German, French, and Spanish.

In Arizona the foreign language given in most high schools is Spanish, therefore this department offers a major in the Spanish language and literature providing special training for students who wish to qualify as teachers of Spanish. For students planning to teach foreign languages the following suggestions are made: (1) Those majoring in Spanish are strongly advised to select French as a minor. (2) English and the Social Sciences are also acceptable minors for foreign language majors. (3) A Major in the Romance languages may be obtained, also, by taking a minor in French and a minor in Spanish. (4) Thirty semester hours are required for a teaching major in the foreign languages. (5) The teaching minor or fifteen hours must be taken in one language.

A non-teaching major of twenty-four hours may be composed of two or more different foreign languages of not less than eight semester hours each. The non-teaching minor may be composed of fifteen hours in one or two languages.

Since no college or university accepts transfer of credit for less than a full year of foreign language, the attention of students is called to the fact that this department will give no credit for less than a year's work in any language. Certain courses may be taken for graduate credit.

To apply on the major or minor all courses must be approved by the head of the department.

## DESCRIPTION OF COURSES

## SPANISH LANGUAGE AND LITERATURE

Span. 101 Elementary Spanish. Designed to give the beginner a knowledge of the fundamentals of pronunciation and grammar. Open to beginners only. First semester, four times a week. Credit, 3 hours.

Cattelain

102 Elementary Spanish. A continuation of Span. 101 together with the reading of several elementary texts. Prerequisite: Span. 101 or one year of high school Spanish. Second semester, four times a week. Credit, 4 hours.

Cattelain
103 Intermediate Spanish. Along with a review of grammar, reading is given which stresses vocabulary-building and accuracy of expression. Prerequisite: Span. 102 or equivalent. First semester, four times a week. Credit, 4 hours.

Wilson
104 Advanced Spanish. The work is similar to Span. 103 with greater emphasis upon rapid reading and oral expression. Prerequisite: Span. 103 or equivalent. Second semester, four times a week. Credit, 4 hours.

Wilson
201 Contemporary Writers. A study of present-day trends with special regard for the modern essay. First semester, three times a week. Credit, 4 hours.

Wilson
202 Spanish Classics. A study of Don Quixote for its intrinsic interest as a novel, and another masterpiece of the Golden Age. Second semester, three times a week. Credit, 3 hours.

Wilson
203 Survey of Spanish Literature to 1700. A history of the literature through the Golden Age. Lectures, readings, and reports. Prerequisite: Span. 202. First semester, three times a week. Credit, 3 hours. Not offered, 1941-1942.

Wilson
205g Advanced Grammar and Composition. For those who have mastered the fundamentals of the language. Designed to develop the student's power of thought and expression. Required for the department's recommendation to teach. First semester, twice a week. Credit, 2 hours.

Wilson
207g, 208g Nineteenth Century Literature. The first semester is devoted to the Romantic Movement and the works of the "costumbristas"; the second, to the important regional novels and the works of the PostRomantic dramatists and poets. Two semesters, three times a week. Credit, 3 hours each. Not offered, 1942-1943.

Wilson
222g Modern Spanish Poetry. An interpretation of selections from the writings of Ruben Dario and subsequent poets. Second semester, three times a week. Credit, 3 hours.

Wilsen
224g Hispanic American Prose. A study of the outstanding novelists and essayists. Second semester, three times a week. Credit, 3 hours. Not offered, 1941-1942.

Wilsor

227g The Regional Novel. A study of the modern novels of manners in Spain. Second semester, three times a week. Credit, 3 hours. Wilson

390 Individnal Problems. Open to graduates only who wish to work on problems in French, German, or Spanish. Credit and hours to be arranged.

Staff

## FRENCH

Fr. 101 Elementary French. For beginners. Self expression and oral drill are practiced. The scientific method of pronunciation is emphasized. Text: De Sauze, "Francais pour Commencants." First semester, four times a week. Credit, 4 hours.

Cattelain
102 Elementary French. A continuation of French 101. Oral drill, dialogues, and conversations, Students express their thoughts in short French sentences. An easy French reader is used. Prerequisite: French 101 or one year of high school French. Second semester, four times a week. Credit, 4 hours.

Cattelain

103 Intermediate French. A grammar review, followed by a fast reading course of French plays or short stories. Prerequisite: French 102 or equivalent. First semester, three times a week. Credit, 3 hours.

Cattelain
201 Nineteenth Century Writers. A condensed review of the French novel illustrated with readings from Balzac, Maupassant, Hugo, Dumas, and others. Prerequisite: French 103 or equivalent. Second semester, three times a week. Credit, 3 hours.

Cattelain

## GERMAN

Ger. 101 Elementary German. For beginners. The aim is to teach the principles of the German language and pronunciation. Students having previous training in German should register for German 102. Text: Schinnerer, "Beginning German." First semester, four times a week. Credit, 4 hours.

Cattelain
102 Elementary German. A continuation of German 101, with the reading of easy German works. Text: Schinnerer, "Continuing German." Second semester, four times a week. Credit, 4 hours. Cattelain

103 Intermediate German. A reading course with some grammar review to enable the student to read with ease. Prerequisite: Eight hours of German. First semester, three times a week. Credit, 3 hours.

## LATIN

Lat. 101 Elementary Latin. A beginners' course for all students desiring a general cultural background, and for majors in English and the Sciences. Emphasizes vocabulary and derivations rather than grammar. First semester, four times a week. Credit, 4 hours.

Wilson
102 Elementary Latin. A continuation of Lat. 101 with the use of a simple Latin reader. Second semester, four times a week. Credit, 4 hours.

Wilson

## DEPARTMENT OF HOME ECONOMICS

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

This department offers training designed to meet the needs of students of the following types: (1) Those who wish to teach in this field at the elementary or junior high school level. (2) Those who wish to meet the requirements for Smith-Hughes certification. (3) Those wishing to secure a secondary certificate with a major in Home Economics. (4) Those wishing the special certificate in home economics. (5) Those who wish to prepare for the vocation of homemaking, or who desire a backgrourd for other vocations which grow out of the study of home economics.

## MAJORS IN HOME ECONOMICS

For Elementary and Special Certification. This major meets the needs of those planning to teach home economics on their elementary or special certificates. The elementary certificate permits the holder to teach in grades one to nine inclusive. The holder of the special certificate may teach home economics in grades one to twelve inclusive. The major consists of 29 to 30 hours, excluding Ed. 260, with the following courses required: H. Ec. 101, 102, 104, 105, 108, 203, 208, 260 . In addition five hours of the required teaching must be in home economics. The remaining courses may be H. Ec. 206, 207, 211, 214, or other approved courses.

For Secondary Certifieation. The requirements for the major are the same as given above, but, in addition, those seeking the master's degree must meet the requirements made by the graduate division.

## 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 41 semester hours, exclusive of the hours 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 amounting to 26 hours. Those that are accepted include chemistry, bacteriology, physics, biology, physiology, hygiene, sociology, and art. (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.

The following courses are required and should be taken in the years indicated: Freshman year, H. Ec. 101, 102, Biol. 120; sophomore year, H. Ec. 104, 105, 108, 115, Chem. 110, 180; junior year, H. Ec. 203, 206, 208, 211 ; senior year, H. Ec. 207, 209, 214, 217.

## THE MINOR IN HOME ECONOMICS

Fifteen hours are required for the minor. Home Economics 106 and 107 are required. The remaining courses must be approved by the head of the department.

## DESCRIPTION OF COURSES OFFERED

H. Ec. 101 Elementary Nutrition. 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. Fee, 25 cents. First year, first semester, three times a week. Credit, 3 hours. Rannells

102 Clothing Selection. The selection of clothing with consideration of materials, of cost, of style and design, of the individual, and occasion. Fee, 25 cents. First year, second semester, three times a week. Credit 3 hours.

Elisworth
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. Fee, 25 cents. Second year, second semester, twice a week. Credit, 2 hours.

Rannells
105 Applied Food Principles. A study of general principles of cookery and the nutritive facts involved. Open only to majors in the department. Fee, $\$ 3.00$. Second year, first semester, six hours a week. Credit, 3 hours.

Rannells

106 Food Preparation and Meal Service. A consideration of the fundamental processes involved in food cookery, meal planning and table service. Designed especially for non-major students. Fee, $\$ 3.00$. First or second year, first semester, six hours a week. Credit, 3 hours. Rannells
107. Fundamentals of Clothing Construction. Gives non-major students some experience in the practical aspects of clothing selection and construction. First or second year, second semester, six hours a week. Credit, 3 hours.

Ellswarth
108 Clothing Construction. Develops the principles of dressmaking through the construction of inexpensive garments. Experience in the selection of materials and design. Open only to major students. First or second year, second semester, six hours a week. Credit, 3 hours.

## Ellsworth

110 Household Equipment. The selection and use of all types of household equipment is studied in detail. Fee, 50 cents. Second year, second semester, three times a week. Credit, 3 hours.

Rannells
115 Home Furnishing. Considers the selection, combination, and arrangement of furniture; color schemes; choice of wall finishes, flow coverings, draperies, and accessories. Fee, 50 cents. Second year, first semester, three times a week. Credit, 3 hours.

Rannells
$\mathbf{2 0 9 g}$ 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. Considers the influence of advertising, retail stores, and government agencies on the consumer. Fee, 50 cents. First term, third or fourth year, first semester, twice a week. Credit, 2 hours. Offered in 1941-42 and alternate years.

Ellsworth
203 Child Development. A study of the physical, mental, emotional, and social development of the young child. Observation in the nursery school. Third year, first semester, three times a week. Credit, 3 hours.

## Brewer

206g Food for the Family. Stresses the economic selection and nutritive value of foods, types of meals, and table service. Practice is given in planning, preparing, and serving family meals. Open only to majors in the department. Prerequisites: H. Ec. 101, 105. Fee, $\$ 3.00$. Third year. second semester, six times a week. Credit, 3 hours.

Rannells
207g Nursery School Education. Opportunity is given to observe in and assist with the nursery school program. Studies the development of the nursery school and the theories underlying current practices. Prerequisite: H. Ec. 203 or Educ. 234. Fee, $\$ 1.00$. Third or fourth year, either semester, six hours a week. Credit, 3 hours.

Brewer

208 Home Economics Education. A study of the content of the home economics curricula and the methods of teaching, including Vocational Home Economics, working out a home project, and an evaluation of teaching aids./Fee, $\$ 1.00$. Third year, first semester, three times a week. Credit, 3 hours.

Ellsworth
$\mathbf{2 0 9 g}$ The Family. A study of the organization of the family as a changing institution, and the development of guiding principles for the future family. Open to junior and senior men and women. Fee, 25 cents. Third or fourth year, second semcster, three times a week. Credit, 3 hours.

Ellsworth
211g Advanced Clothing. Deals with wool and silk construction problems, advanced fitting problems, good style and design, and the making and assembling illustrative material for the teaching of clothing. Prerequisites: H. Ec. 102, 108. Fee, 25 cents. Third year, first semester, six hours a week. Credit, 3 hours.

Ellsworth
212g Advanced Nutrition. A study of special problems in diet and nutrition. Prerequisites: H. Ec. 101, 105. Fee, \$1.00. Fourth year, second semester, six times a week. Credit, 3 hours. Not offered, 1941-42.

214g Home Management House. Students live in a family-sized dwelling for a six week period, and carry on all the duties involved in homemak. ing. Open only to senior home economics majors. Prerequisites: H. Ec. 104, 203, 206. Parallel, 217. Fee, $\$ 5.00$ and board and room at the regular college rate. Fourth year, second semester. Credit, 3 hours. Brewer

217g Home Management. A study of standards of living, the budgeting of time and income, household accounting, and the selection, care, efficient arrangement and use of the house and equipment. Fee, 50 cents. Parallel: H. Ec. 214. Fourth year, second semester, three times a week. Credit, 3 hours.

Brewer
p19g Textiles. Textile fibers and the construction and finish of fabrics, their sources, characteristics, identification, and uses. Fee, 50 cents. Third or fourth year, first semester, twice a week. Credit, 2 hours.

Ellsworth
Ed. 260. Directed Teaching. Majors must teach home economics for one-half semester under the supervision of the department. Prerequisite or parallel: H. Ec. 208. Third or fourth year, either semester, every afternoon. Credit, 5 hours.

Ellsworth and Ranmells
390 Individual Problems. Designed to meet the needs of those students wishing to investigate a problem of their own in any phase of Home Economics. Time and credit to be arranged.

