# ARIZONA STATE TEACHERS COLLEGE 

## AT TEMPE

## BULLETIN

## CATALOGUE ISSUE FOR THE SESSION OF <br> 1934-1935



## TEMPE, ARIZONA

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ARIZONA STATE TEACHERS COLLEGE

General Series JUNE, 1934 Number 12

## CATALOGUE ISSUE <br> FOR THE SESSION OF

1934-1935



TEMPE, ARIZONA

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## GOLDEN JUBILEE

With the coming of the Year, 1935. the State Teachers College

at Tempe

Crlebrates the

## FIFTIETH YEAR

of Service to the State of Arizona

## COLLEGE CALENDAR

1934-1985
FALL SEMESTER, 1934
First faculty meeting.......................7:30 P. M., Tuesday, September 4
Assembly of Freshmen...................8:30 A. M., Thursday, September 6
Registration............Thursday, Friday, and Saturday, September 6, 7, 8
Instruction begins..............................................Monday, September 10
Mid-semester scholarship reports due................Thursday, November 8
Home Coming Day.............................................Saturday, November 10
Thanksgiving recess....Thursday, November 29 to Sunday, December 2
Christmas vacation........Saturday, December 22 to Sunday, Jan. 6, 1935
Final examinations........Tuesday, Wednesday, Thursday, Jan. 22, 23, 24
Last day of fall semester
Friday, January 25

SPRING SEMESTER, 1935
Registration Monday, Tuesday, January 28, 29

Instruction begins, second semester Wednesday, January 30
Mid-semester scholarship reports due Wednesday, March 27

Spring vacation Friday, April 19 to Monday, April 22
Baccalaureate Service. Sunday, May 26
Commencement Exercises Tuesday, May 28
Final Examinations........Wednesday, Thursday, Friday, May 29, 30, 31

SUMMER SESSION, 1935
Summer session opens Monday, June 3 Note:-Dates given for vacations are both inclusive.

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## OFFICIAL DIRECTORY

STATE BOARD OF EDUCATION
His Excellency, Benjamin B. Moeur

$\qquad$
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Superintendent of Public Instruction
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President, University of Arizona
Dr. T. J. Tormey ..... Flagstaff
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President
Horace B. Griffen, '14 Mesa
Vice-President
Leona M. Haulot, '02 Tempe

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John R. Murdock, A.M. ..... Dean
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Viva May Lindahl, A.M. Financial Secretary
Mary L. Bunte, A.B Secretary to the President
Laura Dobrs Assistant in Business Office
Thomas Jerome Cookson, A.B. ..... Librarian
Willard Allison Heaps, B.S., A.B.L.S. Assistant Librarian
Amelia Kudobe Recorder
Josephine Durham, R.N Health Service
Sibyl May ..... Bookkeeper
Edward Earle Pomeroy, A.B Head Resident, Alpha Hall
George O. Eisenhart, A.B. Head Resident, East Hall
Sallie Davis Hayden, A.B. Head Resident, South Hall
Helen M. Hanshue Head Resident, North Hall
Eva Hurst Head Resident, Carrie Matthews Hall
Robert R. Krause. ..... Steward, Dining Hall
Mrs. Robert Krause. ..... Matron, Dining Hall

## FACULTY <br> 1934-1935

Graby Gammage, A.M., LL.D. - - - President of the College A.B., A.M., LL.D., University of Arizona

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

Sylvia Theresa Anderson, A.M. - - - - Instructor in Education; Instructor in Campfire Leadership: Training Teacher, Campus Elementary School
B.Pd., Michigan State Normal College; B.S. in Ed. and in Elementary Supervision, Teachers College, Columbia University; A.M. University of Michigan.
C. R. Atkinson, M.S., Ph.D - - - - Professor of Commerce; Head of Commerce Department
A.B., George Washington University; A.M., Ph.D., Columbia UnIversity.

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Willard Allison Heaps, B.S., A.B.L.S. $\begin{aligned} & \text { Librarian of the Campus Training School }\end{aligned}$ B.S., Northwestern University; A.B.L.S., University of Michlgan.
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Carl G. Hoyer - - - - - - - - - Band and Orchestra Diploma in Music, Letpzig and Wurzburg, Germany.

Frederick M. Irish, B.A. - - - - - - - - Registrar B.A., University of towa.

Pearl R. Kloster, M.A. - - - - - - Instructor in Fine arts B.s., Jniversity of North Dakota; M.A., Stanford University.

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| :---: |
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| Douglas L. Russell - - - - - - - Individual Voice Training B.Mus., Northwestern University; B.Mus., American Conservatory of Music. |
|  |
| Joe Selleh, B.A. - - - - - Assistant in Physical Education B.A., Arizona State Teachers College at Tempe |
|  |
| Selby Millmore Skinner, Ph.D. Assistant Professor of Physical Sciences |
| *A. Lionel Stevenson, M.A., Ph.D. - - - Professor of English; Head of the Department of English <br> B.A., Ondversity of British Columbia; M.A., University of Toronto: <br> Ph.D., University of California |
| Willlam D. Taylor, Jr., M.A. Associate Professor of English and Journalism B.A., M.A., University of Washington |
| $\begin{gathered} \text { Charles Wexler, M.A., Ph.D. - - - Professor of Mathematics; } \\ \text { Head of the Department } \end{gathered}$ |
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|  |  |

[^1]
## THE COLLEGE

## PURPOSE


#### Abstract

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


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

Ample opportunities for participating in teaching are also provided. A program of extra-curricular activities gives to the student the advantage of participating in forms of self-expression more directly under his control.

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

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

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

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

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

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

## HISTORY

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

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

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

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

For the accommodation of those students who desire to meet the requirements of the Arizona elementary certificate, but who do not wish to complete a fourth year of work, a three year curriculum is offered. Graduates from this curriculum receive an educational diploma which entitles the holder to receive the Arizona elementary certificate.

A regulation of the State Board of Education adopted on June 16, 1932, provides that after August 20, 1936, the three year diploma will be eliminated. Students in the Teachers College may then take their Bachelor's Degree here in elementary education, entitling them to teach in the elementary grades and junior high schools, or in a pre-secondary course, which leads to the secondary certificate when followed by a year's work in an institution offering graduate courses.

With the year 1935 Arizona State Teachers College at Tempe marks the arrival of its fiftieth year of continuous service to the youth of Arizona. In that period, nearly four thousand students have been graduated and an even larger number have received more or less of their educational experience in these halls.

It is the intention of the Alumni to mark the year by a series of home coming events in celebration of the GOLDEN JUBILEE of the College. This program of events will be forward-looking in character. Details will be announced in a later bulletin.

# THE COLLEGE SETTING 

## LOCATION

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

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

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

Among the features of interest within easy reach by automobile for week-end excursions are the Superstition Mountains rising to an
elevation of five thousand feet and remarkable for their innumerable examples of grotesque rock sculpture, and Canyon Lake, a beautiful sheet of water, winding for fifteen miles between stupendous perpendicular cliffs of many-colored rock. The famous Apache Trail leading to Roosevelt Dam and the great reservoir, and the Superior Highway tapping one of the richest copper districts, are among the finest examples of mountain road-building in the world. The wooded banks of the Verde River offer beautiful sites for camping trips.

A drive of an hour and a half over the Superior Highway brings one to the Boyce Thompson Arboretum where one finds growing hundreds of species of plants from all parts of the world, affording unusual opportunities for the study of vegetation adapted to semi-arid climates.

A municipal swimming pool, the finest in all Arizona, is only a short half mile from the campus.

The existence at Phoenix of many large industrial establishments, and the accessibility of great irrigation projects, power plants, and copper mines and reduction works offer unusual advantages for interesting and instructive excursions in connection with many of the college courses.

## CAMPUS

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

Ample facilities are provided for outdoor recreation in well-kept tennis courts of cement concrete, screened basketball courts, and fields for speedball, volley-ball and women's baseball.

The athletic field occupies a tract of ten acres at the south end of the campus. The football field and the baseball diamond are equal to any in the state and ample provision is made for seating spectators. Adjoining this field is the gymnasium.

Extensive gardens afford the necessary training for the students in agriculture, and at the same time provide fresh vegetables for the dining hall.

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

## COLLEGE BUILDINGS

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

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

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

The College Auditorium is located on the west side of the Quadrangle, opposite the Science Hall. Seating capacity is provided for one thousand persons and the forty foot stage is well
equipped with modern scenery and lighting apparatus, and stock properties sufficient to stage dramatic work of a high order. The lower floor of this building is devoted to the Women's Gymnasium with the usual apparatus, dressing rooms, lockers and showers. The College Bookstore, conveniently located in the south end of the Auditorium Building, is kept stocked with all necessary textbooks and stationery supplies.

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

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

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

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

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

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

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

The Men's Gymnasium, erected in 1928 and enlarged in 1929, is located on the athletic field at the south end of the campus. The floor space is ample for basketball, athletic exhibitions, and other public events as well as for the regular floor work connected with the physical education program. There is adequate provision for showers, locker rooms, and dressing rooms and for the storage of apparatus. A raised gallery is provided for spectators.

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

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

South Hall and North Hall, both for women, are situated in the west half of the campus directly opposite East Hall. Each of them accommodates seventy-five students, with the same character of furnishings and equipment as in the other halls.

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

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

## HEATING SYSTEM

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

## GENERAL INFORMATION

## THE ALUMNI ASSOCIATION

All graduates of the College automatically become active members of the alumni association. Students who have attended for at least one semester and who have left the institution in good standing automatically become associate members of the organization. Including the class of 1934, the association now numbers 3,787 members, the great majority of whom reside within the state of Arizona. This large group of influential citizens, through efficient organization, has become a potent force in promoting the welfare and advancement of the College. All loyal alumni take pride in the recent rapid growth and development of their Alma Mater, and it is their desire further to perfect their organization that it may continue effectively to serve the interests of Arizona State Teachers College at Tempe.

Endowment Fund. Believing that a teachers' college education is a most valuable asset in any walk of life, the alumni desire to extend to others the benefits of such preparation. With this end in view, the alumni association has been conducting a vigorous campaign for the raising of a ten thousand dollar fund for the assistance of worthy students who need financial aid. Under the zealous leadership of Clarence M. Paddock, '03, who has been aptly named "The Father of the Endowment Fund," and with the active cooperation of the officers of the association, the fund has grown to more than $\$ 13,000$ and is becoming established on a working basis, as is shown by the fact that in the past few years, over 225 students practically owe their graduation to the assistance received from this source. Because of the limited amount which can be kept in the working fund, loans are confined to prospective graduates in their second semester.

Scholarships. The steady growth of the student loan fund over a period of years has made it possible to make a distinct advance in the application of the benefits of the loan fund. For the first time since the establishment of the fund, the alumni association finds itself in a position to offer, this year, $\$ 200.00$ in scholarships. These awards will be made to seniors in the second semester of the senior year. The number and size of the scholarships is to be left to the judgment of a committee of six which
is composed of alumni, under-graduate, and faculty representatives. This committee will select, each year, the students who are to receive the benefits of the fund. The first consideration in making awards will be that of economic need. Other factors are scholarship, leadership, and dependability. Due allowance will be made in the case of students who may have been handicapped by the necessity of working their way through the early years of their college program.

Annual Reception. The annual reception and banquet of the association is held on the evening of Alumni Day, giving every member an opportunity to renew old friendships and to pledge anew their loyalty to their Alma Mater. The date for the next reception and banquet is tentatively set for May 4, 1935. Since 1935 is the Golden Jubilee Year for Tempe Teachers College, the alumni hope to make this annual banquet an extraordinary event.

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

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

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

## EXTENSION COURSES

For the accommodation of teachers in service who desire to fulfill requirements for the renewal of their certificates and other qualified persons who are prevented by circumstances from taking work in regular session, the College offers a limited number of extension courses. These courses are given either as evening courses on the campus, or as evening or afternoon courses in cities or towns within easy reach of the College. Each of these courses carries a credit of three semester hours. As a rule, the courses given are identical in every respect with the corresponding courses offered in the regular session, being conducted by the same
instructors and involving the same amount and kind of assigned reading and outside preparation.

For the organization of any extension class, a minimum of fifteen students must be registered. Classes will be organized early in the fall semester. For information with regard to the organization of any desired course address applications to the Director of Extension, Arizona State Teachers College, Tempe.

As the program of courses to be offered will be determined largely by the number of applications received, it is suggested that applications be filed soon after September 1.

Among the courses to be offered are the following:

| Com. | 205 | Business Law |
| :--- | :--- | :--- |
| Educ. | 250 | Philosophy of Education |
| Educ. | 214 | Supervision and Administration of |
| Educ. | 120 | Elementary Schools |
| Educ. | 216 | Educalogy |
| Educ. | 220 | Personnel Problems of the Elementary School |
| Educ. | 241 | Current Educational Problems |
| Educ. | 222 | Secondary Education |
| Educ. | 280 | Research |
| Engl. | 202 | History of the Novel |
| Engl. | 205 | Shakespeare |
| Engl. | 215 | Contemporary Poetry |
| Engl. | 212 | Victorian Poetry |
| French | 101 | Beginning French |
| French | 103 | Intermediate French |
| Geog. | 100 | Introductory Geography |
| Math. | 100 | Teaching of Arithmetic |
| Math. | 202 | Analytic Geometry |
| Math. | 221 | Theory of Numbers |
| Math. | 222 | Differential Calculus |
| Math. | 231 | Integral Calculus |
| Math. | 250 | Special Topics in Mathematics |
| Psych. | 200 | Educational Measurements |
| Psych. | 206 | Mental Hygiene |
| Psych. | 225 | Educational Psychology |
| Psych. | 233 | Child Psychology |
| S. Sci. | 109 | History of Modern England |
| S. Sci. | 204 | History of the American Frontier |

Courses not listed above may be offered if, in the judgment of the Director, the demand warrants the arrangement. Credit earned in extension courses may be applied toward graduation subject to the rule that not more than one-fourth of any curriculum leading to a degree or to a diploma shall be taken in extension classes or by correspondence and not more than half of this shall be done by correspondence.

Inquiries concerning extension courses may be addressed to Dr. J. O. Grimes, Director of Extension.

## CORRESPONDENOE COURSES

No correspondence courses will be offered by the College this year, but credits acquired through correspondence courses taken under the direction of an accredited college or university may be applied toward graduation from the Teachers College provided the total amount of such credit offered does not exceed one-eighth of the amount required for graduation.

## LECTERES AND ENTERTAINMENTS

During the year a number of worthwhile entertainments are offered in the college auditorium. These include lectures and addresses by visiting persons of note and musical and dramatic programs. The weekly assemblies frequently are the occasion for the presentation of programs or special numbers by prominent members of the musical, artistic, and educational circles of the Valley and of the state. The Geographic Society and the Pasteur Scientific Society bring to the college each year a number of eminent lecturers to address these groups. These lectures are usually open to the entire student body.

## SCHOLARSHIPS

Within the past few years, a number of students have received the benefit of a professional education and have become self-supporting through the generous assistance of various fraternal orders and other organizations, in the shape of loans or special scholarships granted to selected individuals. Through the efforts of the Alumni Association, a sum has been set aside to provide, each year,
a limited number of scholarships for seniors in the last half year immediately preceding graduation. Further particulars concerning these scholarships will be found on another page under the title, Alumni Association.

## PRIZES

The Moeur Medal for scholarship, offered by Dr. B. B. Moeur of Tempe, is awarded each year at commencement to the graduate of the three-year curriculum who obtains the highest standing in class work during the three years immediately preceding graduation. The winning of this prize has always been considered one of the greatest honors open to college students.

The Mocur Pin, also offered by Dr. B. B. Moeur, is awarded to the three-year graduate whose scholarship rating ranks second. To be eligible for either of the Moeur prizes, a student must have attended Tempe Teachers College for three years directly preceding graduation, and the work for which the prizes are awarded must have been done in residence during the regular sessions of the College.

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

Daughters of the Confederacy Prize. The United Daughters of the Confederacy of Dixie Chapter, Tempe, have voted to give, each year, a gold medal for the best essay not to exceed twenty-five hundred words on American History. The subject is chosen each year by the Literary Committee of the order. Competition for this medal is open to any student of the college.

## PLACEMENT OF TEACHERS

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

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

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

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

## SUMMER SESSION

## A Permanent lnstitution

The exceptionally large attendance at the first summer session held in 1932 indicated clearly that a summer session in the Salt River Valley is a necessity. Therefore, the College decided to make the summer session a permanent institution. The fine attendance and the satisfactory results attained in the summer sessions of 1933 and 1934 have fully justified the wisdom of this decision.

## Complete Educational Facilities

All the educational facilities of the College are available to summer students. This includes the regular faculty, all the facilities of the new Matthews Library, full laboratory and shop facilities.

In summer session the student obtains much more individual attention in all laboratory and shop courses. Finely equipped laboratories are available to students for work in Physics, Chemistry, Biology, Zoology, Botany, Entomology, Nature Study, Geography, Household Arts, and Fine Arts. Complete shop facilities are available in Electricity, Machine Shop, Radio, Wood Work, CabinetMaking, and Carpentry.

## Summer Session Credit

The summer session consists of two terms of five weeks each. By holding classes six days per week, or its equivalent, students may receive six semester hours per term or twelve for the summer session.

Full residence credit is given. This enables students to use the summer session for the completion of requirements for graduation.

## Admission Requirements

In general, a high school diploma or its equivalent, or evidence of good standing in college is required. Students over 21 years of age may be qualified. Such students must complete the work required for admission or its equivalent in case they become candidates for graduation.

## Expenses and Fees

The tuition fee is $\$ 20$ per term, or $\$ 35$ for the full session. A library fee of $\$ 1.00$ is charged. Board and room for the summer may be obtained at exceptionally low rates.

## Extra-Curricular Activities

Regular assemblies are held in the Auditorium. These include addresses by prominent educators, one-act plays, musical programs, and special lectures.

Recreational facilities include swimming in the fine municipal swimming pool, tennis, and volley ball.

Social activities include the customary informal party on the campus, an evening picnic at Hole-in-the-Rock, and such other parties and dances as the students may desire.

# THE TRAINING SCHOOLS 

## Under Direction of Mr. Payne

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

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

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

The Junior High School. In order to meet the growing demand for teachers who are specially trained for junior high school work this unit has been organized and in operation for several years. Here the sixth, seventh, and eighth grades are administered as a separate unit but as an integral part of the training school system. The junior high school idea is carried out by means of the flexible program, departmentalized work, a limited number of electives, adaptation to individual differences in abilities, needs and interests,

Assembly and home room periods and the organization of social and other extra-curricular activities are carried on as part of the regular school program. Beside the traditional subjects, there are courses in physical education including class instruction, supervised play, and athletics for both boys and girls; home economics; shop work consisting of woodwork, forge work, and sheet metal; general science; typing; Latin; Spanish; art courses especially adapted to the needs of junior high school pupils; and music. The music program includes glee clubs and orchestra. Individual instruction is given on the various orchestral instruments. Agricultural education is elective and is carried on by means of boys' and girls' clubs organized and sponsored by the agricultural department of the college in cooperation with the State extension work in agriculture and home economics. Unusual advantages are enjoyed by the pupils due to the fact that they have access to the equipment of the college, including gymnasium, athletic field, playground, shops, laboratories, gardens, farms, libraries, and auditoriums. The chief extracurricular organizations are the Campfire Girls' unit and the troop of Boy Scouts. Social activities are closely correlated with the school life of the pupil.
*The practice teaching in the junior high school is open only to college seniors working toward the B.A. degree and to three year students who have done special work in one or more of the junior high school subjects and who have the recommendation of the department in which the special work was done.

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

[^2]in Americanization work and the problems connected with teaching non-English speaking primary children.

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

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

## THE COLLEGE LIBRARY

Mathews Library. The new library, located south of the Industrial Arts Building and just east of the Carrie L. Matthews Hall, occupies the entire upper floor of the new Matthews Library Building. The general plan includes a reading room to accommodate 150 persons, steel book stacks, and shelving for 26,000 volumes, the librarian's office, a work room, and a special room to house all Arizona material. The last mentioned room is also available as a reference room.

There are now more than 19,000 bound volumes in this library, and more than 2,700 bound volumes of periodicals. In addition, there are several hundred unbound volumes of periodicals, bulletins, and reports. The library is a designated depository for the educational and agricultural publications of the United States Government.

Every department of the library has been enlarged and new departments have been added to meet the demands of the broadened curriculum now offered; care has been taken to provide liberally for the cultural side as well. At present the library subscribes regularly for one hundred sixty-five general and technical periodicals. On the racks in the reading room are found several of the
leading daily newspapers of the country and a number of the daily and weekly newspapers of the state.

Library Hours. During the college year the main library is open from 7:30 a. m. to 6:00 p. m. every day except Saturday and from 7:30 p. m. to $9: 30 \mathrm{p} . \mathrm{m}$. five nights a week. On Saturday it is open from 9:00 a. m. to $4: 00 \mathrm{p} . \mathrm{m}$. It is closed on Sundays and on all holidays. Books not on reserve may be checked out for two weeks with privilege of renewal, provided they are not needed by other students.

Training School Library. In addition to the college library there is a children's library in the Training School. This collection contains nearly 4,000 carefully selected juvenile books, covering all types of literature. The purpose of the library is two-fold; first, to develop the children's taste for the best in literature and to teach them the use of reference material in connection with their studies; second, to familiarize student teachers with a select collection of juvenile literature and furnish them material to use in practice teaching. A large picture collection and outstanding juvenile periodicals supplement the book collection. Five student teachers each quarter are given the opportunity of actual experience in library administration. This includes the care of the library, care of the books, keeping of records, reading of outstanding books, a brief study of library science, children's literature and illustrators, and practice in story-telling. This work carries the same credit as regular practice teaching.

## EXPENSES AND FINANCIAL ASSISTANCE

## BASIC EXPENSES

Registration Fee. Every student is required to pay a registration fee of $\$ 20.00$ each year. This fee is payable in advance on the date of registration. The same fee of $\$ 20.00$ is required if a student registers for one semester only. Half of this fee is used for the costs of registration and other items of expense dealing directly with student welfare, such as health service, and assembly programs. The other half is budgeted under the direction of the Associated Student Council for extra-curricular activities, such as athletics, student publications, music, dramatics, and student recreation.

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

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

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

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

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

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

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

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

Physical Education Equipment. All young women will provide themselves with the standard gymnasium costume which is ordered through the department of physical education and costs approximately $\$ 6.00$. Young men are required to provide themselves with gymnasium suits and basketball shoes.

Board and Room. For all students residing in the dormitories, board and room costs $\$ 22.50$ per four-week month, payable monthly in advance on a date set by the business office. No allowance or refund will be made for vacations, absences over week ends, or absence due to disciplinary action. Students absent for one week or more for unavoidable reasons, may arrange for payment of half the usual rate during such absence.

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

$$
\text { Registration fee ............................................. } \$ 20.00
$$

Tuition free to Arizona students ................ 0.00
Books and stationery (approximately) ...... 25.00
Laboratory fees ............................................. 5.00
Gymnasium outfit ......................................... 6.00
Board and room ( 9 months) ...................... 202.50
Library fee ( $\$ 2.00$ per semester) .............. 4.00
$\$ 262.50$
To this amount must be added the student's necessary personal expenses for clothing, personal laundry, recreation and other items. A student registering for the first time should be provided with cash to the amount of $\$ 75$ or $\$ 80$ for necessary initial expenses. Board and room is payable each month in advance on a date announced by the business office.

Graduation Fee. Graduation fees are due at the time of making application for graduation.

Three year educational diploma ................... $\$ 3.00$
Bachelor of Arts in Education .................... 5.00

## DEPOSITS

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

Dormitory Deposit. All dormitory residents shall deposit $\$ 5.00$ at the business office before taking possession of a room. If all fees are paid, this amount will be refunded at the close of the year, less charges for damage to dormitory building, furniture, or equipment.

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

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

## MISCELLANEOUS FEES

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

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

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

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

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

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

Board Only Fee. A fee of $\$ 19.00$ per four-week month payable monthly in advance on a date set by the business office, is required for board at the college dining hall from students who are not dormitory residents. Allowances and refunds shall be on the same basis as for dormitory residents.

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

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

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

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

Women students who desire to engage room and board outside campus limits must first obtain approval of the committee and must agree to observe all regulations adopted for the government of dormitory residents.

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

Refund of Fees. One-half of the registration 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 registration 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 returned to obtain any refund of registration fees,

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

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

## FINANCIAL RESPONSIBILITY

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

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

## LOAN FUNDS

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

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

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

## STUDENT EMPLOYMENT

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

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

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

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

By mutual agreement among the institutions of higher learning in the state, freshmen will not be employed for more than sufficient to pay half of board and room.

## ADMINISTRATION

## CHANGES IN REGULATIONS

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

## CREDITS

1. The college year is divided into two semesters of eighteen weeks each.
2. The unit of credit is the semester-hour which represents one fifty minute hour of class work per week for one semester of eighteen weeks, supplemented by such additional class, library, or laboratory work as the given course may require. As a rule, two hours of outside preparation or the equivalent shall be required for each hour of class work.
3. The standard requirement for graduation in any three year curriculum is ninety-six semester hours, and in a four year curriculum, one hundred twenty-six semester hours of credit.
4. No credit is allowed for experience in teaching. Each candidate for graduation from any curriculum is required to teach one semester in the training school, under supervision of the training teachers. The student teaches one half day each day during the semester. For this work, ten semester hours of credit are given. Exception to this rule is made in the case of teachers who present satisfactory evidence of successful experience, on account of which they may be permitted to substitute five hours of academic work for the second quarter of student teaching provided the first quarter of student teaching is completed satisfactorily.

## STUDENT PROGRAM

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

## MARKING SYSTEM

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

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

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

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

A, 4 points per semester hour.
B, 3 points per semester hour.
C, 2 points per semester hour.
D, 1 point per semester hour.
E, 0 points.
The Scholarship Index. The scholarship index is obtained by dividing the number of honor points acquired by the number of semester hour units for which the student has registered. Cr courses are not included in computing the index.

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

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

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

## SCHOLARSHIP STANDARDS

In order to be qualified for graduation from any curriculum, a student must have attained a scholarship index of a rank to be determined by the standards committee.

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

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

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

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

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

## ATTENDANCE

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

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

## GRADUATION

Application for Graduation. Candidates for the degree or for the three year diploma are expected to file an application for graduation in the office of the registrar not later than November 15 of the college year during which graduation is expected. In order to receive consideration, each application must be accompanied by the prescribed graduation fee. Blank forms for the application may be obtained at the office of the registrar.

Completion of Requirements. Important items to be checked in the completion of requirements for graduation are:
a. Total units earned.
b. Required courses.
c. Results of final examinations.

Graduation Fees. The fee of $\$ 3.00$ for graduation from the three-year curriculum and $\$ 5.00$ for graduation with the A.B. degree are charges against the student's account. The diploma will not be isued nor graduation be completed until this fee is paid.

Commencement Exercises. In order to receive either the diploma or the degree the candidate must be in person at the Commencement exercises in the prescribed academic costume. Exceptions to this rule shall be made only in extreme cases and upon petition to the president of the college.

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

# STUDENT LIFE AND WELFARE 

## - LIVING ARRANGEMENTS

Dormitories for Women. Women students whose homes are not in Tempe are expected to live in one of the three dormitories: North, South or Matthews Hall. No single college influence may contribute more vitally to the development of the personality and character of a student, than life in a hall with sixty or more other students. Here the problems of living together must be definitely faced, resulting in an experience which may be invaluable to every college man or woman. The dormitories at Tempe Teachers College are managed and equipped so as to insure the maximum values in student life at a minimum cost. For that reason women are asked to live in the dormitories and only under very special circumstances are they allowed to establish locations outside the campus boundaries. When, for any reason, such a privilege seems necessary the request is to be made by parents directly to the office of the acting Dean of Women.

