# ARIZONA STATE TEACHERS COLLEGE 

## AT TEMPE

## BULLETIN

CATALOGUE ISSUE<br>FOR THE SESSION OF<br>1933-1934



TEMPE, ARIZONA

## BULLETIN

## ARIZONA STATE TEACHERS COLLEGE

General Series $\quad$ JUNE, 1933 Number 8

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TEMPE, ARIZONA

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## COLLEGE CALENDAR

## FALL SEMESTER, 1933

First faculty meeting 7:30 P. M., Tuesday, September 5
Assembly of Freshmen 8:30 A. M., Thursday, September 7
Registration........Thursday, Friday, and Saturday, September 7, 8, 9
Instruction begins Monday, September 11
Mid-semester scholarship reports due Thursday, November 9
Armistice Day and Home Coming Saturday, November 11
Thanksgiving recess, Thursday, November 30 to Sunday, December 3Christmas vacation-Saturday, December 23 to Sunday, January 7, 1934
Final examinations-
Tuesday, Wednesday, Thursday, Friday, January 23, 24, 25, 26
Last day of fall semester Friday, January 26
SPRING SEMESTER, 1934
Registration Monday, Tuesday, January 29, 30
Instruction begins Wednesday, January 31
Mid-semester scholarship reports due Wednesday, March 28
Spring vacation Friday, March 30 to Monday, April 2
Final examinations-Tuesday, Wednesday, Thursday, Friday, May 29, 30, 31, June 1
Sunday, June 3 Baccalaureate ServiceMonday, June 4
SUMMER SESSION, 1934
Summer Session opens ..... Monday, June 11, 1934

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## OFFICIAL DIRECTORY

## STATE BOARD OF EDUCATION

His Excellency, Benjamin B. Moeur. Governor of Arizona
Dr. Herman E. Hendrix Phoenix
Superintendent of Public Instruction
Dr. Homer Leroy Shantz ..... Tucson
President, University of Arizona
Dr. Grady Gammage. Tempe
President, Arizona State Teachers College at Tempe
Mr. John D. Loper. ..... PhoenixSuperintendent of City Schools
Mr. A. W. Hendrix Prescott
Principal, Frescott High School
Mrs. Dorothy Eidson Sykes ..... Globe
County Superintendent of Schools, Gila County
BOARD OF EDUCATION, TEACHERS COLLEGE
Dr. Herman E. Hendrix Phoenix
Superintendent of Public Instruction
Mr. Garfield A. Goodwin Tempe
Secretary of the Board
Mr. Fred J. Joyce. Tempe
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Mrs. Rollie Pomeroy. Mesa
Col. Jas. H. McClintock ..... Phoenix
Mr. D. H. Bonsall ..... Glendale
OFFICERS OF THE ALUMNI ASSOCIATION
Mr. John R. Sandige, ' 14 Phoenix
President
Mr. Francis Vihel, '31 ..... Tempe
Vice-Presiđent
Miss Leona M. Haulot, ’02 Tempe
Secretary-Treasurer

## OFFICERS OF ADMINISTRATION

Grady Gammage, LL.D. President of the College
Frederick M. Irish, A.B. Registrar
Viva May Lindahl, A.M. Financial Secretary
Mary L. Bunte Secretary to the President
Laura Dobbs Assistant in Business Office
Thomas Jerome Cookson, A.B. Librarian
Willard Allison Heaps, B.S., A.B.L.S.

$\qquad$
Assistant Librarian
Amelia Kudobe Recorder
Josephine Durham, R.N. Health Service
Sibyl May Bookkeeper
Hilen M. Hanshue Head Resident, North Hall
Sallie Davis Hayden, A.B. Head Resident, East Hall
Eva Hurst Head Resident, Carrie Matthews Hall
Robert R. Krause Steward, Dining Hall
Mrs. Robert R. Krause Matron, Dining Hall

## FACULTY

## 1933-1934

Grady Gammage, A.B., A.M., LL.D. - - - President of the College
Arthur J. Matthews, LL.D., D.Pd. - - - President Emeritus
Sylvia Theresa Anderson, A.M: - - - Instructor in Education; Instructor in Campfire Leadership; Training Teacher, Training School
C. R. Atkinson, A. M., Ph.D. - - - - Professor of Commerce; Head of Commerce Department

George Monroe Bateman, M.S., Ph.D. Professor of Physical Science; Head of the Department of Science

Samuel Burkhard, M.A., Ph.D. - - - Professor of Education; Head of the Department of Education

Esther Alma Calloway, A.B., A.M. - - . Instructer in Education; Training Teacher, Junior Itigh School

Fernand Cattelain, M.A., Docteur de l'Université - - I'rofessor of French Language and Head of the Department of

Languages
Vera A. Chase, A.B., M.A. - - - - . Instructor in Education; Training Teacher, Training School

Donald E. Cluxton, A.M. - - - - - Instructor in Rducation; Training Teacher, Training School

Thomas Jerome Cookson, A.B. - - - - - - Librarian
Vienna Ione Curtiss, A.B. - - - - - - Assistant in art
Ruth Douglass, M.S. - - - - - Instructor in Home Economics
Mary McNulity Empey, A.B., A.M. - - - Instructor in Education; Training Teacher, Training School

Olive M. Gerrish, M. A. in Music Education -
Assistant Professor of Music; Training Teacher, Training School

John Odus Grimes, A.M., Ph.D. - - Professor of Psychology;
Head of the Department

Leona M. Haulot, A.B., M.A. - - $-\quad-\quad$| Instructor in Education; |
| :---: |

Willard Allison Heaps, B.S., A.B.L.S. - - Assistant librarian; Librarian of the Training School
J. Wenger Hoover, M.S. - - - - - Assistant Professor of Geography and Geology

Carl G. Hoyer - - - - - - - - - Band and Orchestra

Frederick M. Irish, A.B. - - - - - - - - - Registrar

Pearl R. Kloster, M.A. - - - - - Instructor in Fine Arts

Rudolf H. Lavik, A.B., B.P.E. - - - Head of the Department of Physical Education; Director of Athletics

Mary T. Lutz, M.A. - - - - Assistant Professor of Education: Supervising Director, KindergartenPrimary Training

Louise B. LYND, B.S. - - - - - - - Supervising Critic, Rural Training Schools
*F. Glenn Macomber, M.A. - - Assistant Professor of Education; Training Teacher, Training School

Bettse E. Marten, A.B. - - - - Instructor in Ihysical Education
*Ralph A. Masteller, A.M. - - Associate Professor of Commerce
Martin Mortensen, Jr., A.B., A.M. - - - Instructor in Science
John Robert Murdock, A.M. - Associate Professor of Social Studies Nina Murphy, A.M. - - - - Instructor in Physical Education Lewis S. Neeb, M.A. - - - - - - Associate Professor of Head of the Department of Industrial Arts

Alma M. Norton, M.A. - - - - Assistant Professor of Music IdA WOOLF O'CONNOR, M.A. - - - - - $\quad \begin{array}{r}\text { Instructor in Education }\end{array}$

Forest E. Ostrander, M.S. - Assistant Professor of Agriculture
Ira Dawson Payne, A.M. - - - Associate Professor of Education; Director of Training Schools
*On leave of absence, 1933-1934.

Edith Blanche Pilcher, M.A. - - Assistant Professor of English

Ella L. Roll, M.A. - - - - Assistant Professor of Education; High School
George A. Ross, M.S. - - - - Instructor in Industrial Arts

Esther Sather, A.M. - - - - - Associate Professor of Music; Head of the Department of Music

Dorothy Cecilia Schilling, Ph.D. - - - - Professor of Englisl

Joe Sellef, A.B. - - - - - - Assistant in Physical Education
Beryl Simpson, A.M. - - - - - Assistant Professor of English and Dramatics

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 and Speech

Norris Joseph Steverson, A.B. - Assistant in Physical Education William D. Taylor, Jr., A.M. - - - - Associate Professor of English and Journalism

Charles Wexler, A.M., Ph.D. - - Professor of Mathematics; Head of the Department of Mathematics

Irma Wilson, A.M. - - - - - Assistant Professor of Spanish
Rufus Kay Wyllys, A.M., Ph.D. - - Professor of Social Studies; Head of the Department of Social Studies
*On leave of absence, 1933-1934.
Note: Faculty members will be added in the departments of Commerce, and Home Economics. These appointments will be made in time for the opening of the fall semester.

# THE COLLEGE 

## PURPOSE

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. Professional courses deal with the theory and technique of teaching, including the latest discoveries in 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 whereby a student may build on his general background a special knowledge in his particular field.

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, triognometry, calculus, physics, chemistry, geology, history, 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 for the purpose. 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 September 1, 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.

The college is a member in Class A of the American Association of Teachers Colleges. It is also a duly accredited member of the North Central Association of Colleges and Secondary Schools.