Staff

# DEPARTMENT OF INDUSTRIAL ARTS 

## NEEB (Head of the Department) LAING

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. It is also planned to care for the needs of those wishing to select courses in this field for general and special purposes.

Two types of work are offered to students preparing to teach industrial arts work. One concerns itself with problems as presented by the elementary and junior high schools, the other with subject matter and methods suited especially to secondary schools. In addition, students not interested in teaching industrial arts may select a major or a minor to fit their special needs with the approval of the head of the department.

## MA.JORS IN INDUSTRIAL ARTS

With the exception of the General Major, which requires only 24 hours, all other majors require thirty hours. All minors in Industrial Arts require fifteen hours. The different types of majors and minors and their requirements are given below.

The General Major. This major is for those students who do not wish to teach Industrial Arts, and yet desire a background in industrial arts of a general nature. Twenty-four semester hours are required which may be selected with the appoval of the head of the department. The following courses are required:

The Teaching Major. Those planning to teach Industrial Arts in elementary or high schools will select 30 hours of work, at least 15 hours being upper division work, from the following courses: I. A. 105, 106 or 114-a, 121, 122, 154, 163, 207, 211, 213, 218, 257, 264.

Special Majors. Designed to meet the needs of students wishing a major in a special field of industrial arts. These are: (1) Building and Construction; (2) Electrical; (3) General Shop. Each requires 30 hours of work selected from the courses listed after each as follows: (1) Building and Construction. The following courses are required: I. A. 211, 212, 257. Enough courses should be selected from the following to make a total of thirty semester hours: I. A. 105,, 113, 114-a, 121, 122, 154, 160, 163, $164,207,208,217,218$. It is recommended that students taking this major should elect a minor in science. (2) Electrical. The following courses
are required: I. A. 211, 212, 257 . The remaining hours to make a total of thirty are to be chosen from the following: I. A. 100, 101, 105, 107, 111, 113 $115,116,153,160,215,216$. It is suggested that students taking this major should elect a science minor. (3) General Shop. The following 18 semester hours of work are required: I. A. 113, 121, 122, 163, 211, 212, and the remaining 12 hours are to be selected from the following: I. A. 100, 101, $105,111,112,115,116,154,160,164$. It is recommended that students taking this major elect a science minor.

## MINORS IN INDUSTRIAL ARTS

All minors consist of 15 semester hours of work. For those planning to teach, courses for the minor may be selected to suit the student's needs with the advice of the head of the department. C. A. A. courses may be counted toward the minor. Those wishing minors in the special fields should meet the following requirements: (1) Architectural Drawing. Required courses, I. A. 211, 212. Select the remainder from the following: I. A. 105, 106, 201, 202. (2) Mechanical Drawing. Select from the following: I. A. 113, 114-a, 114-b, 155, 156, 211, 212. (3) Woodworking. Required courses are: I. A. 211. 212. Select other courses from the fol lowing: I. A. 121, 122, 207, 208, 217. (4) Mechanics. Required courses are: 211, 212. Select other courses from the following: I. A. 111, 112, 160, 164. (5) Electrical. Required courses are: I. A. 211, 212. Select other courses from the following: I. A. 100, 101, 115, 116, 154.

Time Requirements. All work is so planned that three hours per week are required for each semester hour earned. These three hours include class work, laboratory work, or any other type of preparation.

## DESCRIPTION OF COURSES

100 Elementary Electricity. Designed to acquaint the student with practical electrical work, including splicing; soldering; light, bell and annunciator circuits. A prerequisite for all electrical and radio courses. Fee, $\$ 3.00$. Either semester, three times a week. Credit, 3 hours. Laing.

101 Auto Ignition. Prepares the student for commercial shop practice, and includes testing, recharging, and repairing storage batteries; ignition coils; distributors; lighting systems; fuses and circuit breakers. Machine shop practice. Fee, $\$ 3.00$. First year, first semester, two lectures, four hours laboratory. Credit, 3 hours.

Laing.
105 Architectural Drawing. For students preparing to teach in the junior and senior high schools or for architectural drafting and engineering work. Fee, $\$ 3.00$. First year, first semester, one lecture, six hours laboratory a week. Credit, 3 hours.

Neeb.

106 Architectural Drawing. A continuation of I. A. 105. Complete plans and estimate of materials for a two story house. Open to all students. Prerequisite: I. A. 105. Fee, $\$ 3.00$. First year, second semester, one lecture, six hours laboratory a week. Credit, 3 hours.

Neeb.
107 Forge. A study of, and practice in the elements of forging, drawing bending, up-setting, welding, casehardening and tempering and allied topics. Fee, $\$ 3.00$. First year, second semester, six hours laboratory. Credit, 3 hours.

108 Agricultaral Mechanics. Meets the needs of students of agricultural and farm management. Fee, $\$ 3.00$. First year, second semester, six hours laboratory. Credit, 3 hours.

109 Calculations. The practical application of the fundamental arithmetical processes to problems of the shop with emphasis upon rapid calculations and theory and practical use of the slide rule. First semester, three lectures a week. Credit, 3 hours.

Laing.
111 Machins Shop. A beginning course in machine shop practice including filing, drilling, turning, and polishing done with hand tools; and general use of machine equipment. Fee, $\$ 3.00$. First year, first semester, six hours laboratory. Credit, 3 hours.

112 Machine Shop. The making of industrial projects involving the use of the complete machine equipment of the department. Prepares men for machinists and auto mechanics, as well as for teachers in secondary schools. Fee, $\$ 3.00$. First year, second semester, six hours laboratory. Credit, 3 hours.

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. Fee, $\$ 3.00$. First year, first semester, one lecture, six hours laboratory each week. Credit, 3 hours.

Laing.
114-a Mechanical Drawing. (Descriptive Geometry). Designed for students majoring in mechanic arts. The elements of descriptive geometry including problems in warped surfaces and intersections of solids. Prerequisites: I. A. 101, 113. Fee, $\$ 3.00$. First year, second semester, one lecture, six hours laboratory each week. Credit, 3 hours. Laing.

114-b Mechanical Drawing. (Descriptive Geometry.) Same as I. A. 114-a with emphasis on shades and shadows. Prerequisites: I. A. $105,106$. Fee, $\$ 3.00$. First year, second semester, one lecture, six hours laboratory Credit, 3 hours.

Neeb.

115 Radio Construction. Covers the elements of electrical theory, electromagnetism, potential, current, resistance, capacitance, storage and dry cells, the vacuum tube, and vacuum tube circuits. Fee, $\$ 3.00$. First year, first semester, two lectures, four hours laboratory. Credit, 3 hours.

Laing.
116 Radio Construction. A continuation of I. A. 115, involving a study of the more advanced types of receiving sets, testing and servicing, and vacuum tube characteristics. Constructional work and laboratory practice. Fee, $\$ 3.00$. First year, second semester, two lectures, four hours laboratory. Credit, 3 hours.

Laing.
121 Wood Work. A course in the basic types of furniture construction and furniture repair suitable for use in junior high school shop work. No machine work. Fee, $\$ 3.00$. First year, first semester, six hours a week. Credit, 3 hours.

Neeb.
122 Cabinet Making. Gives practice in the proper use and care of hand tools. A study of the fundamental principles involved in furniture construction. Fee, $\$ 3.00$. First year, second semester, six hours a week. Credit, 3 hours.

Neeb.
151 Broadening and Finding. For students preparing to teach in the junior and senior high school. Consists of model work, boats, steam engines, electrical motors, and similar projects, and special problems in woodworking. Fee, $\$ 3.00$. Second year, first semester, laboratory, six hours a week. Credit, 3 hours. Neeb.

154 House Wiring. The chief topics are the installation of lighting circuits, underwriters' regulations, conduit work, and the estimation of cost. Fee, $\$ 3.00$. Second year, second semester, two lectures, four hours laboratory. Credit, 3 hours.

Laing.
155 Mechanical Drawing. The story and design of linkages, gears, cams, screws, and other machine elements are studied together with the relative motions of machine parts. Prerequisite: I. A. 114-a. Fee, $\$ 3.00$. Second year, first semester, one lecture, six hours laboratory each week. Credit, 3 hours.

Laing.
156 Mechanical Drawing. (Machine Drawing.) Treats such topics as shafts, bearings, pulleys, belts, clutches, standard machine parts, and fastenings. Prerequisite: I. A. 130, 155. Fee, $\$ 3.00$. Second year, second semester, one lecture, six hours laboratory each week. Credit, 3 hours.

Laing.
160 Sheet Metal Work. Prepares the student to teach in junior high school. Laying out and cutting of sheet metal; soldering; riveting; pro-
jects including utensils and toys. Prerequisite: I. A. 114-a. Fee, $\$ 3.00$. Second semester, second year, six hours laboratory. Credit, 3 hours.

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

Neeb.
200 C. A. A. Primary Ground School Course. Sponsored by the Civil Aeronautics Authority. A total of 72 hours in class are required as, follows: History of Aviation, 2 hours; Theory of Flight, 15 hours; Civil Air Regulations, 12 hours; Practical Air Navigation, 15 hours; Meteorology, 15 hours; Parachutes, 1 hour; Aircraft Power Plants, 5 hours; Aircraft: Instruments, 5 hours; Radio Uses and Terms, 2 hours. In addition to the Ground School course, a flying course consisting of 35 hours of flying time is provided through our authorized flight operator at Phoenix Sky Harbor. Each student is required to pay not more than $\$ 40.00$ for this Ground School training. Either semester, five times a week. Credit, 4 hours.

Neeb and staff.
201 Architectural Drawing. A study of some of the best classical elements in archilecture, and of the fundamentals of design. Prerequisites: I. A. 106, 114-b. Fee, $\$ 3.00$. Third year, first semester, one lecture, six hours laboratory a week. Credit, 3 hours.

Laing.
202 Architectural Drawing, A series of problems involving a study of the principles of architectural composition. Prerequisite: I. A. 201. Fee, $\$ 3.00$. Third year, second semester, one lecture, six hours laboratory a week. Credit, 3 hours.

Neeb.
204 The Secondary Ground School Course. Consists of a minimum of 128 hours in the following subjects: Aerodynamics and Structures, 32 hours; Navigation, 48 hours; Powerplants, 48 hours. The cost for this course varies according to the money available. For 1940 and 1941 the charge was $\$ 34.00$. Prerequisite: C. A. A. 200. Passing of Government Examination required for college grade. Either semester, five times a week. Credit, 8 hours.

Neeb, Wexler.
207 Cabinet Making and Mill Work. Deals with advanced types of furniture; construction, and tenoning; panel construction; methods of glueing; the application of finishes; design; the use of power machines. Prerequisite: I. A. 122. Fee, $\$ 3.00$. Third year, first semester, one lecture, six hours laboratory a week. Credit, 3 hours.

Neeb.
208 Carpentry. Construction problems involved in the erection of building emphasizing the use of the steel square and carpenters' tools; sharpening of cutting tools; framing processes; short cuts; trade terminclogy. Prerequisites: I. A. 122, 207. Fee, $\$ 3.00$. Third year, second semester, one lecture, six hours laboratory a week. Credit, 3 hours.

Neeb.

211 Job Analysis. Jobs are analyzed into their various steps and their relationship is studied. This course is necessary in curriculum building. Second year, first semester, two two-hour periods a week. Credit, 2 hours.

Neeb.
212 Curriculum Making. For students preparing to teach. Trade and technical material, tool processes, occupational information, and job analysis are arranged to form effective teaching guides. Prerequisite: I. A. 211. Second year, second semester, two two-hour periods a week. Credit, 2 hours.

Neeb.
215 Radio Construction. Acquaints 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 the equivalent of a government examination for an amateur operator's license. Prerequisite: I. A. 116. Fee, $\$ 3.00$. Second year, first semester, two hours lecture, four hours laboratory. Credit, 3 hours.

Laing.
216 Radio Construction. Seminar. Fee, $\$ 3.00$. Second semester, six hours laboratory. Credit, 3 hours.

Laing.
217 Stair Building. Construction of straight stairways, platforms, and circular stairways to one-third scale. Prerequisite: I. A. 208. Fee, $\$ 3.00$ First semester, six hours laboratory a week. Credit, 3 hours. Neeb.