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

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

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

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

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

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

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

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

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

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

Off Campus Housing. Rooms are available in the homes of Tempe to men who cannot secure accommodation in college dormitories and to mature women students. Individual room rents with two people sharing a room range from $\$ 7.50$ to $\$ 10.00$ per month. A list of rooms approved by the college health committee is kept on file in the office of the acting Dean of Women. Students, both men and women, are asked not to locate in any other rooms unless special arrangements are made with the acting Dean of Women.

The administration reserves the right to change the boarding or rooming place of any student living off campus when any place is not satisfactory, or when the owner does not maintain the standard suggested by the College.

Students who live off campus may board in the dining hall for $\$ 19.00$ per month. Occasionally board may be secured off campus, usually at a higher rate. Generally speaking living off campus is slightly more expensive than living in the dormitory, and no student should expect to cover such expenses at less than $\$ 25.00$ per month.

The college is not a rental agency and therefore does not arrange to collect rents or stipulate prices.

## MEDICAL CARE

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

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

## EXTRA-CURRICULAR ACTIVITIES

## STUDENT PARTICIPATION IN GOVERNMENT

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

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

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

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

## ATHLETICS

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

Men's Athletics. The College is a member of the Border InterCollegiate Conference which includes colleges and universities in Arizona, New Mexico, and Texas, and is represented by teams in the conference football, baseball, and track and field schedules.

Separate intercollegiate contests for the freshmen are held in football, baseball, and track and field.

A program of intramural and interclass contests in the various major and minor sports affords interesting competition between groups on the College campus.

Women's Athletics. Women students take part in an active athletic program, featuring such season and individual sports as archery, basketball, hockey, baseball, volley ball, and track and field; and such individual sports as tennis, golf, archery, hiking, swimming, and equitation. Intramural and interclass contests are conducted between groups on the campus, and friendly intercollegiate contests are held with the University of Arizona and with the Phoenix Junior College. The Annual Sports Day or Play Day with the University of Arizona culminates the year's athletic activities. All women's athletics are under the management of the Women's Athletic Association and have the supervision of the Physical Education Department.

Athletic Fields. The outdoor fields consist of two well appointed athJetic fields which provide space for three separate football and two baseball fields, with a quarter mile track surrounding one football field, and a small five-hole golf course.

The main athletic field is equipped with a system of flood lighting permitting football and track events at night, greatly to the comfort of both players and spectators. With this equipment, the field has become an important center of athletic activity for schools within a radius of many miles.

The women's athletic field is large enough to provide space for two full sized hockey fields, and the other courts necessary for the carrying out of the women's program. In addition, the College has nine concrete tennis courts used jointly by men and women students.

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

## DRAMATICS

During the past two or three years a live and very definite interest in dramatic art has been aroused among the students. This interest was developed by a program including the "Play-a-week" idea which was maintained throughout the entire year.

For those students who wish to develop their talents for dramatic expression, the college affords many opportunities and excellent facilities. The college auditorium seats one thousand persons and the stage is ample for programs in the field of dramatic art. The back-stage space has been reconstructed to provide ample dressing rooms equipped with mirrors, lights, and individual lockers; shower rooms; stock rooms; scene dock; and the office of the director. The equipment of apparatus and scenic effects includes a modern reversible cyclorama which is capable of varied uses, sky drops, flood and spot lights, and flat sets.

The department of English and Speech offers separate courses in dramatics including dramatic interpretation, program building, and pageantry. The courses in play production include make-up, costuming, lighting, scenic design, and stage management.

## MUSICAL ACTIVITIES

Opportunity for expression of musical talent is given in the glee clubs, college band, and orchestra. College credit is given for regular work in these organizations. The men's glee club and the women's glee club offer opportunity for the study and performance of standard and lighter compositions, and each year join in the presentation of numerous musical programs. The glee clubs render valuable community service by appearing upon the programs of civic organizations of Tempe, Phoenix, and other towns and are often called upon to broadcast programs from the Phoenix radio stations. From each glee club a quartet is chosen through tryouts. These are always in popular demand.

The past year each glee club included a tour of the state in the second semester. The women's glee club presented programs to high schools and communities of northern Arizona while the men's glee club presented similar programs in the southern part of the state.

The college concert orchestra of symphonic character consists of a select membership of about thirty-five. This organization looks back on a busy and highly successful season in the concert
field, having played monthly concerts in the college auditorium; broadcast once a month over station KTAR, and appeared in concert before many of the civic and social clubs of Tempe, Phoenix and other cities in the state.

The coilege concert band consists also of a select membership of about thirty-five. During the past year the band has played for civic affairs, has given concerts in the neighboring towns of the Salt River Valley, and has been featured frequently in radio broadcasts.

The organization furnishes inspiring music for all football and basketball games, pep meetings, and student rallies, and features frequent public concerts on the campus.

The band is drilled as a military unit in marching and fancy formations, and smartness is contributed by the attractive uniform of white flannel trousers, white woolen sweaters, and white Pershing style cap.

All qualified students are eligible for membership and by their participation not only derive much pleasure from the work, but are making a valuable contribution to campus life and student body activities.

## STUDENT PUBLICATIONS

The COLLEGIAN Staff. For many years the students have edited and published a newspaper whose purpose is to note and record the current events of the life on the campus. This paper was printed under the name of The Tempe Normal Student until, with the advent of the Tempe Teachers College, the name was changed to THE COLLEGIAN. The Collegian is a weekly, printed on a good quality of paper, permitting the use of half tones which enhance the appearance of the publication and add greatly to its historical importance. All the work of collecting, editing, and arranging news items and other matter is done by the student staff under the direction of a member of the faculty as official adviser.

Although its main purpose is to provide a live newspaper for the interest of the student body its columans frequently give space to the best literary efforts of the students. The editorials have real weight in moulding college sentiment, and the files of the paper become a valuable record of campus life and college history. Posi-
tions on the staff are highly prized, as the experience gained in this work is educative and of practical value. Arrangements are made whereby every student receives a copy of each issue of the paper. There is also a considerable circulation among the Alumni who thus keep themselves informed of events transpiring in the halls and on the campus of the Alma Mater.

The SAHUARO. It is customary for the sophomore class to compile and publish the college annual which has been appropriately named THE SAHUARO. The book is profusely illustrated after the manner of such publications, and its intimate record of the personnel and yearly activities of faculty, classes, and student organizations, becomes a treasured souvenir.

## STUDENT ORGANIZATIONS

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

## PROFESSIONAL AND DEPARTMENTAL ORGANIZATIONS

Kappa Delta Pi is a national honor fraternity organized for the purpose of encouraging in its members a higher degree of consecration to social service by fostering high professional and scholarship standards during the period of college training, and by recognizing outstanding service in the field of education.

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

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

International Relations Club is an organization of students majoring in the field of social studies. By semi-monthly meetings devoted to discussions and book reviews, it aims to create an interest in affairs of nation-wide and world-wide scope.

In its relationships, the organization is international, having clubs in many foreign countries as well as in more than three hundred American colleges and universities. The national organization furnishes many of the pamphlets, books, and summaries used by the local group in their studies. Much important material is made available by the Carnegie Endowment for International Peace at New York City.

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

Sigma Tau Delta, Tau Gamma Chapter. During the session of 1931-1932, an honor society for English majors was organized in the College, and in February, 1932, it was installed as Tau Gamma Chapter of Sigma Tau Delta, national professional English fraternity. Membership is restricted to English majors of high scholarship rating, sophomores being admitted as associate members, and advanced degrees being awarded on the basis not only of English courses completed with high grades, but also of achievement in creative writing. The purpose of the fraternity is to promote the mastery of written expression, to encourage worthwhile reading, and to foster a spirit of fellowship and high scholarship among students specializing in English.

The chapter in Tempe has taken as its special function the encouragement of literary production among the student body and therefore requires each member to contribute original material to the "Rectangle," the national quarterly magazine of the fraternity. The chapter serves as an editorial committee for a monthly feature column in the ARIZONA REPUBLIC of Phoenix. Any student in the College is invited to contribute to this column.

Beta Chi is composed of girls whose major interest lies in the department of home economics. The organization is affiliated with the National Home Economics Association and with the state organization. Twice each month, meetings are held which are planned to advance professional and cultural interests.

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

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

Los Hidalgos del Desierto is a club composed of members of the Spanish classes of the College, having as a prerequisite one year of college Spanish and a grade index of 2.00 . The purpose is to promote an interest in things Spanish. This club is a member of El Instituto de las Espanas, and through this affiliation, offers a medal to the member writing the best essay on Cervantes.

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

The Proscenium Players, a dramatic society, was organized for the purpose of offering a stimulus for those dramatically inclined and to further dramatic endeavor. Enjoyable programs of dramatic interest and good fellowship are the aims of this organization.

The Research Club has been organized with a double objective: to afford the student an opportunity for acquiring information regarding methods to be employed in writing a thesis for an advanced degree, and to make application of these principles to practical projects.

Women's Athletic Association. All women's athletic activities are under the control of the Women's Athletic Association which is authorized by the Student Body Council to make all expenditures of funds budgeted by the Council for the advancement of women's athletics. The Association is further authorized to arrange contests
and athletic meets, and to confer the women's athletic awards. Every woman in the student body is entitled to membership in the association, and, upon the earning of thirty-five points in athletics, becomes an active member.

Within the association are secondary clubs or squads in each branch of athletics and hiking, each with its own sports manager. The Association holds a combined business and social meeting once a month and conducts regular meets, tournaments, and play days.

## SOCIAL ORGANIZATIONS

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

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

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

Chi Sigma<br>Delta Theta<br>Kappa Kappa Alpha<br>Lambda Kappa<br>Philomathian<br>Pi Alpha Gamma<br>Phi Beta Epsilon<br>Phi Lambda Nu<br>Zeta Sigma

Fraternities. There are two fraternities on the campus which serve the men in their need for social contacts. In this respect these organizations might be considered as the counterparts of the women's sororities. Lambda Phi Sigma has chosen for its motto, "Leadership, Fellowship, and Scholarship." It has the distinction of being the first organization to maintain a fraternity house at Tempe.

Pi Delta Sigma is a similar organization of men. Its establishment dates from the spring of 1931 and its members make their home in Alpha Hill.

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

The Hiking Club is one of the most active groups in the Women's Athletic Association. Regular hikes of five miles are held once a week, and a ten-mile hike, once a month. The Hiking Club is open to all women students and enrolls a membership of about one hundred.

The Thirteen was organized March 23, 1932, as an honorary service club of Arizona State Teachers College. Its membership is limited to men students of junior and senior class standing. Leadership in various fields of college activity determines the entrance into membership. The purpose of the organization is to sponsor college activities, to support student enterprises, and to stand at all times for the welfare of A. S. T. C. The first activity of the group was to sponsor the annual "Campus Day" program.

## RELIGIOUS ORGANIZATIONS

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

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

## ADMISSION

## GENERAL QUALIFICATIONS

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

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

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

English 3 units
History and Civics ..................................................... 2 units
Algebra ....................................................................... 1 unit
Laboratory Science ..................-................................ 1 unit
Electives, subject to committee approval .............. 8 units
Total .-.......................................-.-.-.............................. 15 units

## PHYSICAL EXAMINATION

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

## COLLEGE APTITUDE TEST

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

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

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

## ENGLISH A

Students who fail the entrance test in English may follow one of two procedures:

1. Take the examination again the following year, and, meantime, postpone enrollment in any composition courses until the second year.
2. Elect English A and be transferred to Engl. 101 or 102 upon the recommendation of the head of the English department at the end of one or two semesters as their progress may indicate.

Students enrolled in Engl. 101 or 102 who are obviously disinclined to work or who do not show satisfactory progress may be transferred at any time to English A at the discretion of the head of the English department.

English A does not carry credit.

## ALTERNATIVE QUALIFICATIONS

1. Teachers. Teachers holding valid credentials to teach in Arizona may be admitted for further study. Such students may become candidates for a degree only when deficiencies in entrance requirements have been satisfactorily removed, as determined by the faculty of the College.
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 diploma, degree, or teaching credential only when deficiences in entrance requirements have been satisfactorily removed, as determined by the faculty of the College.
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 faculty of the College.

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

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

Candidates for graduation who present satisfactory evidence of three years' successful teaching may be permitted to substitute five units of elective work for the second quarter of student teaching provided the first quarter of student teaching is completed with a satisfactory grade. No academic credit is allowed for teaching experience.

## TRANSFERS FROM JUNIOR COLLEGES

Junior college students planning to be graduated from the Arizona State Teachers College at Tempe after September 1, 1936, may present for admission to Tempe not more than sixty-four semester units. Neither professional courses nor courses ordinarily offered as upper division courses in the teachers college shall be accepted from a junior college.

To transfer from the junior college to the teachers college at the end of the freshman year it is recommended that the student should have followed this program:
Units
Principles of Art ..... 2
English Composition ..... 6
Hygiene ..... 2
Sight Singing ..... 2
Physical Education ..... 2
Science ..... 6
Social Studies, including Federal and Arizona Constitutions ..... 6
Major ..... 6
Total ..... 32

To transfer from the junior college to the teachers college at the end of the sophomore year, it is recommended that the student bring credit for the following:

Units
Principles of Art ..------...............................................-........ 2
English Composition ........................................................... 6
Geography .-..------.................................................................... 3
Hygiene .-............................................................................... 2
Sight Singing ....................................................................... 2
Physical Education (Activity) ........................................... 2
Science .-............................................................................... 6
Social Science, including Federal and
Arizona Constitutions ............................................ 12

Minor and Electives .............................................................. 17
Total .-..................................................................................... 64
Junior college transfers graduating from the Arizona State Teachers College at Tempe previous to September 1, 1936, will follow the terms of the special agreement between the junior collges and the teachers colleges of Arizona, which will remain in force and effect for all students graduating from teachers colleges previous to that date.

## REGISTRATION

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

For the first semester, September 6, 7, and 8, 1934.
For the second semester, January 28 and 29, 1935.
Freshmen. Freshmen registering for the first semester should note that they are required to be present at a special assembly at $8 \mathrm{a} . \mathrm{m}$. on the Thursday of Registration Week.

Sophomores, juniors, and seniors may register on any one of the three registration days, Thursday, Friday, Saturday.

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 Scholarship Committee. Students who are permitted to register after the first week of the semester will be expected to reduce the number of courses taken below the normal load.

Transcripts Due. Transcripts of work done in high school or in junior college, or of advanced credits from any college, should be filed with the registrar at least thirty days in advance of the time of registration. If transcripts are not filed at the time of registration, a special transcript fee is charged. This fee is returnable if the transcripts are on file within thirty days after registration.

# CURRICULA, CREDENTIALS, DEGREE 

## NEW CERTIFICATION REQUIREMENTS

By action of the State Board of Education, taken February 4, 1933, requirements for certificates granted after August 20, 1936, will be as follows:

For the ELEMENTARY CERTIFICATE, entitling the holder to teach in the elementary grades and in the junior high schools of Arizona, graduation from a four-year course leading to a bachelor's degree in a teachers' college in Arizona or in any other higher institution authorized to train elcmentary teachers;

For the SECONDARY CERTIFICATE, entitling the holder to teach in the high schools and in the junior high schools of Arizona, a four-year course leading to a bachelor's degree and one additional year of graduate work;

For a SPECIAL CERTIFICATE, entitling the holder to teach a special subject in either the elementary or secondary schools of the state, a four-year course leading to a bachelor's degrec.

According to these new requirements, all of the elementary curriculum, the kindergarten-primary curriculum, and four of the five years required for the secondary certificate may be obtained in the teachers colleges. The additional year of graduate work required for the secondary certificate will have to be taken in the State University at Tucson or in some other institution of higher learning authorized to give graduate work.

All curricula described in this catalog are based on these requirements.

## OLD CERTIFICATION REQUIREMENTS UP TO 1936

Students graduating from Tempe before August 20, 1936, may still obtain the elementary diploma on the old three-year basis, and the secondary credential completing requirements for high school certification on the old four-year basis. The curricula for the old courses will contain as many as possible of the courses required for the new curricula. However, students graduating before 1936 are strongly urged to meet the new requirements in order to be better prepared for teaching and also to meet the competition of teachers trained under the new curricula.

## MAJORS AND MINORS

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

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

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

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

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

| Art | Foreign Languages |
| :--- | :--- |
| Commerce | Mathematics |
| English | Music |
| Geography and Geology | Physical Education |
| Home Economics | Biological Science |
| Industrial Arts | Physical Science |
| Kindergarten-Primary | Social Science |

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

Courses taken in a given field beyond the maximum limit of thirty semester hours for the major cannot be counted toward graduation.

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

## UPPER AND LOWER DIVISION

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

## Lower Division

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

## Upper Division

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

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

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

## RESIDENCE REQUIREMENTS

A minimum of one year in residence is required of all candidates for graduation, and the semester immediately preceding graduation must be spent in resident work. Exception to the last mentioned requirement may be made by action of the Scholarship Committee in the case of students who lack for graduation an amount of credit not greater than can be acquired by attendance at a single summer session at an approved institution of collegiate rank. Students who are allowed this extension of time must complete the remaining units required for graduation not later than the opening of the semester next following the granting of the extension, otherwise the rule concerning the final semester of work will apply.

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

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

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

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

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

## CORE SUBJECTS

| Education courses Units | Units |
| :---: | :---: |
| General Psychology ............... 3 | Physical Activity courses ...... 2 |
| Educational Measurements .... 3 | English Composition |
| Sociology .............................. 3 | Constitutional Government .... 3 |
| Principles of Teaching-...-......- 3 | Cultural courses |
| School Management .............. 3 | Fundamentals of Music .-....... 2 |
| Philosophy of Education ........ 3 | Public School Art (or Art |
| Education Elective .-............... 2 | Appreciation) .-.-.-..............- 2 |
| Directed Teaching ................ 10 | Hygiene .-.-........................... 2 |
|  | Library Practice ................... |
| Total........................... 30 | Elements of Geography ........ 3 |
| Science courses ...-...-.-.-........... 6 | Biological Projects ................. 3 |
| Physics |  |
| Chemistry | Total............................. 13 |
| Biology |  |
| Social Studies ......................-. 6 | Total specified requirements 66 |
| To be selected from the fol- | Major (minimum 24 units) 30 |
| lowing: | Two minors (min. 15 units) 30 |
| American History, |  |
| European History, | Total units required |
| Principles of Economics. | for graduation ............. 126 |

The tabulation on the next page outlines the distribution of the required or core courses through the four years of the curriculum, and indicates a suitable distribution of the courses constituting the major. A similar outline illustrating the typical arrangement of courses for each major will be found at the beginning of the description of courses offered by the corresponding department.

# STANDARD CURRICULUM <br> LEADING TO THE DEGREE OF BACHELOR OF ARTS IN EDUCATION 

## Freshman Year

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Engl. 101 Composition .... 3 | Engl. 102 Composition .... 3 |
| Science --................ (3 or) 4 | Science .................. (3 or) 4 |
| *Mus. 100 Fundamentals .... 2 | *Art 110 Public School Art 2 |
| *Hygiene .......................... 2 | *S. Sci. 100 Const. Govt. .... 3 |
| *Engl. 160 Library Practice 1 |  |
| P. E. Activity .................. 1/2 | P. E. Activity .................-1/2 |
| Major (or Elective) (4 or) 3 | Major (or Elective) (4 or) 3 |
| Elective ........................... 1 | Elective ........................... 1 |
| $161 / 2$ | 161/2 |
| Sophomo | re Year |
| *Psych. 100 Gen. Psych.... 3 | *Educ. 120 Sociology -...... |
| *Geog. 100 Elem. of Geog. 3 | *Gen. Sci. 120 Biol. Proj. 3 |
| $\underset{\text { Social Studies ( }}{ }$ (See Note 2) 3 | $\underset{\text { Social Studies ( }{ }^{\text {S }} \text { (See Note 2) }{ }^{\text {a }} \text { 1/2 }}{ }$ |
| P. E. Activity | P. E. Activity .................) ${ }^{1 / 2}$ |
| Minor or Elective ----------. ${ }^{\text {M }}$ | Minor or Elective ............. ${ }^{3}$ |
| (161/2 or) $151 / 2$ | (161/2 or) $151 / 2$ |
| Junior | Year |
| *Educ. 230 Prin. Teaching 3 | *Educ. 220 School Man. .... |
| *Psych. 200 Educ. Meas..... 3 | *Minor or Elective ............. 3 |
| Major ............................. 3 | Major .... |
| Major ............................. 3 | Major ..-.......................... 3 |
| Minor or Elective ............. 3 | Minor or Elective .....-------- 3 |
| 15 | 15 |
| Senior | Year |
| *Educ. 250 Phil. Educ. -.-.-- ${ }^{3}$ | *Educ. (Elective)....( 2 or) 3 |
| *Directed Teaching ............ 10 | *Minor and Elective ........... 10 |
|  | Major ............................ 3 |
| 16 | 16 |

[^3]
## CURRICULUM REQUIREMENTS

The courses specified by number and title in the outline of the Standard Curriculum on the preceding page comprise the core subjects which are thought to constitute a desirable foundation or general cultural background for every student who is preparing to teach.

The specified professional courses are selected to provide a suitable major of thirty hours in education including general psychology and educational measurements.

Every candidate for graduation must complete an additional major of not less than twenty-four, nor more than thirty hours in a field of learning other than education. The student must also complete an approved minor of not less than fifteen hours in a field different from that in which the major is chosen.

The major may be begun in the freshman year, and it must be chosen not later than the beginning of the sophomore year. The major should be fully planned under the guidance of the head of the department in which it is selected.

For the guidance of students who wish to plan a program for the chosen major, a typical curriculum for the major will be found outlined at the head of the section of the catalogue which is devoted to the description of the courses offered by the department.

Suggestions for suitable minors in various departments are also given.

## Certification

Until August 20, 1936, students who complete the standard four year curriculum as outlined above, with the degree of Bachelor of Arts in Education, will be eligible to receive the Arizona Secondary Certificate entitling them to teach in junior and senior high schools. They will also be licensed to teach in the elementary grades.

After August 20, 1936, graduates of the four year curriculum, with the baccalaureate degree, will be eligible to receive the Arizona Elementary Certificate which entitles them to teach in the elementary grades and junior high schools.

After August 20, 1936, graduates of the four year curriculum who wish to qualify for secondary certification, will be required to complete not less than thirty hours of graduate work at an accredited college or university authorized to grant advanced degrees.

In order to receive a certificate, the applicant must present evidence of graduation to the State Department of Public Instruction which is the sole authority for the issuance of teaching credentials in Arizona.

The complete text of the revised rules for certification of teachers as adopted by the State Board of Education will be found on a later page of this Bulletin, following the sections devoted to the description of courses.

## THREE YEAR CURRICULUM

Students who complete the old three year curriculum before August 20, 1936, will be entitled to receive the Arizona Elementary Certificate. After that date, the three year curriculum will be discontinued.

For the information of students who feel that they must take advantage of this opportunity for earlier certification, an outline of the old curriculum is presented below.

All prospective teachers are strongly advised to complete the four year curriculum since it is only a question of time until this qualification will be demanded of all elementary teachers in the state.

## Three Year Curriculum <br> Leading to the Educational Diploma

## First Year

| First Semester | Second Semester |
| :---: | :---: |
| Units | Units |
| Engl. 101 Composition .... 3 | Engl. 102 Composition .... 3 |
| *Psych. 100 Gen. Psych. .... 3 | *Elective .... |
| *Geog. 100 Elem. of Geog. 3 | *Mus. 100 Fundamentals .... 2 |
| *Art 110 Public School Art 2 | *Hygiene |
| P. E. Activity .................. 1/2 | P. E. Activity ................... 1/2 |
| Elective ............................ 4 | Elective .......................... 5 |
| $15^{1 / 2}$ | $15^{1 / 2}$ |

[^4]

The total credit requirement for the completion of this curriculum is 96 hours.

Electives will be so selected as to complete a satisfactory major of at least twenty-four hours in some field other than education. The major will be planned under the advice and with the approval of the head of the department in which it is selected.

Every candidate for the three year diploma must complete the course in S. Sci. 100, Const. Government, or file satisfactory grades in state tests in Federal and Arizona Constitutions.

[^5]
## SPECIAL CURRICULA

## SPECIAL CURRICULA PREPARATORY TO OTHE PROFESSIONS

For students interested in professions other than teac in two or more years of general college work, special curri recommended. Since for the most part these curricula a posed of the arts and sciences and are distinguished fi preparatory to the later professional courses, they may $b$ fied as pre-professional courses.

In each case the student should confer with his faculty after determining his ultimate objective and the college versity to which he will later transfer. Then the cour fitting his needs may be chosen. The curriculum suggest is an example of a good liberal arts preparation for upper work. Variations should be made to meet special curriculum ments, such as are necessary for pre-engineering, pre-ley medical, pre-dental needs.

## Freshman Year



## Sophomore Year



## DESCRIPTION OF COLLEGE COURSES

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

Numbering Courses. In designating courses by number, lower division courses are numbered 100 to 199 inclusive; courses intended primarily for upper division students are numbered 200 to 299 inclusive. 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 indicate courses given in the second semester only.

## DEPARTMENT OF FINE ARTS <br> Miss Kloster, Miss Curtiss

The department offers training in art designed to meet the following needs:

1. Art education for classroom teachers.
2. Curriculum for art majors and minors.
3. Practical art for the layman.
4. Pre-professional training for artists.

TYPE CURRICULUM FOR STUDENTS MAJORING IN ART
Freshman Year

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

## Sophomore Year

| *Psych. 100 Gen. Psych. .... 3 | *Educ. 120 Sociology ....... |
| :---: | :---: |
| *Geog. 100 Elem. of Geog. 3 | *Gen. Sci. 120 Biol. Proj..... 3 |
| Social Studies (See Note 2) 3 | Social Studies (See Note 2) |
| P. E. Activity ..................-1/2 | P. E. Activity ..................-1/2 |
| Art 103 Figure ............... 2 | Art 114 Elem. Painting.... 3 |
| Art 117 Costume | Art 116 Clay Modeling |
| Appreciation ................. 2 | (or Art 112 Puppetry) |
| Elective ............................ 2 | Elective .-..................... |
| $15^{1 / 2}$ | 151/2 |
| Junior | Year |
| *Educ. 230 Prin. Teaching 3 | *Educ. 220 School Man. .-.. 3 |
| *Psych. 200 Educ. | *Minor (or Elective) |
| Measurements ............... 3 | Art 208 Industrial Styling |
| Art 201 Lettering and | Art 214 Primary Art |
| Advertising ......... | (or Art 216 Interm. and |
| Minor or Elective ............. 7 | J. H. S. Art) -.. |
|  | Minor or Elective |
|  | 15 |
| Senior | Year |
| *Educ. 250 Phil. Educ. ...... 3 <br> *Directed Teaching …........ 10 | *Education (Elective course) ............... (2 |
| Art 205 Block Printing.... 2 | *Minor and Elective ......... 10 |
| Art 215 Ancient and | Art 222 Dom. Archit. |
| Primitive Art (or Art | and Int. Dec. ............... 3 |
| 217 Renaissance Art).... 2 |  |
| 17 | 16 |

[^6]
## THE MINOR IN ART

Students majoring in other fields may elect a minor in art. Such a minor should conform to the following specifications:
Units
Art 100 Art Appreciation ..... 2
Art 110 Public School Art ..... 2
Elect from lower division courses ..... 4
Elect from upper division courses ..... 7
Minimum for the Art minor ..... 15

## DESCRIPTION OF COURSES IN ART

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

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

Miss Kloster.
First year, either semester, two hours a week. 2 units.
110. Public School Art. General art requirement for all students of the four year degree curriculum. Problems in grade school art with a study of modern trends in art education. Lecture and laboratory.