## THE COLLEGE SETTING

## LOCATION

Tempe is in all respects an ideal location for a teachers' college. One might characterize it as a town of pleasant homes, numbering about 3,000 residents, and situated in the center of Salt River Valley, the wealthiest and most productive irrigated district in the United States. While enjoying freedom from many of the disadvantages and distractions of a larger city, yet this community is within easy reach, by automobile or by 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. 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 wellkept 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 early traditions of the days of Tempe Normal School cluster about the MAIN BUILDING, with its three stories of ivy-covered red brick, which for many years after its erection in 1894, was the scene of nearly all student activities. With the growth of the institution, one department after another has been separately housed until at the present time this parent building is devoted chiefly to classrooms for the academic work. The east half of the main floor contains the large recreation hall, which serves as the center for the social functions of the student body.

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

The College Auditorium is located on the west side of the Quadrangle, opposite the Science Hall. Seating capacity is provided for one thousand persons and the forty foot stage is well equipped with modern scenery 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.

East Hall, a dormitory for women, 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.

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

## 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

Graduates of the professional courses of the college automatically become members of the alumni association. Including the class of 1933, the association now numbers about 3574 members, the majority of whom are residing within the state. 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 to further perfect their organization that it may continue effectively to serve the interests of the Arizona State Teachers College at Tempe.

Endowment Fund. Believing that a professional education is a most valuable asset in life, the Alumni desire to extend its benefits to others. With this end in view, the Alumni Association for some time 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 $\$ 10,000$ and is becoming established on a working basis, as is shown by the fact that in the past few years, over 200 students practically owe their graduation to the assistance received from this source.

In view of the fact that many worthy students were forced to leave school the past year because of the lack of funds, the alumni association is making the securing of loans for a number of such students one of its objectives for the coming year.

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. Members should use every effort to be present at this event, as the meeting usually results in the shaping of plans for the ensuing year. The date for the next reception is May 5, 1934.

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. 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 every 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, Arizona State Teachers College, 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 Elementary Schools
Educ. 120 Sociology
Educ. 216 Educational Sociology

| Educ. | 220 | Personnel Problems of the Elementaxy School |
| :--- | :--- | :--- |
| Educ. | $\mathbf{2 4 1}$ | 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.

## CORRESPONDENCE 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.

## LECTURES 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 Gcographic 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. Although no permanent scholarships have been established, much good has been accomplished in this field, and a number of successful teachers in Arizona owe their education to timely aid of this character.

## 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 Moeur 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 Institution

The attendance at the first summer session held in 1932 so far exceeded all expectations as to demonstrate beyond a doubt the need and demand for a summer session in the Salt River Valley. The exceptionally large attendance, the enthusiastic application of the students to the work offered, and the satisfactory results convinced the administration that the summer session at Tempe should become a permanent institution. The satisfactory attendance at the summer session of 1933 fully confirmed this decision.

Teachers in service and others interested are assured a permanent summer session giving the same high quality of instruction for which the institution has been known for almost half a century. The 1934 summer session will open June 11, and the session of 1935, June 10.

## A Self-Supporting Institution

Not one cent of the State tax dollar goes to the support of the summer session. It is financed entirely by the comparatively low fee charged the students for tuition.

## High Quality Instruction

The courses offered in the summer session are given by members of the regular faculty of the College. Therefore, students coming to Tempe for the summer work are assured the same high class instruction as is given during the regular college year. Courses given in the summer session are equivalent in every respect, in content, in method, and in credit value to those offered during the regular sessions.

## Complete Educational Facilities

All the educational facilities of the College are available to the summer students, including the regular faculty, all the facilities of the new and well-appointed Matthews Library, the shop facilities, and the equipment of the laboratories in science and home economics.

## Full College and Residence Credit

Each class meets six days a week thus giving full six weeks' credit in five weeks' attendance. Three courses may be carried each
term giving six semester hours of credit each term or twelve semester hours for the entire session of ten weeks.

Full residence credit is allowed, enabling students to complete the requirement for the three year diploma or for the A.B. degree during the summer session. The summer session is an integral part of the college year, and summer work is given the same consideration in every respect as that done in the fall and spring semesters.

# 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 seventh, eighth and ninth 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. Upon completing the work of this junior high school, the pupil is admitted to the second year of any four year high school.
*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 six 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 fur-

[^0]nish special teacher training to college students who are interested in Americanization work and the problems connected with teaching non-English speaking primary children.

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

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

## THE COLLEGE LIBRARY

Matthews Library. The 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 p. 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, assembly programs, and library books. 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.

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 expense, the students enjoy the advantage of a considerable saving in this important item of expense.

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 rebate 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 $\$ 21.50$ 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.

Laundry Fee. A fee of $\$ 2.00$ per semester, payable in advance on the date of registration, is required of all dormitory residents for laundering of towels and bed linen. No reduction in the rate is to be made for laundry done at home, nor for absences or withdrawal from the dormitory.

Summary. The following summary includes the fees and minimum expenses incurred by a student living in a dormitory for one college year:
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) ..... 193.50
Laundry fee ..... 4.00

$\$ 253.50$

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.

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

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

## DEPOSITS

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

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 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 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 $\$ 18.00$ 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 $\$ 7.00$.

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 $\$ 2.00 \mathrm{per}$ 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.

All of the 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. This includes accounts payable to the college and all other accounts that are brought to the attention of the college authorities.

## 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.

## 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. Excess load. Special faculty action is necessary to permit a student to register for an amount of work in excess of that prescribed in a given curriculum. Application for such excess work must be made in writing on the prescribed form to the scholarship committee, and must give a detailed statement of work regularly assigned and additional work desired, together with the student's reasons for the special consideration. As a rule, no consideration will be given to such a request unless the record of the applicant has attained a satisfactory scholarship index for the semester immediately preceding. The higher the index, the larger the load permitted.
3. 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 instructor, will be returned to the registrar's office. Failure to attend to this formality will result in a grade of E being recorded in the course
or class dropped. In case a student withdraws from the college, it is necessary to follow this procedure for each of the courses which are thus to be dropped.

## MAREING 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.
$\mathrm{Cr}, \mathrm{Credit}$ (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 depart-
ment 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

In order to be qualified for graduation from any curriculum, a student must have attained a scholarship index equivalent to a mark of C or better.

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 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 $E$ 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 diploma 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.

Diploma Fees. The fee of $\$ 3.00$ for graduation from the threeyear curriculum and $\$ 5.00$ for graduation with the A.B. degree are charges against the student's account. The diploma will not be issued 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 the last named 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. All commercial obligations in the community that have been reported to the business office.

# 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 four dormitories: East, 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 $\$ 2$ per month.

Limited kitchenette privileges are provided in each hall, but no cooking of any sort is permitted in individual rooms. A laundry room, furnished with hot and cold water, gas plate and ironing boards is available for the laundering of personal belongings. All bed linens and towels are laundered by the college at a flat rate of $\$ 2$ per semester.

Vocal or instrumental music is not practiced in these halls nor in Alpha Hall; arrangement for such work can be made through the music department.

Foung 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.

## DORMITORY 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.

Dormitory for Men. Alpha Hall, the only dormitory available for men, accommodates sixty-three students. Facilities, dormitory rates, and laundry rates 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 Alpha Hall 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 the campus may board in the dining hall for $\$ 18$ per month. Occasionally board may be secured off campus, usually at a higher rate. Generally speaking living off the 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 axrange 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.

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 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 athletic 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 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 cylorama 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 try-outs. 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 presenting 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 college 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 columns 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. Positions 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 community. The society has included upon its list of speakers and guests some of the world's noted geographers and scientists.

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

Los Hidalgos del Desierto 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
Delta Theta
Kappa Kappa Alpha
Lambda Kappa
Philomathian

Pierian
Phi Beta Epsilon
Phi Lambda Nu
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 Hall.

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 graduation from 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, including 1 unit Biology.......... 2 units
Electives, subject to committee approval... ........... 7 units
Total .......... ............................................................... 15 units
By arrangement- with the faculty committee on admissions, a program including two majors of three units each, one of which majors is in English, and two minors of two units each may be accepted for admission instead of the program outlined above. The total number of units offered must not be less than fifteen.

## 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.

## COLLEGE APTITUDE TEST

All new students are required to take a college aptitude test.

## FUNDAMENTALS

It is extremely important that each candidate for a teaching certificate have an every day working knowledge of the fundamental subjects in the elementary curriculum-reading, writing, arithmetic, composition, spelling, grammar, geography, history, and speech. Students in teacher-training courses whose skill in these fundamentals is not up to the standard necessary in the ordinary functions of life must bring their work up to such a standard before they will be permitted to enroll for student teaching. Necessity for taking the courses in the fundamentals will be evidenced by poor reading ability, illegible penmanship, inaccuracies in arithmetical processes, misspelled words, or poor sentence structure in written work in any of the college courses. Standardization tests and measurements in the fundamentals are also given to all applicants for student teaching at least one semester before taking up their work in the training schools.

## 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 deficiencies 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 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.

## STUDENTS FROM JUNIOR COLLEGE

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. No credits for professional courses in education will be accepted.