218 Steel Square. A study of problems involving the use of the steel square in carpentry, framing, stair building, and sheet metal. Prerequisite: I. A. 208. Fee, $\$ 3.00$. Second semester, six hours laboratory a week. Credit, 3 hours.

Neeb.
230 K-P Kindergarten-Primary Woodwork. For women students following the kindergarten-primary curriculum. Fundamental tool processes; design and construction of small projects; study of materials and their adaptation for constructive uses. This credit cannot be used toward a major or a minor in industrial arts. Fee, $\$ 3.00$. Either semester, six hours a week. Credit, 2 hours.

231 K-P Weodwork. A continuation of I. A. $230 \mathrm{~K}-\mathrm{P}$. Home mechanics problems are studied along with advanced design and construction of wood projects. Prerequisite: I. A. 230 K-P. Either semester, six hours a week. Credit, 2 hours.

252 Bradening and Finding. A continuation of I. A. 151, with some machine lathe practice, drill press work, and milling machine. Fee, $\$ 3.00$. Second semester, laboratory, six hours a week. Credit, 3 hours.

255 Teaching Problems. Assists students preparing to teach industrial arts in the making of lesson plans, and the presentation of materials to students. Prescribed for prospective teachers in this field. Prerequisites: I. A. 211, 212. Fee, $\$ 3.00$. Third year, first semester. Credit, 3 hours.

Neeb.
257 Supervision and Administration of Industrial Arts. The general principles of supervision applied to the teaching of shop classes. Classification of tools, tool operations and projects. Purchasing of supplies and equipment. Prerequisites: 211, 212, or equivalent. Second year, second semester, two two-hour periods a week. Credit, 3 hours. Neeb.

260 Advanced Wood Turning. Instruction in all kinds of built-up, segmented and jointed projects. Prerequisite: I. A. 163. Fee, $\$ 3.00$. Either semester, six hours a week. Credit, 3 hours.

Neeb.
264 Patternwork. A study of draft, shrinkage, finish, warp, and shake. The construction of patterns involving the common problems of the pattern maker. Prerequisite: I. A. 163. Fee, $\$ 3.00$. Third year. second semester, six hours a week. Credit, 3 hours.

Neeb.
390 Individual Problems. Meets the needs of graduate students speccializing in industrial arts who wish to investigate a problem of their own. Problems must be approved by the head of the department. Fee, $\$ 3.00$. Either scmester. Hours and credit to be arranged.

Neeb.

## DEPARTMENT OF MATHEMATICS

## WEXLER, Head of the Department.

People study mathematics, first, because is 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, 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. It requires time, effort, ability to concentrate, imagination and originality.

The major in mathematics consists of twenty-eight semester hours of work completed successfully. This is to be spread so that at least one course is taken each semester.

Minors in mathematics. There are two types of minors offered in Mathematics. One includes the absolute minimum amount of technical mathematics prerequisite for engineering and scientific careers. It cannot be too strongly emphasized in this connection, however, that a major in mathematics, not a minor, is the best possible preparation for most engineering fields (especially electrical and aeronautical), and for future research in physics, meteorology, and certain phases of chemistry and biology. The other minor in Mathematics includes a cultural survey course in Mathematics and a course in teaching problems in arithmetic and Junior High School Mathematics. The Department of Mathematics will also accept as a minor the two Civilian Pilot Training courses (Primary and Secondary) and the first year Mathematics course. The minor consists of fifteen semester hours.

In planning his program, the student should have repeated conferences with the head of the department. Attention of prospective mathematics majors is called to the Secondary and the Special Curriculum outlined elsewhere.

## COURSES IN MATHEMATICS

110. Introduction to Mathematics. For students who want to know what Mathematics is about, desiring non-technical acquaintance with some of the great concepts of Mathematics and their applications to everyday living. May be taken as part of the Science requirement in the core curriculum. First semester. Credit, 3 hours.

Wexler.
111, 112 First Year Mathematics. Algebra, Trigonometry, and Analytic Geometry. A year's course. No credit will be given for only one semester. Five times a week throughout the year. Credit, 4 hours each. Wexler.

113, 114 Second Year Mathematics. Includes Differential and Integral Calculus and further work in Analytic Geometry. A year's course, but credit will be given for either semester, by special permission. Prerequisite: Math. 112. Five times a week throughout the year. Credit, 4 hours each.

Wexler.
125. Advanced Geometry. The geometry of the triangle. No prerequisite beyond high school geometry. Second semester, twice a week. Credit, 2 hours.

Wexler.
212. The Teaching of Junior High School Mathematics. Second $\mathrm{s} \in$ mester, twice a week. Credit, 2 hours.

Wexler.
221-g. Advanced Calculus. Includes Multiple Intergration, Partial Differentiation, Line Integrals, Applications, and other topics as far as
time allows. Prerequisite: Math. 114. First semester, five times a week. Credit, 4 hours.

Wexler.
224-g. 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. Second semester, four times a week. Credit, 4 hours.

Wexler.
241-g, 242-g. Theory of Functions. Concepts of limits, continuity, derivatives, and the theory that underlies modern mathematical analysis. Four times a week throughout the year. Credit, 4 hours each. Wexler.

250 Thesis Work in Mathematics. Independent study undertaken by the student, with occasional conferences with the instructor. May be taken more than once for credit. Either semester, hours to be arranged. Credit, 1 or 2 hours. WexIer.

301 Theory of Numbers. Study of the properties of whole numbers, First semester, four times a week. Credit, 3 hours.

Wexler.
302 Theory of Finite Groups. Groups of presentation, the Galois theory.
Second semester, four times a week. Credit, 3 hours.
Wexler.
311 Differential Geometry. Three dimensional curves and surfaces and their properties. First semester, four times a week. Credit, 3 hours.

Wexler.
312 Projective Geometry. Analytic study of the projective properties of figures. Second semester, four times a week. Credit, 3 hours.

Wexler.
390 Individual Problems. Designed to meet the needs of those students wishing to investigate a problem of their own in Mathematics. Time and credit to be arranged.

Staff.
Note. Certain upper division and graduate courses can not be offered each year. The selection will depend upon the demand.

## DEPARTMENT OF MUSIC

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

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

In planning their work music majors must meet the requirements of the Standard Curriculum printed in the section of the catalog headed, "Curriculums, Degrees, and Certification". In addition they must meet the requirements in music as outlined hereafter:

Freshman Year. Mus. 100, 102, 109; Piano, 2 hours; Voice or instrument, 2 hours; Glee club, band, or orchestra, 2 hours.

Sophomore Year. Mus 103, 104, 143, 144; Piano, 2 hours; Voice or instrument, 2 hours; Glee club, band, or orchestra, 2 hours.

Junior Year. Mus. 205 or 207, 211, 212; Instrumental instruction, 2 hours; Glee club, band, or orchestra, 2 hours.

Senior Year. Mus. 202; Instrumental instruction, 2 hours; Glee club, band, or orchestra, 2 hours.

## THE MINOR IN MUSIC

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

Vecal Music Minor. The following sequence of courses is suggested: $100,102,109.211$, or 212 . In addition. courses should be chosen from Applied Music, Piano, Voice. Glee Club, Band. Orchestra.

Instrumental Music Minor. The following sequence of courses is suggested: $100.102,103,109.207$. Work in band and orchestra should also be taken.

## MUSIC FEES

PIANO- Per semester
Two private lescons a week (half hour) ..... $\$ 36.00$
One private lesson a week (half hour) ..... 27.00( $\$ 9.00$ if paid in adrance.)
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 adrance.)Class piano methods18.00
YOICE-
Two private lessons a week (half hour) ..... 37.00
One private lesson a week (half hour) ..... 13.50
Two class lessons a week (one hour) ..... no fee
Class lessons in roice 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 INSTRUMENTS-
Two private lessons a week (half hour) ..... 27.00
Oue prisate lesson a week (half hour) ..... 13.51

## COURSES IN MUSIC

Music 100 Fundamentals of Music. 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. First year, either semester, twice a week. Credit, 2 hours.

Barkley, Lyon.
102 Advanced Sight Singing and Ear Training. Further development of music reading with special attention to aural recognition and writing. Prerequisites: Music 100, and a knowledge of reading notes. First year, either semester, twice a week. Credit, 2 hours.

Harelson.
103 Harmony I. Prerequisite: Music 102 or equivalent. Second year, first semester, three times a week. Credit, 3 hours.

Tata.
104 Harmony II. A continuation of Harmony I. Prerequisite: Music 103 or equivalent. Second semester, three times a week. Credit, 3 hours.

Tata.
105, 106 Voice-Private Instruction. Voice building for beginners.. Either semester, two lessons a week and five hours practice. Credit, 1 hour each.

Barkley, Harelson.
107, 108 Voice-Private Instruction. Second year, further development in technique of voice production in singing. Prerequisites: Music 105, 106 or equivalent. Either semester, two hours a week, arranged. Credit, 1 hour each.

Harelson, Barkley.
109 Music Appreciation. Designed to develop judgment and discrimination in listening to music. The material used consists largely of phonographic recordings. First year, first semester, twice a week. Credit, 2 hours.

Harelson.
111, 112 Class Voice. For music majors and minors, and kindergartenprimary majors with little or no previous training in voice. Either semester, twice a week. Credit, 1 hour each.

Barkley.
113, 114 Piano-Private Instruction. Courses arranged to meet the needs of students. Each student plays before the music faculty once each semester. Advanced students play in recital at least once during the semester. Either scmester, one or two lessons a week. Credit, 1-2 hours each.

Quaid, Bullock.
115, 116 Piano-Private Instruction, Second Year. Either semester, one or two Iessons a week. Credit, 1-2 hours each.

Quaid, Bullock.
121, 122 Class Piano. For music majors or minors, first year. Study of the elements of piano, keyboard technique and sight-reading of simple folk songs and studies. First semester, two lessons a week; second, one a week. Credit, 1 hour cach.

Quaid.
123, 124 Class Piane For music majors and minors, second year. Study
of more advanced keyboard technique, sight-reading and memorization of repertoire. Either semester, one lesson a week. Credit, 1 hour each.

Quaid.
125, 126 Class Piano. For kindergarten-primary majors. First semester, a study of elements of keyboard technique. Sight reading of folk song material in all keys. Second semester, sight-reading. improvisation and kindergarten-primary rhythms. First semester, two lessons a week; second, one per week. Credit, 1 hour each. Quaid.

127, 128 Class Piano. For the kindergarten-primary major, second year. Further study of kindergarten-primary literature and technique necessary to fluency of performance. Either semester, one lesson a week. Credit, 1 hour each.

Quaid.
143, 144 Keyboard Harmony. Includes harmonization of melodies both from the soprano and the bass; improvisation and transposition at the keyboard. Prerequisites: Music, 100,102 , and the ability to read at sight music of hymn-tune difficulty. Second year, twice a week. Credit, 1 hour each.

Bullock.
151, 152 Women's Glee Club. Open to women students who can qualify. Apply to the director. Students should plan to retain membership throughout the year in order to receive the benefit of public appearance in the mid-winter and spring. Any year, four times a week unless otherwise arranged. Credit, 1 hour each.

Harelson.
153, 154 Men's Glee Club. Open to men students who can qualify. Apply to the director. Students should plan to retain membership throughout the year in order to receive the bencfit of public appearance in the mid-winter and spring. Any year, four times a week. Credit, I hour each.

Barkley.
155, 156 Class Instruction in Violin. Open to beginners only. Affords the opportunity for study of the fundamentals of violin and ensembleplaying. No fee. Either semester, twice a week. Credit, 1 hour each.

Tata.
161, 162 Class Instrumental Instruction. Brass, reed, and percussion instruments. Students sufficiently proficient are admitted to the college band, or college orchestra. A fee of $\$ 2.50$ per semester is charged all students using instruments furnished by the college. Either semester, two times a week. Credit, 1 hour each.

Lyon.
165, 166 College Orchestra. The major objective of this organization is the study of symphonic musical literature. The orchestra participates in college assembly programs and provides incidental music for major pro-
ductions of the drama department. Membership is selective. Twice a week, either semester. Credit, 1 hour each.

Lyon.
167, 168 College Band. Functioning as a concert band, this organization presents a series of public performances during the mid-winter and spring. The band drills in marching and formations and plays for the college athletic contests and other public occasions. Application for membership is made to the director. Either semester, twice a week. Credit, 1 hour each.

Lyon.
171, 172 Violin-Private Instruction. First year. Either semester, one lesson a week. Credit, 1 hour each.