Miss Curtiss.
First year, either semester four hours a week. 2 units.
101. Perspective. Principles in elliptical, parallel, angular, and aerial perspective.
Laboratory fee, 50 cents.
Miss Kloster.
First year, first semester, two hours a week. 1 unit.
102. Drawing. Drawing, including plants, trees, animals, and still life, in charcoal, lithograph crayon, brush and ink. Emphasis upon the third dimension, line, and dark and light pattern.

Miss Kloster.
First year, second semester, four hours a week. 2 units.
103. Figure. Proportion, line, action in the human figure along with solidity in form. Various mediums.
Model fee $\$ 2.00$.
Miss Kloster.
Second year, first semester, four hours a week.
2 units.
105. Color Theory. The scientific basis of color, the properties of color and color combinations producing harmony. Lecture and laboratory.

Miss Kloster.
First year, first semester, four hours a week.
2 units.
106. Elementary Design. A series of problems in designing for decorative purposes. Creation of units, borders, and surface patterns in mass, valuc, and color. Source material studied: nature and historic ornament.
Prerequisite, Art 105, Color Theory.
Miss Kloster.
First year, second semester, four hours a week. 2 units
112. Puppetry. Preparation of a puppet performance for grade school children involving a study of the making of marionettes, planning and building the stage and stage sets, lighting, learning to manipulate the marionettes as well as learning parts; the history of the marionette. This course is especially recommended to teachers of grade school dramatics.
Laboratory fee, $\$ 3.00$.
Miss Kloster.
Second year, second semester, four hours. 2 units.
114. Elementary Painting. Handling of opaque water color, principally out-of-doors. Field sketching of desert, Mexican town, and the campus. Plant, still life, and figure painting. Special study of light as it affects color.
Prerequisites: Art 101, Perspective, 102, Drawing.
Miss Kloster.
Second year, second semester, six hours a week. 3 units.
116. Clay Modeling. A strictly laboratory course in designing and forming hand-built pottery. Modeling in relief and in the round. Laboratory fee, $\$ 3.00$.
Prerequisite: Art 106, Elementary Design.
Miss Curtiss.
Second year, second semester, four hours a week. 2 units.
117. Costume Appreciation. The principles of good taste in dress for the individual, considering personality, build, complexion, and occasion. Open to all upper division students.

Miss Curtiss.
Second year, first semester, two hours a week. 2 units.
201. Lettering and Advertising. Modern styles in lettering applied to grade school teaching as well as to commercial fields. Study of Roman, Gothic, and other historic styles. Advertising and posters.

This course may be substituted for Art 110, Public School Art, upon recommendation of the head of the department.
Prerequisites for art majors: Art 101, 102, 103, 105, 106.
Miss Curtiss.
Third year, first semester, four hours a week. 2 units.
203. Merchandise Display. A practical course dealing with the effective display of merchandise. Open to all upper division students.
(Not offered, 1934-1935)
Miss Curtiss.
Third year, first semester, two hours a week. 2 units.
204. Costume Design. A course in fashion designing for those having special interest along this line.
Prerequisites: Art 103, 105, 203.
(Not offered in 1934-1935)
Miss Curtiss.
Third year, second semester, two hours a week.
1 unit.
205. Block Printing. A strictly laboratory course in linoleum and wood block printing as a graphic arts expression; also, applied to textiles. Stenciling on textiles.
Laboratory fee, $\$ 2.00$. To cover cost of linoleum, wood, paint, and ink, exclusive of textiles and papers.
Prerequisites: Art 102, 103, 106.
Miss Kloster.
Fourth year, first semester, four hours a week. 2 units.
208. Industrial Styling. Advanced design considered from presentday industrial and commercial angles. The course includes the field of modern packaging.
Prerequisites: Art 105, 106.
Miss Kloster.
Fourth year, second semester, six hours a week.
3 units.
214. Primary Art. Combination lecture, laboratory, and observation with problem material such as a teacher of primary art might expect to encounter in the field. Open to all upper division students. Miss Curtiss.
Third year, second semester, four hours a week.
2 units.
215. Ancient and Primitive Art. Fine arts expression in architecture, sculpture, painting, and the crafts, from prehistoric man through Egyptian, Greek, Roman, Oriental, Romanesque, and Gothic; early and present-day primitive art of the Indian and African. Open to all upper division students.

Miss Kloster.
Fourth year, first semester, two hours a week.
2 units.
216. Intermediate and Junior High School Art. Type problems, lectures, and observation designed to meet the needs of the prospective teacher of art in the intermediate grades and junior high school. Open to all upper division students.

Miss Curtiss.
Third year, first semester, four hours a week.
2 units.
217. Renaissance, Seventeenth, Eighteenth, Nineteenth Century

Art. Architecture, sculpture, painting, and the crafts from the Renaissance through the nineteenth century. Emphasis upon the schools of painting. Open to all upper division students.

Miss Kloster.
Fourth year, first semester, two hours a week.
2 units.
222. Domestic Architecture and Interior Decoration. Study, investigation, and application of the principles of good taste to be exercised in exterior and interior house design. Emphasis is placed upon practical problems in reference to the Southwest. Open to all upper division students.

Miss Curtiss.
Fourth year, first semester, six hours a week. 3 units.
226. Contemporary Art. A survey of the field of contemporary art in America and abroad with emphasis upon the aims and tendencies in expression together with a study of the major artists and their accomplishments. Open to all upper division students.

Miss Kloster.
Fourth year, second semester, one hour a week.
1 unit.

## DEPARTMENT OF COMMERCE

Dr. Atkinson, (Head of the Department; Mr. Masteller, Miss Bunte

The Department of Commerce keeps in view two main objectives. Opportunity is here offered for thorough preparation of those who wish to become teachers of commercial subjects in the elementary schools or in the junior and senior high schools. Those who prefer to prepare themselves for a business career or for secretarial work may plan a program in which commercial courses predominate.

## TYPE CURRICULUM FOR STUDENTS MAJORING IN COMMERCE

## Freshman Year

| First Semester | Second Semester |
| :---: | :---: |
| Units | Units |
| Engl. 101 Composition .... 3 | Engl. 102 Composition .-.... 3 |
| Science .................. (4 or) 3 | Science ................... (4 or) |
| *Mus. 100 Fundamentals .... 2 | *Art 110 Publ. School Art 2 |
| *P. E. 100 Hygiene ........... 2 | *S. Sci. 100 Const. Govt. -..- 3 |
| Physical Activity ............. 1/2 | Physical Activity .......-.--- 1/2 |
| Com. 113 Shorthand 1...... 3 | Com. 114 Shorthand 2 .-.-.-. 3 |
| Elective ................-(2 or) 3 | Elective ................(1 or) 2 |
| $16^{1 / 2}$ | $161 / 2$ |

## Sophomore Year

| Econ. 131 Prin. Economics 3 | Econ. 132 Prin. Economics 3 |
| :---: | :---: |
| *Geog. 100 Elem. of Geog. 3 | *Gen. Sci. 120 Biol. Proj..... 3 |
| *Psych. 100 Gen. Psych .... 3 | *Educ. 120 Sociology ........ 3 |
| Com. 101 Accounting 1.... 3 | Com. 102 Accounting 2.-.. 3 |
| Physical Activity ............. 1/2 | Physical Activity .......---.... 1/2 |
| Elective ......................---.- 3 | Elective ...............-........... 3 |

[^7]| Junior | Year |
| :---: | :---: |
| *Educ. 230 Prin. Teaching 3 | *Educ. 220 School Man. .... 3 |
| *Psych. 200 Educ. Meas. .... 3 | Com. 214 Office Training 3 |
| Com. 205 Business Law...- 3 | Com. 206 Business Law.... 3 |
| Com. 217 Salesmanship .. 3 | *Minor or Elective .............. 3 |
| Minor or Elective ....-......... 3 | Minor or Elective .............. 3 |
| 15 | 15 |
| Senior | Year |
| *Educ. 250 Phil. Educ. ...... 3 | *Educ. Elective ........(2 or) 3 |
| *Directed Teaching -.---...... 10 | *Minor and Elective ......... 10 |
| Com. 221 Comm'l Teaching Techniques ............... 3 3 | Com. 222 Comm'l Teaching Techniques ............... 3 |
| 16 | 16 |

## THE MINOR IN COMMERCE

Practically all the courses offered in this department are open as electives to qualified students who are majoring in other fields, provided approved sequences and prerequisites are observed.

A suitable minor in commerce is suggested in the following outline. Those who take the minor in commerce should select Econ. 131, 132, Principles of Economics, as the required social science in the sophomore year.

## Hours

Com. 110, 120, Typing ..................................... 4
Com. 113, 114, Shorthand ....--..-....................... 6
Commerce Electives ............................................. 6
Total .................................................................... 16
DESCRIPTION OF COURSES
Commerce 100. Zaner Penmanship. Principles of writing. Exercises for the development of freehand writing; techniques of teaching; practice in script writing.
Text: Zaner Method, Manual 144.
(Not given, 1934-1935)
Either sernester, two hours a week. No credit.
101, 102. Accounting 1 and 2. General principles of accounting. Short problems with particular attention to classification of accounts, personal and partnership accounts, discounts, opening, closing, and
adjusting entries; preparation of statements. During the second semester, consideration is given to negotiable instruments, working sheets, adjustments, controlling accounts, consignments, deferred charges, and introduction to corporation accounting. Both courses are required of all commerce majors in the standard four year curriculum.

Mr. Masteller.
First and second semesters.
Lecture three hours, laboratory two hours. 3 units each sem.
110, 120. Typewriting 1 and 2. Instruction in the use and care of the typewriter. Practice in letter writing; use of carbons. Practice in tabulation and the writing of cards. Special attention in the second semester to the development of speed and accuracy in typewriting.

Miss Bunte.
Three hours a week. 2 units each semester.
113, 114. Shorthand 1 and 2. Beginning and intermediate shorthand. Complete the Gregg Manual. Drills in reading and writing; principles of shorthand; use of Gregg Speed Studies; reading in the Gregg Writer; use of all the supplementary books in the Gregg Shorthand System. Required of all commerce majors.

Miss Bunte.
First and second semesters.
Lecture three hours, laboratory two hours. 3 units each sem.
201, 202. Accounting 3 and 4. A study is made of corporation accounts, factory costs, mercantile credits, temporary and permanent investments, depreciation. Accounting 4 treats of machinery and tools, buildings, intangibles, capital stock, surplus and reserves and sinking funds, branch house accounting, trust accounting. During both semesters, problems and sets are worked to illustrate principles involved.
Prerequisite: Accounting 1 and 2.
Mr. Masteller.
First and second semesters.
Lecturc, three hours, laboratory two hours. 3 units each sem. 205, 206. Business Law 1 and 2. Contracts, agency, sales, partnerships, corporations, negotiable instruments. Lecture and case methods are employed. Required of all majors in commerce in the standard four year curriculum.

Mr. Masteller.
First and second semesters.
Lecture, three hours a week.
3 units each sem.
209. Principles of Marketing. Investigation of products and their analysis; forms of marketing; organizations; methods of marketing; grading; storage; cooperative marketing; price policies; price maintenance; brands and trademarks.
Prerequisite: Econ. 131, 132, Principles of Economics.
Dr. Atkinson.
Lecture three hours a week. 3 units.
211. Money and Credit. The principles relating to money and credit are today commanding an interest and assuming an importance never before experienced in American business life. In this course, a fair appraisement of controversial viewpoints on these subjects are given and probable future trends based upon facts of the past and changing conditions of the present receive careful consideration.
Prerequisite: Econ. 131, 132.
Dr. Atkinson.
Lecture, three hours a week. 3 units.
212. Principles of Banking. The history of American banking. Economics of credit. Correlation of banking with economics and economic conditions. Consideration of loans, discounts, types of credit, bank organization and management, financial institutions, banking systems and banking statements.
Prerequisite: Econ. 131, 132.
Dr. Atkinson.
Lecture, three hours a week. 3 units.
213. Shorthand 3. A study of advanced dictation and transcription. Thorough review of the principles of Gregg shorthand. Use of all of the advanced material that is edited by the Gregg system. Text: Gregg Speed Building, 1932.
Prerequisite: Com. 113, 114, Shorthand 1 and 2.
Miss Bunte.
Lecture three hours; laboratory two hours. 3 units each sem.
214. Office Training. A study of the principles and practices of conducting a modern office. An advanced course. Thorough digest and study of the principles of filing, keeping records, making reports, preparing itineraries, submitting digests, outlining material for speeches, and all other branches of secretarial work,
Prerequisite: Com. 113, 114 or the equivalent of a year of shorthand.

Miss Bunte.
Second semester.
Three hours a week. Additional laboratory work. 3 units.
215. Corporation Finance. The corporation, its problems and formation; the types of corporation securities; the relation of bankers to promotion. Types of corporations; methods of combination. Reorganizations; exchange; investments. Practical laboratory work with stock market and corporation problems is an essential part of the presentation of the course.
Prerequisite: Econ. 131, 132.
Dr. Atkinson.
First semester, three hours a week.
3 units.
217. Salesmanship. A study of the art, practice, and psychology of selling with practical application emphasized in laboratory work. Course open to sophomores and upper division students.

> Mr. Masteller.

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

Mr. Masteller.
Second semester, three hours a week. 3 units.
221, 222. Commercial Teaching Techniques. Aims to prepare teachers for the commercial field in secondary education. A comprehensive survey of teaching techniques in all of the commercial subjects with appropriate emphasis upon those which are more widely used. The full year is required of all students majoring in commerce in the fourth year of their work.
Prerequisites: senior standing; Com. 113, 114; Com. 101, 102; typewriting.

Mr. Masteller.
Both semesters.
Lecture, two hours; supervised laboratory, four hours.
3 units each sem.
223, 224. Statistics 1 and 2. Introduction to statistics. Methods of graphic presentation, organization of statistical data; frequency distribution; the mean, mode, and median; index numbers of prices. Measurements of trend; analysis of time series; measurement of seasonal and cyclic fluctuations; index numbers of physical volume; correlation. The last half of the work starts with trend measurement.
Prerequisite: Econ. 131, 132, Principles of Economics.
Mr. Masteller.
Both semesters.
Lecture three hours. Additional laboratory work. 3 units each sem.
Econ. 131, 132. Principles of Economics. A study of economics that does not take into account the principles and projects proposed in what is commonly known as the New Deal fails to meet the requirements of today. In this course a fair estimate is made of the values of what is good in the old, and what must be modified by the changing conditions of modern life. In the second semester, study is directed chiefly to the effects of economic laws
and tendencies upon present day business problems. Open to sophomores and upper division students only. Required of commerce majors in the sophomore year.

Dr. Atkinson.
Three hours a week, both semesters. 3 units each sem.
Geog. 101. Economic Geography. The description of this course will be found under the Science Department. The course may be taken by Commerce majors with credit to be applied either in science or in commerce.
Prerequisite: either Geog. 100 or one semester of principles of economics.

## DEPARTMENT OF EDUCATION

Dr. Burkhard (Head of the Department), Mr. Payne (Director of the Training Schools), Dr. Grimes (Head of the Department of Psychology), Miss Roll, Miss Haulot, Mrs. Empey, Miss Lynd, Miss Anderson, Mr. Macomber, Miss Calloway, Miss Robinson, Mrs. O'Connor, Miss Roberts, M=. Cluxton, Miss Chase, and Miss Reed.

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

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

## Required Professional Courses

Psych. 100, General Psychology .................................................. 3 hrs.
Educ. 120, Sociology .............................................................................. 3 hrs.
Educ. 230, Principles of Teaching .................................................... 3 hrs.
Psych. 200, Educational Measurements ..................................... 3 hrs.
Educ. 220, School Management ........................................................... 3 hrs.
Educ. 250, Philosophy of Education .-......................................... 3 hrs.
Educ. 260, Directed Teaching ............................................................... 10 hrs.
Education or Psychology ................................................................ 2 hrs.
The courses in General Psychology and Sociology should be taken in the sophomore year; all other required courses in Education are to be taken in the third and fourth years. The course in Philosophy of Education is open only to seniors, except by special permission from the instructor.

Candidates for the degree will do their student teaching in the fourth year. Others who are registered in the three-year curriculum will arrange for their student teaching in the junior year.

All student teachers are required to teach for one half day each day during one semester. This half day includes three hours in the classroom and one and one-half hours each day in conferences and in school activities.

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

Students who wish to qualify for kindergarten and primary teaching will be required to pursue professional courses in these fields in addition to the required courses in education as listed above. The proper program leading to certification in this field will be arranged upon consultation with the kindergarten-primary adviser.

## The Major in Rural Education

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

The practice teaching is done in a rural school operated under the sole supervision of the Teachers College faculty. Students who wish to qualify for professional leadership in rural education may elect a major in this field. They should include the following courses in their program of study, which should be undertaken only with the advice and approval of the supervisor of rural education.

Units
Gen. Sci. 120, Biological Projects ..................................................... 3
Gen. Sci. 132, Nature Study ............................................................. 2
Educ. 120, Sociology ........................................................................... 3
Econ. 131, Principles of Economics ................................................ 3
Educ. 240, Rural Education ............................................................ 3
Engl. 108, Literature for the Grades .............................................. 3
P.E. 230, School Health .................................................................... 3
P.E. 232, Social Recreation Leadership ........................................... 2

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

Other courses may be substituted in this program at the discretion of the rural adviser.

## DESCRIPTION OF COURSES

Educ. 120. Sociology. This is an introductory study of sociology. It is the aim to evaluate various problems growing out of the conflicts between individuals, groups, and nations. The psychology of human activity and the social institutions that have grown up as a result of the effort to satisfy human wants and needs are given critical analysis. This is a course which deals with the basic interests of society as a whole and aims to discover social laws upon which a progressive and stable civilization may be based.
Required of all students for graduation.
Dr. Burkhard.
Either semester, three hours a week.
3 units.
200. The Elementary School Curriculum. The subject matter and activities of the elementary school. The aims and objectives of education are determined; current practices are analyzed; new type schools are studied. An effort is made to determine just what materials belong in the modern curriculum, in the light of the discoveries that have been made through experimental studies and scientific research.

Miss Roll.
Third year, either semester, three hours a week. 3 units.
210. Reading and Language Problems. A course planned to give a background for the teaching and appreciation of reading, language, spelling and writing, through the first six grades. Special emphasis is placed upon the technics necessary for teaching beginning reading. Such language problems as increased vocabulary, correct usage, individual composition, and the place of creative language work are discussed.

Mrs. Empey.
Third year, three hours a week.
3 units.
211. History of Education. A survey of the social life, ideas, and institutions that gave direction to western civilization. The purpose of such a survey will be to cnable the student to gain a better understanding of the problems confronting present day society. Dr. Burkhard.
Third or fourth year, three hours a week. 3 units.
214. Supervision and Administration in the Elementary School. This course begins with a review of the purposes of elementary education. Following this review the specific problems of the supervisor and the principal are considered, such as the newer type organizations and procedures; grading and promotions; use of newtype examinations, rating of teachers, discipline, other related problems. Whenever possible, the problems are worked out in the training school.

Mr. Payne.
Fourth yekr, second semester, three hours a week. 3 units.
216. Educational Sociology. A study of the social institution in which the individual gains his experience. Problems centering around the control of the environment and of the control of social institutions as a means of determining the educational processes are dealt with. Such institutions as the family, school, church, industrial groups, civic organizations are given consideration.
Prerequisite: Educ. 120, Sociology, or its equivalent.
Dr. Burkhard.
Third or fourth year. 3 units.
220. School Management. A course designed to give the prospective teacher an understanding of the practical everyday problems of the classroom and the relationship existing among pupils, teachers, principals, school boards, and the community. This is accomplished as far as possible through discussion of concrete problems in this field. The first twelve weeks of the course are given to the study of such topics as care of grounds and buildings, school hygiene, discipline, incentives, punishment, records and reports, marking, classification and promotion, extra-curricular activities, and public relations. The last six weeks of the course are devoted to a study of the principles of school law with special reference to Arizona school law.

Mr. Macomber.
Third year, either semester, three hours a week.
3 units.
222. Secondary Education. A study of the history of the high school and current problems growing out of present-day economic industrial life as these pertain to the work of both teaching and administration in secondary schools.

Dr. Grimes.
Third or fourth year, three hours per week.
3 units.
230. Principles of Teaching. Deals with the three following items: (1) the nature of the learning processes; (2) the nature of subject matter and its function in the work of the school; and (3) the nature of the teaching processes.
Prerequisite: Psych. 100, General Psychology, or its equivalent.
Roll, Lynd, and Robinson.
Third year, either semester, three hours a week. 3 units.
240. Rural Education. Designed to assist the rural teacher to solve the immediate problems in the school and the community. The following topics are discussed: the rural school plant; equipment and instructional supplies; organization of the daily program; grouping and classifying pupils; individual instruction; occupational activities; the hot lunch; health program; club work; management and administration; community service. The work is planned to assist teachers with both English speaking and non-English speaking children.

## Miss Lynd.

Third or fourth year, three hours a week.
241. Modern Educational Problems. A study of educational problems that have appeared as a result of changes in social and economic conditions. The current educational and social problems relating to school administration, school finance, curriculum revision, elementary-secondary schools, vocational guidance, text books, child welfare, private and public agencies, and school health are given careful consideration.

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

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

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

10 units.

## Kindergarten-Primary Courses

Engl. 109. Literature for Kindergarten-Primary Grades. A detailed study of literature which will give a basis for the appreciation, selection, and presentation of the best and most suitable matcrial for the Kindergarten-Primary School. Folk-lore, poetry, and children's illustrators are given careful study with class participation in story-telling.
Required of Kindergarten-Primary majors.
Second year, first semester, three hours a week. 3 units.
Educ. 205. Play Education for Kindergarten-Primary Grades. A brief study of the play movement and the theories of play. A
critical study of children's play interests and needs at various age levels, with the selection of appropriate games and rhythmic activities to meet these needs.
Prerequisite: Psych. 233, Child Psychology.
Required of Kindergarten-Primary majors.
Third year, first semester, three hours a week. 3 units
206. Construction and Play Materials. The course is concerned with the use of constructive and play materials based on children's interests and needs at different age levels, with emphasis upon criteria for judging the worth of the material. Class work consists of the application of such materials as paper, clay, textiles, wood, paint.
Laboratory fee, $\$ 1.50$.
Third year, second semester, two double periods a week. 3 units. 260k. Directed Teaching in Kindergarten. For admission to prac-tice-teaching in the kindergarten, the student must pass a music test in sight reading, singing, and accompaniment. During one semester she is required to spend the morning session, three and a half hours daily in conference, observation, and participation.

In order that the student may have practice experience in some other fields of primary work she will be required to elect teaching in one of the primary grades the following semester for one hour daily, one quarter, receiving 2 credits in addition.

Under direction of a Training Teacher.
Fourth year, either semester.
8 units.

## DEPARTMENT OF ENGLISH AND SPEECH

*Dr. Stevenson (Head of the Department), Dr. Schilling (Acting Head of the Department), Miss Pilcher, Miss Simpson, Mr. Taylor, Mr. Heaps.
The course in first year composition $(101,102)$ with a passing grade is prerequisite for all other English courses except Library Practice, Speech, and Dramatics.
An average index of 2.00 or higher in all English courses is expected of students majoring in English.
The Survey of English Literature, Engl. 151, 152, is prerequisite for all upper division courses in literature.

## SEQUENCE FOR ENGLISH MAJORS <br> FOR FOUR YEAR CURRICULUM IN ELEMENTARY EDUCATION

First Year
English Composition (See note)
Library Practice, 160 (See note) .................................................... (1)
Elementary Speech, 110
2
Survey of English Literature, 151, 152 ......................................... 6
Literature for the Grades, 108 ......................................................... 3
Third Year
Elect 9 units from the following:
201, 202 History of the Novel
203, 204 History of the Drama
205, 206 Shakespeare
211, 212 Victorian Poetry
221, 222 American Literature
232, 234 Advanced Composition
231 English Grammar
Fourth Year
Elect 9 units from the following: 9
207, 208 Romantic Period
209, 210 Victorian Prose
213, 214 Contemporary Prose
215, 216 Contemporary Poetry
217, 218 Modern Drama
240 Children's Dramatics

[^8]SEQUENCE OF COURSES IN ENGLISH93
SEQUENCE FOR ENGLISH MINORS FOR FOUR YEAR CURRICULUM IN ELEMENTARY EDUCATION
First Year
English Composition, 101, 102 (See note) ..... (6)
Library Practice, 160 (See note) ..... (1)
Elementary Speech, 110 ..... 2
Second Year
Survey of English Literature, 151, 152 ..... 6
Literature for the Grades, 108 ..... 3
Third and Fourth Years
Elect 6 units from the courses listed for English majors ..... 617
Note: Engl. 101, 102 and Engl. 160 may not be counted toward the minor.
SEQUENCE OF ELECTIVES IN SPEECH AND DRAMATICS
First Year
Elementary Speech, 110 ..... 2
Dramatic Interpretation, 121 ..... 2
Second Year
Play Production, 123 ..... 2
Pageantry, 124 ..... 1
Third Year
Drama Workshop, 125 ..... 1
Debate and Oratory, 220 ..... 2
Fourth Year
Children's Dramatics, 240 ..... 3
MINOR IN SPEECH AND DRAMATICS
First Year
Elementary Speech, 110 ..... 2
Dramatic Interpretation, 121 ..... 2
Second Year
Play Production, 123 ..... 2
(Elect Engl. 151, 152, prerequisite to third literature courses.)
Third and Fourth Years
Elect 6 units from the following: ..... 6
*203, 204 History of the Drama
*205, 206 Shakespeare*217, 218 Modern DramaChildren's Dramatics, 240315*Engl. 151, 152, prerequisite.

## TYPE CURRICULUM FOR STUDENTS MAJORING IN ENGLISH



## Junior Year

| *Educ. 230 Prin. Teaching 3 | *Educ. 220 School Man. .... 3 |
| :---: | :---: |
| *Psych. 200 Educ. Meas. ...- 3 | *English, Junior Elective.--- 3 |
| English, Junior Elective.... 3 | English, Junior Elective...- 3 |
| Minor or Elective .............. 6 | Minor or Elective .-............ 6 |
| 15 | 15 |



[^9]
## DESCRIPTION OF COURSES

English A. Special First Year English. For freshmen whose ratings in the preliminary standard test indicate need in the mechanics of language.

Dr. Schilling.
First year, two semesters, three hours a week. No credit.
Engl. 101, 102. First Year English. Theme writing and theme correction. Introduction to literature and methods of literary study. Required of all students passing the entrance examination in English. May not be counted toward the major.

Miss Pilcher, Miss Simpson, Mr. Heaps, Mr. Taylor.
First year, two semesters, three hours a week.
6 units.
108. Literature for the Grades. A survey of the field of literature suitable for reading in the grades. A progressive study of literary forms from the fairy tale, animal story, myth, legend, hero tale, and adventure story up to the books appropriate for the reading of more advanced pupils. Method of inculcating literary appreciation are studied.

[^10]Second semester, three hours a week. 3 units.
109. Children's Literature. A study of literature for children in sufficient detail to give a good basis for the appreciation, selection, and presentation of the most suitable material for the kindergarten and the primary school. Folk-lore, poctry, and children's illustrators are given careful study. Class practice is given in the art of story telling.
Required of kindergarten-primary majors.
Second year, first semester, three hours a week. 3 units.
110. Elementary Speech. Voice: diction; enunciation; articulation; voice quality and place; varieties in pitch, volume, and tempo; a study of the physiology of the vocal instrument and actual laboratory practice in classroom speaking from the point of view of the needs of the teacher.