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
Sight Singing................................................................ 2
Physical Education ........................................................ 3
Science ....... ................................................................ 6
Social Studies, including Federal and
Arizona Constitutions....................................... 6
Teaching Major.............................................................. 6
Free Elective ................................................................. 1
Total ............................................................................ 32
To transfer from the junior college to the teachers college at the end of the sophomore ycar, it is recommended that the student bring credit for the following:
Units
Principles of Art ..... 2
English, including Oral English ..... 12
Sight Singing ..... 2
Physical Education ..... 4
Science ..... 12
Social Studies, including Federal and Arizona Constitutions ..... 12
Teaching Major ..... 6
Free Elective ..... 8
Total ..... 64

The electives should be largely chosen around a teaching major.

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 colleges 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 7, 8, and 9, 1933.
For the second semester, January 29 and 30, 1934.
Freshmen. Freshmen registering for the first semester should note that they are required to be present at a special assembly at 8 a. 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 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 June 16, 1932, requirements for certificates granted after September 1, 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 elementary 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 degree.

This action of the State Board of Education is in line with the movement throughout the country in the direction of better preparation for both elementary and secondary teachers. These standards have been in force in the State of California since 1930 and also in many of the leading cities of the nation as well as in many of the large school districts of Arizona.

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 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 courses.
GROUP ELECTIVES AND TEACHING MAJORS AND MINORS
Group Elective. A group elective is composed of 24 semester units in one department. It may include the subjects required in the core curriculum. The term "group elective" is used only in the elementary school curriculum. It shows that the candidate has not only taken a broad background of cultural courses, but has also intensified in one particular field. Some of the subjects included in a group elective may be used for a high school teaching major, while others may not be so used.

Teaching Major. The teaching major is the term applied to the sequence of courses selected in one department which represents the student's intensive preparation to teach that particular subject in high school. It consists of not less than 24 nor more than 50 semester hours of related work, at least 12 of which must be in upper division courses. Not more than 50 units in any one department may be allowed in the combined lower and upper divisions except where the student is a candidate for a special certificate.

Teaching Minor. The teaching minor is a sequence of courses selected from one department other than that from which the teaching major is chosen. It consists of not less than 15 hours of related work.

## 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 divisions.

## 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.

## STANDARD CURRICULUM FOR FRESHMAN YEAR

With a few exceptions, all students intending to become teachers, either in the kindergarten-primary, elementary, secondary, or special fields, have a common curriculum during the freshman year as follows:

| First Semester Units | Second Semester Units |
| :---: | :---: |
| English Composition ............. 3 | English Composition .......... 3 |
| Science ................................ 3 | Science |
| Economic History of the U.S. 3 | Constitutional Government 3 |
| Sight Singing ........................ 2 | Principles of Art............... 2 |
| Library Practice .................. 1 | Hygiene ........................... 2 |
| Elective ...--......................... 3 | Elective ..----..................... 3 |
| Physical Education ...............1/2 | Physical Education ........... ${ }^{1 / 2}$ |
| 1512 | $161 / 2$ |

Before the close of the second semester, each student, under the guidance of the Scholarship Committee and special advisers, will decide which curriculum to follow after the freshman year. Also choice will be made as to group electives and teaching majors and minors.

Guidance to students in this matter of selection of the field of teaching, whether kindergarten, elementary, secondary, or special, and also choice of group electives and teaching majors, will be made on the basis of special interest, aptitudes, general scholarship, and current supply and demand for teachers.

For example, the number of teachers recommended each year for the presecondary curriculum will be in line with the number of high school teachers needed in Arizona and in line with the special aptitudes not only for teaching in high school, but also for the particular teaching major chosen.

Freshmen who show no particular aptitude for teaching will be advised to transfer to some other school, college, or university.

## REQUIREMENTS FOR GRADUATION FROM THE FOUR-YEAR DEGREE CURRICULUM IN ELEMENTARY EDUCATION

The regular four-year elementary teachers' degree course prescribed in accordance with law, with the regulations of the State Board of Education, and the regulations of the faculty of the College, requires for graduation, 126 semester units. This curriculum will be required of all candidates for elementary teaching credentials after September 1, 1936.

The certificate based on this curriculum is valid in the elementary and junior high schools of Arizona.

Previous to 1936 , candidates who so desire may earn the old three-year elementary diploma.

## SUBJECT REQUIREMENTS GROUP I

General Requirements Units
Principles of Art ..... 2
Public School Art ..... 2
Agricultural Projects ..... 3
*Fundamentals:
English A ..... 0
Arithmetic A ..... 0
Reading A ..... 0
Spelling A ..... 0
Penmanship A ..... 0
Speech A ..... 0
Geography ..... 3
Home Economics or Shop Work ..... 2
Arithmetic ..... 2
Sight Singing ..... 2
Public School Music ..... 2
GROUP II ..... 18
Departmental Requirements English
English Composition ..... 6
Literature for the Grades ..... 3
Oral English ..... 2
Library Practice ..... 1

[^1]
## Education and Psychology

Psychology ..... 3
Elementary Curriculum ..... 3
Reading and Language Problems ..... 3
Principles of Teaching ..... 3
Educational Measurements ..... 3
Philosophy of Education ..... 3
Directed Teaching ..... 1028
Physical Education
Hygiene ..... 2
Growth and Development of Child ..... 2
Activities one half unit each semester ..... 4

## Science

Six units to be elected from the following courses ..... 6
*Physics 100, *Chemistry 100; *Biology 100; Chemistry 101,102; Physics 101, 102; Botany 111, Zoology 122.

* Students who plan to major in science or home economics, or who have taken a year's course in high school biology, chemistry, or physics, are ad- vised to register for either Chemistry 101, 102, or Biology 111, 122.
Social Science
Economic History of the United States ..... 3
Constitutional Government ..... 3
European History ..... 6
Sociology ..... 3
MAJORS AND GROUP ELECTIVES ..... 15
The candidate for the degree must have completed a majorin Education and a group elective of 24 units in a field to beselected from the following:

| Art | Mathematics |
| :--- | :--- |
| Commerce | Music |
| English | Physical Education |
| Foreign Languages | Psychology |
| Home Economics | Science |
| Industrial Arts | Social Science |

The specific courses required for the group electives in each department are given just preceding the department course descriptions.
RECOMMENDED SEQUENCE
FOUR YEAR DEGREE CURRICULUM IN ELEMENTARY EDUCATION
Freshman Year
First Semester Second Semester
Units Units
English Composition ............ 3 English Composition ..... 3
Science 3 Science ..... 3
Economic History of U.S. 3 Constitutional Government ..... 3
Sight Singing 2 Principles of Art ..... 2
Library Practice 1 Hygiene ..... 2
Group Elective 3 Group Elective ..... 3
Physical Activities 1/2 Physical Activities ..... $1 / 2$
$15^{1 / 2}$ ..... $16^{1 / 2}$
Sophomore Year
Oral English 2 Literature for the Grades ..... 3
Agriculture 3 Geography ..... 3
European History 3 European History ..... 3
Psychology 3 Sociology ..... 3
Group Elective 3 Group Elective ..... 3
Free Electives 2 Free Electives ..... 1
Physical Activities .............. 1/2 Physical Activities ..... 1/2
$161 / 2$ ..... $161 / 2$
Junior Year
Reading and Language ........ 3 Elementary Curriculum ..... 3
General Shop Work 2 Growth and Development
Public School Art ................ 2 of the Child ..... 2
Arithmetic 2 Public School Music ..... 2
Group Elective 3 Principles of Teaching ..... 3
Free Electives 4 Group Elective ..... 3
Free Electives ..... 3
Physical Activities 1/2 Physical Activities ..... $1 / 2$
$16^{1 / 2}$ ..... $161 / 2$
Senior Year
Student Teaching 5 Student Teaching ..... 5
Measurements 3 Philosophy of Education ..... 3
Group Electives 3 Group Elective ..... 3
Free Electives 3 Free Electives ..... 3
Physical Activities $1 / 2 \quad$ Physical Activities ..... $1 / 2$
$14^{1 / 2}$ ..... $14^{1 / 2}$

## REQUIREMENTS FOR GRADUATION FROM THE FOUR YEAR DEGREE CURRICULUM IN KINDERGARTENPRIMARY EDUCATION

The regular four-year kindergarten-primary teachers' degree course prescribed in accordance with law, with the regulations of the State Board of Education, and the regulations of the faculty of the College requires for graduation 126 semester units. This curriculum will be required of all candidates for the kindergarten-primary teaching credential after September 1, 1936.

The certificate based on this curriculum is valid in the kindergartens, elementary and junior high schools of Arizona.

Previous to 1936 candidates who so desire may earn the old three-year kindergarten-primary diploma.