Tata.
173, 174 Violin-Private Instruction. Second year. Either semester, one lesson a week. Credit, 1 hour each.

Tata.
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 student. Either semester, two lessons a week. Credit, 1 hour each.

## Hargiss.

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. Either semester, two lessons a week. Credit, 1 hour each.

Lyon.
201 Harmony III. A continuation of Harmony II. Prerequisite: Music 104 or equivalent. Third year, first semester, three times a week. Credit, 3 hours.

Tata.
202 Literature and History of Music. A cultural course dealing with the various epochs in the development of music. Prerequisite: Music 109, or equivalent. Fourth year, second semester, three times a week. Credit, 3 hours.

Tata.
205 Choral Condueting. Study of all the elements of choral technique and interpretation. Required of all music majors unless registered for music 207. Third year, first semester, three times a week. Credit, 3 hours.

Harclson.
206 Accompanying. Includes acecmpaniment of vocal and instrumental solos and of group and choral singing. Either semester. Credit, I hour. Harelson, Barkley.

207 Instrumentation and Conducting. 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 substitution. Required of music majors unless registered for Music 205. Prerequisites: band or orchestra, and theory
courses of the first three years or equivalent. Third year, first semester, three times a week. Credit, 3 hours.

Lyon.
211 Music Education-Primary and Intermediate Grades. Problems in supervising and teaching music in the modern elementary school. Speciol study of creative activities. Prerequisites: Music 100, 102. or their equivalent, and the ability to play the piano. Third year, three times a week. Credit, 3 hours.

Hargiss.
212 Music Education-Jr. and Sr. High School. The study of problems, materials, and rehearsal techniques. Emphasizes the relationship of the music department to the whole school program. Prerequisites: Music $100,102,211$. Third year, second semester, three times a week. Credit, 3 hours.

Hargiss.
233, 234 Piano-Private Instruction. Third year. Eitber semester. Credit. 1 or 2 hours each. Quaid, Bullock.

235, 236 Piano-Private Instruction. Fourth year. Either semester. Credit, 1 or 2 hours each.

Quaid, Bullock.
237, 238 Voice-Private Instruction. Advanced, third year. Either semester, two Iessons a week. Credit, 1 hour each. Harelson, Barkley. 239, 240 Voice-Private Instruction. Advanced, fourth year. Either semester, two lessons a week. Credit. 1 hour each. Harelson, Barkley.

250 Music in the Kindergarten and Primary Grades. Considers problems, materials, creative activities, and the place of music in the integrated program of the modern school. Prerequisites: Music 100, 102, or their equivalent. Third year, either semester, twice a week. Credit, 2 hours.

Hargiss.
271, 272 Violin-Private Instruction. Third year. Either semester. Credit, 1 hour each.

Tata.
273, 274 Violin-Private Instruction. Fourth year. Either semester. Credit. I hour each.

Tata.
275, 276 Voice-Private Instruction. Third year. Either semester. Credit. 1 hour each. Harelson, Barkiey.

277, 278 Voice-Private Instruction. Fourth year. Either semester. Credit. 1 hour each.

Harelson, Barkley.
$284-\mathrm{g}$ Counterpoint. The Polyphonic vocal style of the sixteenth century. Prerequisite: Music 201. Third or fourth year, second semester, three times a week. Credit, 3 hours. Not offered in 1941-1942. Tata.

288-g Composition. Analysis and practical application of harmony to the
smaller formal designs and methods of structural treatment in musical composition. Prerequisite: Music 201. Third or fourth year, second semester, threc times a week. Credit, 3 hours. Not offered in 1942-1943.

Tata.
292-g Form and Analysis. The intimate study of various musical forms with emphasis on the development and application of the sonata to the symphony and chamber music. Admission by permission of instructor. First semester, three times a week. Credit, 3 hours.

Tata.
390 Individual Problems. For graduates only who wish to pursue a special problem in any phase of music. Credit and hours, arranged. Staff.

## DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION

LAVIK (Head of the Department), POMEROY, STEVERSON, ALLEN, HOWELL, WALKER, 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 trains teachers in health and physical education.
3. It provides coaching and other supervision for all intramural and intercollegiate athletic teams.

## ATHLETICS FOR MEN

Opportunity is provided for all men to take part in intramural and 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.

## ATHLETICS FOR WOMEN

The department offers to women a broad instructional program of dance and sport activities designed to meet the needs and wishes of all college women, and through the co-operation of the Women's Athletic Association, sponsors an extensive intramural program in all phases of both dance and sports. Sports days, play days, and dance symposiums,
telegraphic tournaments in archery, and state and city tournaments in tennis and golf offer opportunities for many social contacts.

Gymnasium Suits. Women students enrolling in P. E. 101, 102, 103, $104,105,106,110 \mathrm{a}, 110 \mathrm{~b}$, and 160 will provide themselves with a gymnasium suit of a special design. These suits are purchased at the college bookstore and cost approximately $\$ 2,00$. For men students enrolling in 107, 108 and other activity courses mentioned, a special suit costing approximately $\$ 1.00$ may be purchased at the college bookstore.

## MAJORS AND MINORS

Excluding the physical education courses required in the standard curriculum, the requirement for the major in physical education is 24 semester hours, and 15 hours for the minor. Students should follow the Standard Curriculum printed under the section of the catalog headed "Curriculums, Degrees, and Certification" and the major and minor requirements printed hereafter.

The Major. The following courses are required of all men students for the major: First and second years, P. E. $109,175,190$ and activity courses; Chem. 110, Biol. 120, 140. Third and fourth years, P. E. 21'7, 218, 236, 251, 254, and activity courses; Biol. 231.

For the major the following courses are required of all women: First and second years, P. E. 109, 175, 131, 132, 161, 162, 190, and activity courses; Chem. 110, Biol. 120, 140. Third and fourth years, P. E. 236, 251, 254 and activity courses; Biol. 231.

The Minor in Physical Education. The following courses are required of men: P. E. 161 or $162,175.217,218,236$, and two hours of activity courses; Biol. 120, 231.

The following courses are required of women: P. E. 161 or 162, 175 , 207 or 208,236 , one hour dance, one hour sports survey; Biol. 120, 231.

The Minor in Health Education. The following are required: P. E. 185, 236, 240, and activity courses; Biol. 120, 231, H. Ec. 101.

## 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. First year, twice a week. Credit, $1 / 2$ hour each.

Pomeroy

111, 112 AthIetics. Open to men accepted as candidates for varsity or freshman teams representing the college. Five times a week. Credit, 1/2 hour each.

Staff
115, 116 Minor Sports. A continuation of P. E. 107, 108. Includes such sports as golf, tennis, swimming, handball, volleyball, badminton, shuffleboard, deck tennis, hiking. Second year, twice a week. Credit, $1 / 2$ hour each.

Staff
125, 126 Boxing. Twice a week, Credit, $1 / 2$ hour each.
Allen
127, 128 Wrestling. Twice a week. Credit, $1 / 2$ hour each.
Allen

## THEORY COURSES FOR MEN

172 Fundamentals of Scouting. The philosophy of scouting organization and practices. Actual practice in scoutcraft. Those completing the course receive Elements of Scoutmastership Certificates, Parts I and II. Second and third year, first semester, three times a week. Credit, 3 hours.

Steverson
217, 218 Coaching. Theory and techniques of major sports. These include football, basketball, track and baseball. Required of all men who major in health and physical education. Third or fourth year, twice a week. Credit, 2 hours each. Staff

256 Advanced Scouting. Principles of scout and cub leadership, and special organization courses. Leadership certificates awarded on completing course. Prerequisite: P. E. 172 or equivalent. Second semester, three times a week. Credit, 3 hours.

Steverson

## ACTIVITY COURSES FOR WOMEN

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

101 Sports Survey. Badminton, volleyball, and basketball. First semester, twice a week, Credit, $1 / 2$ hour. Staff

102 Sports Survey. Speedball, softball, track, and minor team games. Second semester, twice a week. Credit, $1 / 2$ hour. Staff

103, 104 Athletics. Both semesters, four times a week. Credit, $1 / 2$ hour each.

Staff

## THEORY COURSES FOR WOMEN

207, 208 Coaching. Theory and technique of major and individual sports. Practical experience in game officiation. Required of all women majors. Third or fourth year, twice a week. Credit, 2 hours each.

Murphy
210 Camp Fire Leadership. Theory and practice of Camp Fire with special attention to practical programs. Successful completion of course leads to a certificate of training from National Camp Fire Headquarters, antecedent to later appointment as a Guardian. Fee. 75 cents. Third or fourth year, second semester. once a week. Credit, 1 hour. Anderson

## ACTIVTTY AND THEORY COURSES

## (Courses Open to Both Men and Women)

100 Hygiene. Required of all students. Separate sections for men and women. Either s $\in$ mester, twice a week. Credit, 2 hours. Lavik,

Murphy, Pomeroy
H. Ec. 101 Elementary Nutrition. See description under Home Economics. First year, first semester, three times a week. Credit, 3 hours. Rannells

109 Introduction to Physical Education. An orientation and guidance course. Required of all freshmen majoring in physical education. Separate sections for men and women. First year, first semester, three times a week. Credit, 3 hours.

Staff
110-a Tap and Clog. Beginning elementary techniques; simple routines. Either semester, twice a week. Credit, 1 ' hour.

Gillanders
110-b Advanced Tap and Clog. Advanced techniques and routines. Prerequisite: P. E. 110-a. Either semester, twice a week. Credit. 1/2 hour.

Gillanders
113 Badminton. First semester, twice a week. Credit, $1 / 2$ hour. Wood
120-a Golf. Beginning class. Fee, 50 cents. Either semester, twice a week. Credit, $\frac{1}{1}$ hour. Pomeroy, Wood

120-b Golf Advanced. Advanced technique, fundamentals and course experience. Fee, 50 cents. Either semester, twice a week. Credit, 1í hour. Pomeroy, Wood

Biol. 120 Human Physiology. See description under Biology. Second year, first semester, three times a week. Credit, 3 hours.

123, 124 Tumbling. Beginning and advanced sections for men. A separate beginning section for women. Second year, two semesters, twice a week. Credit, $1 / 2$ hour each.

Steverson

130-a Tennis. A class for beginners. Either semester, twice a week. Credit, $1 / 2$ hour.

Staff
130-b Tennis. An advanced class. Either semester, twice a week. Credit, $1 / 2$ hour.

Staff
131 Technique I. Modern dance, hockey, volleyball, and golf. Required of all women majors. First semester, five times a week. Credit, 1 hour. Staff

132 Technique 1I. Tap, clog, folk dance, basketball, softball, track, archery and tennis. Required of all women majors. Second semester, five times a week. Credit, 1 hour. Staff

140-a Archery. A beginning class. Fee, $\$ 1.00$. Either semester, three times a week. Credit, $1 / 2$ hour.

Wood
140-b Archery. An advanced class. Fee, 50 cents. Either semester, three times a week. Credit, $1 / 2$ hour.

Wood
150-a Beginning Social Dancing. The fundamentals of this type of dancing. Not more than one semester accepted for required physical education credit. Either semester, twice a week. Credit, $1 / 2$ hour. Gillanders

150-b Advanced Social Dancing. Advanced steps and combinations; practices in current steps. No credit toward the two hour P. E. requirement. Either semester, twice a week. Credit, $1 / 2$ hour.

Gillanders
160 Fencing. A class for beginners. Either semester, twice a week. Credit, $1 / 2$ hour.

Wood
162 Techniques of Dancing. Methods of teaching folk, tap, social and creative dancing. Problems in dance production, costume, and organization. Prerequisite: P. E. 161. Second year, second semester, three times a week. Credit, 2 hours.

Gillanders
167 First Aid. The principles of first aid and their application in practice. Demonstrations of the proper use of first aid materials and methods. First semester, once a week. Credit, 1 hour.

Steverson
1\% Folk and Character Dance. A study of dances suitable for elementary grades and high schools. Either semester, twice a week. Credit, $1 / 2$ hour.

Wood.
175 Demonstration and Observation Teaching. Required of major students prior to student teaching. Second year, first semester, twice a week. Credit, 2 hours. Staff.

180-a Beginning Modern Dance. Either semester, twice a week. Credit, 1/2 hour.

Gillanders:

180-b Advanced Modern Dance. Prerequisite: P. E. 180-a. Either semester, twice a week. Credit, $1_{2}^{\prime}$ hour.