Miss Simpson.
First or second year.
Either semester, three hours a week.
2 units.
121. Dramatic Interpretation. Sccuring and presenting the intellectual and emotional content of prose, poetry, and drama. Characterization and impersonation.
Prerequisite, Engl. 110.
Miss Simpson.
First year, second semester, two hours a week. 2 units.
122. Acting. One or two plays are produced during the semester, members of the class being assigned to the cast and staff positions. Prerequisite: Engl. 110 and 121. (Not offered in 1934-1935)

Miss Simpson.
Second year, second semester, two hours a week.
2 units
123. Play Production. A study of the fundamentals of stage design and construction, lighting, costuming, make-up, and stage management.
No prerequisite.
Miss Simpson.
Second ycar, first semester, three hours a week.
2 units.
124. Pageantry. Writing and production problems of pageantry, with special emphasis on the possibilities of outdoor pageantry in Arizona.
Required of Physical Education majors.
No text. Fee $\$ 2.00$.
Miss Simpson.
Second year, second semester, one hour a week.
1 unit.
125. Drama Workshop. One hour of credit is given for fifty-four hours of supervised work in Drama Workshop staff duties.
No text. Fee $\$ 1.00$.
Miss Simpson.
Second year, first semester.
1 unit.
130. Journalism-News Writing. A general introduction to the field of journalism; study of the basic principles of news writing; practice in news writing; study of news sources; newspaper illustrations; related topics.
Prerequisite to other courses in journalism.
Laboratory fee, $\$ 1.00$.
Mr. Taylor.
First year, either semester, three hours a week.
3 units.
140. Journalism-Reporting. A study of all types of stories covered by a reporter; practice in writing editorials, feature stories, society, sports, interviews.
Prerequisite: Engl. 130, News Writing.
Laboratory fec, $\$ 1.00$.
Mr. Taylor.
Either semester, three hours a week.
3 units.
151, 152. Second Year Survey of English Literature. An historical study of English literature from the beginnings to the present, with reading of representative masterpieces and attention to social backgrounds and intellectual movements.

Dr. Schilling.
Second year, two semesters, three hours a week,
6 units.
160. Library Practice. Lectures on library organization, the study and compilation of a bibliography, note taking, and a study of the most important reference books; followed by problems involving the actual handling of each book or tool studied.
Required of all freshmen.
Fee, 15 cents.
Mr. Heaps.
First year, either semester, one hour a week.
1 unit.
170. Practical Journalism. Advanced study of practical newspaper work. A laboratory course devoted to the publication of the COLLEGIAN, the weekly publication of the associated students. Reporting, editing, make-up, publishing, and all that goes with the issuing of a weekly newspaper.
Prerequisite: Engl. 130, News Writing; Engl. 140, Reporting.
Laboratory fee, $\$ 1.00$.
Mr. Taylor.
Second year, either semester, three hours a week. 3 units.
201, 202. History of the Novel. The origins of prose fiction; the novel in England and America, with some attention to significant examples in foreign literatures; analysis of typical examples and reading of outside assignments.
(Not offered in 1934-1935)
Miss Pilcher.
Two semesters, three hours a week.
3 units.
203, 204. History of the Drama. The English drama from the middle ages to the present, together with selected examples of foreign influences. Reading of representative plays of each period. (Not offered in 1934-1935)
Dr. Schilling.
Two semesters, three hours a week.
6 units.
205, 206. Shakespeare. Critical study of ten plays, with special attention to Shakespeare's dramatic methods and development. A Midsummer Night's Dream, The Merchant of Venice, As You Like It, Twelfth Night, Hamlet, Othello, King Lear, Macbeth, Antony and Cleopatra, The Tempest.

Dr. Schilling.
Two semesters, three hours a week.
6 units.
207, 208. The Romantic Movement. English poetry and prose of the period, $1780-1830$; a study of its literary characteristics and its relations with current philosophies and social conditions.
(Not offered in 1934-1935)

> Dr. Schilling.
> Two semesters, three hours a week.

6 units.
209, 210. Victorian Prose. The leading prose writers of England during the nineteenth century, with readings of their most significant work and study of their influence.

Miss Pilcher.
(Not offered in 1934-1935)
Two semesters, three hours a week.
6 units.
211, 212. Victorian Poetry. Nincteenth century English poetry, with special attention to Tennyson, Browning, Arnold, Swinburne, Rosetti, Morris, Mrs. Browning, Meredith, and Hardy. The political and social background of the period; the personality of the various writers, with extensive readings from their works.

Miss Pilcher.
Two semesters, three hours a week.

213, 214. Contemporary Prose. The chief writers of essays, biography, history, and fiction, since the beginning of the twentieth century; their careers and distinctive traits, with particular attention to the relationship of their ideas with important present-day problems.
No text. Fee, $\$ 1.00$.
Miss Pilcher.
Two semesters, three hours a week. 6 units.
215, 216. Contemporary Poetry. English and American poetry of the twentieth century; literary forms and poetic outlook; relation of poetry to present day life.

Dr. Schilling.
Two semesters, three hours a week. 6 units.
217, 218. Modern Drama. The chief dramatic writers of the last half century. Readings from representative plays in Dickinson's Second Series of Modern Dramatists. Study of the theatre as influenced by the national schools of the period.
(Not offered in 1934-1935)
Dr. Schilling.
Two semesters, three hours a week.
6 units.
220. Debate and Oratory. Theory and practice of debate technique and platform ethics.

Miss Simpson.
First semester, two hours a week.
2 units.
221, 222. American Literature. A review of the national period of American literature. Study of the New England movement; transcendentalism; modern realism. Wide readings in the works of the leading poets and essayists.

Dr. Schtlling.
Two semesters, three hours a week. 6 units.

## 226. Advanced Drama Workshop.

Miss Simpson.
Third year, second semester.
1 unit.
227. Advanced Debate and Oratory. Prerequisite: Engl. 220.

Miss Simpson.
First semester. 2 units.
231. English Grammax. A study of technical grammar based upon the prose structure and idiom of the best modern writers. Etymology, word formation, and sentence formation. Variations in terminology and opinion in grammars of the present day are compared and harmonized.

Miss Pilcher.
First semester, three hours a week.
3 units.
232. Creative Writing. The writing of original verse, prose, and poetic plays. The essay and short fiction.

Miss Filchor.
Sccond semester, three hours a week. 3 units.
234. Advanced Composition. Intended for students who are seriously interested in writing and who hope to achieve professional ranking. Study of the chief types of present day writing, with frequent exercises. Free assignments for students who wish practice in verse writing, fiction, and playwriting.

Mr. Taylor.
Second semester, three hours a week. 3 units.
240. Children's Dramatics. Theory and practice of dramatics for grade school children. No text. Fee, $\$ 2.00$.

Miss Simpson.
Fourth year, either semester, three hours a week. 3 units.
235. Directing. Laboratory practice in directing of Drama Workshop productions under faculty supervision.
Prerequisites: Engl. 123, 110, 121, 122. (Not offered in 1934-35)
Miss Simpson.
Third year, first semester, two hours a week.
2 units.

# DEPARTMENT OF HOME ECONOMICS 

## Miss Douglass (Head of the Department)

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

## The Major in Home Economics

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

In the first year, majors will take the science requirement in Chem. 103, 104, Introductory College Chemistry. In the second year, they will elect Chem. 211, Organic Chemistry and Biol. 120, Human Physiology.

## Home Economics Minor

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

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

# TYPE CURRICULUM FOR STUDENTS MAJORING IN HOME ECONOMICS 

| Freshman Year |  |
| :---: | :---: |
| First Semester Units | Second Semester Units |
| Engl. 101 Composition .... 3 | Engl. 102 Composition .-.. 3 |
| Chem. 103 Inorg. Chem..... 4 | Chem. 104 Inorg. Chem..... 4 |
| *Mus. 100 Fundamentals .... 2 | *Art 100 Publ. School Art 2 |
| *Hygiene ....-.......--........... 2 | *S. Sci. 100 Const. Govt..... |
| ${ }^{*}$ Engl. 160 Library Practice 1 |  |
| P. E. Activity ....-............. 1/2 | P. E. Activity ...-.............. 1/2 |
| H. Ec. 101 Elem. Nutr. .... 3 | H. Ec. 102 Cloth. Select..... 3 |
| Elective ........................... 1 | Elective ........................... 1 |
| $16^{1 / 2}$ | $16^{1 / 2}$ |
| Sophomore Year |  |
| *Psych. 100 Gen. Psych. .... 3 | *Educ. 120 Sociology |
| *Geog. 100 Elem. of Geog. 3 | *G. Sci. 120 Biol. Proj. .... 3 |
| Social Studies (See Note 2) 3 | Social Studies (See Note 2) |
| P. E. Activity .................. 1/2 | P. E. Activity .................. 1/2 |
| H.Ec. 105 App. Food Prin. 3 | H.Ec. 108 Cloth. Cons. .... 3 |
| Chem. 211 Org. Chem. .... 4 | Biol. 120 Physiology ..... |
| $16^{1 / 2}$ | 151/2 |
| Junior Year |  |
| *Educ. 230 Prin. Teaching 3 | *Educ. 220 School Man. .... 3 |
| *Psych. 200 Educ. Meas. .-.. 3 | *Elective ........................ |
| H.Ec. 205 Home Man. ... 3 | H.Ec. 208 H.Ec. Educ. .... 3 |
| H.Ec. 203 Child Dev. (or | H.Ec. 206 Food for Fam. |
| H.Ec. 209 Family) .-..... 3 | (or H.Ec. 204 Fam. |
| Elective or Minor .-........... 4 | Health) $\qquad$ 3 4 |
| 16 |  |
|  | 16 |
| Senior | Year |
| *Educ. 250 Phil. Educ. .-.... 3 | *Educ. (Elective)....(2 or) 3 |
| *Directed Teaching ........... 10 | *Elective or Minor ........... 10 |
| H.Ec. 211 Adv. Clothing.... 3 | H.Ec. 212 Adv. Nutr. (or HEc. 222 |
| 16 |  |

[^11]Note 2. The courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; 113; and Econ. 131, 132. Electives will be so chosen as to include an approved minor of at least fifteen units in a field of learning other than home economics or education.

## DESCRIPTION OF COURSES OFFERED IN HOME ECONOMICS

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

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

First year, second semester, three hours a week. 3 units.
105. Applied Food Principles. A study of general principles of cookery and the nutritive facts involved. Fee, $\$ 3.00$.

Miss Douglass.
Second year, first semester, six hours a week.
3 units.
108. Clothing Construction. An opportunity to develop the principles of dressmaking through the construction of several inexpensive garments. Also further experience in the selection of materials and designs with due regard to suitability and cost.
Prerequisite: H. Ec. 102.
Second year, second semester, six hours a week. 3 units.
205. Home Management. A study of standards of living, the budgeting of time and income, household accounting, and the selection, care, and efficient arrangement and use of the house and equipment.

Miss Douglass.
Third year, first semester, three hours a week. 3 units.
204. Family Health. Information on good health for the family, special attention being given to a study of the mother through pregnancy and childbirth and the care of the infant.

Miss Douglass.
Third year, second semester, two hours a week. 3 units.
203. Child Development. A study of the physical, mental, emotional, and social development of the pre-school child. Special emphasis is placed on habit formation and the correction of common behavior problems.

Miss Douglass.
Third year, first semester, three hours a week.
3 units.
206. Food for the Family. The economic selection and nutritive value of foods are stressed. Various types of meals and table serv-
ice are studied. Practice is given in planning, preparing, and serving suitable family meals.
Prerequisites: H. Ec. 101 and 105.
Fee, $\$ 3.00$.
Miss Douglass.
Third year, second semester, six hours a week. 3 units.
208. Home Economics Education. The special content and the special methods to be used in the teaching of home economics. Prerequisites: H. Ec. 105, 108, and 205.

Miss Douglass.
Third year, second semester, three hours a week. 3 units.
209. The Family. A study of the organization of the family as an institution that is changing, and the development of guiding principles for the future family. Open to junior and senior men and women.

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

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

# DEPARTMENT OF INDUSTRIAL ARTS 

Mr. Neeb (Head of the Department), Mr. Ross

The work of this department has been arranged to prepare students to become teachers, supervisors, and directors of industrial arts subjects in both the elementary and secondary schools.

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

## SPECIAL CURRICULA

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

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

| Vic H. Housholder, Chairman | Starling M. Morse |
| :--- | :--- |
| W. R. Hutchins | William L. Pendleton |
| James L. Bone | Howard S. Reed |
| J. Lee Chambers | L. S. Neeb |

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

Electricity
B. F. Carter, Chairman

Louis Doutrick
Roy Richards
Building and Construction
Sheldon Baker, Chairman
Ralph Hoffman
Walter Johannessen

## Drawing

V. O. Wallingford, Chairman Otto Janssen
Lloyd Leraine Pike

## Farm Electricity

H. J. Lawson, Chairman

David F. Wilkie
Mechanics
Walter DuMoulin, Chairmaz
B. F. Carter
C. C. Tillotson

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

Roy Richards

## THE FOUR YEAR SPECIAL CURRICULUM IN INDUSTRIAL ARTS WITH EMPHASIS ON ARCHITECTURAL COURSES



Fifth Semester



# THE FOUR YEAR SPECIAL CURRICULUM IN INDUSTRIAL <br> ARTS WITH EMPHASIS ON BUILDING AND CONSTRUCTION 





## Seventh Semester



## Elghth Semester



# THE FOUR YEAR SPECIAL CURRICULUM IN INDUSTRIAL <br> ARTS WITH EMPHASIS ON ELECTRICAL COURSES 




## Fifth Semester



## Seventh Semester

Alternating Current Elec. $\quad 3$
A. C. Lab.

## THE MAJOR IN INDUSTRIAL ARTS

The minimum requirement for the major should include a total of twenty-four units of work distributed according to the following outline. Units
Drawing Courses ..... 6
Electrical Courses ..... 6
Wood Working Courses ..... 6
Machine Shop Courses ..... 6

## THE MAJOR FOR THE FOUR YEAR CURRICULUM

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

## Freshman Year <br> Units

Engineering Drawing ..... 3
Elementary Cabinet Making ..... 3
Descriptive Geometry ..... 3
Advanced Cabinet Making ..... 3
12
Sophomore Year
Wood Turning ..... 3
Mechanism ..... 3
Machine Shop Practice ..... 3
Job Analysis ..... 3
Junior and Senior Years
Auto Ignition ..... 6
Electrical Construction ..... 6
Direct Current Electricity ..... 6
Supervision and Administration of Industrial Arts ..... 3

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

| Freshman Year |  |
| :---: | :---: |
| First Semester | Second Semester |
| Units | Units |
| Engl. 101 Composition .... 3 | Engl. 102 Composition .... 3 |
| Science .-................ ( 3 or) 4 | Science --................ (3 or) 4 |
| *Mus. 100 Fundamentals .... 2 | * Art 110 Publ. School Art 2 |
| *Hygiene ............................ 2 | *S. Sci. 100 Const. Govt....- 3 |
| *Engl. 160 Library Practice 1 |  |
| P. E. Activity .................. 1/2 | P. E. Activity ................... 1/2 |
| I. Art 121 Wood Work...... 3 | I. Art 122 Adv. Cab. Mkg. 3 |
| Elective ............................-- 1 | Elective ..........--................. 1 |
| 161/2 | $16^{1 / 2}$ |
| Sophomore Year |  |
| *Psych. 100 Gen. Psych. --.- 3 | *Educ. 120 Sociology ........ 3 |
| *Geog. 100 Elem. of Geog. 3 | *G. Sci. 120 Biol. Proj. .-- 3 |
| Social Studies (See Note 2) 3 | Social Studies (Sce Note 2) 3 |
| P. E. Activity .-.-...-.........- 1/2 | P. E. Activity ..................- 1/2 |
| Math. 107 Algebra ......... 3 | Math. 120 Trig. ..............- 3 |
| I. Art 113 Mech. Draw..... 3 | I. Art 114 Mech. Draw. .... 3 |
| $15^{1 / 2}$ | $151 / 2$ |
| Junior | Year |
| *Educ. 230 Prin. Teaching 3 | *Educ. 220 School Man. .-.. 3 |
| *Psych. 200 Educ. Meas. ...- 3 |  |
| 1. Art. 101 Auto Ign. <br> or I. Art 153 Elem. Elec. <br> or I. Art 208 Carpentry <br> or 1. Art 207 Mill Work.. | I. Art 102 Auto Ign. or 1. Art 154 Elec. Con. or I. Art 208b St. Sq. or I. Art 164 Pat. Mkg. .. 3 |
| 1. Art 111 Mach. Shop .... 3 | I. Art 112 Mach. Shop .... 3 |
| Elective ............................ 4 | Elective ....--------.----.........-- 7 |
| 16 | 16 |
| Senior | Year |
| *Educ. 250 Phil. Educ. ...... 3 | *Educ. (Elective) ...... (2 or) 3 |
| *Directed Teaching ........... 10 | *Elective .............-.............. 10 |
| I. Art 115 Radio ............. 3 | I. Art 116 Radio ............. 3 |
| 16 | 16 |

Note 1. In the case of the starred courses, sections are to be so arranged that half the group will take the course in the first semester and half in the second semester.
Note 2. The courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; 113; and Fcon. 131, 132.
Note 3. Electives may be so chosen as to include a minor of fifteen units
Note 3 in some special field other than education. This field may be a
Note 3. special phase of industrial arts, Substitutions for the I. Art courses listed above may be made with advice of the head of the department.

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

## Freshman Year

| First Semester | Second Semester |
| :---: | :---: |
| Engl. 101 Composition .-.- $3^{3}$ | $\text { Engl. } 102 \text { Composition } .--3^{\text {Units }}$ |
| Chem. 103 Inorg. Chem..... 4 | Chem. 104 Inorg. Chem..... 4 |
| *Mus. 100 Fundamentals .-.. 2 | *Art 110 Publ. School Art 2 |
| *Hygiene .--......--...-......-.-... 2 | *S. Sci. 100 Const. Govt. .... 3 |
| *Engl. 160 Library Practice 1 |  |
| P. E. Activity ...............---1/2 | P. E. Activity ......----........ 1/2 |
| I. Art 121 Wood Work .... 3 | I. Art 122 Adv. Cab. Mkg. 3 |
| Elective ........................... 1 | Elective .--.-.-.................... 1 |
| $16^{1 / 2}$ | $161 / 2$ |
| Sophomo | re Year |
| *Psych. 100 Gen. Psych. .-.- 3 | *Educ. 120 Sociology --..... 3 |
| *Geog. 100 Elem. of Geog. 3 | *G. Sci. 120 Biol. Proj. ---. 3 |
| Social Studies (See Note 2) 3 | Social Studies (See Note 2) |
| P. E. Activity ...........-...- | P. E. Activity |
| Math. 107 Algebra ........... 3 | Math. 120 Trig. |
| I. Art 164 Pat. Mkg. <br> or I. Art 163 Turning.... 3 | I. Art 207 Mill Work or I. Art 105 Arch. Draw. 3 |
| $15^{1 / 2}$ | $151 / 2$ |
| Junior | Year |
| *Educ. 230 Prin. Teaching 3 | *Educ. 220 School Man. .... 3 |
| *Psych. 200 Educ. Meas. -... 3 | Elective |
| I. Art 208 Carpentry --.... 3 | I. Art 208b St. Square .-.. 3 |
| I. Art 154 Elec. Cons. .... 3 | 1. Art 211 Job Anal. ...... 3 |
| Phys. 111 Gen. Physics .... 4 | Phys. 112 Gen. Physics |
| 16 | 16 |
| Senior | Year |
| *Educ. 250 Phil. Educ. ...... 3 | *Educ. (Elective)....(2 or) 3 |
| *Directed Teaching ........... 10 | *Elective .......................... 10 |
| I. Art 255 Stair Bldg. ...- 3 | I. Art 257 Supv. and Adm. 3 |
| 16 | 16 |

Note 1. In the case of starred courses, sections are to be so arranged that half the group will take the course in the first semester and half in the second semester.
Note 2. The courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; 113; and Econ. 131, 132.
Note 3. Electives may be so chosen as to include a minor of fifteen units in some field other than education. This field may be a special phase of industrial arts. Substitutions for the I. Art courses listed above may be made with the advice of the head of the department of industrial arts.

FOUR YEAR CURRICULUM IN INDUSTRIAL ARTS WITH EMPHASIS ON ELECTRICAL COURSES

| Freshman Year |  |
| :---: | :---: |
| First Semester | Second Semester |
| Engl. 101 Composition | Fncl 102 Composition Units |
| Chem. 101 Inorg. Chem....- 4 | Chem. 102 Inorg. Chem...-. 4 |
| *Mus. 100 Fundamentals .... 2 | *Art 110 Publ. School Art 2 |
| *Hygiene --....................... 2 | *S. Sci. 100 Const. Govt. .-.. 3 |
| *Engl. 160 Library Practice 1 |  |
| P. E. Activity .................. 1/2 | P. E. Activity .................. 1/2 |
| I. Art 101 Auto lgn. ...... 3 | 1. Art 102 Auto Ign. ....-.-. 3 |
| Elective .-..-.-...-......-.......... 1 | Elective ........................... |
| 161/2 | $161 / 2$ |
| Sophomore Year |  |
| *Psych. 100 Gen. Psych. .... 3 | *Educ. 120 Sociology ........ 3 |
| *Geog. 100 Elem. of Geog. 3 | *G. Sci. 120 Biol. Proj. .-. 3 |
| Social Studies (See Note 2) 3 | Social Studies (See Note 2) 3 |
| P. E. Activity .................. 1/2 | P. E. Activity .................. 1/2 |
| Math. 107 Algebra .-.-....... 3 | Math. 120 Trig. .-.----........ 3 |
| I. Art 153 Elem. Elec. .... 3 | I. Art 154 Elec. Cons. ...... 3 |
| $15^{1 / 2}$ | $15^{1 / 2}$ |
| Junior Year |  |
| *Educ. 230 Prin. Teaching 3 | *Educ. 220 School Man. .... 3 |
| *Psych. 200 Educ. Meas. .... 3 |  |
| I. Art 203 D. C. Electr... 3 | I. Art 204a D. C. Mach..... 3 |
| I. Art 215 Radio ............. 3 | I. Art 216 Radio ............. 3 |
| Phys. 111 Gen. Physics .... 4 | Phys. 112 Gen. Physics .... 4 |
| 16 | 16 |
| Senior Year |  |
| *Educ. 250 Phil. Educ. ...... 3 | *Educ. (Elective)....(2 or) ${ }^{3}$ |
| *Directed Teaching ........... 10 | *Elective .......................... 10 |
| 1. Art 251 A. C. Electr.... 3 | I. Art 252 A. C. Mach. .... 3 |
| 16 | 16 |

Note 1. In the case of the starred courses, sections are to be so arranged that half the group will take the course in the first semester and half in the second semester.
Note 2. The courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; 113; and Econ. 131, 132.
Note 3. Electives may be so chosen as to include a minor of fifteen units in some special field other than education. This field may be a special phase of industrial arts. Substitutions for the industrial arts courses listed in the above outline may be made with the advice of the head of the department.

# MINORS FOR STUDENTS NOT MAJORING IN THE INDUSTRIAL ARTS DEPARTMENT 

## Drawing Minor

Units
Engineering Drawing ..... 3
Descriptive Geometry ..... 3
Elementary Mechanism ..... 3
Machine Design ..... 3
Architectural Drawing ..... 3
15
Woodworking Minor
Elementary Cabinet Making ..... 3
Advanced Cabinet Making ..... 3
Carpentry ..... 3
Carpentry ..... 3
Wood Turning ..... 3
15Mechanics Minor
Machine Shop Practice ..... 3
Machine Shop Practice ..... 3
Pattern Making ..... 3
Foundry Practice ..... 3
Sheet Metal ..... 3
15
Electrical Minor
(For students who have had a year of physics and mathematics through calculus.)
Auto Ignition ..... 3
Auto Ignition ..... 3
Electrical Construction ..... 3
Electrical Toy Construction ..... 3
D. C. Electricity ..... 3
D. C. Machinery ..... 3

## Electrical Minor

(For students who have had a year of physics and 3 units each ofcollege algebra and trigonometry.)
Units
Principles of Radio ..... 3
Radio Transmission ..... 3
Radio Receiving (equipment, design, and construction) ..... 3
Apparatus ..... 3
Machine Shop Practice ..... 3
15

Majors and minors for curricula completed previous to August 20, 1936, will be approximately as outlined above or may be modified in conference with the head of the department.

## DESCRIPTION OF COURSES

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

Mr. Neeb.
First semester, three hours lecture a week.
Six hours preparation.
3 units.
105. Architectural Drawing 111. Designed to assist students who are preparing to teach in the junior and senior high schools or for architectural drafting and engineering work. Laboratory fee, $\$ 1.00$. Prescribed for prospective high school teachers. Open to all students as an elective.

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

3 units.
106. Architectural Drawing 121. A continuation of I. Art 105. Complete plans and estimate of materials for a two story house. Open to all students. Laboratory fee, $\$ 1.50$.
Prerequisite: I. Art 105.
Mr. Neeb.
First year, second semester, one lecture, laboratory, six hours a week.

3 units.
201. Architectural Drawing 201. Consists of a study of some of the best classical elements in architecture and a study of the funda-
mentals of design. Prescribed for students majoring in architecture. Laboratory fee, $\$ 1.00$.
Prerequisite: I. Art 106.
Mr. Neeb.
Third year, first semester, one lecture, laboratory, six hours a week.

3 units.
202. Architectural Drawing 211. Consists of a series of problems involving a study of the principles of architectural composition. Laboratory fee, $\$ 1.00$.
Prerequisite: I. Art 201.
Mr. Neeb.
Third year, second semester, one lecture, laboratory, six hours a week.

3 units.
151. Broadening and Finding 102. Designed to aid students preparing to teach in the junior high school. The work consists entirely of model work, boats, steam engines, electrical motors, and similar projects. Laboratory fee, $\$ 2.00$.

Mr. Neeb.
Second year, first semester, laboratory, six hours a week. 3 units.
152. Broadening and Finding 112. A continuation of I. Art 151, with some machine lathe practice and drill press work. Laboratory fee, $\$ 2.00$.

Mr. Neeb.
Second year, second semester, laboratory, six hours a week. 3 units.
113. Mechanical Drawing 106. (Engineering Drawing.) A study of the elements of orthographic projection and standard presentation, including lettering, tracing, and blue printing; the making and reading of working drawings and commercial drafting room practice. Prescribed for all freshmen carrying a mechanic arts major. Laboratory fee, $\$ 1.00$.

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

3 units.
114a. Mechanical Drawing 116a. (Descriptive Geometry.) Designed for students majoring in mechanic arts. This course presents the elements of descriptive geometry including problems in warped surfaces and intersections of solids. Prescribed for all freshmen carrying a mechanic arts major. Laboratory fee, $\$ 1.00$. Prerequisite: I. Art 101.

Mr. Neeb.
First year, second semester, one lecture, six hours laboratory each week.

3 units.
114b. Mechanical Drawing 116b. (Descriptive Geometry.) Same as I. Art 114a with emphasis on shades and shadows. Laboratory fee, $\$ 1.00$.
Prerequisite: I. Art 101.
Mr. Neeb.
First year, second semester, one lecture, six hours laboratory. 3 units.
155. Mechanical Drawing 126. (Mechanism.) The theory and design of linkages, gears, cams, screws, and other machine elements are studied together with the relative motions of machine parts. Required of all students carrying a mechanic arts major. Laboratory fee, $\$ 1.00$.
Prerequisite: I. Art 114a.
Mr. Neeb.
Second year, first semester, one lecture, six hours laboratory each week.