## SUBJECT REQUIREMENTS <br> GROUP I

General Requirements Units
Principles of Art.............................................................. 2
Public School Art................................................................... 2
Agriculture 110 ......................................................................................
Geography 100 ............................................................... 3
Mathematics 100 ................................................................... 2
Sight Singing ............................................................................. 2
Public School Music ........................................................... 2
Bench Wood Work............................................................ 2
*Fundamentals English A ........................................................... 0
Arithmetic A ..................................................... 0
Reading A ......................................................... 0
Spelling A ......................................................... 0
Penmanship A .................................................. 0
Speech A ........................................................... 0
GROUP II 18
Departmental Requirements
English Kindergarten-Primary
Units Units
English Composition ............ 6 Children's Literature ..........- 3
Literature for the Grades-... 3 Play Education .................... 3
Oral English ...-.................... 2 Kgn.-Prim. Curriculum ..-..... 3
Library Practice .................- $\frac{1}{12}$ Constr. and Play Materials $\frac{3}{12}$
*The fundamentals requirements may be satisfied either by passing preliminary examinations or by passing courses in these subjects.


## MAJORS AND GROUP ELECTIVES

The candidate for a degree must have completed a major in Elementary Education and a minor in Kindergarten-Primary Education.

While not required, it is highly recommended that the candidate also complete a group elective of 24 units in a field to be selected from the following:

| Art | Home Economics | Physical Education |
| :--- | :--- | :--- |
| Commerce | Industrial Arts | Psychology |
| English | Mathematics | Science |
| Foreign Language | Music | Social Strdies |

The specific courses required for the group electives in each department are given just preceding the departmental course descriptions.

[^2]
## RECOMMENDED SEQUENCE <br> FOUR YEAR DEGREE CURRICULUM IN KINDERGARTENPRIMARY EDUCATION



## REQUIREMENTS FOR GRADUATION FROM THE FOU DEGREE CURRICULA IN PRE-SECONDARY EDUCA

The regular four-year presecondary degree curricula 1 in accordance with law, with the regulations of the State Education, and the regulations of the faculty of the Colleg for graduation at least 126 semester units. These curricu' required of all candidates finishing the requirements for hi teaching credentials after September 1, 1936.

After completion of the four-year presecondary curric earning the A.B. degree the graduate is further requirec plete one year of graduate work at the State University : or at any other university or college authorized to give work and train high school teachers.

The secondary certificate is valid in the senior and jr schools of Arizona.

Previous to 1936 candidates who so desire may ear. four-year secondary credential.

| Art | *Fundamentals |
| :---: | :---: |
| Principles of Art .............- 2 | English A ..................... |
| 2 | Arithmetic A ............... |
| Education | Reading A |
| Reading and Language or | Spelling A ...................- |
| Elementary School Curriculum 3 | Penmanship A |
| Educational Measurements .. 3 | Speech A |
| Principles of Teaching ........ 3 |  |
|  | Music |
| English | Sight Singing |
| English Composition ..........- |  |
| Literature |  |
| Oral English ...................... | Physical Educati |
| Library Practice .-.-............ | Hygiene |
| Foreign Languages ${ }^{12}$ | Growth and Developmer of the Child $\qquad$ |
| Though not required, it is | Activities one-half unit |

Science Social Studies
*Laboratory Science 12 Economic History of U. S...3
To be elected from the follow- Constitutional Government ..... 3ing courses:
European History ..... 6
Sociology ..... 3
Chemistry 101, 102; ..... -
Physics 101, 102. ..... 15
Psychology
Psychology ..... 3 Arts, or Science see exceptions noted below.

## TEACHING MAJORS AND MINORS

Candidates for a degree in presecondary education must complete 14 units in Education, a teaching major in a field to be selected from the following, and a teaching minor in a second field.

| Art | Mathematics |
| :--- | :--- |
| Commerce | Music |
| English | Physical Education |
| Foreign Languages | Psychology |
| Home Economics | Science |
| Industrial Arts | Social Studies |

## *Exceptions

*Students choosing a teaching major in Home Economics will be required to take in Science.

Units
Biology ................................................................................ 3
Physiology ........................................................................... 3
General Chemistry ................................................................ 8
Organic Chemistry ............................................................... 4
18
Students choosing a teaching major in Industrial Arts will be required to take General Chemistry in the Sophomore Year.

Students electing to major in either Physical or Biological Science should follow the teaching major in Science as outlined just preceding the description of science courses.

The specific courses required for the teaching majors and minors in each department are given just preceding the departmental course descriptions.

## RECOMMENDED SEQUENCE FOUR YEAR DEGREE CURRICULA IN PRESECONDARY EDUCATION

With teaching majors in art, commerce, English, foreign language, mathematics, music, physical education, social studies.

## Freshman Year

First Semester Second Semester Units Units
English Composition ............ 3 English Composition .......... 3
Science ...............................- 3 Science ................................. 3
Economic History of the Constitutional Government.. 3
U. S. .................................. 3 Art Appreciation ................ 2

Sight Singing .-.---................. 2 Hygiene ................--..............- 2
Library Practice ................... 1 Elective ................................ 3
Elective ................................ 3
Physical Activities .............. 1/2 Physical Activities .............. 1/2
$151 / 2 \quad 16 \frac{1}{2}$
Sophomore Year
Elementary Speech .............. 2 Literature ............................. 3
Laboratory Science ............ 3 Laboratory Science .............. 3
European History ................ 3 European History ................ 3
Psychology 100 ..................... 3 Sociology ............................... 8
Major and Minor ................. 5 Major and Minor ................ 4
Physical Activities .............. 1/2 Physical Activities .............. 1/2
$16^{1 / 2} 16^{1 / 2}$
Junior Year
Elementary Curriculum ...... 3 Principles of Teaching ........ 3
Growth and Development Major and Minor ................. 13
of Child ............................. 2
Major and Minor ................ 11
Physical Activities .............. 1/2 Physical Activities .............. 1/2
$16^{1 / 2} 161 / 2$
Senior Year
Student Teaching ................ 10 Educational Measurements .. 3
Major and Minor ................ 6 Major and Minor ................. 13
Physical Activities .............. 1/2 Physical Activities .............. 1/2
$16^{1 / 2} \quad 16^{1 / 2}$

## REQUIREMENTS FOR GRADUATION FROM THE FOUR YEAR DEGREE CURRICULA IN SPECIAL FIELDS

The regular four-year special degree curricula, prescribed in accordance with law, with the regulations of the State Board of Education, and the regulations of the faculty of the College, require for graduation at least 126 semester units. These curricula will be required of all candidates finishing the requirements for special credentials after September 1, 1936.

The special fields are:
Agriculture Industrial Arts
Art
Commerce

Music
Physical Education

Home Economics
The special certificate is valid in the elementary and high schools of Arizona, but only to teach the subjects designated on the face of the certificate.

Previous to the year 1936, candidates who so desire may qualify for the old special credential.

## SUBJECT REQUIREMENTS

The subject requirements for the special curricula in Art, Commerce, Music, and Physical Education are the same as for the presecondary curricula in these four fields, with the addition of 5 units of student teaching, totalling 10 units of teaching, and a course in Presecondary Education, 3 units.

Recommended sequences for the special curricula in Art, Commerce, Music, and Physical Education are the same as for the standard presecondary curricula.

Recommended sequences for the special curricula in Agriculture, Home Economics, and Industrial Arts may be arranged by conference with the heads of these departments. Agriculture is a division of the Department of Science.

## 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, | Starling M. Morse |
| :--- | :--- |
| Chairman | William L. Pendleton |
| W. R. Hutchins | Howard S. Reed |
| James L. Bone | L. S. Neeb |

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

## Electricity

B. F. Carter, Chairman

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

## Drawing

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

## Farm Electricity

H. J. Lawson, Chairman David F. Wilkie

## Mechanics

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

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

Roy Richards

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



|  | Second Semester |  |
| :---: | :---: | :---: |
| Geometry 1 | Descriptive Geometry _-_ 3 Trigonometry | English Composition $\qquad$ 3 <br> Chemistry $\qquad$ <br> Art Appreciation $\qquad$ 4 2 <br> Fhysical Activities $\qquad$ $1 / 2$ |
|  |  | Total Onits ..........._161/2 |
|  | Third Semester |  |
| Architectural Drawing $\qquad$ 3 (Elem. 1 hr . lec., 6 lab.) | Analytical Geometry $\qquad$ 3 Arch. Comp. Lect. $\qquad$ 1 | Elementary Speech Physics Econ. Hist. of U. S. Physical Activities |
|  |  | Total Units ___ 163/2 |
|  | Fourth Semester |  |
| Architectural Drawing $\qquad$ 3 (Elem. 1 hr. lect., 6 lab.) | Mechanica ___ 3 | Physies ..._-_ 4 |
|  | Arch. Comp. Lect. - 1 | Constitutional Govt. $\quad$ - 3 Psychology $\qquad$ 3 |
|  |  | Physical Activities _-........1/2 |
|  |  | Total Units |