Gillanders.
185 Principles of Health Education. The underlying principles. the aims, and objectives of school health education. A survey of available teaching materials. A study of official and non-official health agencies. Second year, first semester, three times a week. Credit, 3 hours.

Wood.
190 Playgraund Leadershlp. A study of the games suitable to the playground and other phases of the physical education program in the elementary school. Practical experience in organizing, promoting. and directing them. Required of all students taking the standard curriculum. Second year, either semester, three times a week. Credit, 2 hours. Staff.

230 Social Recreation. A study in social recreational activities for the home, school and community and their leadership. Second semester, twice a week. Credit, 2 hours.

Steverson.
Biol. 231 Human Anatomy. See description under Biology. Second year, first semester, three times a week. Credit, 3 hours.

236-g Organiation and Administration of Health and Physical Education. A study of the organization, administration. and supervision of the physical education program in elementary and high schools. Separate sections for men and women. Third or fourth year, second semester, three times a week. Credit, 3 hours.

Murphy, Lavik.
240 Public Health Education. A nine weeks' course in communicable diseases and health education. First semester, three times a week. Credit, $11 / 2$ hours.

Williams.
251 Applied Anatomy and Kinesiology. Origins, insertions, and actions of muscles with emphasis upon postural problems. Prerequisite: Biol. 231. Third year, first semester, three times a week. Credit, 3 hours.

Lavik.
254-g Physiology of Exercise. The effects of exercise upon bodily functions. Required of all majors. Prerequisite: Biol. 120. Second semester, three times a week. Credit, 3 hours.

Lavik.
390 Individual Problems. Study and investigation of current problems in health and physical education.

## DEPARTMENT OF PSYCHOLOGY

## SKINNER (Head of the Department), GRIMES, BURKHARD, RICHARDSON, CARRIER

The Major in Psychology shall consist of not less than twenty-four semester hours of work in this field, excluding Psych. 100, and 200. The minor shall consist of not less than fifteen hours excluding Psych. 100 and 200. 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.

## DESCRIPTION OF COURSES

Psych, 100 Elementary Psychology. Emphasis is placed on normal adult psychology with application of the facts to the control of human behavior. Gives a foundation for later study in education or psychology and an appreciation of the psychological approach to analysis of animal and human behavior. Second year, either semester. Credit, 3 hours.

Skinner, Grimes, Carrier.
200 Educational Measurements. The meaning of measurement and its place in education; types of educational and psychological tests and their functions; selection, interpretation and supervision of tests in guidance, classroom situations, supervision and administration are the chief topics. Tests and evaluation devices will be available for study and use. Prerequisitc: Psych. 100. Third year, either semester. Credit, 3 hours.

Richardson.
208 Abnormal Psychology and Mental Hygiene. A study of prevalent types of insanity and mental deficiency. The interaction of the psychological and environmental factors determining the well-being of the school child, with references to the origin, development, treatment, and prevention of behavior problems of children. Prerequisite: Psych. 100. Second semester. Credit, 3 hours.

Skinner.
211-g Statistical Methods. Stresses the interpretation and application of statistics as employed in education and psychology instead of mathematical theory. Topics include the assembling and analysis of data, the computation, interpretation, and use of measures of central tendency, variability, reliability, and simple correlation. Prerequisite: Psych. 100. Not offered in 1941-1942. Credit, 2 hours.

Richardson.
213 Educational Psychology. Based on information, principles, and experimental fields of psychology. A study of original nature, the learn-
ing process, laws of learning and habit formation, and economical principles of learning. Prerequisite: Psych. 100. First semester. Credit. 3 hours.

Skinner.
214 Applied Psychology. Application of psychological principles in busness, industry, medicine, law and personnel. Considers social and vocational problems, factors making for personal efficiency. Vocational and personality tests. Prerequisite: Psych. 100. Not offered in 1941-1942. Credit, 3 hours.

Skinner.
224-g Clinical Psychology. Survey of clinical work on diagnosis and adjustment of problem children. Intelligence. performance, and achievment tests are analyzed and demonstrated. Educational and other adjustment problems are diagnosed and remedial measures are suggested. Individual testing. Prerequisites: Psych. 100. 200. Fee, \$1.00. Second semester. Credit, 2 hours

Skinner.
225-g Social Psychology. Problems of social organization, social control, racial cultures, leadership, communication, imitation, heredity, and environment are considered. Problems in education. industry, commerce and social organization are analyzed in the light of modern psychology. Prerequisite: Psych. 100. Not offered in 1941-1942. Credit, 3 hours.

## Burkhard.

231-g Psychology of Adolescence. A presentation of facts on growth and development; physical, mental, moral and social traits of adolescence; the prediction and control of behavior; and their bearing upon the problems of instruction in junior and senior high schools. Prerequisite: Psych. 100. First semester. Credit, 2 hours. Skinner.

234 Child Psychology. A study of physical. mental, emotional. and social development of the chiid from birth to adolescence. The period from five to ten years is esfecially emphasized. Designed to meet the needs of those planning to teach in the kindergarten, primary, or intermediate grades. Prerequisite: Psych. 100. Second semester. Credit, 3 hours.

Skinner.

241-g Psychological Problems and Research. Designed for upper class and graduate students. An acquaintance with psychological methods of research and the results of important investigations. Each student carries out an individual research project, preferably in line with his interests. Credit determined by amount of work done. Prerequisites: Psych. 100. 200. First semester. Credit. 2 or 3 hours. Skinner.

308 Advanced Educational Psychology-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 of Psychology. Second semester. Credit, 2 hours. Skinner.

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 supervision. Prerequisite: at least two courses in psychology. Not offered in 1941-1942. Credit, 2 hours.

Skinner.
316 Mental Hygiene in the Public School Program. The application of mental hygiene principles to school situations with special reference to preventive aspects and to work with groups. The relation of the classroom teacher and the principal to the pupils, the parents, the community and the staff. The adaptation of school organization to personality needs and to the teacher's health. First semester. Credit, 2 hours.

## Carrier.

322 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 common forms of defect, and the education of gifted children. Prerequisite: Psych. 100. First semester. Credit, 2 hours.

Skinner.
333 Personnel Techniques and Problems. Applies psychological principles to student personnel, and considers personnel in business and industry. Emphasizes personnel techniques and problems facing the counselor, social worker, or supervisor. Prerequisite: Psych. 100. Credit, 2 hours. Not offered in 1941-1942.

Skinner.
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.

Staff.

## DEPARTMENT OF SCIENCES

## BATEMAN (Head of the Department), JUDD, OSTRANDER, HOOVER MORTENSEN, WILLIAMS.

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

Students majoring in science are required to follow one of the sequences listed below. Those interested primarily in teaching in the elementary grades are advised to concentrate in either Elementary Science or Geography, and to meet the requirements of the Standard Curriculum. Those who plan to teach science in the secondary schools should concentrate on Biology, Chemistry, or Physics and fit their elected sequence of courses into either the Standard or Secondary Curriculum. Those not interested in certification for teaching may elect any of the sequences given below fitting it into the Special Curriculum. These curriculums are printed in the section of the catalog entitled "Curriculums, Degrees and Certification." To complete a major, twentyfour hours, exclusive of the general curriculum requirement in science, must be completed in one of the sequences. The starred courses are required, other listed courses may be elected to complete the major in one of the fields of concentration.

Students electing to major in science will plan their programs under the direction of the department head and the special advisor in the field of their concentration. Over-specialization in the physical and
biological sciences is to be avoided. All majors in physical science, biological science, pre-medicine, and other similar pre-professional fields are advised to take Biology 130 and 140 , Chemistry 111 and 112 , Physics 111 and 112, and Mathematics 111 and 112, to insure a broad foundation, then concentrate in the science field of their choice. Physical and biological majors should elect courses in German or French if they plan to work for graduate or professional degrees.

Individuals planning to study pre-medicine, pre-nursing, or medical technology are advised to consult the type curriculums which are on file at the department office. Attention is called to the medical technology and health courses described in this catalog, which are offered in collaboration with St. Joseph's Hospital at Phoenix.

During the senior year, all science majors should make arrangements with their departmental advisors to obtain experience in the handling of equipment and operation of laboratories. Majors in biological and physical science are required to maintain a grade of C or better in all of their biology, chemistry and physics courses.

## THE MINOR IN SCIENCE FOR THE FOUR-YEAR CURRICULUM

Fifteen hours to be chosen in conference with the department head and the instructor representing the student's minor interest. This work may be selected from any one of the following fields: biology, chemistry, geography, physics or general sciences.

## SUGGESTED MINORS FOR SCIENCE MAJORS:

General Elementary Science: Physical education, industrial arts, home economics, geography.

Geography: Commerce, social studies, biology.
Biological Sciences: Chemistry, home economics, physical education, geography, foreign languages.

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

## SEQUENCES IN SCIENCE

## 1 ELEMENTARX SCIENCE



## IV PHYSICAL SCIENCES

First Year
Second and Third Year
*Chem. 131 (Qualitative), *Chem. 201-202 (Quantitative) or Chem. 142 (Quant.)
*Physics 111-112 (General), Math, 113-114 (Calculus)
*Chem. 211-212 (Organte) or Physics 201-202 (Advanced General)
Physics 116 (Astronomy), *Biol. 130 (Botany), *Biol. 140 (Zoology)
Fourth and Fifth Year
Chem. 260 (Applied), Chem. 270 (Adv. Quant.)
Chem. 282 (Biochemistry)
Chem. 290 (Physical)
Physics 204 (Optics), Physics 241 (Modern)
Physics 251-252 (Mathematical)
Biol. 183 (Bacteriology), Biol. 204 (Genetics)
Sci. 390 (Individual Problems)
*Starred courses are required.

## DESCRIPTION OF COURSES

## GENERAL SCIENCE

G. Sci. 100 Introduction to the Physical Sciences. A non-mathematical, non-laboratory treatment of the fundamental facts of the physical sciences, the scientific method of approach, and the applications of the physical sciences to daily life. Fee, 50 cents. Either semester, three lecture-discussions a week. Credit, 3 hours.

110 Introduction to Biological Sciences. Survey of the scope of biology and of life on the earth, characteristics of living matter, fundamental structures of plants and animals and their activities. 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. Fee, $\$ 2.00$. First year, either semester, two lectures and one twohour laboratory a week. Credit, 3 hours.

Mortensen.
121 Elementary Photography. Light and its behavior, lenses, camera construction and performance, exposures, developing, printing, enlargement, making of lantern slides, copying, itensification, composition. For the amateur, or the teacher who wishes to make use of photography as an aid to his teaching. Prerequisite: Chem. 110 or Chem. 112. Fce, $\$ 3.50$. First semester, two lectures and three hours of laboratory a week. Credit, 3 hours. Not offered 1941-1942.
231, 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. Lectures, library reports, class discussions, field observations, and one three day camping trip to the Nature Lodge under Tonto Rim. Prerequisite: One college course in physical science and one in biological science. Fee, $\$ 1.00$ each. Third year, both semesters, twice a week. Credit, 2 hours $\epsilon$ ach.

Mortensen.

## GEOGRAPHY

Geog. 100 Elements of Geography. An introductory analysis of principles for a scientific interpretation of the world and its regions, interrelations of climate, soil, relief, vcgetation, economic development and cultural achievement. To establish procedure for further geographic knowledge as a foundation for teaching. Fee, 50 cents. Either semester, three times a week. Credit, 3 hours.

Hoover.
Geography A. Map Studies and Locations. For those only who are unable to pass satisfactorily a test on minimum essentials in map studies and who plan to follow the standard curriculum. Students needing this special drill will take it when they register for Geography 100 or
before. Either semester, once a week until completed. No credit.

101 Economic Geography. A study of the relations of physiographic, climatic and economic conditions to production, trade, and transportation. Important agricultural, forest, mineral, and manufactured products of the world. Special emphasis is placed upon regional aspects of commodities. First semester, three times a week. Credit, 3 hours.

## Hoover.

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. Prerequisite: Geog. 100. F'ee, 50 cents. Second semester, three times a week. Credit, 3 hours.

Hoover.
203 Geography of Europe. Natural regions and political divisions compared. An investigation of the geographical backgrounds necessary for the interpretation of major economic, social, and political problems. Prerequisite: Geog. 100. Fec, 50 cents. First semester, three recitationlectures a week. Credit, 3 hours. Not offerd, 1941-1942.