3 units.
156. Mechanical Drawing 136. (Machine Drawing.) This course treats of machine drawing and takes up such subjects as shafts, bearings, pulleys, belts, clutches, standard machine parts, fastenings. Required of all students carrying a mechanic arts major. Laboratory fee, \$1.00.
Prerequisite: I. Art 130.
Mr. Neeb.
Second year, second semester, one lecture, six hours laboratory each week.

3 units.
120. Wood Work 109. (No machine work.) Designed to meet the needs of beginning students and special students majoring in kindergarten-primary work. Fundamental tool processes; design and construction of small projects for the home and school; toy construction with emphasis on mechanical set-up; study of materials and their adaptation to constructive uses. Laboratory fee, $\$ 2.00$.

Mr. Neeb.
First year, first semester, five hours a week.
3 units.
121. Wood Work 119. (No machine work.) The students are given a thorough course in the basic types of furniture construction suitable for use in junior high school shop work; the principles of furniture repair. Laboratory fee, $\$ 2.00$.

Mr. Neeb.
First year, first semester, six hours a week.
3 units.
122. Cabinet Making 129. Gives definite practice in the proper use and care of hand tools; a study of the fundamental principles involved in furniture construction. Laboratory fee, $\$ 2.00$.

Mr. Neeb.
First year, second semester, six hours a week. 3 units.
163. Wood Turning 139. Drills in spindle, face plate, and chuck work, together with practice in finishing and polishing.

Mr. Neeb.
Second year, first semester, six hours a week.
3 units.
164. Patternwork 149. Designed to give a thorough study of the following pattern allowances: draft, shrinkage, finish, warp, and shake. The construction of the patterns involving the common problems of the pattern maker. Prescribed for students preparing
to teach industrial arts in the secondary schools. Laboratory fee, $\$ 2.00$.
Prerequisite: I. Art 163.
Mr. Neeb.
Second year, second semester, six hours a week.
3 units.
207. Cabinet Making and Mill Work 159. A course dealing with advanced types of furniture; construction, involving the various methods of tenoning; the principles of panel construction; correct methods of glueing; the application of finishes; a study of design. Safe and practical methods involved in the use of wood working power machines. Prescribed for all students preparing to teach wood working in the secondary schools.
Prerequisite: I. Art 164.
Mr. Neeb.
Third year, first semester, one lecture, six hours laboratory a week.
208. Carpentry 209. The construction problems involved in the erection of buildings are studied. Emphasis is placed upon the use of the steel square; use and care of carpenter's tools; sharpening of cutting tools; framing processes; short cuts; trade terminology. Prescribed for students preparing to teach in secondary school shops.
Prerequisite: I. Art 207.
Mr. Neeb.
Third year, second semester, one lecture, six hours laboratory a week.

3 units.
211. Job Analysis 208. Jobs are analyzed into their various steps and their relationship is studied. Continuity threads are worked out. This course is necessary in curriculum building. Prescribed for all students planning to teach industrial arts.

Mr. Neeb.
Third year, first semester, two two-hour periods a week. 2 units.
212. Curriculum Making 218. For students preparing to teach. A course in which trade and technical material, tool processes, occupational information, and job analysis are arranged to form effective teaching guides. Prescribed for all students planning to teach industrial arts subjects.
Prerequisite: I. Art 111.
Mr. Neeb.
Third year, second semester, two two-hour periods a week. 2 units.
255. Teaching Problems 228. A course designed to assist students preparing to teach industrial arts in the making of lesson plans, presentation of materials to students. Prescribed for prospective teachers in this field.
Prerequisite: I. Art 112.
Mr. Neeb.
Third year, first semester, five hours a week.
3 units.
257. Supervision and Administration of Industrial Arts 258. This course offers the general principles of supervision as applied to the teaching of shop classes. Classification of tools, tool operations and projects. Purchasing of supplies and equipment. Prescribed for all students who plan to teach.
Prerequisite: I. Art 112.

> Mr. Neeb.
> Fourth year, first semester, three hours a week.

3 units.
Educ. 260. Methods and Teaching 238, 248. Every student who selects a major in industrial arts with the intention of qualifying as a special teacher of the subject is required to teach industrial arts for one semester under supervision in the elementary and junior high school grades in the training schools. This work is accompanied by a suitable study of the methods involved. These courses may not be counted as a part of the major in industrial arts.

Fourth year, first or second semester, five hours a week. 10 units.
Ind. Arts 101. Auto Ignition 100. This course is designed to prepare the student for commercial shop practice and includes testing, recharging, and repairing storage batteries; ignition coils; distributors, timing; lighting systems; fuses and circuit breakers. Machine shop practice is included in the course. Laboratory fee, $\$ 2.00$.

Mr. Ross.
First year, first semester, two hours lecture, four hours
laboratory.
3 units.
102. Auto Ignition 110. A continuation of I. Arts 101. Combined laboratory and class work consists of the study of repairing, adjusting, and testing of generators, starting motors, magnetos, and other electrical equipment found on the modern automobile. Laboratory fee, $\$ 2.00$.

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

3 units.
153. Elementary Electricity 113. Designed to give the student a thorough knowledge of magnetism, battery cells, bell circuits, and the underlying principles of direct and alternating current motors. Students must furnish their own tool kit. Prescribed for students planning to teach Industrial Arts. Laboratory fee, $\$ 2.00$. Prerequisite for all radio and electrical courses.

Mr. Ross.
Second year, first semester, two hours lecture, four hours laboratory.

3 units.
154. Electrical Construction 103. The object of this course is to teach the student how to install lighting circuits in houses with standard methods; underwriters regulations regarding the size, and
kind of wire and fixtures for various purposes; conduit work; and the estimate of cost for the jobs. Laboratory fee, $\$ 2.00$.
Prerequisite: I. Arts 165, Shop Math 20.
Mr. Ross.
Second year, second semester, two hours lecture, four hours laboratory.

3 units.
115. Radio Construction 107. Arranged to cover the elements of electrical theory; principles of electromagnetism; potential; current; resistance; capacitance; storage and dry cells; the vacuum tube as a detector, audio and radio frequency amplifier. Vacuum tube circuits. Constructional problems involving assembly of many different types of receiving circuits. Laboratory fee, $\$ 3.00$.
Prerequisite: I. Art 154.
Mr. Ross.
First year, first semester, two hours lecture, four hours laboratory.

3 units.
116. Radio Construction 117. A continuation of I. Art 115, involving a study of the more advanced types of receiving sets; testing and servicing; vacuum tube characteristics. Constructional work and laboratory practice. Laboratory fee, $\$ 3.00$.

Mr. Ross.
First year, second semester, two hours lecture, four hours
laboratory.
3 units.
215. Radio Construction 127. Designed to acquaint the student with the fundamentals of radio transmission. Oscillating circuits; system of modulation, antenna systems; frequency measurements; international Morse code; government regulations. The student is required to pass equivalent of a government examination for an amateur operator's license. Laboratory fee, $\$ 3.00$.
Prerequisite: I. Art 116.
Mr. Ross.
Second year, first semester, two hours lecture, four hours laboratory.

3 units.
107. Forge 114. The content of this course combines a thorough study of, and practice in the elements of forging; drawing, bending, upsetting, welding, casehardening and tempering. Allied topics are also covered. Prescribed for students majoring in I. Arts. Laboratory fee, $\$ 2.00$.

Mr. Ross.
First year, first semester, six hours laboratory.
3 units.
108. Agricultural Mechanics 104. Designed to meet the needs of students of agricultural and farm management. Laboratory fee, $\$ 2.00$.

Mr. Ross.
Mr. Ross.
First year, second semester, six hours laboratory.
3 units.
111. Machine Shop 105. A beginning course in machine shop practice. The projects include filing, drilling, turning, and polishing
done with hand tools; general use of machine equipment. Prescribed for students majoring in I. Arts. Laboratory fee, $\$ 2.00$. Mr. Fioss.
First year, first semester, six hours laboratory. 3 units.
112. Machine Shop 115. Devoted to the making of industrial projects involving the use of the complete machine equipment of the department. The work is technical and practical to fit men as machinists and auto mechanics, as well as for teachers in the secondary schools. Prescribed for all students majoring in I. Arts. Laboratory fee, $\$ 2.00$.

Mr. Ross.
First year, second semester, six hours laboratory. 3 units.
160. Sheet Metal Work 108. This course is to prepare the student to teach this work in junior high school classes. Laying out and cutting of sheet metal; soldering; riveting; projects from utensils to and including mechanical toys. Prescribed for all students preparing to teach prevocational courses in junior high school. Laboratory fee, $\$ 2.00$.

Mr. Ross.
Second semester, second year, six hours laboratory.
3 units.
206. Sheet Metal Work 208. A course to include projects involving problems in roofing; cornice work, practical intersections and developments; use of sheet metal machines. For students preparing to teach in secondary schools or going into the trade. Laboratory fee, $\$ 2.00$.

Mr. Ross.
Third year, second semester, six hours laboratory. 3 units.
203. Direct Current Electricity 203. Includes a study of electric current; power and work; resistance; rheostats and resistors, the direct current electric circuit; magnets and magnetism; the magnetic effect of the electric current; induced electromotive force; and electrostatics, and condensers.
Prerequisite: I. Art 154.

> Mr. Ross.
> First semester, three hours a week.

3 units.
203a. Direct Current Laboratory 213. A laboratory course given in conjunction with I. Art 203. The experiments are designed to acquaint the student with the care and use of direct current measuring instruments as well as to demonstrate the various properties of the direct current electric circuit. Laboratory fee, $\$ 2.00$.

Mr. Ross.
Third year, first semester, three hours a week.
1 unit.
251. Alternating Current Electricity 243. Embodies a study of alternating currents and voltages; inductance; impedance; power and power factor; single and polyphase circuits; the production of
polyphase voltages; theory of operating characteristics of alternating current machines.
Prerequisites: I. Arts 204 and 204a.
Mr. Ross.
Fourth year, first semester, three hours lecture.
3 units.
251a. Alternating Current Laboratory 253. Experiments include voltage, current, and power measurements in inductive and noninductive circuits; impedance; inductance; capacitance. Concise and intelligent reports are required.
Prerequisite: Enrollment in I. Art 251.
Mr. Ross.
Fourth year, first semester, three hours laboratory.
1 unit.

## DEPARTMENT OF FOREIGN LANGUAGES

## Dr. Cattelain, Miss Wilson.

This department provides special training for students preparing to teach in secondary schools, for pre-professional students who require a knowledge of French and German, and for any student desiring a liberal education.

Since Spanish is the language most frequently offered and taught in the high schools of Arizona, this department offers a major in that language, plus a minor in French, and a year and a half of German. The Spanish major consists of thirty units of college work or its equivalent. It is strongly recommended that students majoring in Spanish make French their minor. English and social science are also acceptable as minors for students majoring in foreign language. Beginners in foreign language shall not receive credit for less than two semesters' work.

Lower division courses are numbered from 100 to 199; upper division courses, from 200 to 299.

# TYPE CURRICULUM FOR STUDENTS MAJORING IN FOREIGN LANGUAGES 

| Freshman Year |  |
| :---: | :---: |
| First Semester | Second Semester |
| Units | its |
| Engl. 101 Composition .... 3 | Engl. 102 Composition .... 3 |
| Science - -.....--...............-. 4 | Science ....................----. 4 |
| *Mus. 100 Fundamentals .... 2 | *Art 110 Publ. School Art 2 |
| *Hygiene .-.-.................. 2 | *S. Sci. 100 Const. Govt..... |
| *Engl. 160 Library Practice 1 |  |
| P. E. Activity .................. 1/2 | P. E. Activity .................. 1/2 |
| Span. 101 Elem. Spanish.. 4 | Span. 102 Elem. Spanish. |
| $16^{1 / 2}$ | $16^{1 / 2}$ |
| Sophomore Year |  |
| *Psych. 100 Gen. Psych. --.. 3 | *Educ. 120 Sociology -...... |
| *Geog. 100 Elem. of Geog. 3 | *G. Sci. 120 Biol. Proj. |
| Social Studies (See Note 2) 3 | Social Studies (See Note 2) |
| P. E. Activity ...............-- 1/2 | P. E. Activity ................. 1/2 |
| Span. 103 Interm. Spanish 4 | Span. 104 Adv. Spanish.... |
| Fren. 101 Elem. French .... 4 | Fren. 102 Elem. French |
| 171/2 | $171 / 2$ |
| Junior Year |  |
| *Educ. 230 Prin. Teaching 3 | *Educ. 220 School Man. .... 3 |
| *Psych. 200 Educ. Meas. .... 3 | *Elective .-....................... |
| Span. 201 Contemporary 3 | Span. 202 Classics .......... 3 |
| Span. 205 Adv. Gram. .... 2 | Span. 204 Literature |
| Fren. 103 Inter. French .... 4 | Fren. 201 Composition |
| 15 | 15 |
| Senior Year |  |
| *Educ. 250 Phil. Educ. ...... 3 | *Educ. (Elective)......(2 or) 3 |
| *Directed Teaching -...-....... 10 | *Elective ….................... 10 |
| Span. 203 Literature ........ 3 | Fren. 202 French Theatre 3 (or Fren. 203 Lit.) |
| 16 | 16 |

[^12]
# SPANISH LANGUAGE AND LITERATURE <br> Miss Wilsan 

## Lower Division Courses

Spanish 101. Elementary Spanish. Designed to give the beginner a knowledge of the fundamentals of pronunciation and grammar. Not open to those who have had previous instruction in Spanish. Text: House and Mapes-Essentials of Spanish Grammar. First semester, four hours a week.
102. Elementary Spanish. A continuation of Span. 101. To the study of grammar is added the reading of several elementary texts. Prerequisite: Span. 101 or one year of high school Spanish.

Second semester, four hours a week.
4 units.
103. Intermediate Spanish. Along with a review of grammar, reading is given which stresses vocabulary-building and accuracy of expression.
Text: Parker and Rioseco-Intermediate Spanish Grammar.
Prerequisite: Span. 102 or equivalent. First semester, four hours a week.

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

## Upper Division Courses

201. Contemporary Writers. An introduction to types of modern literature, including a study of La Barraca and other works of members of the Generation of 1898.
Prerequisite: Span. 104 or equivalent.
First semester, three hours a week.
3 units.
202. Spanish Classics. Readings of masterpieces of the Siglo de Oro, including Lope de Vega, Cervantes, and Calderon.
Prerequisite: Span. 201.
Second semester, three hours a week. 3 units.
203. Survey of Spanish Literature to 1700 . A history of the literature from its beginnings through the Golden Age. Lectures, illustrative readings, and reports.
Text: Romera-Navarro-Antologia de la literatura espanola.
Open only to juniors and seniors. Required of all Spanish majors. Prerequisite: Span. 202.

First semester, three hours a week.
3 units.
204. Survey of Spanish Literature from 1700 to 1898. Essential features of Romanticism and the growth and development of the regional novel. Lectures, discussions, and reports on outside readings. Open only to juniors and seniors. Required of all Spanish majors.
Prerequisite: Spanish 203.
Second semester, three hours a week.
3 units.
205. Advanced Grammar and Composition. A practical course in writing Spanish. Castillo and Montgomery-Advanced Spanish Composition is used along with Ramsey-A Textbook of Modern Spanish.
Required for the department's recommendation to teach.
Prerequisite: Span. 104.
First semester, two hours a week.
2 units.
206. Spanish American Literature. A survey of the principal movements and literary achievements of Hispanic America. Lectures, discussions, and illustrative readings.
Open only to juniors and seniors.
Second semester, three hours a week. 3 units.

## FRENCH AND GERMAN LANGUAGES <br> Dr. Cattelain

## French

French 101. Elementary French. A beginner's course. Selfexpression and oral drill in French practiced through the course. Scientific method of pronunciation emphasized. (This course is not opened to those who have had previous training in French.) Text used: de Sauze's Francais pour Commencants.

Dr. Cattelain.
First semester, four hours a week. 4 units.
102. Elementary French. A continuation of 101. Oral drill increased by means of dialogues, songs and conversations. Students are trained to express their thoughts in short French sentences. Texts used: De Sauze's Francais pour Commencants, Le Voyage de Monsieur Perrichon.
Prerequisite: French 101 or one year of high school French.
Dr. Cattelain.
Second semester, four hours a week.
4 units.
103. Intermediate French. A composition and grammar review course during the first nine weeks, followed by a fast reading course. Texts used: Carnahan's Intermediate French Grammar and Composition; Anatole France's Le Livre de mon Ami.
Prerequisite: French 102 or its equivalent.
Dr. Cattelain.
First semester, four hours a week. 4 units.
202. Reading and Composition. A reading and composition course, with dictations and phonetics. This course aims at a greater fluency of the spoken French. Extracts from modern French writers are read.

Dr. Cattelain.
Second semester, three hours a week.
3 units.
203. The French Theatre. The French theatre from the Renaissance to the Romantic period. Works of Moliere, Corneille, Racine, Marivaux, Lesage, and others are read.

Dr. Cattelain.
First semester, three hours a week.
3 units.
204. French Literature. The Romantic, Realistic, and Naturalistic schools in French literature. Works of Victor Hugo, Musset, Lamartine, Flaubert, Anatole France, and others are studied.

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

## German

German 101. Elementary German. A beginner's course. The aim of this course is to teach the principles of German grammar and pronunciation. Text used: Alexis' First German Course. (Not open to those who have had previous training in German.)

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

Dr. Cattelain.
Second semester, four hours a week.
4 units.
103. Intermediate German. A composition and grammar review course, together with a rapid reading course. Texts used: Pope's, Simple Writing and Speaking German; Alexis and Pfeiler's, In Deutschland.

Dr. Cattelain.
First semester, four hours a week.
4 units.

# DEPARTMENT OF MATHEMATICS 

## Dr. Wexler (Head of the Department)

Every student of good capacity, in whatever direction his special interest may lie, whether scientific or literary, is advised to include in his program of study mathematical courses covering the fundamental concepts of the calculus. These concepts should be a part of one's educational and cultural background.

Students who look forward to industrial or commercial research of mathematical character, or to the teaching of mathematics, should major in mathematics.

In the description of mathematics courses which follows, a star (*) prefixed to the number of a course indicates that the course must not be taken without the previous consent of the instructor.

## The Major in Mathematics

To major in mathematics, a total of thirty units, including Math. 232, must be taken during the four years of the curriculum, with not more than nine units of lower division courses counted toward the major. Certain upper division courses in the department of physics, of mathematical character, may be counted toward a mathematics major.

The outline which follows represents a typical four year curriculum with an approved major in mathematics. Rearrangements and substitutions to fit particular cases may be made with the advice and approval of the head of the department.

Students majoring in other fields may elect a minor in mathematics with the approval of the major adviser and the head of the department of mathematics.

# TYPE CURRICULUM FOR STUDENTS MAJORING IN MATHEMATICS 

## Freshman Year

| First Semester | Second Semester |
| :---: | :---: |
| Engl. 101 Composition .... ${ }^{\text {U }}$ | Engl. 102 Composition .... $3^{\text {Units }}$ |
| Science ....-.............(3 or) 4 | Science .-............... (3 or) 4 |
| *Mus. 100 Fundamentals .... 2 | *Art 110 Publ. School Art 2 |
| *Hygiene .......................... 2 | *S. Sci. 100 Const. Govt..... 3 |
| *Engl. 160 Library Practice $1_{1 /}$ |  |
| P. E. Activity ................ 1/2 | P. E. Activity ................. 1/2 |
| Math. 107 College Algebra 3 | Math. 120 Plane Trig. .-.-.. 3 |
| Elective .......................... 1 | Elective |
| $16^{1 / 2}$ | $161 / 2$ |

## Sophomore Year

| *Psych. 100 Gen. Psych. .... 3 | *Educ. 120 Sociology |
| :---: | :---: |
| *Geog. 100 Elem. of Geog. 3 | *G. Sci. 120 Biol. Proj. ...... 3 |
| Social Studies (See Note 2) 3 | Social Studies (See Note 2) 3 |
| Math. 201 Anal. Geom. .-.. 4 | Math. 222 Diff. Calculus.- 4 |
| Elective or Minor .-...-....... 3 | Math. 112 Adv. Algebra.- |
| P. E. Activity ..................- 1/2 | P. E. Activity ...............-- 1/2 |
| $16^{1 / 2}$ | $161 / 2$ |



| Senior | Year |
| :---: | :---: |
| *Educ. 250 Phil. Educ. .... 3 | *Educ. (Elective) ......(2 or) 3 |
| *Directed Teaching ........... 10 | *Elective or Minor ........... 10 |
| Math. 250 Special Topics (or Math. Elective) $\qquad$ | Math. 250 Special Topics (or Math. Elective) $\qquad$ |
| 16 | 16 |

Note 1. In the case of the starred courses, sections are to be so arranged that half of the group will take the course in the first semester and half in the second semester.
Note 2. The sophomore courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; 113; and Ficon. 131, 132.
Note 3. Electives will be so chosen as to include a minor of at least fifteen units in a ficld of learning other than mathematics or education.

## COURSES IN MATHEMATICS

107. College Algebra. A study of fundamental laws, negative and fractional indices, quadratic equations, the binomial theorem, curve plotting. Course 107 is essential in the study of higher mathematics and science. Intended for students who have had but one year of high school algebra or who have not had algebra recently.
Prerequisite: one entrance unit in algebra.
Dr. Wexler.
Flist semester, three hours a week.
3 units.
*112. College Algebra. Simultaneous quadratics, arithmetic and geometric progressions, permutations and combinations, the binomial theorem, complex numbers, determinants, the theory of equations. Prerequisite: Math. 107.

Dr. Wexler.
Second semester, three hours a week.
3 units.
*120. Plane Trigonometry. Definitions of the trigonometric functions, proofs and applications of the fundamental relations among these functions, logarithms, solutions of right and oblique triangles, identities and trigonometric equations.
Prerequisite: Math 107 and one entrance unit in geometry.
Dr. WexIer.
Second semester, three hours a week. 3 units.
*201. Analytic Geometry. A study of the conic sections by the methods of analytic geometry; polar coordinates; solid analytic geometry.
Prerequisite: Math. 120.
Dr. Wexler.
First semester, five hours a week.
4 units.
*222. Differential Calculus. The theory and applications of the fundamental concepts of the calculus.
Prerequisite: Math. 201.
Dr. Wexler.
Second semester, five hours a week. 4 units.
*231. Integral Calculus. Integration of functions of a single variable; the integral as the limit of the sum; problems in volumes and areas; center of gravity; problems in mechanics; rectilinear and constrained motion of a particle; infinite series, regarded primarily as a means of computation; Taylor's theorem.
Prerequisite: Math. 222.
Dr. Wexler.
First semester, flve hours a week.
4 units.
*232. Advanced Calculus. Partial differentiation, double anid triple integrals; general methods of integration; applications.
Prerequisite: Math. 231.
Dr. Wexler.
Second semester, five hours a week.
4 units.
*221. The Theory of Numbers. Divisibility of integers, congruences, residues, quadratic residues, the Theorem of Reciprocity. Although there is no prerequisite for this course, a certain mathematical maturity is required.

## Dr. Wexler.

First semester, three hours a week. 3 units.
*250. Special Topics in Mathematics. In this course advanced topics are chosen by the student with the approval of the instructor, and mastered almost entirely by the student's own efforts. From time to time individual conferences are held with the instructor for help, advice and encouragement. One or more reports showing a mastery of the chosen topics are required. This course is open only to mathematics majors during the junior and senior years (under special circumstances in the sophomore year.)
Prerequisite: Math. 222.
Dr. Wexler.
Third or fourth year, either semester.
1, 2 or 3 units.

## DEPARTMENT OF MUSIC

## Miss Norton (Acting Head of the Department) <br> Miss Barkley, Mr. Hoyer, Mr. Russell

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.

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

## The Major in Music

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

## Music Minors

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

> Suggested Sequence for Minors in Music
Music 102 Advanced Sight Singing and Ear Training ..... 2
Music 109 Appreciation ..... 2
Music 211 orMusic 212 Music Education3
Music 209 Problems in Extra-Classroom Activities ..... 3
Music Activities-Band, Orchestra or Glee Club ..... 5

# TYPE CURRICULUM FOR STUDENTS MAJORING IN MUSIC 

## Freshman Year



Note 1. In the case of the starred courses, sections are if be so arranged that half of the group will take the course in the first semester and half in the second semester.
Note 2. The sophomore courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; 113; and Econ. 131, 132.
Note 3. Electives will be so chosen as to include an approved minor of at least fifteen units in a field of learning other than music or education.

## COURSES IN MUSIC

## Lower Division Courses

Music 100. Fundamentals of Music. This course includes song singing with and without syllables, in unison and in parts; common symbols of notation and their application; discovery and development of rhythms through singing and listening. Men and women are placed in separate sections. Required of all candidates for graduation.

First year. either semester, two hours a week.
2 units.
102. Advanced Sight Singing and Ear Training. Further development of music reading with special attention to aural recognition and writing. Emphasis upon the harmonic substructure of melody. Required of all music majors.
Prerequisite: Music 100.
First year, second semester, two hours a week.
2 units.
103. Harmony 1. A study of scale forms, intervals, triads, inversions; tonic and dominant progressions; cadences and inharmonic tones. Simple harmonization of section and phrase. Free composition. Keyboard application throughout. Required of all music majors.
Prerequisite: Music 102 or equivalent.
Second year, second semester, three hours a week. 3 units.
104. Harmony 11. A continuation of Harmony I. Subdominant and super-tonic harmony. Emphasis on relation of rhythm and harmony. Analysis and free composition. Keyboard application throughout. Required of all music majors.
Prerequisite: Music 103 or equivalent.
Sccond year, first semester, three hours a week.
3 units.
107a-b:108a-b Applied Music. Piano. Courses are arranged according to the needs of the student. Provision is made for the beginner and for the advanced student working on repertoire. Two lessons per week.

Each student is required to play before the music department faculty once during each quarter. Advanced students play in recital once during the year. Required of all music and kinder-garten-primary majors.

Any year, either semester, two lessons a week.
1 unit.
105a-b:106a-b Applied Music. Voice. Voice building for beginners or those working on repertoire. Attention is given to resonance, breath support, diction, style, and interpretation. Lessons to be arranged with head of the department. Required of music majors unless excused.

Ary year, either semester, two lessons a week,
1 unit.
109. Music Appreciation. A course designed to develop judgment and discrimination in listening to music. The material used consists largely of phonographic recordings, and includes standard instrumental and vocal works. Procedures are applicable both to the non-music student and the prospective teacher of music. Recquired of music majors.

First or second year, first semester, two hours a week. 2 units.
110. Public School Music. A survey designed to prepare the teacher to handle classroom music in the elementary grades. Study of the child voice; the musically deficient; selection and teaching of rote songs; presentation of rhythmic and tonal problems incident to these grades. Attention to the State Course of Study in Music. Open to all qualified students.
Prerequisite: Music 100 or equivalent.
Second year, either semester, two hours a week.
2 units.
150. College Chorus. Open to all college men and women having a correct sense of pitch and interested in chorus work. On certain occasions the chorus is combined with the glee clubs.

Any year, either semester, two hours a week.
$1 / 2$ unit each semester.
151, 152. Women's Glee Club. Membership in this organization is open to women students who can qualify. Apply to the director. Women should plan to remain in the glee club one full year in order to receive the benefit of public appearance in the mid-winter and spring.

Any year, either semester, four hours a week 1 unit each semester.
(except by arrangement).
153, 154. Men's Glee Club. Membership in this organization is open to men students who can qualify. Apply to the director. Men should plan for a year's membership in order to receive the benefit of public appearance in the mid-winter and spring.

Any year, either semester, four hours a week (except by arrangement).

1 unit cach semester.