| Architectural Drawing __ 3 | Fifth Semester <br> Arch. Technology $\qquad$ 3 <br> ( 2 hr . lect., 4 hr . lab.) <br> Carpentry $\qquad$ 3 | Growth and Devel. of Child 2 Secondary Education $\qquad$ 3 <br> Physical Activities $\qquad$ $1 / 2$ |
| :---: | :---: | :---: |
|  |  | Total Units ___ 141/2 |
| Architectural Draming .-m | Sixth Semester |  |
|  | Carpentry $\qquad$ <br> Arch. Technology …_-_ 3 | Principles of Teaching _-___ ${ }^{3}$ Sociology Physical Activities |
|  |  | Total Units __._._ $151 / 2$ |
| Architectural Drawing $\qquad$ <br> Modeling (House) $\qquad$ 1 | Seventh Semester |  |
|  | Teaching Problems -_- 2 | student Teaching ___.__ ${ }^{8}$ |
|  | Estimating $\qquad$ $\qquad$ 2 <br> Arch Practice 2 | Physical Activities ___ $1 / 2$ |
|  | Plane Surveylng | Total Units ._. 16/, $^{\text {a }}$ |
|  | Eighth Semester |  |
| Architectural Drawing -_-_ 3 <br> Thesis $\qquad$ 1 | Supv. and Admin, of Indus- | Student Teaching __...... ${ }^{5}$ |
|  | trial Arts ${ }^{3}$ | Educ. Measurements ——. 3 |
| (Some cultur. subj. for which student shows aptitude)_ 2 | Citizenshlp | Physical Activities - ${ }^{\text {a }}$ |
|  |  | Total Units ...... $181 / 2$ |

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





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

| Tints | First Semester |  |
| :---: | :---: | :---: |
| Auto Ignition and Machine Practice for Electricity $\qquad$ 3 | College Algebra _ Units | English Composition ._.... ${ }^{\text {U }}$ |
|  | Mechanical Drawing _-_ 2 | Chemistry $\qquad$ 4 |
|  |  | Physical Activities ___ $1 / 2$ |
|  |  | Total Units ...._ 151/2 |
| Auto Ignition and Machine Practice for Electricity $\qquad$ 3 | Second Semester |  |
|  | Trigonometry $\qquad$ 3 | English Composition _-_ 3 |
|  | Mechanical Drawing - - . 2 | Chemistry |
|  |  | Total Units ... $151 / 2$ |


| Electrical Construction (House wiring) | Third Semester <br> Analytical Geometry Descriptive Geometry 3 | Elementary Speech $\qquad$ Physics 2 Econ. Eist. of U. S. $\qquad$ Physteal Activities $1 / 2$ |
| :---: | :---: | :---: |
|  |  | Total Units _-. $161 / \frac{1}{2}$ |

Electrical Toy Construct._-3 \begin{tabular}{c}
Fourth Semester <br>

| Differential Calculus |
| :---: |
| Teaching Problems |
| (Industr. Arts) |

\end{tabular}

Fifth Semester
Direct Current Electrlcity_ 3 Integral Calculus
D. C. Lab.

3 Secondary Education _._ 3
Growth and Devel. of Child 2
Physical Activities
Total Units $\quad-\frac{12}{151 / 2}$



|  |  |  |
| :---: | :---: | :---: |
|  |  |  |
| A. C. Lab. | Radio Transmission |  |
|  | $(2 \mathrm{hr}$, lect., 3 lab ) |  |
|  | Eeminar _-....-_-_-1 | Total Units __ 161/2 |

## SPECIAL CURRICULA PREPARATORY TO OTHER PROFESSIONS

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

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

## Freshman Year



Sophomore Year


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

## 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 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 ART <br> Miss Kloster, Miss Curtis

The department offers training in art designed to meet the needs of the following groups:
(1) Teachers of art in the primary or intermediate grades, junior or senior high school.
(2) General cultural training in the arts.
(3) Supervision of art in the public schools.
(4) Pre-professional students of the arts.

## THE GROUP ELECTIVE FOR THE FOUR YEAR DEGREE CURRICULUM IN ELEMENTARY EDUCATION

## Freshman Year

Units
Art 100. Appreciation of Art ..... 2
Art 102. Freehand, Perspective, and Figure ..... 3
Art 103. Elementary Design ..... 3
Sophomore Year
Applied Art I or II (116 or 117) ..... 3
Art 201. Lettering and Posters ..... 2
Costume Design, 123 or Interior Decoration, 222 ..... 3
Junior and Senior Years
Art 213. Problems in Primary Art ..... 2
Art 214. Problems in Intermediate and J. H. S. Art ..... 2
Art History I or II (217 or 218) ..... 2
Art 228. Color Theory ..... 28
Total 24 units
THE TEACHING MAJOR FOR THE FOUR YEAR PRESECOND- ARY CURRICULUM AND THE SPECIAL CREDENTIAL IN ART
Freshman Year Units
Art 100. Appreciation of Art ..... 2
Art 102. Freehand, Perspective, and Figure. ..... 3
Art 103. Elementary Design ..... 3
Sophomore Year
Art 116. Applied Art I. ..... 3
Art 201. Lettering and Posters. ..... 2
Costume Design, 123, or Interior Decoration, 222 ..... 3
Advanced Design ..... 3
11
Junior and Senior Years
Art 230. Curriculum Building in Art ..... 3
Art 228. Color Theory ..... 2
Art 217. Art History I ..... 2
Art 218. Art History II ..... 2
Art 227. Stage Design ..... 2
Art 213. Problems in Primary Art ..... 2
Art 214. Problems in Intermediate and J. H. S. Art_ ..... 2
Art 222. Interior Decoration ..... 3
Art 117. Applied Art II ..... 3
Total ..... 40

## ADDITIONAL COURSES REQUIRED IN OTHER DEPARTMENTS

Music Appreciation ..... 2
Nature Study, Biol. 132 ..... 2
THE TEACHING MINOR FOR THE FOUR YEAR PRESECONDARY CURRICULUM
Lower Division
Art 100. Appreciation of Art ..... 2
Art 102. Freehand, Perspective, and Figure ..... 3
Art 103. Elementary Design ..... 3
Applied Art I or II (116 or 117) ..... 3

## Upper Division

Art History I, 217, or Art History II, 218. ..... 2
Art 228. Color Theory ..... 2

Group electives and teaching majors and minors for curricula completed previous to September 1, 1936 will be approximately as outlined above or may be modified in conference with the head of the department.

## RECOMMENDATIONS FOR STUDENTS MAJORING IN OTHER DEPARTMENTS

1. All Departments. Art 100. Appreciation of Art.
2. Departments of Industrial Arts and Home Economics. Art 102. Freehand, Perspective, and Figure Drawing.
3. Kindergarten-Primary Majors. Art 213. Problems in Primary Art.
4. All prospective teachers of the intermediate and junior high school grades. Art 214. Problems in Intermediate and Junior High School Art.
5. Department of Home Economics. Art 123. Costume Design; Art 222. Interior Decoration.
6. Students of Dramatic Art. Art 227. Stage Design.
7. All prospective teachers interested in community work. Art 232. Community Art.
8. Department of Commerce. Art 240. Commercial Art; Art 201. Lettering and Posters.
9. Department of Industrial Arts. Art 217. Art History I; Art 218. Art History II.

## Description of Courses in Art

Art 100. Appreciation of Art. This course consists of an elementary study of the principles of art and their application to everyday life situations as exemplified in industrial, commercial, and home art. The course terminates with a general consideration of a few outstanding examples of architecture, painting, and sculpture. Required of all freshmen.

Miss Kloster.
First year, either semester, two hours a week.
2 units.
101. Elementary Painting. A technical course dealing exclusively with the manipulation and application of tempra and watercolor mediums to still life, nature study, and creative compositions.
Laboratory fee or cost of materials not to exceed $\$ 1.50$.
Miss Kloster.
First year, first semester, four hours a week.
2 units.
102. Freehand, Perspective, and Figure Drawing. A strictly technical course dealing with elementary procedures of freehand and object drawing; a study and application of the rudiments of perspective; figure construction. This work is supplemented by creative composition.
Laboratory fee or cost of materials not to exceed $\mathbf{\$ 1 . 0 0}$.

> Miss Kloster. First year, second semester, six hours a week. 3 units.
103. Elementary Design. A series of elementary problems involving the study and use of the principles of design. The technical work deals with the creation of single-unit designs, borders, surface patterns, and panel designs in light and dark and color. Supplementary investigation includes the study of historic design and a clipping collection.
Laboratory fee or cost of materials not to exceed \$1.50.
Miss Kloster.
First year, first semester, six hours a week.
3 units.
114. Advanced Design. A continuation of elementary design with special emphasis on native Southwestern designing, the source material of which is to be derived from Indian and Mexican symbols. Prerequisite, Art 103. Laboratory fee or cost of materials not to exceed $\$ 1.50$.