Hoover.
204 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. Second semester, three times a week. Credit, 3 hours.

Hoover.
206g Anthropogeography of the Southwest. Cultures of Arizona and bordering areas interpreted in their setting of physiographie, 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. Fee, 75 cents. Second semester, three times a week. Credit, 3 hours.

Hoover.
214g Field Work in Arizona Geography and Geology. Saturday and week-end trips arranged to include type localities and areas. Prerequisites: Geog. 100, 206, Geol. 151, and approval of the instructor. Fee, $\$ 5.00$ per hour. Credit, 1-3 hours.

Hoover.
217g Conservation of Natural Resources. Distribution of the natural resources of the United States; their most efficient utilization and conservation. Problems of land reclamation, erosion, forestry, conservative mining, flood prevention, water supply, water power, navigation, conservation of wild life and scenery. Prerequisite: Geog. 100. Fee, 50 cents. First semester, twice a week. Credit, 2 hours.

Hoover.

220 g Climatology. Composition and structure of the atmosphere; air masses and storms; weather mapping, and forecasting. Climate analysis, classifications and regional distribution of climate types. Prerequisite: Geog. 100. Fee, 50 cents. First semester, twice a week. Credit 2 hours. Not offered, 1941-1942.

Hoover.
222 Physiography of the United States. The physiographic regions of the United States analyzed. The many inferesting scenic features of the United States are studies as illustrative of the various types of land forms in relation to geologic processes; also the human adjustments to physiographic conditions. Prerequisites: Geog. 100, Geol. 151. Fee, $\$ 2.00$. Second semester, two to three recitation-lectures and four hours laboratory a week. Credit, 3 hours.

Hoover.

## GEOLOGY

Gcol. 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, $\$ 3.00$. First semester, three recitation-lectures, two hours laboratary and a minimum total of eighteen hours of field work. Credit, 4 hours. Hoover

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. Second semester, three recitation-lectures together with laboratory assignments. Credit 3 hours. Not offered, 1941-1942.

Hoover.

## BIOLOGICAL SCIENCES

Biol. 130 General College Botany. The make-up of a typical flowering plant is studied in some detail, as regards its structure and physiology. Special attention is given to the morphology of the Thallophytes, Bryophytes, and Pteridophytes, and the principles of growth, reproduction, variation, and heredity. Fee, $\$ 2.00$. Either semester, three lectures and three hours laboratory a week. Credit, 4 hours. Martensen.

140 General Zoology. General principles of animal structure and function and comparative methods of reproduction. Systematic classification and a consideration of the geographical distribution in relation to the origin and development of animal life. Fee, $\$ 3.00$. Either semester, three lectures, three hours of laboratory a week. Credit, 4 hours.

Ostrander.
120 Human Physiology. The human body is studied as a mechanism in relation to its environment. A study of the vital functions and the phy-
sical principles which govern them. A foundation for those contemplating further work in hygiene, health education, or physical education. Fee, $\$ 1.00$. Second semester, three times a week. Credit, 3 hours.

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. Fee. \$2.50. Two hours lecture and six hours laboratory a week. Credit, 4 hours.

Judd.
134 Plant Physiology. A study of the plant functions of absorption, food synthesis, nutrition, respiration, growth and reproduction. with special reference to agricultural practices. Prerequisites: Biol. 133, Chem. 111, 112. Fee, $\$ 3.00$. Second semester, two lectures, six laboratory hours a week. Credit, 4 hours.

Judd.
163 Comparative Anatomy of Vertebrates. A study of the structure, development, and homology of the organ systems of vertebrates.Labora $=$ tory dissection of the shark, frog, pigeon, and cat. Alternates with Biol. 225. Prerequisites: Biol. 112, 120. Fee. $\$ 5.00$. First semester, two lectures, two three-hour laboratory periods a week Credit, 4 hours.

## Ostrander.

183 General Bacteriology. Emphasis upon the fundamental principles of bacteriology, and their hygienic, industrial and agricultural application. Organisms representing the principle groups are studied in cultural and microscopic preparations. Milk, soil, water and hygienic surveys are conducted by the students. Prerequisite: Biol. 110 or equivalent. Fee, $\$ 5.00$. First semester, two lectures and three two-hour laboratory periods per week. Credit, 4 hours.

Ostrander.
204g 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. Prerequisites: Biol. 130, 140 or equivalent. Second semester, three lectures a week. Credit, 3 hours.

Ostrander.
204 Ag Laboratory Course in Genetics. The study is based on fruit fly breeding and herediscope problems. Prerequisite: Biol. 204 or concurrent registration. Fee, $\$ 1.00$ per hour. Second semester. Credit, 1-2 hours.

Ostrander.
213g 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. Fee, $\$ 2.00$. First semester. three lectures and one laboratory period a week. Credit, 4 hours.

Judd.

216 g Plant Breeding. The principles and practice of plant breeding, t $\varepsilon$ chnique, and improvements by selection and hybridization. Prerequisites: Botany, plant industry, and genetics. Fee, $\$ 2.00$. Second semester, three lectures a week. Credit, 3 hours. Not offered, 1941-1942. -

Judd.
219g 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: Biol. 140, 204. First semester, three lectures a week. Credit, 3 hours. Not offered, 1941-1942.

Ostrander.
222 General Entomology. A general study of insects, including structure, physiology, economic importance, classification and relationships. Each student is required to complete a project including collection and special report on some group of insects. Alternates with Biol. 224. Prerequisite: G. Sci. 110 or equivalent. Fee, $\$ 1.00$. Second semester, two hours lecture and one two-hour laboratory or field work a week. Credit, 3 hours. Not offered, 1941-1942.

Ostrander.
224g 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. Second semester, three lectures a week. Credit, 3 hours. Not offered, 1941-1942.

Ostrander.
231 Anatomy. Human anatomy with special emphasis on the anatomy of mascles and joints and application to the movements involved in exercises and sports. Fee, $\$ 2.60$. First semester, three times a week. Credit, 3 hours.

## THE PHYSICAL SCIENCES

## Chemistry

110 Introduction to Chemistry. Fundamentals of chemistry and their application to modern life. For majors of home economics, pre-nursing and similar fields. Fee, $\$ 4.00$. Three recitation-lectures and three hours laboratory a week. Credit, 4 hours. Bateman, Assistants.

110-a Introduction to Chemistry. Similar to chemistry 110 except no laboratory is required. For majors of physical education and similar fields. Fee, $\$ 1.00$. Three recitation-lectures a week. Credit, 3 hours. Bateman.

111, 112 General College Chemistry. Intensive treatment of the fundamental facts and principles of general chemistry, in connection with the metals, non-metals and their compounds. Qualitative analysis is in-
troduced in the second semester. Primarily for students of science, mathematics, engineering, pre-medicine and agriculture. Fee, $\$ 4.00$ each semester. Three lectures and three hours laboratory a week. Credit, 4 hours each semester. Bateman, Assistants.

131 Qualitative Analysis. A systematic separation of the most important metals and acids, together with a oareful consideration of the theories, principles and laws involved. Prerequisite: Chem. 112, or equivalent. Fee, $\$ 5.00$. First semester, two lecture-recitations and six or more hours of laboratory a week. Credit, 4 hours. Bateman, Assistants.

142 Elementary Quantitative Analysis. Fundamentals of volumetric and gravimetric analysis. Includes practice in the standardization of acid, bases and oxidizers, and analysis of common substances. Careful manipulation of apparatus, integrity, and accuracy are stressed in the laboratory. Prerequisite: Chem. 131 or equivalent. Fee, $\$ 5.00$. Second semester, one lecture and nine or more hours of laboratory. Credit, 4 hours.

Bateman.
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, agriculture, and biology. Prerequisite: Chem. 110 or equivalent. Fee, $\$ 5.00$. Second semester, three lectures and three hours of laboratory a week. Credit, 4 hours.

Bateman.
201, 202 Analytical Chemistry. Laboratory practice in the methods of chemical analysis with emphasis on gravimetric and volumetric methods, supplemented by lectures and problems to illustrate principles involved. Prerequisites: Chem. 112 or equivalent. Fee, $\$ 5.00$ per semester. Two lectures and six or more hours of laboratory a week. Credit, 4 hours each semester

Batemañ
211g, 212g General Organic Chemistry. An intensive treatment of the chemistry of organic compounds, including the aliphatic and aromatic hydrocarbons and their derivatives. Theories and reactions of organic chemistry. The laboratory work includes the study and preparation of typical carbon compounds. Alternates with Chem. 201, 202. Prerequisite: Chem. 112 or equivalent. Fee, $\$ 5.00$. Both semesters, six lectures and three or more hours of laboratory each week. Credit, 5 hours. Not offered, 1941-1942.

## Bateman.

260g 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. Prerequisite: Chem. 180, 211, or equivalent. Fee, $\$ 5.00$. Second semester, three lecture-recitations and one three-hour laboratory period per week. Credit, 4 hours. Not offered, 1941-1942.

Bateman.
270g Advanced Quantitative Analysis. Special methods of analysis such as water, food, ore, rock, steel, urine. Time and credit to be arranged. Prerequisites: Chem. 112, 142 or 202, 212; Physics 112. Hours to be arranged. Credit, arranged.

Bateman.
280g 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. Fee, $\$ 4.00$. Second semester, three lectures and three hours of laboratory a week. Credit, 4 hours.

Bateman.
290 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. 142; Phys. 112, and Calculus. Fee, $\$ 5.00$. Second semester, three lectures and three or more hours of laboratory work a week. Credit, 4 hours. Not offered, 1941-1942.

Bateman.

## Physics

Phys, 110 Elements of Physics. The fundamental principles of physics are developed and discussed in an elementary way and application is made of these principles to practical problems of the farm and home. Treatment of such topics as: mechanical principles of machinery, heating systems, air conditioning, home lighting, refrigeration, and electrical appliances. Neither high school physics nor college mathematics is required. Fee, $\$ 3.00$. First year, second semester, three lecture-recitations and three hours of laboratory a week. Credit, 4 hours.

111, 112 General College Physics. A detailed lecture and laboratory treatment of general physics covering mechanics, heat, sound, light, electricity and magnetism. Prerequisites; College algebra and trigonometry. Fee, $\$ 3.00$ per semester. Both semesters, three lecture-recitations and three hours of laboratory a week. Credit, 4 hours.

116 Descriptive Astronomy. A non-mathematical treatment of general astronomy. Includes a detailed study of the members of the solar system and their characteristics, stars, constellations, nebulae, and the structure of the universe. First semester, three lectures a week. Credit, 3 hours. Not offered in 1941-1942.

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. Second semester, three times a week. Credit, 3 hours. Not offered in 1941-1942.

201 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. First semester, three lectures a week. Credit, 3 hours. Not offered in 1941-1942.
2.02 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 padio. Prerequisites: Phys. 112 and calculus. Second semester, three lectures a week. Credit, 3 hours. Not offered in 1941-1942.

204 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 and calculus. Second semester, three lectures a week. Credit, 3 hours. Not offered in 1941-1942.

241g 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 and calculus. First semester, three lectures a week. Credit, 3 hours. Not offered in 1941-1942.

251g, 252g. 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, and differential and integral calculus. Two semesters, four times a week. Credit, 4 hours each. Not offered in 1941-1942.

350 Individual Problems. Problems of biology, chemistry, geography, and physics, with special emphasis on science teaching. Open to graduate students majoring in science. Time and credit to be arranged.

Staff.

## MEDICAL TECHNOLOGY AND HEALTH

The following courses are offered at St. Joseph's Hospital in Phoenix and are restricted to seniors following the curriculum in Medical Technology and Health. Hours and fees for the following courses by arrangement with the instructor.

Biol. 225 Pathogenic Bacteriology. Disease-producing bacteria studied by special stains, culturing and animal inoculation. Preparation of differential media for bacterial isolation and differentiation. First semester. Credit, 4 hours.

Williams.
240 Biological Laboratory Technique. Routine laboratory procedures. Examinations of stained smears for morphological identification of bacteria, sputum examinations, routine blood counting, blood typing and matching, and urinalysis. First semester. Credit, 4 hours. Williams.

250 Histology. The study of the structure of tissues and organs and the preparation of stained sections for microscopic examination. Second semester. Credit, 4 hours.

Williams.
265 Serology. Serological and immunological procedures. Special emphasis on complement fixation and precipitation tests for the diagnosis of syphilis. First semester. Credit, 2 hours.