## 167a-b Violin First year.

$167 \mathrm{c}-\mathrm{d}$ Violin. Second year.
Any year, either semester, two lessons per week. 1 unit each sem.
168 a. Reed Instruments. First semester.
168 b. Reed Instruments. Second semester.
Any year, either semester, two lessons per week. 1 unit each sem.
169 a. Brass Instruments. First semester.
$£ 69$ b. Brass Instruments. Second semester.
Any year, either scmester, two lessons per week. 1 unit each sem.

Instrumental lessons and hours are arranged with the director of the orchestra. Students sufficiently proficient are admitted to the beginners' orchestra or to the college orchestra.
161, 162. Beginners' Orchestra. Apply to the director for membership.

Any year, either semester, two hours a week. $1 / 2$ unit each sem.
163, 164. Concert Band. The band drills in marching and formations and wears the adopted uniform. The organization plays for college athletic contests and other public occasions. Application for membership is made to the director and admission is arranged after a satisfactory showing of ability.

Any year, either semester, five hours a week (except by arrangement).

1 unit each sem.
165, 166. Concert Orchestra. This orchestra is symphonic in character and maintains a membership of about thirty-five. Application for membership is made to the director and admission is arranged after a satisfactory showing of ability.

Any year, either semester, five hours a week (except by arrangement).

1 unit each sem.

## Upper Division Courses

Music 201. Harmony III. A continuation of Harmony I and II. Includes modulations, chromatic harmony, analysis and free composition. Keyboard application throughout. Required of all music majors.
(Not offered in 1934-35)
Prerequisite: Music 103, 104, or equivalent.
Third year, first semester, three hours a week. 3 units.
211. Music Education in Primary and Intermediate Grades. This is a methods course for students majoring in music and preparing to become special teachers or supervisors. The work is arranged also for kindergarten-primary majors. Open to all qualified students. Music Majors register also for Music 212, second semester. Prerequisite: Music 100, 107, 108, or equivalent.

Third year, first semester, three hours a week. 3 units.
212. Music Education in Junior and Senior High School. A continuation of Music 211. Required of music majors.
Prerequisite: Music 211.
Third year, second semester, three hours a week. 3 units.
202. Music Literature and History. A cultural course dealing with various epochs in the development of music from primitive to modern times. The college record library affords valuable opportunity for the study of masterpieces from Beethoven to the present. Required of all music majors.
Prerequisite: Music 109 or equivalent.
Fourth year, second semester, two hours a week. 2 units.
205. Choral Conducting. Designed to afford music majors and others with superior musical ability the opportunity to develop initiative and leadership, and to learn the fundamentals of teaching and conducting community singing and part work in large vocal groups. Required of all music majors unless registered for Music 207.
Prerequisite: Music 100, 102, Glee Club, and theory courses of first three years or equivalent. Fourth year, first semester, three hours a week. 3 units.
207. Instrumentation and Conducting. A course designed especially for teachers of instrumental music. In addition to conducting, the work covers the range, tuning, and playing technique of the various band and orchestra instruments, transposition, and possible substitutions. Required of music majors unless registered for Music 206. Prerequisite: Music 100, 102, band or orchestra, and theory courses of the first three years or equivalent. Fourth year, first semester, three hours a week.

3 units.
208. Piano Accompanying. This course is designed to broaden the general usefulness of the teacher of music. The work includes accompaniment of vocal and instrumental solos and of group and choral singing, transposition, interpretation, sight-reading, and keyboard harmonization of melodies.
Prerequisite: Music 100, 107, and 108.
Third year, second semester, two hours a week. 1 unit.
212. Problems in Extra-Classroom Music Activities. A practical course dealing with music problems frequently met outside the classroom period. These include auditorium work, projects, special days, music-plays, materials, rehearsals, assembly singing, entertainments, instrumental classes. Open to interested and qualified students. Required of music majors and minors.
Prerequisite: Music 100, 211 or 212.
Fourth year, second semester, three hours a week. 3 units.

# DEPARTMENT OF PHYSICAL EDUCATION 

Mr. Lavik (Head of the Department), Miss Murphy, Miss Marten, Mr. Pomeroy, Mr. Selleh.

The department of physical education has a threefold mission:

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

## Core Curriculum Requirements

A two-hour course in hygiene is required of all freshmen. Every student is required to take an activity course during each of his first four semesters for a total credit of two units. During the freshman year, this course (sports survey) is prescribed, and participation in freshmen or varsity major sports may not be substituted. After the Sports Survey course is completed, the student may elect any activity he chooses, or may substitute major sports participation.

## Athletics

Opportunity is provided for students to take part in intramural and in intercollegiate athletics. Participation in men's athletics is subject to the eligibility rules of the Border Faculty Athletic Conference. Field Day Competition and a comprehensive intramural program offer opportunities for women to participate in athletics. Games in all sports are scheduled with the various school and independent teams of the vicinity. These games are sponsored and very carefully supervised by faculty members of the department.

## Majors and Minors

The department offers a four year curriculum leading to a major in physical education which qualifies graduates to teach the subject in the elementary and the secondary schools of the state. The minimum departmental requirement for a major is 24 units and for a minor, 15 units. In either case, the following three subjects must be included: Biol. 231, Anatomy; Biol. 120, Human

Physiology; and P. E. 215-216, Techniques of Activities. Courses which are required of all students, such as P. E. 100, Hygiene, and the first two years of activity courses, cannot be counted toward a major or a minor.

## RECOMMENDED SEQUENCE OF COURSES

## Freshman Year

P. E. 100 Personal Hygiene (may be taken either semester) ..... 2Hours
P. E. 101, 102 (Women) Sports Survey, or 111, 112 (Men) ..... 1
Sophomore Year
First Semester-
Activity (individual choice) ..... 1/2
P. E. 231 First Aid ..... 1
Biol. 231 Anatomy ..... 3
Second Semester-
Activity (individual choice) ..... $1 / 2$
Biol. 120 Human Physiology ..... 3
Junior and Senior Years
First Semester-
Activities (Elective, one-half hour each semester) ..... 1
P. E. 207 Coaching (Women) Continued through the year ..... 2
P. E. 215 Techniques of Physical Activities ..... 2
P. E. 217 Coaching (Men) Continued through the year ..... 2
P. E. 251 Applied Anatomy and Kinesiology ..... 3
Second Semester-
Activities (Elective, one-half hour each semester) ..... 1
P. E. 208 Coaching (Women) Continued from first semester ..... 2
P. E. 216 Techniques of Physical Activities. Continued from first semester ..... 2
P. E. 218 Coaching (Men) Continued from first semester ..... 2
P. E. 232 Social Recreation Leadership ..... 2
P. E. 236 Organization and Administration of Physical Education ..... 3
P. E. 252 Scout Leadership ..... 2
P. E. 254 Physiology of Exercise ..... 4
Either Semester-
P. E. History and Principles of Physical Education ..... 3
P. E. 230 School Health ..... 3
P. E. 260 Campfire Leadership ..... 1

# TYPE CURRICULUM FOR STUDENTS MAJORING IN PHYSICAL EDUCATION 

| First Semester Freshman | Year Second Semester |
| :---: | :---: |
| Engl. 101 Composition ... 3 | Engl. 102 Composition Units |
| Science ................ (3 or) 4 | Science ................. (3 or) 4 |
| *Mus. 100 Fundamentals .... 2 | *Art 110 Publ. School Art 2 |
| *Hygiene ..................-......... 2 | *S. Sci. 100 Const. Govt....- 3 |
| *Engl. 160 Library Practice 1 |  |
| P. E. Activity .-................- 1/2 | P. E. Activity .................. 1/2 |
| Minor or Elective .-...........- 4 | Minor or Elective .-.........-- 4 |
| $16^{1 / 2}$ | $16^{1 / 2}$ |
| Sophomore | - Year |
| *Psych. 100 Gen. Psych. .... 3 | *Educ. 120 Sociology ........ 3 |
| *Geog. 100 Elem. of Geog. 3 | *G. Sci. 120 Biol. Proj. .-. 3 |
| Social Studies (See Note 2) 3 | Social Studies (See Note 2) 3 |
| P. E. Activity ................... 1/2 | P. E. Activity .................. 1/2 |
| Biol. 231 Anatomy .......... 3 | Biol. 120 Human Physiol. 3 |
| Minor and Elective .......... 3 | Minor and Elective .........- 3 |
| $15^{1 / 2}$ | $15^{1 / 2}$ |
| Junior | Year |
| *Educ. 230 Prin. Teaching 3 | *Educ. 220 School Man. .... 3 |
| *Psych. 200 Educ. Meas. .... 3 | *Elective ............................ 3 |
| P. E. Activity .................. 1/6 | P. E. Activity ....-.............- 1/6 |
| P. E. 207 or 217 Coaching 2 | P. E. 208 or 218 Coaching 2 |
| P. E. 215 Techniques ..-... 2 | P. E. 216 Techniques .---.... 2 |
| Minor or Elective .............. 5 | Minor or Elective .-........... 5 |
| $15^{1 / 2}$ | $15^{1 / 2}$ |
| Senior | Year |
| *Educ. 250 Phil. Educ. .....- 3 | *Educ. (Elective) ...... (2 or) 3 |
| *Directed Teaching ........... 10 | * Minor or Elective ............. 6 |
| P. E. 251 Kinesiology ...... 3 | P. E. 254 Physiol. Exerc. 4 P.E. 236 Org. \& Adm. P.E. 3 |
| P. E. Activity ................. 1/2 | P. E. Activity .................. 12 |
| $16^{1 / 2}$ | $16^{1 / 2}$ |

Note 1. In the case of the starred courses, sections are to be so arranged that half of the group will take the course in the first semester and half in the second semester.
Note 2. The sophomore courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; 113; and Econ. 131, 132.
Note 3. Electives are to be so chosen as to include an approved minor of at least fifteen units in a field other than physical education.
Note 4. P. E. majors may elect four more units from following upper division courses: P. E. 231. First Aid. 1 unit; P. E. 232, Soc. Recr. Leadership, 2 units; P. E. 252. Scout Leadership, 2 units; P. E. 200, Hist. and Prin. of Phys. Educ., 2 units; P. E. 230, School Health, 3 units; P. E. 260. Campfire Leadership, 1 unit.

## DESCRIPTION OF COURSES

P. E. 100. Hygiene. Deals with the physical and mental well being of the individual. Required of all students during the freshman year. Separate sections are offered for men and for women.

Miss Murphy, Mr. Lavik.
First year, either semester, two hours a week.
2 units.
101, 102. Sports Survey Course (Women). Required of all women in the freshman year. Participation in sports and team games for women. Students will be divided into groups on the basis of ability, and those who show sufficient aptitude will be transferred to the athletic class.

Miss Murphy, Miss Marten.
First year, two semesters, two hours a week. $1 / 2$ unit each sem.
103, 104. Athletics (Women). An advanced course, open to all women students who are candidates for interclass teams in hockey, basketball, volleyball, baseball, or track and field athletics.

Miss Murphy, Miss Marten.
First year, two semesters, four hours a week. $\quad 1 / 2$ unit each sem.
110. Elementary Clogging. Simple buck, waltz, clog, and softshoe routines leading up to the original routines by students.

Miss Marten.
Second year, either semester, two hours a week. $1 / 2$ unit.
111, 112. Sports Survey Course (Men). Required of all men in the freshman year.

Mr. Pomeroy.
First year, two semesters, two hours a week. $1 / 2$ unit each sem.
113, 114. Athletics (Men). An advanced course open to men who are accepted as candidates for college teams.

Staff.
Second year, two semesters, five hours a week. $1 / 2$ unit each sem.
117. Folk Dancing. National dances of American and foreign origin.

Miss Marten.
Second year, first semester, two hours a week. $1 / 2$ unic.
118. Advanced Clogging. A continuation of P. E. 110, Elementary Clogging.

Miss Marten.
Second year, second semester, two hours a week. $1 / 2$ unit.
120. Golf. (Open to men and women.) Beginning and advanced sections.

Mr. Selleh.
Either semester, two hours a week. $1 / 2$ unit.
121, 122. Interpretative Dancing. Includes rhythm training, fundamental natural movements of the body, and the appreciation of music in relation to the dance.

Miss Marten.
Second year, two semesters, two hours a week. $\quad 1 / 2$ unit each sem.

123, 124. Tumbling. Beginning and advanced sections for men, and a separate beginning section for women.

> Mr. Pomeroy.

Second year, two semesters, two hours a week. $1 / 4$ unit each sem.
125, 126. Boxing. (Men).
Mr. Pomeroy.
Second year, two semesters, two hours a week. $1 / 2$ unit each serm.
127, 128. Wrestling. (Men).
Mr. Pomeroy.
Second year, two semesters, two hours a week. $1 / 2$ unit each sem.
130. Tennis (Open to men and women.) Students taking this course will be divided into beginning, intermediate, and advanced sections.

Staff.
Either semester, two hours a week. $1 / 2$ unit each sem.
140. Archery (Open to men and women.) Beginning and advanced sections.

Miss Marten.
Either semester, two hours a week. $1 / 2$ unit.
200. History and Principles of Physical Education. Introduces the student to the physical education field from the standpoint of scope and development. Emphasis is laid upon extensive rather than intensive study. Required of all majors.

Mr . Pomeroy.
Third year, either semester. 3 unita.
205. Techniques of Dancing. Practice and presentation of interpretative dancing, folk dancing, and clogging. Required of all women physical education majors.

Miss Marten.
Third year, first semester, three hours a week. 2 units.
207, 208. Coaching (Women). Theory of coaching major sport activities with practical experience in the conducting of high school girls' sports.
Prerequisite: P. E. 103, 104, Athletics.
Miss Marten.
Third or fourth year, two semesters.
1 unit each sem.
215, 216. Techniques of Physical Activities. Includes the practice and presentation of individual sports, stunts, gymnastics, group and team games, and rhythmical activities. Rhythmical activities include story games, singing games, and simple folk dances.

Staff.
Third year, two semesters, three hours a week. 2 units each sem.
217, 218. Coaching (Men). Theory and techniques of major sport activities.
Prerequisite: P. E. 113, 114, Athletics.
Staff.
Third or fourth year, two semesters, two hours a week.

2 units each sem.
230. School Health. Considers problems of personal hygiene and community sanitation. Prepares students to outline and construct health programs for children at different age levels and in different types of schools.
Prerequisite: Biol. 120, Human Physiology.
Miss Murphy.
Third or fourth year, either semester, three hours a week. 3 units.

## 231. First Aid.

Mr. Lavik.
Second year, first semester, one hour a week. I unit.
232. Social Recreation Leadership. Enables recreational leaders to discover the purposes of recreational programs and to develop leadership techniques. Offers a brief for the promotion of recreation by the community and stresses the importance of a commun-ity-centered recreational program.

Mr. Selleh.
Third or fourth ycar, second semester. 2 units.
236. Organization and Administration of Physical Education. Prepares the student to organize and conduct playdays, track meets, field days, and other athletic programs.

Miss Murphy.
Third or fourth year, second semester, three hours a week. 3 units.
251. Applied Anatomy and Kinesiology. Origins, insertions, and actions of muscles with considerable emphasis upon postural problems.
Prerequisite: Biol. 231, Human Anatomy.
Mr. Lavik.
Third year, first semester, three hours a week. 3 units.
252. Scout Leadership. Opportunity for actual practice as assistant scoutmasters in a live scout troop.

Mr . Macomber.
Second semester, two hours a week. 2 units.
253. Community Recreation. A study of tax supported recreation, its history, present status, and trends. Attention is given to the correlation of the various agencies now engaged in administrating public recreation. The role of community dramatics, community music, and community art are discussed. How to conduct playgrounds, municipal sports, community centers, summer camps, and general recreational service are presented through the medium of lectures, demonstrations, and recitations.

Mr. Selleh.
Third or fourth year, two hours a week.
2 units.
254. Physiology of Exercise. The effects of exercises upon bodily functions. The literature concerning tests and measurements in physical education is reviewed.
Prerequisite: Biol. 120, Human Physiology.
Mr. Lavik.
Third or fourth year, second semester, three hours a week. 4 units.

## 260. Campfire Leadership.

Miss Anderson.
Third or fourth year, either semester, one hour a week. 1 unit.
Biol. 120. Human Physiology.
Mr. Irish.
Second year, second semester, three hours a week. 3 units.
Biol. 231. Human Anatomy. Laboratory fee $\$ 3.00$.
Mr. Trish.
Second year, first semester, three hours a week. 3 units.

# DEPARTMENT OF PSYCHOLOGY 

Dr. Grimes (Head of the Department), Dr. Burkhard, Mr. Payne

The Minor in Psychology must include Psych. 100, General Psychology; Psych. 200, Educational Measurements; Psych. 213, Educational Psychology, and six additional hours in psychology courses selected by the student.

## DESCRIPTION OF COURSES

Psych. 100. General Psychology. An introductory study of the field of mental life. The primary emphasis is placed on normal adult psychology with application of the facts to the control of human behavior. The course aims to lay a foundation for all later study in education or psychology, and to give a general appreciation of the psychological approach to an analysis of animal and human behavior.

Dr. Grimes.
Second year, either semester, three hours a week. 3 units.
213. Educational Psychology. Based upon the findings of general and experimental psychology. It makes a study of original nature, the learning process, and individual differences. The facts pertaining to the effective use of subject matter in the educative process are evaluated in keeping with the laws of the learning process. Prerequisite: Psych. 100, General Psychology.

Dr. Grimes.
Third or fourth year, first semester, three hours per week. 3 units.
225. Social Psychology. This is an advanced course in psychology dealing with the science of social relationship. Problems of social
organization, social control, racial cultures, leadership, communication, imitation, heredity and environment, are given attention. Problems in education, industry, commerce, and social organization are analyzed in the light of modern psychology.
Prerequisite: Psychology 100.
Dr. Burkhard.
First semester, three hours per week, third or fourth year. 3 units.
200. Educational Measurements. A course dealing with the use and interpretation of intelligence and achievement tests. The relationship of these devices to the administration and supervision of instruction, simple statistical and graphic methods, the significance of scores and diagnostic value of results obtained are carefully considered. The student is prepared to give, score, and interpret, the important tests now in use in the elementary schools.
Prerequisite: Psychology 100.
Dr. Grimes, Mr. Payne, Mr. Macomber.
Third year, either semester, three hours per week. 3 units.
204. Educational Measurements in Secondary Schools. This course is the same as Psychology 200, except that the tests used are those relating to the secondary school subjects.
Prerequisite: Psychology 100.
Dr. Grimes.
Third year, second semester, three hours per week.
3 units.
206. Mental Hygienc. A study of the principles of mental hygiene and their application to the personal needs of school children. Deals largely with the cmotions, hereditary tendencies, types, causes, and educational treatment of mental instability and defects of personality.

Dr. Grimes.
Third or fourth year, second semester, three hours a week. 3 units.
231. Psychology of Adolescence. An upper division course presenting recent scientific work in such fields as the nature of development of interests, physical, mental, moral, and social traits of adolescence, the prediction and control of adolescent behavior, and their bearing upon the problems of instruction in junior and senior high schools.
Prerequisite: Psychology 100.
Dr. Grimes.
Fourth year, first semester, three hours a week.
3 units.
232. The Atypical Child. This course aims to help teachers with those types of pupils causing the chief educational and disciplinary problems. These are the dull, the problem, and the very bright children. Analyses difficulties, and studies current methods of
furnishing the highly differentiated educational and social treatment required in successful teaching.
Prerequisite: Psychology 100.
Dr. Grimes.
Third or fourth year, second semester.
3 units.
233. Child Psychology. A study of the physical, mental, emotional, and social development of the child from birth to adolescence. The period from five to ten or twelve years of age is especially emphasized. Designed to meet the needs of those planning to teach in the kindergarten, primary, or intermediate grades.
Prerequisite: Psychology 100.
Dr. Grimes.
Third or fourth year, first semester.
3 units.

## DEPARTMENT OF SCIENCES

Dr. Bateman (Head of Department), Mr. Irish, Mr. Ostrander, Mr. Hoover, Dr. Skinner, Mr. Mortensen.

The department of sciences offers courses in the following fields: Agriculture, 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 their majors, such as Home Economics or Physical Education.
(4) Students desiring training in either vocational or practical agriculture.
(5) 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 a university.

## Agriculture Students

A standard two year course in Agriculture is offered to prospective agriculture majors who intend to transfer to an Agricultural College for a degree. (See Agricultural Division for courses and curriculum.)

## SCIENCE MAJORS

The science student may emphasize one of the following fields:
a. Biological sciences.
b. Physical sciences.
c. Geography.

To complete a major, twenty-four hours, (twelve hours of which must be upper division) in one of the above fields must be completed in addition to the core requirements of eight hours of science. The general science courses will not be counted in the above minimum.

Students are warned against over-specialization. Most of the elementary and secondary schools of the state prefer teachers of science, rather than some specific division of it. Science majors are advised to take Biology 111-112, Chemistry 111-112, Physics 111-112, to insure a broad foundation, and then emphasize the field of their choice. For the guidance of science majors in the selection of a course of study for the four years, curricula are presented with each of the divisions in which the student may major.

## THE MINOR IN SCIENCE FOR THE FOUR YEAR CURRICULUM

Fifteen units to be chosen from one of the divisions of the department in conference with the Department Head, and the instructor representing the student's minor interest.

## COURSES IN GENERAL SCIENCE

Gen. Sci. 100. Introduction to the Physical Sciences. A nonmathematical, informative course giving a knowledge of the fundamental facts within the province of the physical sciences, the scientific method of approach, the grouping and explanation of facts, and the applications of the physical sciences to daily life. The course consists chiefly of lectures with experimental demonstrations. Physics and chemistry are emphasized. This course is open to all students. Fee, $\$ 1.00$, to defray cost of lecture demonstrations. Dr. Skinner.
Fither semester, three lecture periods per week.
3 units.
110. Introduction to Biology. A brief survey of the scope of biology and of the theories of the origin and development of life on the earth. A study of the characteristics of living matter and of the fundamental structures of plants and animals. The student gets a general understanding of the manner in which plants and animals feed, grow, reproduce and develop. Not open to students
who have had, or who expect to take Biology 111 and 112.
Laboratory fee, $\$ 2.00$.
Mr. Mortensen.
First year, either semester, two lectures and one three hour laboratory per week.

3 units.
120. Biological Projects and Correlations. A course in applied biology which emphasizes practical aspects, rather than scientific principles. The more common plants and animals and their economic importance are studied as a background for practical material for vivifying curricula and extra curricula subjects of the elementary schools. Some attention is given to the inter-relations of rural and urban economic and social problems. Organization and methods of presentation of project material is stressed. Laboratory fee, $\$ 1.00$. Required in the elementary teachers course. Mr. Ostrander.
Second year, either semester, two hours lecture, and four hours of project and field work.

3 units.
132. Nature Study. Lectures, reports and assigned readings; campus and nearby field study trips, personal observation reports, and the collection and mounting of nature materials form the basis of this course. The main object of the course is the development of a permanent personal and professional interest in our biological environment. Aims, methods, and materials suitable for nature study in different grades of the elementary school are outlined. Laboratory fee, $\$ 1.00$.

Mr. Mortensen.
Third year, second semester, two hours lecture, supplemented by an equal amount of observation and study.

2 units.

## AGRICULTURE

The agriculture curriculum covers two years of a standard four year course and is recommended for those students who plan to transfer to an agricultural college for a degree in agriculture.

Students who plan to enter directly into the field of practical agriculture will also find this curriculum well suited to their needs.

The college farm adjoins the campus and is equipped with modern implements, stocked with pure bred animals, and provided with ample demonstration plots for field and horticultural crops.

The adjacent country supports a wide variety of agricultural industries and offers excellent opportunity for observation and field studies.

In addition, the well equipped college laboratories make possible thorough training in the basic physical, chemical, and biological sciences.

## AGRICULTURE CURRICULUM

First Year

| First Semester | Second Semester |
| :---: | :---: |
| Units | Units |
| Engl. 101 Composition .... 3 | Engl. 102 Composition .... 3 |
| Chem. 103 or 111 Gen. Ch. 4 | Chem. 104 or 112 Gen. Ch. 4 |
| Biol. 111 Botany ............. 4 | Biol. 112 Zoology ............. 4 |
| Agric. 107 Animal Ind. .... 4 | Agric. 108 Plant Ind. .-...... 4 |
| P. E. Activity ..................-1/2 | P. E. Activity ................... 1/2 |
| 151/2 | $151 / 2$ |
| Seco | Year |
| Phys. 111 Gen. Physics .... 4 | Phys. 112 Gen. Physics .... 4 |
| Organic Chem. --.-............. 4 | Psych. 100 Gen. Psych. --.. 3 |
| Agric. 203 Bacteriology .. 4 | Agric. 114 Dairy Husb. or |
| Agric. 143 Soils or | Agric. 116 Poultry Husb. 3 |
| Agric. 125 Fruit Prod... 3 | Agric. 126 Pract. Hort. or Agric. 144 Irrigation .... 3 |
|  | Elective ....-.......-..............- 3 |
| P. E. Activity ................... 1/2 | P. E. Activity .-................- 1/2 |
| $15^{1 / 2}$ | $16^{1 / 2}$ |

## AGRICULTURAL COURSES

## Lower Division Courses

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. Elective. Fee, \$1.00.

Mr. Ostrander.
Pirst year, first semester. Four hours lecture or its equivalent in laboratory and field work. 4 units.
108. Plant Industry. Begins with a survey of agriculture in general, based upon the current U. S. Dept. of Agriculture Year Book. Then, through assigned readings, special reports and laboratory and field observations the following topics are studied: the development of permanent agriculture; the basic principles of plant growth and improvement; the factors involved in profitable crop production; the leading crop plants and producing areas; cultural methods; harvesting, storing and marketing of field crops. Gen-
eral botany is an excellent foundation for this course. Laboratory fee, $\mathbf{\$ 1 . 0 0}$.

Mr. Mortensen.
First year, second semester, four hours lecture or its equivalent in laboratory or field work per week.

4 units.
114. Dairy Husbandry. A study of dairy farm management, methods of feeding, breeding, and herd improvement. A study of pedigree and other methods of animal selection; calf raising and dairy equipment and the more common dairy cow diseases are also considered in this course. Elective. Alternating with poultry husbandry, given in 1934-35. Fee, $\$ 1.00$.

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

3 units.
Poultry 116. Poultry Husbandry. A general survey course with emphasis on farm problems and management. This course alternates with Agric. 115, Dairy Husbandry. Not given in 1934-35.

Mr. Ostrander.
Second semester, three hours of lecture or its
equivalent in field work.
3 units.
125. Fruit Production. The leading fruit crops, producing areas, cultural methods, orchard practices, production and marketing problems, with special reference to Arizona and the Southwest. Lectures, assigned readings, field observations and laboratory studies. Prerequisite: General botany.
Laboratory fee, $\$ 1.00$. Given in 1934-35 and alternate years.
126. Practical Horticulture. A study of the leading ornamental trees, and shrubs. Landscaping and planting of home sites, school grounds and public recreation parks. Care, growth and propagation of flowering plants and shrubs for home and school use.
Prerequisite: General botany.
Laboratory fee, $\$ 1.00$ Given in 1934-35 and alternate years.
Mr. Mortensen.
Second year, second semester, two lectures and one
three hour laboratory period per week.
3 units.
133. Plant Anatomy. (See Biology 133.)
143. Soils. The formation, classification and physical properties of soils, the relation of the physical and chemical properties of soils to crop production, cultural methods and irrigation practices; conservation of soil fertility and crop rotation.
Prerequisite: College chemistry and physics.
Laboratory fee, $\$ 1.00$. Given in $1935-36$ and in alternate years.
Mr. Mortensen.
Third year, first semester, two hours lecture and
three hours laboratory per week.
3 units.
144. Irrigation Principles and Practices. Brief history of irrigation, present extent and importance. Water relations of plants; water duty; methods of applying water; conservation and proper use of water.
Prerequisite: Agr. 133.
Laboratory fee, $\$ 1.00$.
Given in 1935-36 and alternate years.
Mr. Mortensen.
Second semester, two lectures and one three hour
laboratory period per week. 3 units.