Miss Kloster.
Second year, second semester, four hours a week.
2 units.
116. Applied Art I. A combination laboratory and lecture course involving the design and construction of hand-built pottery; clay
modeling in relief and in the round; intaglio and fresco. Lectures are to include a study of various types of pottery and examples of sculpture in relief and in the round.
Prerequisite, Art 103, Art 102, or Art 101. Laboratory fee or cost of materials not to exceed $\$ 2.00$.

Miss Kloster.
Second year, second semester, six hours a week. 3 units.
117. Applied Art II. A strictly laboratory course dealing with linoleum and woodblock printing; stenciling applied to textiles; batik; tied and dyed. The scope of the course consists of a series of problems, each initiated by research, illustrations and discussion.
Prerequisite, Art 116 or Art 103. Laboratory fee or cost of materials not to exceed $\$ 2.00$.

Miss Kloster.
Second year, first semester, six hours a week. 3 units.
213. Problems in Primary Art. A combination lecture, laboratory, and observation course consisting of a variety of problems such as a teacher of primary art might expect to encounter in the field. Several lectures and observation trips are devoted to the study of child expression. Laboratory work includes type problems of experience drawing, correlation of reading, story telling, and art, and appreciation adapted to the primary level.
No prerequisite. Laboratory fee or cost of materials not to exceed \$1.00.

Second or third year. first semester, 2 hours a week. 2 units.
214. Problems in Intermediate and Junior High Art. Type problems, lectures, and observations are designed to meet the needs of the prospective teacher of art in the intermediate grades and junior high school. Emphasis is given to the study of creative expression and the systematic development of children's art at various grade levels. Laboratory work consists of type exercises for work adapted to the intermediate and junior high levels.
No prerequisite. Laboratory fee or cost of materials not to exceed $\$ 1.00$.

Second or third year, second semester, two hours a week. 2 units.
123. Costume Design. A practical course dealing with the design of costumes for street, home, party or formal wear, based on principles of design, color harmony, type, figure, and personality. Research and lectures on historic costume supplement the laboratory work.
Prerequisite, Art 103 or Art 102. Laboratory fee not to exceed \$1.50.
222. Interior Decoration. A sexies of exercises involving the study and application of principles of art to various type problems of interior decoration and home furnishing. Emphasis is given to the study of practical situations, i.e., arrangement, color, lighting, selection and purchase of furniture and furnishings.
Prerequisite, Art 102 or 103. Laboratory fee or cost of materials not to exceed $\$ 1.50$.

Miss Kloster.
Second or third year, second semester, three hours a week. 3 units.
225. Marionettes. Preparation of a marionette performance involving a study and the making of marionettes, planning the stage set and lighting, manipulating the marionettes, and learning parts. This course is especially recommended to teachers of elementary or secondary school dramatics.
Prerequisite, Art 102 or 101. Laboratory fee or cost of materials not to exceed $\$ 2.00$. Not offered in 1933-1935.

Miss Kloster.
Second or third year, first semester, six hours a week. 3 units.
201. Lettering and Posters. A combination lecture and laboratory course consisting of type problems in construction of various alphabets; arrangement and execution of elementary educational and commercial posters. Supplementary lectures involve the study of modern advertising and poster art.
Prerequisite, Art 102 or Art 103. Laboratory fee or cost of materials not to exceed $\$ 1.50$.

Second or third year, first semester, two hours a week. 2 units.
220. Practice Teaching in Art. Directed teaching of art in the Training Schools under the supervision of the Department of Education, and with the advice and counsel of the Department of Art. One half-semester, alternating with teaching of other subjects. Third year, either semester, five half days a week. 5 units.
217. Art History I. A general survey of the historic developments of architecture and sculpture from the period of the primitives through Egyptian, Greek, Roman, Gothic, to, and including the Renaissance period. Readings, discussions, and identification of slides and prints.

Miss Kloster.
Third year, first semester, two hours a week.
2 units.
227. Stage Design. A laboratory course devoted to the planning and construction of miniature stage sets to scale. In so far as time and materials permit, stage sets are designed in cooperation with the classes in Dramatics.
Prerequisite, Art 102 or Art 103.
Not offered in 1933-1934.
Miss Kloster.
Third year, first semester, two hours a week.
2 units.
228. Color Theory. A detailed study and application of type color combinations producing harmony.
Laboratory fee or cost of materials not to exceed $\$ 2.00$.
Miss Kloster.
Third year, second semester, two hours a week. 2 units.
232. Community Art. A study of planning exteriors and landscaping of homes; park layouts and civic improvements.
Prerequisite, Art 103 or Art 102. Laboratory fee or cost of materials not to exceed $\$ 1.50$.

Miss Kloster.
Third year, second semester, two hours a week. 2 units.

## DEPARTMENT OF COMMERCE

Dr. Atkinson (Head of the Department),* Mr. Masteller
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.

Practically all of the courses offered in this department are open as electives to qualified students who are majoring in other fields.

Entering students are required to take a standard handwriting test, and those who are unable to attain a satisfactory grade must carry the course in Zaner Penmanship (Com. 100) without credit.

## THE GROUP ELECTIVE FOR THE FOUR YEAR DEGREE CURRICULUM IN ELEMENTARY EDUCATION

## Freshman and Sophomore Years

Twelve units to be chosen from the following subjects:
Shorthand 1
Salesmanship
Shorthand 2
Typing
Accounting 1
Accounting 2

Advertising
Principles of Economics (year course)
Economic History

## Junior and Senior Years

Upper division Commerce electives, twelve units.

## THE TEACHING MAJOR FOR THE FOUR YEAR PRESECONDARY CURRICULUM AND THE SPECIAL CREDENTIAL IN COMMERCE

Freshman Year

Units

Economic History ..... 3
Shorthand 1 and 2 ..... 6
Sophomore Year
Principles of Economics 131, 132 ..... 6
Accounting 1 and 2 ..... 6
Junior and Senior Years
Business Law 1 and 2 ..... 6
Electives ..... 16
THE TEACHING MINOR FOR THE FOUR YEAR PRESECONDARY CURRICULUM

Fifteen units to be chosen in conference with the head of the department.

Group electives and teaching majors and minors for the curricula completed previous to September 1, 1936, will be approximately as outlined above, or may be modified in conference with the head of the department.

## DESCRIPTION OF COURSES

Commerce 100. Zaner Penmanship. Principles of writing. Exercises for the development of freehand writing; methods of teaching; practice in script writing.
Text, Zaner Method, Manual 144. Either semester, 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 negotiable instruments,
working sheets, adjustments, controlling accounts, consignments, deferred charges, and introduction to corporation accounting. Both semesters are required of all majors in the standard four year presecondary curriculum.

First and second semesters.
Lecture three hours, laboratory two hours. 3 units each semester.
110, 120. Typewriting 1 and 2. Instruction in the use and care of the typewriter. Practice in letter writing, use of carbon. Practice in tabulation and the writing of cards. Only one semester of typewriting may be taken by a student. May be taken for either one or two semester hours credit; three sessions a week gives one unit credit; five sessions two units. Required of Commerce majors.

Either semester, three or five times a week. 1 or 2 units.
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. A required course for all majors in the standard four year prescondary curriculum.

First and second semesters.
Three lectures (three hours), laboratory two hours. 3 units each sem.
121. Salesmanship. An intensive course covering the basic principles and methods which underlie selling at retail and the wholesale and marketing of specialties. This course is intended for students interested in salesmanship, sales management, sales correspondence and kindred activities.

Dr. Atkinson.
Lecture three hours a week. 3 units.
122. Advertising. A study of methods and problems of advertising in business. Advertising as related to marketing. A study of facts and methods of advertising and a discussion of proper plans for the selection of advertising media.

> Dr. Atkinson.

Lecture three hours a week. 3 units.
Econ. 131, 132. Principles of Economics. An introductory study of economics. Elementary concepts are emphasized. Terminology and definitions are stressed. Much practical material is used to emphasize abstract economic principles. A complete treatment of all economic principles, and required of students majoring in commerce in the four year presecondary curriculum. Open to sophomores and upper classmen only.

> Dr. Atkinson.
> Both semesters, lecture three hours a week.

3 units.
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.

First and second semesters.
Lecture three hours a week.
3 units.
205, 206. Business Law 1 and 2. Contracts, agency, sales, partnerships, corporations, negotiable instruments. Lecture and case methods will be employed in this course. Required of all majors in commerce in the standard four year presecondary curriculum.

Dr. Atkinson.
Lecture three hours a week.
First and second semesters.
3 units.
211. 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 Economics 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, Economics $131,132$.

Dr. Atkinson.
Lecture three hours a week.
3 units.
213. Shorthand 3. A study of advanced dictation and transcription. This course will review thoroughly the principles of Gregg Shorthand and will give all of the advanced material that is edited by the Gregg System. The advanced Gregg Shorthand book, edited in 1932, will be used as the basic text in the course. Prerequisite, Shorthand 1, 2.