Williams.
271 Parasitology. Parasites of the intestines and blood in their relation to the problem of public health. The recognition of ova, the lile cycle of parasites and their mode of transmission. First semester. Credit, 2 hours.

Williams.
273 Hematology. Study of normal and abnormal blood cells. Alteration of the formed elements of the blood are considered in their relationship to different pathological processes. First semester. Credit, 4 hours.

Williams.
Chem. 282-a Biochemistry. The chemistry of animal life, the chemical properties of biological compounds, digestion, secretions and body metabolism. Normal values of blood and urine chemical compounds are stressed. Second semester. Credit, 4 hours.

Williams.
284 Blood Chemistry. Examination of the blood for pathological compounds in the blood, abnormal changes in its chemical constituents, and examination for abnormal chemical substances in the blood. Second semester. Credit, 4 hours.

Williams.
286 Chemical Examination of the Urine. Changes in chemical composition of the urine. Abnormal values of the usual constituents are studied in their relationship to disease. Second semester. Credit, 2 hours.

Williams.

288 Chemistry of Digestion. Chemical examinations of the gastric contents, duodenal contents, bile. and feces are made; and the relationship of the findings to abnormal absorption and secretion is studied. Second semester. Credit, 2 hours.

Williams.

## DEPARTMENT OF SOCIAL STUDIES

## WYLLYS (Head of the Department), TILDEN

Courses in the Social Studies are designed to make one's college education well-rounded, and to produce intelligent. broad-minded. and tolerant graduates of this institution. Not all students are preparing 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 some knowledge of our human backgrounds and our human relationships, gained through the study of our past history and our present political and social institutions.

## MAJORS

All majors in the Social Studies Department require 24 semester hours of work excluding the 6 semester hours of Social Science and the 3 semester hours of Constitutional Government required of all students. Econ. 131-132, Principles of Economics, will be accepted as electives for the college requirements.

Eighteen hours of the history major should $b=$ in lower division courses and taken in the freshman and sophomore years. The following are required: Hist. 101. 102, 103. 104. The remaining 6 hours of lower division courses should be chosen from the following: Hist. 105-106, 107-108, 111. 113, 114. 116. The twelve hours in upper division courses may be sflected from the following: Hist. 202. 203. 204. 205. 206. 207. 208, 209, 210, 212.

The General Social Studies Major should include the completion of Hist. 101-102 and 103-104 during the first two years. but the electives in both lower division and upper division may be chosen from History, Political Science, or Economic Geography with the approval of the head of the department.

Major in Political Science. Students who wish to complete this major should select eighteen hours of work in lower division courses from the following: Either Hist. 103-104 or Econ. 131-132. and Pol. Sci. 101, 102, 103 and 104. The requisite twelve hours of upper division work should be sclected from Pol. Sci. 201. 203, 204. 205. 206. provided the prerequisites for these courses have been completed.

## MINORS

A minor in History, General Social Studies, or Political Science consists of at least fifteen semester hours, excluding Constitutional Government. Nine of these hours should be in lower division courses selected from those listed above, and six hours should be in upper division courses chosen from those listed above.

The actual selection of the courses which are to constitutc the major or minor will depend, to a considerable extent, upon the desires and the preparation of the individual student. The major or minor should be planned and worked out under the direction of the head of the department. Graduate courses will be organized and conducted by the department as the demand for them becomes sufficient.

## SUGGESTED SEQUENCE OF COURSES

## FIRST YEAR

First Semester: Required of majors, Hist. 101. Elective courses: Hist. 105, 107, 111, 113; Pol. Sci. 101, 103; Econ. 131.

Second Semester: Required of majors, Hist. 102. Electives: Hist. 106, 108, 114, 116; Pol. Sci. 102, 104; Econ. 132; Pol. Sci. 100.

## SECOND YEAR

First Semester: Required of majors, Hist. 103. Electives: Hist. 105, 107, 111, 113; Pol. Sci. 101, 103; Econ. 131; Pol. Sci. 100.

Secand Semester: Required of majors, Hist. 104. Electives: Hist. 106, 108, 114, 116; Pol. Sci. 102, 104; Econ. 132; Pol. Sci. 100. Eighteen units of lower division work including Hist. 101, 102, 103, 104, should have been completed by the end of the second year. Twelve units of upper division work should be completed during the third and fourth years.

## THIRD and FOURTH YEARS

First Semester: Elect from History 203, 205, 207, 209, 210; or Pol. Sci. 201, 203, 205, provided all prerequisites for these courses have been completed.

Second Semester: Elect from Hist. 202, 204, 206, 208, 212; or Pol. Sci. 204, 206, provided all prerequisites for these courses have been completed.

History 101-102 and 103-1v土 are required of all students majoring in History or Social Studies. They should be completed before the end of the second year of college, and are prerequisites for many of the upper division courses. Students majoring in Political Science may substitute Econ. 131, 132 for Hist. 101, 102 as a requirement in lawer division
work. Political Science 100, Constitutional Government, required of all students for graduation, may not be counted toward the completion of a major or minor in this department. First-year students should not take this course until their second semester.

## COURSES IN SOCIAL STUDIES HISTORY

Hist. 101 Early Modern Europe. The history of Europe is covered from the latter part of the fifteenth century down to 1815 . It deals with the four great revolutions in commerce, religion, politics and inuustry. Required of all majors, and should be tak $\epsilon_{n}$ during the freshman year. First semester, three times a week. Credit, 3 hours.

Wyllys.
102 Europe Since 1815. A survey of the history of Europe from the days of Napoleon to the present. Some of the chief topics are the Congress of Vienna; the Industrial Revolution; nationalism and unification; imperialism and alliances; the Near East; the first World War; and Europe since 1920. Required of all majors and shouid be completed during the freshman year. Second semester, three times a week. Credit, 3 hours.

Wyllys.
103 United States to 1865. In this course, 1783-1865, American history is surveyed for judicial decisions, legislative enactments, administrative rulings and policies, political party practices, and social and economic developments. Required of all majors and should be completed by the end of the sophomore year. First semester, three times a week. Credit, 3 hours.

Wyllys.
104 United States Since 1865. The subject matter of this course is the great economic and social revolution in the United States during and after the Civil War. Studies the significance of the rise of capitalism, the growth of cities, cultural changes, foreign relations and the labor movement. Required of all majors and should be completed by the end of the sophomore year. Second semester, three times a week. Credit, 3 hours.

Wyllys.
105 History of England to 1603 . A survey of the political. economic, and social development of the British people from the earliest times to the end of the 1 udor period. First semester, three times a week. Credit, 3 hours.

Tilden.
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. Second semester, three times a week. Credit, 3 hours.

Tilden.

107 History of the Ancient Orient and Greece. A survey of the developments of ancient culture, including the valley of the Nile, the Euphrates, the western coast of Asia Minor, and the mainland and colonies of Greece. Not offered in 1941-1942. First semester, three times a week. Credit, 3 hours.

Tilden.
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 and fall of the Roman Empire are brought out. Not offered in 1941-1942. Second semester, three times a week. Credit, 3 hours.

Tilden.
111 History of the Southwest to 1865. The purpose of this course is to furnish the historical background of the southwestern states before the end of the Civil War as a basis for the understanding of Arizona and her institutions. Not offered in 1941-1942. First semester, three times a week. Credit, 3 hours.

Wyilys.
113 Medieval Europe. The story of Europe from the fall of the Roman Empire in the West to the Reformation. The Church, the Crusades, and the Holy Roman Empire are emphasized with stress upon social and economic life. First semester, three times a week. Credit, 3 hours.

Wyllys.
114 Colonization of North America. A survey of the history of colonial North America from 1492 to 1783 . A detailed account of social and economic life of the French and Spanish colonies, and of the American Revolution are included. Second semester, three times a week. Credit, 3 hours.

Wyllys.
116 Hispanic America. A survey of the cultural, social and economic development of the peoples of Mexico, Central and South America and the West Indies, with some account of their political background. A knowledge of Spanish is desirable but not essential. Not offered in 1941-1942. Second semester, three times a week. Credit, 3 hours.

Wyllys.
2C2-g The Far East. A study of the early as well as the modern history of China, Central Asia, Malaysia, and Japan. Emphasizes the period since the opening of the nineteenth century. Prerequisites: Hist. 101, 102 or equivalent. Second semester, three times a week. Credit, 3 hours.

Wyllys.
203 American Foreign Relations. Deals with the machinery of American diplomacy, and with the history of American foreign policy. Some topics are Manifest Destiny, the Monroe Doctrine, imperialism and expansion, and problems of international law involving the United

States. Prerequisites: Hist. 103-104 or equivalent. First semester, three times a week. Credit, 3 hours.

Wyllys.
204-g History of the American Frontier. Designed to show the effect of the Westward Movement and the frontier upon American national life. Social and economic factors are stressed. Covers the period from about 1700 to 1890. Prerequisites: Hist. 103-104 or equivalent. Not offered in 1941-1942. Second semester, three times a week. Credit, 3 hours.

Wyllys.
205-g The French Revoitation and Napoleon. The central theme is the critical period from 1789 to 1815, covering the Old Regime in France, the chief event of the Revolution and the career of Napoleon. Prerequisites: Hist. 101-102 or equivalent. First semester, three times a week. Credit, 3 hours.

Wyllys.
206-g Contemporary Europe. A brief survey of the first World War followed by such post-war problems as international conferences, the League of Nations, and the present conditions in Europe. Proseminar. Open to upper division students only. Prerequisites: Hist. 101, 102, or equivalent. Second semester, three times a week. Credit, 3 hours.

Tilden.
207-g History of Mexico. An advanced course dealing with the history of the Mexican nation from colonial times to the present. A knowledge of Spanish is desirable but not essential. Prerequisites: Hist. 103-104 or equivalent. Not offered in 1941-1942. First semester, three times a week. Credit, 3 hours.

Wyllys.
208-g American Cultural History. This study takes particular note of the higher attainments of the American people, such as their drama, recreation, education, religion and social life. Proseminar. Prerequisites: Pol. Sci. 10J, Hist. 103-104 or equivalent. Second semester, three hours a week. Credit, 3 hours.

Tilden.
209 Economic History of the United States. A survey of the economic growth of the American people from 1783 to the present. Emphasis is placed upon the Economic Revolution and the development of our modern industrial society. Proseminar. Prerequisites: Hist. 103-104 or equivalent. First semester, three hours a week. Credit, 3 hours.

Tilden.
210-g Renaissance and Reformation. Deals with the antecedents and development of the Renaissance in Italy, together with its political, ecoomic, intellectual and artistic phases in other European countries, and with the resultant revolution in religious and political thought. Prere-
quisites: Hist. 108, 113 or equivalent. First semester, three times a week. Credit, 3 hours.

Tilden.
212 Teaching the Social Studies. Deals with the methods of teaching history and other social science. Conducted on the project method, with observations and reports. Prosemınar. Open to seniors only. Prerequisites: Hist. 101-102, 103-104, and Pol. Sci. 100. Offered if demand is sufficient. Second semester, twice a week. Credit. 2 hours.

Wyllys.
300 Seminar in History. Assignments and reports in individual research work. Offered if demand is sufficient. Either semester, hours to be arranged. Credit, 2 hours.

Wyllys.
Hist. 301 Contemporary United States. Studies in American political social and economic history since 1900 . The problem or project approach may be used in conduction of this course. Offered if demand is sufficient. First semester, hours to be arranged. Credit, 3 hours. Wyliys.

302 Historiography and Historical Philosophy. Studies in historical method and in the literature and theories of history, chiefly in the nineteenth century. Offered if demand is sufficient. Second semester, hours to be arranged. Credit, 3 hours.

Tilden.

## POLITICAL SCIENCE

Pol. Sci. 100 Constitutional Government. Meets the requirements of the state law. Required of all students for graduation. Not open to freshmen during their first semester. Either semester, three times a week. Credit, 3 hours.

Tilden.
101 Introduction to Political Science. Fundamental principles of government, sovereignty, legislation and the origins of the state. First semester, three times a week. Credit, 3 hours.
'02 State Government. The workings of the typical American state government, with the principles of administration. Second semester, three times a week. Credit, 3 hours.

103 Municipal, Government. The methods of city government, studied on a comparative basis. First semester, three times a week. Credit, 3 hours.

104 American Political Parties. A survey of the formation of leading political parties and of the principles of famous party leaders. Sccond semester, three times a week. Credit, 3 hours.