## Upper Division Courses

203. General Bacteriology. Emphasis upon the fundamental principles of bacteriology, and their hygienic, industrial, and agricultural application. Organisms representing the principal groups are studied in cultural and microscopic preparations. Milk, soil, water, and hygienic surveys are conducted by the students.
Prerequisite: Biol. 100 or its equivalent.
Laboratory fee, $\$ 4.00$.
Mr. Ostrander.
Third year, first semester. Two lectures and
two two-hour Iaboratory periods per week. 4 units.
204. Animal Genetics. Includes the principles of heredity and their applications to animal breeding and human welfare. Alternates with Biol. 222, Entomology. Given in 1934-1935.
Prerequisite: Biol. 100 or its equivalent.
Mr. Ostrander.
Second semester, third or fourth year. Three hours of lecture or its equivalent per week.

3 units.
205. Animal Nutrition. Includes the principles of feeding, composition of feeds, physiology of nutrition, and practices in formulating rations for the various classes of live stock. Evaluation of feeds and feeding practices current in Arizona are given special consideration.
Prerequisite: Animal Industry 107, and general chemistry.
Alternates with Biol. 223, Comparative Anatomy.
Laboratory fee, $\$ 2.00$.
Not given in 1934-35.
Mr. Ostrander.
Third or fourth year, first semester, two hours of lecture and six hours of laboratory and observation per week. 3 units.
212. Plant Physiology. (See Biology 212.)
222. General Entomology. (See Biology 222.)

## BIOLOGICAL SCIENCE

## TYPE CURRICULUM FOR STUDENTS MAJORING IN BIOLOGICAL SCIENCE

| First Semester Freshman | n Year Second Semester |
| :---: | :---: |
| Units | Second Units |
| Engl. 101 Composition .... 3 | Engl. 102 Composition ...- 3 |
| Chem. 111 Gen. Chem. .... 4 | Chem. 112 Gen. Chem. .... 4 |
| *Mus. 100 Fundamentals .... 2 | * Art 110 Publ. School Art 2 |
| *Hygiene .-.......................... 2 | *S. Sci. 100 Const. Govt...-. 3 |
| *Engl. 160 Library Pract..... 1 |  |
| P. E. Activity .................. 1/2 | P. E. Activity ..-.............. 1/2 |
| Biol. 111 Botany .............. 4 | Biol. 112 Zoology .-............ 4 |
| $16^{1 / 2}$ | $16^{1 / 2}$ |
| Sophomore Year |  |
| *Psych. 100 Gen. Psych....- 3 | *Educ. 120 Sociology .--.... 3 |
| *Geog. 100 Elem. of Geog. 3 | ${ }^{*}$ G. Sci. 120 Biol. Proj. .... 3 |
| Social Studies (See Note 2) 3 | Social Studies (See Note 2) 3 |
| P. E. Activity ................... 1/2 | P. E. Activity .................. 1/2 |
| Biol. 231 Anatomy ............ 3 | Biol. 120 Physiology ........ 3 |
| Minor or Elective.... (3 or) 4 | Minor or Elective.... (3 or) 4 |
| $16^{1 / 2}$ | 161/2 |
| Junior Year |  |
| *Educ. 230 Prin. Tcaching 3 | *Educ. 220 School Man. .... 3 |
| *Psych. 200 Educ. Meas..... 3 | * Minor or Elective .-...........- 3 |
| Biol. 203 Gen. Bacteriol. or Biol. 225 Comp Anat. 4 | Biol. 212 Plant Physiol. .... 4 (or Chem. 282 Biochem.) |
| Minor or Elective ...........- $\frac{6}{16}$ | Biol. 222 Entomology or Biol. 204 Genetics $\qquad$ |
| 16 | Minor or Elective ............- 3 |
|  | 16 |
| Senior Year |  |
| *Educ. 250 Phil. Educ. .... 3 | *Educ. (Elective)...... (2 or) 3 |
| *Directed Teaching ........... 10 | *Minor or Elective .........-... 10 |
| Biol. 205 Anim. Nutr. .-.... 3 | Biol. 204 Genetics or Biol. 222 Entomology 3 |
| 16 |  |

[^13]
## COURSES IN BIOLOGICAL SCIENCE

## Lower Division Courses

Biology 111-112. General College Biology. This is the foundation one-year course for all work in biological science and in agriculture. It is required for the majors in physical science, biological science, and agriculture. It is accepted in meeting science requirements of all other departments.
111. General College Botany. A course in elementary botany, designed to give a broad survey of the plant kingdom. The make-up of a typical flowering plant is studied in some detail, as regards its structure and physiology, after which attention is given to the morphology of the thallophytes, bryophytes, and pteridophytes. The principles of growth, reproduction, variation, and heredity as applied to plants are reviewed and summarized. Laboratory fee, $\$ 2.00$.

Mr. Mortensen.
First semester, thrce lectures and three hours laboratory per week.

4 units.
112. General Zoology. Includes the general principles of animal structure and function, and comparative methods of reproduction. Introduction to systematic classification, and a consideration of the geographical distribution in relation to the origin and development of animal life. Laboratory fee, $\$ 3.00$. This with Biology 111, constitutes a year course in collegiate biology.

Mr. Ostrander.
Second semester, two hours lecture, four hours of laboratory per week.

4 units.
120. Human Physiology. The human body is studied as a mechanism in relation to its environment. A study of the vital functions and the physical principles which govern them, Intended to supply the foundation for those who contemplate more extended work in hygiene, health education, or physical education. Lectures; demonstrations, individual and group projects.

Mr. Irish.
Either semester, three hours a week.
3 units.
133. Plant Anatomy. The morphology of plant cells, of plant tissues, and of tissue systems. A study both of prepared slides and of fresh material which the student will prepare in the laboratory. Required for the major in biological science and in agriculture.
Prerequisite: Biol. 111, General College Botany.
Laboratory fee, \$2.00. Given in 1934-35 and alternate years.
Mr. Mortensen.
First semester, two hours lecture, three hours laboratory per week.

## Upper Division Courses

203. General Bacteriology. (See Agric. 203.)
204. Animal Genetics. (See Agric. 204.)
205. Animal Nutrition. (See Agric. 205.)
206. 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, Plant Anatomy and one year of college chemistry.
Laboratory fee, $\$ 2.00$.
Given in 1935-36 and alternate years.
Mr. Mortensen.
Second semester, two lectures, six laboratory hours per week.

4 units.
222. General Entomology. A general study of insects, including structure, physiology, economic importance, classification, and relationships. Each student is required to complete a project including collection and special report on some group of insects.
Prerequisite: Biol. 100, or its equivalent.
Laboratory fee, $\$ 1.00$.
Given in 1934-35.
Alternates with Biol. 204.
Mr. Ostrander.
Second semester, two hours lecture and two hours laboratory and field work. 3 units.
223. Comparative Anatomy of Vertebrates. A study of the structure, development, and homology of the organ systems of vertebrates. Laboratory dissection of the shark, frog, pigeon, and cat. Prerequisites: Biol. 100 and 120.
Laboratory fee, $\$ 5.00$.
Given in 1934-35.
Alternates with Biol. 205.
Mr. Ostrander.
First semester, two hours lecture, two two-hour
laboratory periods a week.
3 units.
231. Anatomy. Human anatomy with special emphasis on the anatomy of muscles and joints and application to the movements involved in exercises and sports. Laboratory fee, $\$ 3.00$.

Mr. Irish.
First semester, three hours a week. 3 units.

## GEOGRAPHY AND GEOLOGY

# TYPE CURRICULUM FOR STUDENTS MAJORING IN GEOGRAPHY 

(See note on page 155)


Note 1. In the case of the starred courses, sections are to be so arranged that half of the group will take the course in the first semester and half in the second semester.
Note 2. The sophomore courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; 113; and Econ. 131, 132.
Note 3. The minor will be chosen and planned under the advice of the instructor in geography.

## COURSES IN GEOGRAPHY

## Lower Division Courses

Geography 100. Elements of Geography. An introductory analysis of principles for a scientific interpretation of the world and its regions. Special studies of type regions to illustrate application of principles and to establish procedure for further acquisition of geographic knowledge as a foundation for teaching.
Required for the elementary teachers' course.
Laboratory fee, 50 c .
Text: Case \& Bergmark, College Geography.
Mr. Hoover.
Either semester, second year. Three recitation-lecture periods per week.

3 units.
Geography A. Map Studies and Locations. For those only who are unable to pass satisfactorily a test on minimum essentials in map studies and planning to take the teachers' course. Students needing this special drill will take it when they register for Geography 100 or before.

Mr. Hoover.
Either semester, one hour a week until completed. No credit.
101. Economic Geography. A study of the relations of physiographic, climatic and economic conditions to production, trade, and transportation. Important agricultural, forest, mineral, and manufactured products of the world. Special emphasis is placed upon regional aspects of commodities.

Mr. Hoover.
First semester. Three recitation-lecture periods per week. 3 units.
102. Regional Geography. Regions of the world delimited on the basis of physical and cultural factors. The evolution or modification of economic and cultural types under the influence of natural environment. Selected contrasting regions are studied in some detail and similar regions compared with them and classified. Prerequisite: Geog. 100.

Mr. Hoover.
Second semester, three recitation-lecture periods per week. 3 units.

## Upper Division Courses

201. Geography of North America. A regional study of the continent. An analysis of the relation of the physical environment in the various sections to production, industries and cultural forms. Prerequisite: Geog. 100.

Mr. Hoover.
First semester 1934-35. Two recitation-lecture periods. 2 units.
202. Geography of Arizona. Prehistoric, Indian, Spanish, and American cultures in relation to physical features, climate, and vegetation. Interpretation of the natural scenic wonders and arid
features. Analysis of the economic resources and developments of the state.
Prerequisite: Geog. 100 or Geol. 151.
Mr. Hoover.
Second semester, 1934-35. Two lecture-recitation periods per week.

2 units.
203. Geography of Eurasia. 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.
Mr . Hoover.
First semester 1935-1936. Three recitation-lecture periods per week.

3 units.
204. Field Work in Arizona Geography. Arranged especially for students taking Geography 202. Diversified sections of the state are visited on Saturdays or over week-ends. Written and oral reports.
Prerequisites: Geog. 100 and Geol. 151.
$\$ 3.00$ transportation per unit of credit.
Mr. Hoover.
Second semester, 1924-1935. Credit 1 to 2 units depending upon amount of work covered.
205. Conservation of Natural Resources. Measure and distribution of the natural resources of the United States; their most efficient utilization and conservation. Problems of land reclamation, erosion, forestry, conservative mining, flood prevention, water supply, water power, navigation, conservation of wild life and scenery. Prerequisite: Geog. 100.

Mr. Hoover.
Not offered 1934-1935.
2 units.
206. Geography of Transportation and Trade Centers. A geographical analysis of the world's railways, roads, inland waterways, ocean and air transportation. Transportation advantages of great commercial centers.
Prerequisite: Geog. 100.
Mr. Hoover.
Second semester. Not given 1934-1935.
208. Physiography of the United States. The physiographic regions of the United States analyzed. The many interesting scenic features of the United States will be studied as illustrative of the various types of land forms in relation to geologic processes; also the human adjustments to physiographic conditions.
Prerequisite: Geog. 100 and Geol. 151.
Mr. Hoover.
Second semester, 3 hours a week.
3 units.

## GEOLOGY

Geol. 151. Physical Geology. Processes modifying the earth's surface through the agency of water, ice, wind, vulcanism and diastrophism. Structures, minerals and rocks. Laboratory work with topographic maps, models, rocks and minerals. Fee $\$ 3.00$.

Mr. Hoover.
First semester, three hours recitation-lecture, two hours laboratory, and a minimum total of 18 hours of field work.

4 units.
252. Historical Geology. Principles of stratigraphy revealing the history of the earth, and the changing world geographies with developing life through the geological periods. Field work in northern Arizona will include the Grand Canyon and San Francisco Volcanic Field.
Fees: laboratory, $\$ 2.00$; transportation, $\$ 5.00$.
Mr. Hoover.
Second semester, 1935-1936. Three hours recitation-lecture and a minimum of 50 hours laboratory and field work. 4 units. 3 units without field work.

Note: In the public schools, there is a tendency toward a grouping together of geography, history, and civics, and frequently these subjects are taught by the same teacher. To meet this condition, students majoring in geography may substitute courses in history, government, or commerce for the courses in physical and biological science which are listed in the type curriculum for geography majors on page 152.

## THE PHYSICAL SCIENCES

## TYPE CURRICULUM FOR STUDENTS MAJORING IN PHYSICAL SCIENCE

| First Semester Freshman | Year Second Semester |
| :---: | :---: |
| Units | Units |
| Engl. 101 Composition .... 3 | Engl. 102 Composition ..-- 3 |
| Chem. 111 Gen. Chem. .--- 4 | Chem. 112 Gen. Chem. .-.. 4 |
| *Mus. 100 Fundamentals .... 2 | *Art 110 Public School Art 2 |
| *Hygiene .-.......................... 2 | *S. Sci. 100 Const. Govt. .-.- 3 |
| *Engl. 160 Library Practice 1 |  |
| P. E. Activity .................- 1/2 | P. E. Activity ..................- 1/2 |
| Math. 107 College Algebra 3 | Math. 120 Plane Trig. ...... 3 |
| Elective .........-.-----------......- 1 | Elective .-.-------.........---...--- 1 |
| $16^{1 / 2}$ | $16^{1 / 2}$ |
| Sophomore | - Year |
| *Psych. 100 Gen. Psych. .... 3 | * Educ. 120 Sociology ------- 3 |
| *Geog. 100 Elem. of Geog. 3 <br> P. E. Activity | *G. Sci. 120 Biol. Proj. .... 3 <br> P. E. Activity |
| Phys. 111 Gen. Physics .... 4 | Phys. 112 Gen. Physics .... 4 |
| Biol. 111 Botany --........--- 4 | Biol. 112 Zoology .-.......-. 4 |
| Math. 201 Anal. Geom. .-.. 4 | Math. 222 Diff. Calculus.. 4 |
| $181 / 2$ | $18^{1 / 2}$ |
| Junior Y | Year |
| *Educ. 230 Prin. Teaching 3 | *Educ. 220 School Man. ...- 3 |
| *Psych. 200 Educ. Meas. ... 3 | Social Studies (See Note 2) 3 |
| Social Studies (See Note 2) 3 | French or German .-......... 4 |
| French or German ............ 4 | Major (Elect two) ........... 7 |
| Phys. 201 Mechanics or Chem. 201 Quant. Anal. or Chem. 211 Org. Chem... 4 | Phys. 202 Elec. \& Mag. 3 Chem. 201 Quant. Anal. 3 Chem. 212 Org. Chem. 4 |
| 17 | 17 |
| Senior | Year |
| *Educ. 250 Phil. Educ. --.... 3 | *Educ. (Elective) .....- (3 or) 2 |
| *Directed Teaching ............ 10 | *Major (See Note 3) --.-.... 11 |
| Minor --..-......................... 3 | Minor .-........ .....................- 3 |
| 16 | 16 |

Note 1. In the case of the starred courses, sections are to be so arranged that hall of the group will take the course in the first semester and half in the second semester.
Note 2. The courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; 113; and Econ. 131, 132.
Note 3. Elect 11 units from the following courses: Chem. 262, Appl. Chem.; Chem. 282, Biochem.; Chem. 292, Physical Chem.; Phys. 204, Optics; Phys. 121, Photography; Phys. 117, Meteorol.; Geol. 151, Phys. Geol.; Geol. 252, Hist. Geol.; Phys. 116, Astronomy; Biol. 120, Ihysiology.
Note 4. A suitable minor of at least fifteen units will be planned under the advice of the head of the department of science.
Note 5. At the beginning of the third year, the physical science major may emphasize either chemistry or physics. Physics students are advised to elect mathematics as a minor, while chemistry students may minor in biology or mathematics.

## COURSES IN THE PHYSICAL SCIENCES

## Chemistry <br> Lower Division Courses

Chem. 103. 104. Introductory College Chemistry. Deals with the common elements and their simpler compounds, designed to give the student training in the scientific method, and impart a knowledge of the fundamental laws and theories of chemistry. The illustrative material is taken as far as possible from applications of chemistry in daily life. Primarily for students majoring in homemaking, physical education, pre-nursing, and should be elected by students desiring chemistry as a part of a liberal education. Open to all students. Laboratory fee, $\$ 3.00$ per semester and breakage deposit, \$2.00.

Dr. Bateman and assistants.
Both semesters, three recitation-lecture periods and
three hours of laboratory work per week. 4 units each sem.
111, 112. General College Chemistry. Includes an intensive treatment of the principles of general chemistry, in connection with the metals, non-metals, and their compounds. Designed to give training in the use of the scientific method. Elementary qualitative analysis is introduced in the laboratory at the beginning of the second semester. Primarily for students of science, mathematics, engineering, and pre-medicine.
Prerequisite: high school chemistry or equivalent.
Laboratory fee, $\$ 3.00$ per semester and breakage deposit, $\$ 2.00$. Dr. Bateman and assistants.
Both semesters. Three lecture-recitation periods and
three hours of laboratory per week. 4 units each sem.
131. Qualitative Analysis. The theory and practice of inorganic qualitative analysis. A systematic qualitative separation of the most important metals and acids, together with a careful consideration of the theories, principles, and laws involved.
Prerequisite: Chemistry 104 or 112.
Laboratory fee, $\$ 4.00$, and breakage deposit.
Dr. Bateman.
First semester. Two lecture-recitation periods and six or more hours of laboratory per week.

4 units.
181. Elementary Organic Chemistry. A brief survey of the compounds of carbon including the representative groups of the aliphatic and aromatic compounds. This course is especially adapted to the needs of students of agriculture, home economics and biology.
Prerequisite: Chem. 104, Gen. Coll. Chemistry, or its equivalent.
Laboratory fee, $\$ 4.00$. Breakage deposit. Offered in 1935-36.
Dr. Bateman.
First semester, three Iectures and three hours of laboratory work per week.

4 units.

## Upper Division Courses

201, 202. Quantitative Analysis. A study of the fundamental principles of gravimetric and volumetric analysis with practice in stoichiometry. Analyses of such substances as dolomite, limestone, cement, brass, and various ores are undertaken. This course affords practice in the standardization of solutions of acids, bases, and oxidizers. Careful manipulation of apparatus, integrity, and accuracy are stressed in the laboratory.

Prerequisite: Chemistry 104 or 112 , or its equivalent.
Laboratory fee, $\$ 4.00$ per semester and breakage deposit.
Dr. Bateman.
Both semesters, one lecture and six hours of laboratory work each week throughout the year.

6 units.
211, 212. General Organic Chemistry. A thorough treatment of the chemistry of carbon compounds, including the aliphatic and aromatic hydrocarbons and their derivatives. Emphasis is placed on the theories and reactions of organic chemistry. The laboratory work includes the study and preparation of typical carbon compounds.
Prerequisite: Chemistry 104 or 112 , and upper division rank.
Laboratory fee, $\$ 4.00$ per semester, and breakage deposit.
Dr. Bateman.
Both semesters, three lectures and three hours of laboratory per week.

4 units each sem.
262. Applied Chemistry. A brief study of the application of chemistry in the home and community. Subjects considered are fuels, fire prevention, sanitation, textiles, paints, cellulose products, toilet preparations, drugs, foods, and nutrition.
Prerequisite: Chemistry 112, and upper division rank.
Laboratory fee, $\$ 3.00$, and breakage deposit.
Offered in 1935-36 and alternate years.

[^14]270. Advanced Quantitative Analysis. Special methods of analysis, such as water, food, ore, rock, steel, urine. Time and credit to be arranged.
Prerequisites: Chemistry 112, 131, 142, and 212.

> Dr. Bateman.
> Hours to be arranged.
282. Biochemistry. A study of the chemistry of animal and plant life; the physical and chemical properties of compounds of biological origin; the chemistry of the tissues, secretions, excretions; the composition of foodstuffs, and phenomena of their digestion,
absorption, and metabolism; and the role of enzymes in the plant and animal world.
Prerequisites: Biol. 120, Physiology; Chemistry 182, or 212.
Laboratory fee, $\$ 3.00$, and breakage deposit.
Offered in 1934-35 and alternate years.
Dr. Bateman.
Second semester. Three lectures and three hours of laboratory per week.

4 units.
292. Elementary Physical Chemistry. Includes a brief consideration of the properties of liquids, gases, and solids; solutions, equilibrium, phase rule, osmotic pressure, electrochemistry, colloids. As far as possible the applications of principles will be stressed. Prerequisites: Chemistry 104 or 112, Physics 112, calculus. Fee, $\$ 1.00$. Offered in 1935-36 and alternate years.

Dr. Skinner.
Second semester. Three lectures per week. 3 units.

## COURSES IN PHYSICS

## Lower Division Courses

Physics 111, 112. General College Physics. A detailed lecture and laboratory course in general physics, including physical interpretation of everyday phenomena. It covers mechanics, heat, weather, sound, light, electricity, magnetism. Properties and structure of matter treated from the modern point of view.
Laboratory fee, $\$ 3.00$ per semester.
Dr. Skinner.
Both semesters. Three lecture-recitation periods and three hours of laboratory per week. 4 units each sem.
116. Descriptive Astronomy. A non-mathematical course in general astronomy. The course includes a detailed study of the members of the solar system and their characteristics; stars, constellations, nebulae; and the structure of the universe. Modern views are stressed.

Dr. Skinner.
Second semester. Three lecture periods.
3 units.
117. Physics of the Atmosphere. Composition and circulation of the atmosphere; hygrometry; weather, methods of its observation and prediction; frost warnings; climate and its relation to man and agriculture.
Fee, $\$ 1.00$.
Offered in 1935-36 and alternate years.
First semester, two lectures per week. 2 units.
121. Elementary Photography. Light and its behavior; lenses. Camera construction and performance. Exposure. Developing. Printing. Enlargement. Making of lantern slides. Copying. Intensification. Composition. The course will be suited to the
needs of the amateur, or the teacher who wishes to make use of photography as an aid to his teaching.
Prerequisites: Physics 112, or Chemistry 112 or 104.
Laboratory fee, $\$ 3.50$.
Dr. Skinner.
First semester, one lecture period, and three hours laboratory per week.

2 units.
123. Sound and Music. The general principles underlying sound and its production. Pitch, intensity, quality. Structure of musical scales. The laws of wind and string instruments. Elementary theory of vowel sounds. Amplification and reproduction of sound. Acoustics.
Fee, $\$ 1.00$.
Offered in 1934-35 and alternate years.
Dr. Skinner.
First semester, three lecture periods per week.
3 units.

## Upper Division Courses

201. Mechanics and Heat. A more advanced presentation of mechanics and heat than is given in general physics. Intermediate mathematics will be used throughout the course. It is expected that students taking this course will have had or will be taking calculus concurrently.
Prerequisite: Physics 112.
Offered in 1934-35 and alternate years.
Dr. Skinner.
First semester, three lecture periods per week.
3 units.
202. Electricity and Magnetism. An advanced and detailed course in the theory of electricity and magnetism. Among other things, the course will include a consideration of electrostatics, magnetism, direct and alternating current theory, and radio.
Prerequisites: Physics 112. Calculus is desirable.
Offered in 1935-36 and alternate years.
Dr. Skinner.
Second semester, three lecture periods per week. 3 units.
203. Optics. A more advanced presentation of geometric and physical optics. Reflection, refraction, lenses, image formation, wave properties of light, interference, diffraction, polarization, spectroscopy, relation of light waves to matter.
Prerequisites: Physics 112. Calculus desirable.
Fee, $\$ 1.00$. Offered in 1934-35 and alternate years.
204. 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: the structure of the atom, the properties of electrons and atomic nuclei, the wave and particle
properties of light and of matter, X-rays and crystal structure, the photoelectric effect.
Prerequisites: Physics 112; Math. 107, College Algebra, and Math. 120, Trigonometry.

Offered in 1935-36 and alternate years. Dr. Skinner. First semester, two lectures per week. 2 units.
292. Physical Chemistry. (See Chem. 292).

> (Additional courses in radio are offered in the Dept. of Industrial Arts.)

## DEPARTMENT OF SOCIAL STUDIES

Dr. Wyllys (Head of the Department), Dean Murdock.

Courses in the social studies are designed to make one's college education well-rounded, and to produce intelligent, broadminded graduates of this institution. Not all students are preparing themselves to enter the same profession; but nearly all expect to be citizens of the United States. In order to be able citizens of the United States or of Arizona, it is desirable to have a knowledge of our human backgrounds and our human relationships, gained through the study of our past history and our present political and social institutions.

The Social Studies major requirements are thirty hours, exclusive of social studies courses required of all students. Of these thirty hours, eighteen should be in lower division work, chosen from the thirty hours of lower division courses (exclusive of Political Science 100) offered by the department (History 101-102, 103-104, 107-108, 110, 113, 115, 116, and Economics 131-132). The remaining twelve hours should be in upper division work, chosen from the twenty-four hours of upper division courses offered by the department (History 204, 205, 206, 208; Political Science 201, 203, 211, 212).

A minor in the Social Studies should consist of fifteen hours, exclusive of social studies courses required of all students. Of these fifteen hours, nine should be in lower division work, chosen out of thirty as listed above; and six should be in upper division work, chosen out of twenty-four as above.

History 101-102 and 103-104 will be required of all students majoring in Social Studies, whether taken as part of the college requirements or not. Geography 101, 202, and 204 will be accepted as part of the major or minor in social studies.