Lecture three hours a week. 3 units.
214. Secretarial Procedure. A study of the principles and practices of conducting a modern office. This is an advanced course which makes a thorough digest and study of the principles of filing, keeping records, making reports, preparing itineraries, submitting digests, outlining and writing speeches and all of the other branches of secretarial work. Interesting laboratory work is conducted by the class and constructive criticisms are used throughout. Prerequisites, Shorthand 1, 2 or the equivalent of a year of shorthand.
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 the stock market and corporation problems is a necessary part of the presentation of the course. Prerequisite, Economics 131, 132.

Dr. Atkinson.
Lecture three hours a week. 3 units.
216. Labor Problems. A study of the conditions of poverty and the status of living conditions among laborers. The distribution of wealth, labor unions and labor policies; pensions; insurance; and labor legislation. A definite study is made of the present depression with causes and real issues involved so far as labor is concerned. Prerequisite, Econ. 131, 132.

Dr. Atkinson.
Lecture three hours a week. 3 units.
221, 222. Commercial Teaching Methods. The aim of this course is to prepare teachers for the commercial field in secondary education. It is a comprehensive survey of teaching methods in all of the commercial subjects with appropriate emphasis upon those which are more widely used. All students majoring in commerce in the four year presecondary curriculum are required to take this course in the fourth year of their work for the full year. Prerequisites, senior standing, Shorthand 1, 2, Accounting 1, 2, Typewriting.

> Lecture two hours a week.

Four hours supervised laboratory work.
3 units
223, 224. Statistics 1 and 2. Introduction to statistics. Methods, 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, Economics 131, 132.

Dr. Atkinson.
Lecture three hours a week.
Additional laboratory work.
3 units.
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, Economics 131, 132.

Dr. Atkinson.
Lecture three hours a week.
3 units.

Geog. 201. Economic Geography. This course is to be found under Science Department and may be taken by Commerce majors with credit to be applied either in Science or Commerce. Prerequisite, either Geography 100 or Principles of Economics (one semester). Refer to Science Department for further information.

Econ. 110. Economic History of the U. S. Required for all first year students in the standard four year presecondary curriculum. It 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.

## DEPARTMENT OF EDUCATION

Dr. Burkhard (Head of the Department), Mr. Payne (Director of the Training Schools), Miss Roll, Miss Haulot, Mrs. Empey, Miss Lynd, Miss Anderson, Mr. Macomber, Miss Calloway, Miss Robinson, Mrs. O'Connoz, Miss Lutz, Miss Roberts, Mr. Cluxton, Miss Chase.

The purpose of the Department of Education is to prepare efficient teachers for service in the schools of the state. The work in theory is closely correlated with the directed teaching in the Training Schools.

Of the professional courses, (including psychology and educational measurements), 28 units are required. Six of these units are lower division courses, the others are required in the third and fourth years. Candidates for the degree do their student teaching in the fourth year. Those who are registered in the three year curriculum arrange for their student teaching in the third 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 class room and one hour each day for conferences and work with training school activities.

Students may take six units of academic work during the half day not occupied with teaching.

During the semester that students are teaching they are not allowed to take part in activities that interfere with teaching, conferences, or other duties in the training school.

## Required Professional Courses

Psych. 100. General Psychology; Educ. 230. Principles of Teaching; Educ. 200. Elementary Curriculum; Psych. 200. Educational Measurements; Educ. 210. Reading and Language Problems; Educ. 250. Philosophy of Education; Educ. 201 and Educ. 202. Student Teaching.

## DESCRIPTION OF COURSES

Educ. 200. The Elementary School Curriculum. This course deals with the organized life and subject matter of the elementary school with the purpose of showing how the materials of education shall be used to determine desirable behavior outcomes in the lives of the pupils.

Miss Roll, Miss Robinson.
Third year, either semester, three hours per 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.
210. Reading and Language Problems. This course deals with the problems of teaching reading and language in the elementary schools.

Mrs. Empey, Miss Robinson.
Third year, either semester, three hours per week. 3 units.
230. Principles of Teaching. The principles underlying the teaching and learning processes. These principles are related to the task of dealing with the subject matter common to the work of the elementary school.

Dr. Burkhard, Mr. Macomber.
Third year, either semester, three hours per week.
3 units.
211. History of Education. The part that education has played in the development of civilization. Educational and social theories will be evaluated in terms of the social consequences that have attended them.

## Dr. Burkhard.

Fourth year, three times per week.
3 units.
214. Supervision and Administration of 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 new type examinations, rating of teachers, discipline, other related problems. Whenever possible, the problems are worked out in the training school.

Mr. Payne.
Fourth year, second semester, three hours a week. 3 units.
216. Educational Sociology. The aim is to evaluate social theories and to make a study of the institutions through which society aims to control the social order and insure its continuity.
Prerequisite: Soc. 120. Introduction to Sociology, or its equivalent.
Dr. Burkhard.
Third or fourth year, three hours per week.
3 units.
222. Secondary Education. A study of the history of the high school and current problems growing out of present-day economicindustrial 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.
240. Rural Education. A course 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, either semester, three hours a week. 3 units.
241. Modern Educational Problems. An intensive study designed to acquaint the student with current educational problems and to present an interpretation of these problems in the light of a sociological analysis.

Dr. Burkhard.
Third or fourth year, three hours per week.
3 units.
250. Philosophy of Education. A critical analysis of social ideas and educational philosophies. The student is taught to organize his own experiences for the purpose of being able to give more intelligent direction to the work of education.

Dr, Burkhard.
Fourth year, either semester, three hours per week. 3 units.

## Kindergarten-Primary Courses

Graduates of the Kindergarten-Primary curriculum will be granted the bachelor's degree. Upon application to the State Board of Education they will receive the Arizona Kindergarten-Primary certificate which entitles the holder to teach in the kindergarten and first three grades of the elementary school.

## DESCRIPTION OF COURSES

English 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 material for the Kindergarten-Primary School. Folk-lore, poetry, and children's illustrators are given careful study with class participation in story-teiling.
Required of Kindergarten-Primary majors.
Miss Lutz.
Second year, first semester, three hours a weok, 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, P. E. 270. Growth and Development.
Required of Kindergarten-Primary majors.
Miss Lutz.
Third year, first semester, three hours a week.
3 units.
Educ. 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, $\$ 1.00$.
Miss Lutz.
Third year, second semester, two double periods 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.
Prerequisite, Education 216, Educational Psychology and junior standing.

Mrs. Empey.
Third year, either semester, three hours a week.
3 units.
220k. Directed Teaching in Kindergarten. For admission to practice teaching in the Kindergarten, the student must pass a music test of 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, participation, and in teaching.

Under direction of training teachers.
Fourth year, either semester.
8 units.
220p. Directed Teaching in Primary Grades. Students following the kindergarten-primary curriculum are required to teach one half day for one-half semester in either the first, second or third grade.

Under direction of training teachers.
Fourth year, either semester.
5 units.

## DEPARTMENT OF ENGLISH AND SPEECH

Dr. Stevenson (Head of the Department, absent on leave, 1933-34), Dr. Schilling (Acting Head of the Department), Miss Pilcher, Miss Simpson, Mr. Taylor, Miss Lutz, 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.

The course in First Year Journalism may be elected as a substitute, in either semester, for the regular First Year Composition course (101, 102). This substitution may not be made for more than one semester.

## THE GROUP ELECTIVE FOR THE FOUR YEAR CURRICULUM IN ELEMENTARY EDUCATION

Freshman Year

Units
English Composition............................................................. 6
Library Practice, EngI. 160.................................................. 1
Elementary Speech, Engl. 110............................................ 2

## Sophomore Year

Survey of English Literature, Engl. 151, 152 ..... 6
Literature for the Grades ..... 3
Junior and Senior Years
Upper Division Elective ..... 9
THE TEACHING MAJOR FOR THE FOUR YEAR PRESECONDARY CURRICULUM
Freshman Year
Units
English Composition, Engl. 101, 102 ..... 6
Library Practice, Engl. 160 ..... 1
Elementary Speech, Engl. 110 ..... 2
Sophomore Year
Survey of English Literature, Engl. 151, 152 ..... 6
Junior and Senior Years
Upper Division Electives ..... 18
33
THE TEACHING MINOR FOR THE FOUR YEAR PRESECONDARY CURRICULUM
Freshman Year
Units
English Composition, Engl. 101, 102 ..... 6
Library Practice, Engl. 160 ..... 1
Elementary Speech, Engl. 110 ..... 2
Sophomore Year
Survey of English Literature, Engl. 151, 152 ..... 3
Junior and Senior Years
Upper Division Elective. ..... 6

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Group electives and teaching majors and minors for curricula completed previous to September 1, 1936, will be approximately as outlined above, or may be modified in conference with the head of the department.

## DESCRIPTION OF COURSES

English 101, 102. First Year English. Exposition and argumentation; theme writing and theme correction; conferences with instructors and oral exercises before the class. Introduction to the principal types of literature and training methods of literary study. This course is a regular requirement of the Freshman year.