201 Comparative National Governments. A background course for the better understanding of current history and government administration.

Prerequisites: Hist 101, 102 or equivalent, Pol. Sci. 100. First semester, three times a week. Credit, 3 hours.

203-g Public Administration. Discussion of the methods of administration most commonly followed in the United States. Prerequisites: Pol. Sci. 100. First semester, three times a week. Credit, 3 hours.

204 International Law and Relations. The principles and practices of nations under the laws and customs of war and peace. Prerequisite: Pol. Sci. 100. Second semester, three times a week. Credit, 3 hours.

205 World Politics in the Pacific. Natural resources, population problems, economic imperialism. political ideas, cultural and social trends in the Pacific area. Prerequisites: Hist. 101, 102 or equivalent, Pol. Sci. 100. First semester, three times a week. Credit, 3 hours.

206-g Contemporary Political Thought. A critical survey of political ideas and philosophy from the French Revolution to the present. Prerequisite: Pol. Sci. 100. Second semester, three times a week. Credit, 3 hours.

300 Seminar in Political Science. Offered as graduate work, if demand is sufficient. Either semester, time to be arranged. Credit, 2 hours. 390 Individual Problems. Problems may be worked out in history, political science or teaching methods. Either semester, hours to be arranged. Credit, 3 hours.

Staff.

## STATISTICS

SUMMARY OF REGISTRATION, 1940-1941
College
Resident Students
Regular Session

|  | Freshman | Sophomore Junior | Senior |  |  | Graduate | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Men | 315 | 127 | 165 | 84 | 62 | 753 |  |
| Women | 285 | 125 | 159 | 95 | 62 | 726 |  |
| Total | 600 | 252 | 324 | 179 | $\mathbf{1 2 4}$ | $\overline{1479}$ |  |

Summer Session 1940
Men ..... 246
Women ..... 397
Total ..... 643
Extension Courses
Men ..... 61
Women ..... 153
Total ..... 214
Training Schools
Boys ..... 458
Girls ..... 486
Total ..... 944
Total Registration
In College ..... 2336
Counted more than one ..... 228
Total different students ..... 2108
In Training Schools ..... 944
GRAND TOTAL ..... 3052
SUMMARY OF GRADUATES, 1941
Prior to 1941 ..... 5216
Class of 1941, B. A. Degree ..... 243
M. A. Degree ..... 18261

## COMMENCEMENT 1941

# BACHELOR OF ARTS IN EDUCATION January 31, 1941 

Gilbert Aguilar
James Joseph Allen Jane Bandy
Grace Marie Beriendis
Ernest Brevard Cochran
Ora Luthera Crocker
Byrns Long Darden
Lomie Janet Dotson
Warren Le Roy Fennell
Jack Fishleder
Margery May Foglesong
Jesse Clyde Gardner
Bernard Joseph Glinski
J. Richard Godsell

Alyce Susan Gonzales
Monita Marion Greenwood

Eddie James Hodge
Carl Joseph Hossler
James Richard Landers

- John William McArthur Theo Neely
Cecil H. O Dell
Fernando Bustamente Ortega
Ruby Green Perkins
Mary Katheen Quaid
Albert V. Sanserino
Horace Taylor
Lubbock Brown Taylor
Ruth Alice Tupper
-     - dalene -t. Whalley

Winnabelle Stamps Wilhoit

# BACHELOR OF ARTS IN EDUCATION June 4, 1941 

James Robert Abrams
Bernard F. Allen
Lola P. Allen
Henry A. Andrade
Arthur Alexander Barnes
Anna Marie Barnett
Vivian Barnett
Mary Alice Bayless
Rose $E$. Beasley

- Hilda Virginia Bellinger

Victor J. Berlendis
Robert Hartzel Bos
Elsie-jean Frown
Fred Martin Buck
Waido Leroy Butler
John D. Calhoun, Jr.
Robert Stewart Case
Jean Christensen
Mary Aletha Christman
Frank Pail Clifton
Ada Cohen
Maxine Coleman
Frank A. Costey
Lillian Austin Crist
Anna Belle Darden
Mary Martha de Best
John Paul De Witt
Richard James Dukelow
Mary N. Duncan
Leonard Raymond Eiter
Lee Theron Faver
Stanley Stewart Fay
Daniel Currol Fimbres
Voris Foster

Frank E. Franquero
Hazel C. Gardner
Grace Helen Genung
Jean Shirley Genung
Robert Edward Giacomini

- Floy Elaine Gildea

Edna Ann Gleim
Aurelia Gonzales
Freddie Lee Green
Macrina Haddad
Henry Wayne Hall
Henry Joseph Hamiester
Dorothy Louise Harelson
Roy Lynn ITarkins
Helen Le Noir FIart

- Louis Demuling Hateh

Doris J. Hawke
lsabelle Cardon Hilton
Asahel Delma Hinshaw
Jane stavert Hoges
Lon W. Hood
Wilma Hudson
Norman Edward Iverson
P. Meniahon James

Clara C. Jehnson

- Dale Harriett Jordan

Shirley Elizabeth Jordan
Mark M. Kalastro
Marlow Fieith
Jewell Risley Feswick
Gladys Miles Filerease
Mildred Meyer Klusmeyer
Bellamy Priest Laatz
Margaret Mary Lind

## BACHELOR OF ARTS IN EDUCATION

## June 4, 1941 (Continued)

Orlando Contreras Loera
Lucilie Evelyn Lowe
Vearl Gordon McBride
Francis Jacob McCullough
Irene McRae
Timothy Joseph Mahoney
Hilda. Helon Manuel
Elizabeth Touise Matthews
Myrtle Matthews
Samuel S. Medigovich
Ted Middleton
Clotilde Ferte Miller
Addie Catherine Miner
Rose Mitchell
Coy L. Morgan
Josephine Florian Munoz
Wendell Sirrine Noble
Arnold Duran Orrantia
Seretta Mary Paddock
Rita Annette I'apin
Mary Flda Piasquaione

- Grace Barbara I?atterson

Charles Russell P'earce
Eleanor Perry
Mary Louise Phillips
Othello Giertera I'hillips
Frances N. Plake
Ruth Frances Iowers
Frances Viola I'ugh
Loren Eugene Railsback
Margaret Marie Lannow
. Milton Hartman Rasbury
Hodge Rasmussen
Fay Bynum Rawson

Elsie Nicoll Reed
LaVor Byam Reed
Ross Relles
Carmen Reyes Reynosa
Richard Orville Robbins
Royce W. Rogers
-Walter Paul Ruth

- Gladys Justine Saylor

Helen Schiller
Eva Marie Setka
Edna Jean Sexton
L. Stanley Shawler

Helen M. Sherman
William Shulman
Helen Lorein Sizemore
Lora Lee Skinner
Della Skousen
Betty Lou Smith
William Horace Smitheran
Oley Thomas Sparks
Joan Margaret Steel
Clara Robson Taylor
Mary A. Tremayne
Tony S. Vicente
Dixie Frances Washcheck
Mary Faun (Johnson) West
Ver Nelle Wheticn
Lois Emily Wiese
Frances Marion Williams
Andy T. Wilson
Robert Lawrence Wist
Alverta Dora Wood
Phyllis Marie Woolfolk
Lawrence Le Roy Young, Jr.

# CANDIDATES BACHELOR OF ARTS IN EDUCATION 

## August 31, 1941

Gladys H. Albrecht Christopher F. Allred Mavis Ann Arnold Ina Chloe Barkley Ruth Gertrude Bogley Dessie Chesley<br>Dolly Azubah Clark Anna Craig Cox<br>Mabel Lewis Crutchfield<br>Marguerite Ione Cutland<br>Annie Mae Earnest<br>Tlizabeth Cooley Flint<br>Helen M. Folsom<br>Violet Foreman<br>Mary Eugenia Fox<br>Margaret Rose Gallo<br>Adelia Emilie Gebauer

Monico Gilbert
Joe Gill
Effie Marie Gillis
Wilma Beatrice Glendening
Hugh L. Goff
Garland T. Green
Virginia Elizabeth Haile Bertha Heard
Harold Hascall Henshaw
Lula Sanders FIerold
Robert Edward Hewette
Mary Harriman Hiett
, Samuel J. Hinton
Agness Miller Hollingshead
Effie Dot Hopkins
Ruth Morgason Hopkins
Keitha Florence Humphreys

## BACHELOR OF ARTS IN EDUCATION

## 1941

Vera Madeleine Jackson Inez Viola Johnson
Annis Owens Jones Wiley S. Kendig Thelma Kathryn Kinvig Joe Greenwood Kirby Helen Layton Frieda Mary Matthews Phyllis Bradley McFadden Archie Forest IIeikle Lorena Dorothy ailler Michael Eli Mirich George Wailace Morrell Ruth Ellen Moser Marie Felch Mullen Elizabeth I. Myers Elizabeth Nash Merle Edwin Norris Maybelle Blanche Parsons Doris Isabelle Pilcher Ruth Wallace Pohle

Shelby Worthum Pohle William Welcome Polete Ruth Rieger
Jennie Margaret Robinson
Alma Elena Roukala
Manuel R. Salazar
Mrs. Iva May Seales
Eleanor Clara Sears
Jep Morgan Shamblee
Nelda Narie Silverthorne
Robert E. Simpson
Seawright H. Stewart
Robert Louis Swackhamer
Elizabeth Templin
Charles Everett Toll
Mary Louise Van Horne
Minnie Seaver Wells
George D. Wood
Ida Carol Wroodall
John Lorin Wright
William Louis Yanchor

## MASTER OF ARTS IN EDUCATION

## June 4, 1941

Lettie Houdyshell Bond
Madoc Wynn Davies
John R. Elliott
Cleatus E. Garner
Orville Edward Hamm
S. Frederick Hartung

Ronald Jenkin
Gordon Andrew Jones
Jewell Charlotte Jones

Muriel Kerby
Neuman C. Larkin
Lydia Lugo
William Sharon Mote
Arlene Rasin
Lois Vivienne Rogers
Walter D. Smith
Rosetta $\mathbf{V}$. Syll
Walter Leland Ward

## SENIOR HONORS 1941 <br> WITH HIGH DISTINCTION

LOLA P. ALLEN<br>VIVIAN BARNETT

## JOHN D. CALHOUN, JR.

JACK FISHLEDER
ELEANOR PERRY

## WITH DISTINCTION

JAMES ROBERT ABRAMS
ELSIE-JEAN BROWN ROBERT STEWART CASE MARY ALETHA CHRISTMAN ANNA BELLE DARDEN BYRNS LONG DARDEN JESSIE CLYDE GARDNER ASHAEL DELMA HINSHAW P. McMAHON JAMES CLARA C. JOHNSON DALE HARRIETT JORDAN BELLAMY PRIEST LAATZ

JAMES RICHARD LANDERS LUCILLE EVELYN LOWE MYRTLE MATTHEWS CLOTIDLE FERTE MILLER MARY EDLA PASQUALONE RUBY GREEN PERKINS FAY BYNUM RAWSON ROYCE W. ROGERS EDNA JEAN SEXTON WILLIAM SHULMAN JOAN MARGARET STEEL ADALENE A. WHALLEY

## AWARDS TO GRADUATES

1941-1942
Alpha Activity Award
Alpha Psi Omega Awards......MARIE BARNETT and BERNARD ALLEN
Senior Art Award JUSTINE SAYLOR Beta Chi Award. JENNIE ROBINSON
Commerce Club Award ROBERT ABRAMS Gamma Theta Upsilon. RICHARD DUKELOW
Gibbons Good Leadership Award ROBERT CASE
West Hall Award. JOAN STEEL
Kappa Delta Pi Pin VIVIAN BARNETT
Mu Rho Alpha Award GARLAND GREEN
Pi Gamma Mu Award VIVIAN BARNETT' Pi Omega Pi Awards...........................DALE JORDAN and LAVOR REED Pyschology Club Award. VERNELLE WHETTEN Psychology Department Awards. MILDRED KLUSMEYER and WILLIAM SHULMAN

THEO NEELY
Physical Education Award (Women) Alumni Scholarships MARIE BARNETT FRANCES PLAKE MARLOW KEITH PETE DRAKULICH
C. M. Paddock Fellowship
THEO NEELY
Moeur Medal
DALE JORDAN
Moeur Pin
JEAN SEXTON
English Department Award
ELEANOR PERRY

13 Club Award ARCHIE MEIKLE

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