# SUGGESTED CURRICULUM FOR STUDENTS MAJORING IN SOCIAL STUDIES 

| First Semester Freshman | Year Second Semester |
| :---: | :---: |
| U Units | Units |
| Engl. 101 Composition .--- 3 | Engl. 102 Composition ...- 3 |
| Science .................. (3 or) 4 | Science .................. ( 3 or) 4 |
| *Mus. 100 Fundamentals .... 2 | *Art 110 Public School Art 2 |
| *Hygiene ............................ 2 | *S. Sci. 100 Const. Govt...-. 3 |
| * Engl. 160 Library Practice 1 |  |
| P. E. Activity .................- 1/2 | P. E. Activity ..................- 1/2 |
| Hist. 110 Hist. of S.W. or | Hist. 108 Hist. of Rome or |
| Hist. 115 Colon. of N . | Hist. 116 Hispan. Amer. 3 |
| Amer. ........................... 3 |  |
| Elective ................-------------1 | Elective ............................ 1 |
| $16^{1 / 2}$ | $161 / 2$ |
| Sophomore | e Year |
| *Psych. 100 Gen. Psych. .... 3 | *Educ. 120 Sociology .-...... 3 |
| *Geog. 100 Elem. of Geog. 3 | *G. Sci. 120 Biol. Proj. .... 3 |
| Hist. 101 Early Mod. Eur. or Hist. 103 Am. Pol.Hist. or Econ. 131 Prin. Econ. 3 | Hist. 102 Eur. Since 1815 or Hist. 104 Am. Pol.Hist. or Econ. 132 Prin. Econ. |
| Social Studies ..................- 3 | Social Studies .-..............-- 8 |
| Elect from following: | Elect from following: |
| Hist. 107, 113, 110, 115 | Hist. 108, 116 or any of |
| or any of college re- | college requirements in |
| quirements not chosen | social studies not chosen |
| above. <br> Elective |  |
| P. E. Activity .................. 1/2 | P. E. Activity --.....-.-......... 1/2 |
| $15^{1 / 2}$ | $15^{1 / 2}$ |
| Junior | Year |
| * Educ. 230 Prin. Teaching 3 | *Educ. 220 School Man. .... 3 |
| *Psych. 200 Educ. Meas. .-.. 3 | *Elective .....-....................... 3 |
| Social Studies ................... 6 | Social Studies .................. 6 |
| Elect from following: | Elect from following: |
| Pol. Sci. 201, 203, 211, | Hist. 204, 206, 208, or |
| or Hist. 205. | Pol. Sci. 212. |
| Elective ............................ 3 | Elective .......-..................-- 3 |
| 15 | 15 |

Note 1. In the case of the starred courses, sections are to be so arranged that half of the group will take the course in the first semester and half in the second semester.
Note 2. Students majoring in social studies will consult the head of the department for advice in the selection of the alternative courses offered above.
Note 3. An approved minor of at least fifteen units is to be chosen in some field other than social studies.

| Senior Year |  |
| :---: | :---: |
| *Educ. 250 Phil. Educ. .-...- 3 | *Educ. (Elective) ...... (2 or) 3 |
| *Directed Teaching ........... 10 | *Social Studies .-................. 6 |
| Elective .-...-.......................- 3 | Elect from following: |
|  | Hist. 204, 206, 208, or Pol. Sci. 212. |
|  | *Elective .----------................. 7 |
| 16 | 16 |

## DESCRIPTION OF COURSES

## History

History 101. Early Modern Europe. The history of Europe is covered from the latter part of the fifteenth century down to 1815. In something over three centuries, four great revolutions in commerce, religion, politics, and industry changed the whole course of modern life.
Required of all students majoring in the department.
Dr. Wyllys.
First semester, three hours a week. 3 units.
102. Europe Since 1815. A survey of the history of Europe from the French Revolution to the present time, with stress on the period since 1870 . Some of the chief topics covered are: the Congress of Vienna and its results: the era of Metternich; the Industrial Revolution, the development of nationalism and the unification of all the states of Central Europe; imperialism and alliances; the World War; and a brief survey of post-war Europe.
Required of all students majoring in the department.
Dr. Wyllys.
Second semester, three hours a week.
3 units.
103. American Political and Social History to 1865. A course in constitutional history well follows a study of constitutional government, as the two are closely related. In this course, American history is carefully surveyed for judicial decisions, legislative enactments, administrative rulings, political party practices, or other historical development throwing light upon our constitutional expansion. The utterances of public men, party platforms, diplomatic incidents, are used to make clear the growth of our unwritten constitution.
Required of all students majoring in the department.
Mr. Murdock.
First semester, three hours a week. 3 units.
104. American Political and Social History Since 1865. American history prior to the Civil War is largely concerned with constitutional questions. The great economic Revolution in this country
following the Civil War ushered in economic and social problems which demand our chief attention. This course aims to bring out the significance of the rise of capitalism, the growth of city life, and perplexing intricacies of our commercial and industrial system, and the effect of all this upon our present political institutions. Required of all students majoring in the department.

Mr. Murdock.
Second semester, three hours a week.
3 units.
107. History of the Ancient Orient and Greece. A survey of the development of ancient culture, including the valley of the Nile, the Euphrates, and the western coast of Asia Minor and the mainland of Greece. Special emphasis is laid upon the causes and extent of Greek colonization, throughout the Mediterranean region. The growth of Greek art and philosophy are given a fair share of attention.

Offered in 1935-1936.

> Mir. Murdock.
> First semester, three hours a week.

3 units.
108. History of Rome. A brief survey of Roman and ancient Italian history. The social and economic factors are emphasized, and the causes of the rise of the Roman Empire, as well as the reasons for its downfall, are brought out.

Dr. Wyllys.
Second semester, three hours a week.
3 units.
110. History of the Southwest. The teaching of the Arizona Constitution is required by law throughout the public school system. To understand the constitution and the institutions of the state, it is necessary to be familiar with the history of the commonwealth and of those neighboring communities from which Arizona drew her population and political ideals. This is distinctly a course for teachers, stressing the political history of Arizona but not neglecting the other phases of her remarkable story. Prehistoric man and Spanish explorers and missionaries come in for their part in the narrative.
Required of all students majoring in the department.
Mr. Murdock.
First semester, three hours a week.
3 units.
113. Medieval Europe. The story of Europe from the fall of the Roman Empire in the west to the time of the Reformation. This was the germinating period of modern nations. The Church and the Holy Roman Empire are outstanding. Stress is laid on social and economic life.

Dr. Wyllys.
First semester, three hours a week.
3 units.
115. Colonization of North America. Devoting special attention to the colonial period of our country, this course surveys the history
of North America from 1492 to 1783. Social and economic life are subjects of greatest emphasis. A detailed account of French and Spanish North America, and of the American Revolution, is included. The course is designed to help prospective teachers make our colonial history more vivid and interesting to their pupils. Dr. Wyllys.
First semester, three hours a week.
3 units.
116. History of Hispanic America. In view of the increasing relations between the United States and the nations to the south of us, it is felt that this course should lay stress upon the life and traditions of our Latin-American neighbors. A knowledge of Spanish is desirable but not essential for students choosing this course. Dr. Wyllys.
Second semester, three hours a week. 3 units.
204. History of the American Frontier. Dealing with the movement of population westward across the United States, this course is designed to show the effect of the West and the frontier upon our national life, and upon the expansion of the United States. Social and economic factors are given most attention, and the advance of the frontier line is traced from about 1763 to 1890. The course is open to upper division students only.
Prerequisite: History 103, 104 or equivalent. Offered in 1935-36. Dr. Wyllys.
Second semester, three hours a week.
3 units.
205. The Period of the French Revolution and Napoleon. The central theme of this special course is the critical period of European history from 1789 to 1815 , an era that completely altered world affairs. Stress is laid upon the Old Regime in France, the causes and leading events of the French Revolution, and the career of Napoleon Bonaparte. Open to upper division students only. Prerequisite: History 101, 102 or equivalent.

$$
\begin{aligned}
& \text { Dr. Wyllys. } \\
& \text { First semester, three hours a week. } \quad 3 \text { units. }
\end{aligned}
$$

206. Contemporary Europe. Beginning with a brief survey of the period since 1870 and continuing through the World War, this course then deals with the problems of post-war Europe. Stress is laid on international organization since the War, and some of the problems discussed are: the foreign relations of Soviet Russia; the development of new alliances among the new nations; international conferences and their results; contemporary imperialism; the League of Nations; and the present conditions of most of the European countries. The course is open to upper division students only.
Prerequisite: History 101, 102 or equivalent.
207. History of Modern England. The development of the British people is taken up in the period since 1485. Emphasis is laid on social and economic factors and growth, and on the expansion of the Anglo-Saxon race overseas. Some of the topics discussed are: Elizabethan England; the Puritan Revolution; the agrarian and industrial revolutions; and the rise of the British Commonwealth of Nations.
Prerequisite: History 101, 102 or equivalent.
Dr. Wyllys.
Second semester, three hours a week. 3 units.

## Courses in Political Science

Pol. Sci. 100. Constitutional Government. Covers the essentials pertaining to our national government and to that of Arizona. It meets the requirements of the state law on the study of the national and state constitutions. Required in the freshman year. The course should be taken by those who wish to prepare for the constitution examinations required of all candidates for graduation from the college. Required of all students for graduation.

> Mr. Murdock.

Either semester, three hours a week. 3 units.
201. Comparative National Governments. A desirable background for understanding current history and the world's changing political forms. Emphasis is laid upon the constitutional structure and political machinery of the governments of Great Britain, France, Germany, Italy, Switzerland and the Soviet Union. Open to upper division students only.
Prerequisite: Hist. 101, 102 or equivalent. Offered in 1935-36.

> Or. Wyllys.
> First somester, three hours a week.
> 3 units.
203. American Foreign Relations. This course deals not only with the machinery of American diplomacy, but also with the history and course of American foreign policies. It is designed to enable teachers to understand the underlying currents of our foreign relations and the place of the United States in world politics. The topics especially discussed are: the development of early American foreign policies; the problems of expansion and Manifest Destiny; the Monroe Doctrine and its application; the share of the United States in international conferences; relations with the League of Nations; and relations with other countries of the New World. Open to upper division students only. Prerequisite: History 103, 104 or equivalent.

Dr. Wyllys.
First semester, three hours a week.
3 units.
211. American Political Parties. This course sketches the formation of the two major parties under Hamilton and Jefferson, down to the present day Republican and Democratic parties. Chief emphasis is laid upon the diametrically opposed Hamiltonian and Jeffersonian political philosophies. The object of the course is to trace the Hamiltonian ideal as expressed by political organizations bearing various names down to the present, and how these ideals have found expression in governmental institutions. The same thing is done in tracing Jeffersonian ideals. A dozen or more important third parties come in for notice. Party movements are directed by outstanding political leaders. The survey includes a study of these leaders. Not open to lower division students. Prerequisites: Pol. Sci. 100 and History 103, 104, or equivalent. Mr. Murdock.
First semester, three hours a week.
3 units.
212. State and Municipal Government. Although state governments have been deprived of some of their former functions, yet they are still important in the American government scheme. Because of the rapid urbanization of the United States, the study of municipal government and administration is increasingly important. Cities now influence our society far more than rural conditions, and teachers must be more and more familiar with the conduct of city government. In this course, the emphasis is laid on the comparative merits of the three main plans of city government; on problems of the electorate and public opinion; and on municipal administration. Not open to lower division students.
Prerequisite: Pol. Sci. 100.
Mr. Murdock.
Second semester, three hours a week.
3 units.

## Courses in Economics

Econ. 110. Economic History of the United States. Deals with the history of economic conditions in the United States and the correlation that exists between those conditions and the status of economic society today. Interpretations are stressed.

Dr. Atkinson
Either semester, three hours a week.
3 units.
131, 132. Principles of Economics. A study of economics that does not take into account the principles and projects proposed in what is commonly known as the New Deal, fails to meet the requirements of today. In this course, a fair estimate is made of the values of what is good in the old, and what must be modified by the changing conditions of modern life. In the second semester, study is directed chiefly to the effects of economic laws and ten-
dencies upon present day business problems. Open to sophomores and upper classmen only.

Dr. Atkinson
Two semesters, three hours a week. 3 units each sem.
228. History of Economic Thought. This course is mainly one of theory-or the theory of theories. Modern economic theory can best be understood by tracing its development, noting theories that have been discarded as unsound. A study is made of the last depression and its correlation with economic theory. Prerequisite: Econ. 131, 132.

Dr. Atkinson
Second semester, three hours a week. 3 units.

# NEW RULES FOR CERTIFICATION AS ADOPTED BY THE STATE BOARD OF EDUCATION FEBRUARY 4, 1933, AND LATER AMENDED, READ AS FOLLOWS: 

Certification Granted Upon Scholastic Preparation

## I. KINDERGARTEN-PRIMARY

A. Kindergarten-Primary certificates shall be granted upon evidence of graduation from the four-year kindergarten-primary course in one of the Arizona State Teachers Colleges or any accredited teacher-training institution authorized to train elementary and kindergarten teachers.
B. The requirements shall include a major of thirty semester hours (forty-five quarter hours) in Education, Psychology, and Kinder-garten-Primary courses. including such courses as KindergartenPrimary curriculum, Children's Literature and Story-Telling, Reading and Language, Play Education, Construction and Play Materials, Principles of Education, Educational Measurements, including eight semester hours (twelve quarter hours) of practice teaching, four (six quarter hours) of which must have been in kindergarten.
Candidates for this certificate must present evidence of proficiency in Sight-Singing, Sight-Reading, and Piano Accompaniment.
C. The name Kindergarten-Primary shall be designated on the face of this certificate.
D. The Kindergarten-Primary certificate shall be valid for four years and shall entitle the holder to teach in the kindergarten and in grades 1,2 , and 3 in the elementary school.
If the candidate has completed a total of thirty-six semester hours (54 quarter hours) in Education, Psychology, and KindergartenPrimary Courses, including all the specific requirements for the elementary certificate as well as the Kindergarten-Primary, this certificate shall be valid also in all the grades of the elementary school, and shall be so endorsed.
II. ELEMENTARY
A. Elementary certificates shall be granted on evidence of graduation from the four-year course in one of the Arizona State Teachers Colleges or any accredited teacher-training institution authorized to train elementary teachers.
B. The requirements shall include a major of twenty-four semester hours in Education and Psychology, including instruction in Psychology, the Elementary School Curriculum, Educational Measurements, Principles of Education, including eight semester hours (twelve quarter hours) in practice teaching, four of which must be in the elementary grades.
C. The name Elementary shall be designated on the face of the certificate.
D. The Elementary certificate shall be valid for four years and shall entitle the holder to teach in elementary grades and junior high schools.
III. SECONDARY
A. Secondary certificates shall be granted to holders of the Bachelor's degree from the University of Arizona or the Arizona State Teachers Colleges, or from any other accredited university or college authorized to train teachers, who shall present, in addition, evidence of the satisfactory completion of not less than thirty semester hours of graduate work acceptable toward an advanced degree at the University of Arizona or at similar institutions on the accredited list, and also acceptable to the State Board of Education for certification purposes.
B. Requirements include-

1. (a) A major (24 semester hours) and a minor ( 15 semester hours) in subjects usually taught in hish schools; or
(b) A major in a non-high school field and two minors in subjects usually taught in high schools.
2. Twenty-four semester hours in Education-
(a) Courses in General Psychology; Educational Psychology; Educational Measurements; aims, outcomes, principles, and practices of secondary education; and the Philosophy or History of Education.
(b) Not less than five semester hours of practice teaching.
(c) Not less than six semester hours of graduate courses in Education.
C. The narnes of the major and minor teaching subjects shall be designated on the certificate.
D. The Secondary certificate shall be valid for four years and shall entitle the holder to teach in junior and senior high schools.
IV. SPECIAL
A. Special certificates shall be granted upon evidence of graduation from a regular four-year high school course, or the equivalent, and in addition thereto evidence of graduation from a. regular four-year course in a special school, special department of a teachers college or university accredited by the Arizona State Board of Education.
B. Requirements include-
3. Not less than thirty semester hours, or the equivalent, in the special field for which certificate is granted.
4. Not less than eighteen semester hours in Education and Psychoiogy appropriate to the field and including not less than five semester hours of practice teaching or approved experience, teaching preferably, in the special field for which certification is granted.
5. The name of the special field shall be designated on the face of this certificate. These fields are-
a. Agriculture
b. Art
c. Commerce (Business subjects)
d. Home Economics
e. Industrial Education (Manual Arts)
f. Music
g. Physical and Health Education
6. This certificate shall be valid for four years and shall entitle the holder to teach in grades 1 to 12 inclusive, but only the subjects designated on the face of this certificate.

## V. ADMINISTRATIVE

A. Administrative certificates shall be granted upon evidence of-

1. A minimum of three years of successful teaching experience.
2. Elisibility of an Elementary or a Sccondary certificate.
a. Provided; that at the date of the adoption of this regulation, any person engaged as superintendent, principal, or supervisor, and actually in charge of a school or school system with five or more teachers; shall be entitled to have issued to him an Administrative certificate, in addition to the certificate now held, and for the same period of time. Same may be renewed as requirements on present certificate are fulfilled.
3. A minimum of fifteen semester hours in Education, in addition to and after securing the Baccalaureate degree, devoted to school organization, adrainistration and supervision.
B. The Administrative certificate shall be valid for four years and shall entitle the holder to administer public education and engage in such school supervision as may be properly included in the duties of a superintendent or principal of a school, or supervisor of non-special instruction.
C. The name Administrative certificate shall be designated on the face of this certificate.
NOTE: The Administrator's certificate shall be required of any administrator in charge of a school or school system with five or more teachers.
RENHEWALS: Ten semester hours, or two years of successfuI teaching and five semester hours of credit, or for holders of a Master's degree, evidence of four consecutive years of successful teaching during the Iife of the certificate.

The Administrative Certificate shall become effective at once. All other certification requirements shall become effective for all other certificates granted on or after August 20, 1936. Teachers now holding valid certificates shall be given until July 1, 1946, to qualify under the new requirements.

## AMENDMENT

To amend Administrative Certificate requirements (A), (3), as follows: A minimum of fifteen semester hours in Education, in addition 10 and after securing the Baccalaureate Degree, devoted to school organization, administration and supervision, selected as follows:

## Required:

Ten (10) semester hours with at least one course in each of the following groups:

Group 1
Scheol Administration and Supervision. This may include any of the following elective courses: 11, 12, 16, 17, 18, 19, 20, 21.
Group II
*Statistics. This may include any of the following elective courses: 4, 9, 28.
Group 111
Elementary or High School Curriculum, Organization and Functions. This may include any of the following elective courses: $7,10,13,14$.

## Electives:

Five (5) semester hours selected from the following courses:
**1. Arizona School System, Laws and Records
**2. Philosophy of Education
**3. History of Education
**4. Tests and Measurements
5. Mental Tests and Measurements
f. Current Fducational Froblems
7. Secondary Education
8. School Finance
9. Statistical Methods in Education
10. The elementary School
11. Elementary School Administration and Supervision
12. Supervision
13. The Junior High School
14. The High School
15. Extra-Curricular Activitics in Junior and Senior High School
16. High School Administration and Supervision
17. City School Administration
18. Public School Administration
19. State School Administration
20. Rural School Administration
21. Personnel Problems in School Administration
22. School Surveys
23. Advanced Statistical Methods
24. Educational Research
25. Personnel Guidance
26. Vocational Education, Problems, Guidance
27. Visual Education
28. Character Education
29. Laboratory in Teaching
30. Educational Sociology
*Not required if applicant has this credit in undergraduate work.
**Required unless applicant has already had these courses in undergraduate work.

Adopted by the State Board of Education in regular meeting, June 9, 1934.
STATISTICS
SUMMARY OF REGISTRATION, 1933-1934
College
Resident Students
Regular Session

| Men | 156 | 100 | 101 | 61 | 7 | 425 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Women | 144 | 112 | 143 | 92 | 14 | 505 |
| Total | 300 | 212 | 244 | 153 | 21 | 930 |

Summer Session
Men ..... 109
Women ..... 239
Total ..... 348
Extension Courses
Men ..... 8
Women ..... 34
Total ..... 42
Training Schools
Boys ..... 423
Girls ..... 448
Total ..... 871
Total Registration
In College ..... 1320
Counted twice ..... 174
Total different students ..... 1146
In Training Schools ..... 871
GRAND TOTAL ..... 2017
Summary of Graduates, ..... 1934
Prior to 1934 ..... 3585
Class of 1934
Three Year Curriculum ..... 84
B.A. Degree ..... 144228
Counted twice ..... 1 ..... 227

## GRADUATES, 1934

## BACHELOR OF ARTS IN EDUCATION

## January 26, 1934

Alonzo D. Adams
Frances Edith Anderson
Nelda Grace Dobson
Mary Ruth Duffey
John Reese Evans, Jr.
Cecil Ray Furr
Lola Emma Hankins

Lou Eoline Anderson
Mary Alice Baily
Llona Herma Bosley
Berdine Jackman Bovard
Frank Hermann Bradshaw
Annie May Bryant
Hazel Butler
Reid H. Callicoat
Nina M. Clark
Mary Ann Cocke
Eugene L. Coffinger
Howard J. Cook
Leo Grant Crismon
Harry Snedden Culbert
James Freeman Cullumber
Rachel Dana
Katherine Elizabeth Dayton
Thomas Lee Edens, Jr.
Margaret Morris Edgar
Osye Margaret Cobb Evans
Lynn Warren Fitzgerald
William Harrison Frazier
Meryl Furrey
Marjorie Mary Gabbard
A. M. Gardner

Dorothy Wilhelmina Gooding
Mavis Alberta Green
Daniel Grijalva
Helen Frances Hancock
Landon K. Hardesty
Emma Jean Hatcher
Ella Frances Herring
Fen S. Hildreth, Jr.
Joseph Houston Hinton
Alfred James Howard
Ruby Lloyd Jackson
Katherine Bernice Johnson
Gordon A. Jones
Helen Gertrude Kidd
Elsbeth Kies
Clandia B. Kinsey
J. Victor Kleinman

Violet Carolyne Krepela
Anne Kulinovich
Carmen L. Larison

Theo C. LeBaron
Michael P. Maffeo
Rylie C. McDowell
Thelma MiIstead
Warren Le Roy Paddock
Mildred Christine Tucker
Walter Raymond Wright
June 1, 1934
Francis LeBaron
Doran Leon Lee
Irene Lowry
Teofilo J. Martinez
Violet Ruth Masilko
Hugh J. McGinn
Della McKay
Flora Garnett Miller
Samuel Arthur Montgomery
Marjory Ellen Morgan
Charles Moss
William J. Mougeot
Joseph Marion Naegle
Helen Clare Perry
Mabel Clarinda Peterson
Agnes Redden Ramsey
$J$. Weldon Rohner
Helene Margaret Rosan
Nataline Virginia Rosan
James Edwin Samuels
Mabel Celia Slaughter
Omer James Smith
Ralph Smith
Lewis White Standage
Madeline Staples
Elizabeth Stephenson
Gertrude Dobyns Strange
Florence Clarkson Swift
Harry L. Swift
Florence J. Talley
Ruby Trammell
Susie May Trimble
Jane Sheley True
Juanita Jo Waggener
Nettie Vay Waggoner
Mary Lee Walker
Mary Loulse Watts
Elizabeth Morrell Webster
Warren W. Wells
Nova Davis West
Fllen Williams
Nancy Estelle Wilson
Roger M. Wilson
Ruby Ray Wingfield
Bassett T. Wright
Flora Marie Young
August 31, 1934
Gladys Ralston Allen
Forrest Fred Barefoot
Emma Lou Barrow
Blonda Bushman
Gilbert Leslie Cady
Wallace William Caywood
Peggy Ellen Collins
Marguerite Cramer

Ruth Crosby
Grace Edna Dodd
Daniel Farrell
William Edward FitzSimons
John Abert Freestone
Dorothea Julia Goodwin
Lucile Garrett Haughtelin
Frank B. Forne

James A. Ice
Benton Robert James
Taurence W. Jones
Loyd Leslie Ledford
William Earl Merrill
Orville Dwyer Mudge
Alma Ann Munz
Dorothy Alice Nelson
William Hans Olsen
Attie Veta Pennington
Elma Pope
Edwon Riggs

Marion Thomas Risner
Harry Herschel Scales
Charlene Lane Sheldon
LeNore Shill
Bonnie Fay Shipley
Derald Stowell
James Bishop Sutton
Vernon Tuckey
Juanita Mills Voelker
Claude O. Warfiek
Winnie Dee Wilson

# THREE YEAR DIPLOMA 

## January 26, 1934

Paul F. Griffith
Daniel Grijalva
Leon Clifford Jones
Betty F. Walker

June 1, 1934
Marian E. Krentz
Ruthella Looman
Lois Ann Maffeo
Mary Elizabeth Maffeo
Leslie Grover Maloy
Catherine Elien Mayer
Jean Virginia Menderson
A. Alene Mitchell

Dorothy Lorraine Mitchell
Bernice Moody
Ivern LaRue Pew
Ira Pirtle, Jr.
Adele Bellamy Priest
Melia Mildred Radanovich
Ethel Louise Robinson
Edgar Lamar Rose
Alma E. Roukala
Margaret Sue Salmon
Velma Sanders
Gertrude Frances Sargent
Dorothy Bell Sawyer
Carolyn L. Schirmacher
Mildred Jeanette Smith
Vivian Hallin Starck
Marydea Thomas Stitt
Ellen Carolyn Tefft
Emma Belle Tenney
William Roy Tribble
Invle Eugene Trimble
Marion Waterhouse
August 31, 1934
Norma Lee Acuff
Joe T. Durand
Katherine Anna Farrell
Christine Glass
Edna Oneda Irby
Saul Amos Johnson
Eva Ruse Keebler
Alice $W$. Lee
Dorothy E. Marquess
Anna Christine McDaniel
Ina McNeil
Emma A. Morris
Dorothy Olive Phillips
Lillian Irene Pirtle
Margery R. Pomeroy
Albert B. Sien
Dora J. Skousen
Richard Jennings Solomon
Jane Tatum
E. Zenobia Traylor

## HONORS

Bachelor of Arts in Education With High Distinction<br>Howard J. Cook<br>Berdine Jackman Bovard<br>Elizabeth Stephenson

With Distinction
William Earl Merrill Agnes Redden Ramsey
A. M. Gardner Jane Sheley True
J. Weldon Rohner Madeline Staples

Dorothy Wilhelmina Gooding Lola Emma Hanking
Mary Ann Cocke
Hugh J. McGinn
Della McKay
Roger M. Wilson

KAPPA DELTA PI AWARD
Howard J. Cook
JUNIOR HONORS
Moeur Medal
Rosamond Dalton

Moeur Pin
Vadra Davis

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[^0]:    *On leave of absence, 1934-1935

[^1]:    *On leave of absence, 1934-1935.

[^2]:    *After June, 1936 , no three year diplomas will be granted.

[^3]:    Note 1. In the starred courses, sections are to be so arranged that half the group take the course the first semester, and half in the second semester.
    Note 2. The courses in social studies in the sophomore year are to be selected from the following:

    Hist. 103, 104, American Pol. and Social History Hist. 113, Medieval Europe
    Econ. 131, 132, Principles of Economics

[^4]:    *In the case of starred courses, sections are so arranged that half the group take the subject the first semester and half in the second semester.

[^5]:    *In the case of starred courses, sections are so arranged that half the grouy take the subject the first semester and half in the second semester.

[^6]:    Note 1. In the case of the starred courses, sections are to be so arranged that half of the group will take the course in the first semester and half in the second semester.

    Note 2. The courses in social studies are to be selected from the following: Hist. 101, $102,103,104,113$, and Econ. 131, 132.
    Note 3. Electives will be so chosen as to include an approved minor of at least fifteen units in a field of learning other than art or education.

[^7]:    *In the starred courses, sections are to be so arranged that half the group takes the course in the first semester and half in the second semester. Courses constituting the major will be selected under the advice of the head of the department.

    Electives will be so chosen as to include an approved minor of at least fifteen semester hours, in a field of learning other than commerce or education.

[^8]:    Note: Engl. 101, 102 and Eingl. 160 may not be counted toward the major. Students electing to major in English will plan their programs under the advice and direction of the head of the department.
    *On leave of absence, 1934-1935.

[^9]:    Note 1. In the case of the starred courses, sections are to be so arranged that half of the group will take the course in the first semester, and half in the second semester.
    Note 2. The courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; 113; and Econ. 131, 132.
    Note 3. Electives will be so chosen as to include an approved minor of at least fifteen units in a field of learning other than English or education.

[^10]:    Mr. Heaps.

[^11]:    Note 1. In the case of starred courses, sections are to be so arranged that half the group will take the course in the first semester, and half in the second semester.

[^12]:    Note 1. In the case of the starred courses, sections are to be so arranged that half the group will take the course in the first semester and half in the second semester.
    Note 2. The courses in social studies are to be selected from the following: Hist. 101, 102; 103, 104; 113; and Econ. 131, 132.
    Note 3. Electives are to be so chosen as to include a minor of at least fifteen units in a field other than education.

[^13]:    Note 1. In the case of the starred courses, sections are to be so arranged that half of the group will take the course in the first semester and half in the second semester.
    Note 2. The courses in sophomore social studies are to be selected from the following: Hist. 101, 102; 103, 104; 113; and Econ. 131, 132.
    Note 3. Nlectives will be so chosen as to include an approved minor in some field of learning other than science or education.

[^14]:    Dr. Bateman.
    Second semester, three lectures and three hours of laboratory per week.

    4 units.