Miss Pilcher, Miss Simpson, Mr. Taylor.
First year, two semesters, three hours a week.
6 units.
103, 104. Special First Year English. Similar to English 101, 102, but adapted to the needs of students who require more practice in the technique of written composition. Attention to spelling, punctuation, and sentence formation is made the first essential. Required of freshmen whose ratings in the preliminary standard test indicate need of intensive drill in the mechanics of language. Dr. Schilling.
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. Methods of inculcating literary appreciation are studied.

Miss Simpson.
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, poetry, and children's illustrators are given careful study. Class practice is given in the art of story telling.
Required of kindergarten-primary majors.
110. Elementary Speech. Voice, diction, breath-control; drill in simplicity, sincerity, and directness of address, pronunciation, enunciation, resonance, audibility, posture, gesture, and platform deportment. Required of all students before completing second year. English majors are advised to take it in first year. Students interested in dramatics are advised to take it in first semester.

First or second year, either semester, three hours a week. 2 units,
121, 122. Dramatic Interpretation. A study of the four fields of oral reading. The techniques of literary construction, unit, emphasis, coherence, rhythm, voice melody, tone color, and tempo. En-
thusiasm, confidence, sympathy, and physical vitality as characteristics of the interpreter's personality. A study of impersonation and characterization.

Miss Simpson.
Two semester, two hours a week.
2 units.
130. Journalism-News Writing. A general introduction to the field of journalism; study of the basic principles of news writing; practice in news writing; study of news sources; newspaper illustrations; related topics.
Prerequisite to other courses in journalism.
Laboratory fee $\$ 1.00$.
Mr. 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, English 130 (News Writing).
Laboratory fee $\$ 1.00$.
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 and offered to upper classmen with the permission of the instructor.

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, makeup, publishing, and all that goes with the issuing of a weekly newspaper.
Prerequisite, Engl. 130 (News Writing), Engl. 131 (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.

Miss Pllcher.
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 1933-34.

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

3 units each semester.
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.

Not offered in 1933-34.
Dr. Schilling.
Two semesters, three hours a week. 3 units each semester.
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.

Dr. Schilling.
Two semesters, three hours a week. 3 units each semester.
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.
Two semesters, three hours a week. 3 units each semester.
211, 212. Victorian Poetry. Nineteenth 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.
Not offered in 1933-34.
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.

Not offered in 1933-34.

[^3]3 units each semester.

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, 3 units each semester.
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.

Dr. Schilling.
Two semesters, three hours a week. 3 units each semester.
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. Not offered in 1933-34.

Dr. Schilling.
Two semesters, three hours a week. 3 units each semester.
231. English Grammar. A study of technical grammar based upon the prose structure and idiom of the best modern writers. Etymology, word formation, and sentence formation. Variations in terminology and opinion in grammars of the present day are compared and harmonized.

Miss Pilcher.
First semester, three hours a week. 3 units.
232. 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.
234. Creative Dramatics for Primary Grades. Credit will be given those who wish to do creative dramatics with the children in the Training School in conjunction with their regular English work. Only those who have done practice teaching or who are doing it, will be allowed to register. Hours to be arranged by conference with the instructor.

Miss Simpson.
Fourth year, second semester, two hours a week.
1 unit.
220. Debating. Credit will be given those students who become active members of our debating teams. Teams will meet regularly to organize material and practice delivery.

Miss Simpson.
Either semester, two hours a week.
2 units.

# HOME ECONOMICS 

## Miss Douglass, Miss Reed

This department provides training in home economics for those who wish to teach in elementary schools or in high schools. It fits the student particularly for the vocation of home making and also gives the necessary background for many vocations which grow out of home economics study.

Students adopting the major in home economics fall into two groups:

1. Those who are preparing to teach in elementary schools.
2. Those who are preparing for secondary work.

The curriculums outlined on the pages following are designed to meet the requirements of these groups.

## THE GROUP ELECTIVE FOR THE FOUR YEAR DEGREE CURRICULUM IN ELEMENTARY EDUCATION

Freshman Year Units
Elementary Nutrition, H. Econ. 101.-............................... 3
Clothing Selection, H. Econ. 102......................................... 3
Sophomore Year
Applied Food Principles, H. Econ. 106.............................. 3
Home Management, H. Econ. 107....................................... 3
Clothing Construction, H. Econ. 108.................................. 3
Family Health, H. Econ. 109.............................................. 2

## Junior and Senior Years

Home Economics Education, H. Econ. 208......................... 3
Electives ............................................................................... 4
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## THE TEACHING MAJOR FOR THE FOUR YEAR PRESECONDARY CURRICULUM AND THE SPECIAL CREDENTIAL IN HOME ECONOMICS

Freshman Year ..... Units
Elementary Nutrition, H. Econ. 101 ..... 3
Clothing Selection, H. Econ. 102 ..... 3
Sophomore Year
Applied Food Principles, H. Econ. 106 ..... 3
Home Management, H. Econ. 107 ..... 3
Clothing Construction, H. Econ. 108 ..... 3
Family Health, H. Econ. 109 ..... 2
Junior and Senior Years
Child Development, H. Econ. 206 ..... 3
Food for the Family, H. Econ. 207 ..... 3
Home Economics Education, H. Econ. 208 ..... 3
The Family, H. Econ. 209 ..... 3
Electives ..... 7
36
ADDITIONAL COURSES REQUIRED IN OTHER DEPARTMENTS
Art
Units
Interior Decoration, Art 222 ..... 3
Costume Design, Art 123 ..... 36
Science
Biology 100 ..... 3
Physiology, Biol. 120 ..... 3
General Chemistry 101, 102 ..... 8
Organic Chemistry 211 ..... 418
THE TEACHING MINOR FOR THE FOUR YEAR PRESECONDARY CURRICULUM
Lower Division
Units
Elementary Nutrition, H. Econ. 101 ..... 3
Applied Food Principles, H. Econ. 106 ..... 3
Clothing Selection, H. Econ. 102 ..... 39
Upper Division
The Family, Home Econ. 209 ..... 3
Electives ..... 3
Group electives and teaching majors and minors for curricula completed previous to September 1, 1936, will be approximately as outlined above or may be modified in conference with the head of the department.

# RECOMMENDED SEQUENCE <br> FOUR YEAR PRESECONDARY DEGREE CURRICULUM WITH TEACHING MAJOR IN HOME ECONOMICS 

Freshman Year
First Semester Units
English Composition 3 English Composition ..... 3
Chemistry 4 Chemistry ..... 4
Economic Hist. of U. S ..... 3
Constitutional Government. ..... 3
Sight Singing2
Library Practice ..... 1
Elementary Nutrition ..... 3
Physical Activities1/2
$161 / 2$
Art Appreciation ..... 2
Hygiene ..... 2
Clothing Selection ..... 3
Physical Activity ..... $1 / 2$$17^{1 / 2}$
Sophomore Year
First Semester Units Second Semester Units
Elem. Speech 2 Literature ..... 3
Organic Chemistry 4 Physiology ..... 3
Home Management ..... 3 ..... 3
Clothing Construction 3 Psychology ..... 3
Family Health ..... 3
Sociology ..... 3
Electives1 Electives
Physical Activities ..... 1/2
Physical Activities ..... 1/2
$16^{1 / 2}$ ..... $16^{1 / 2}$
Junior Year

| First Semester Units | Second Semester Units |
| :---: | :---: |
| Elementary Curriculum ...... 3 | Principles of Teaching--.....- 3 |
| Food for the Family........... 3 | Home Economics Education 3 |
| European History................ 3 | Child Development................ 3 |
| Growth and Development of the Child $\qquad$ 2 | European History ................ 3 Educational Measurements.. 3 |
| Costume Design_-............... 3 |  |
| Electives ........................... 1 |  |
| Physical Activities..............1/2 | Physical Activities..--...........1/2 |
| $15^{1 / 2}$ | 151/2 |


| First Semester | Senior Units | Year Second Semester | Units |
| :---: | :---: | :---: | :---: |
| Student Teaching | . 10 | Advanced Nutrition. |  |
| The Family............... | 3 | Interior Decoration. | 3 |
| Electives | 3 | Advanced Clothing | 3 |
|  |  | Family Relationship. | 2 |
|  |  | Electives .-..-- |  |
| Physical Activities... |  | Physical Activities... |  |

## Description of Courses Offered in Home Economics

100. Elementary Nutrition. Fundamental principles of nutrition, of the adequate diet, and the significance of food in its relation to health.

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

Miss Douglass.
First year, second semester, three hours per week. 3 units.
106. Applied Food Principles. A study of how to select and purchase food economically and yet secure an adequate diet for normal consumption, the cookery processes and the effects of heat on food, and the care of food in the home. Fee, $\$ 3.00$.
Prerequisites: Home Economics 101 and Chemistry 101 and 102.
Miss Douglass.
Second year, second semester, three hours per week. 3 units.
107. Home Management. The standards of living, the budgeting of time and income, household accounting, and the care and efficient arrangement of the house and equipment.

Miss Douglass.
Second year, first semester, three hours per week. 3 units.
108. Clothing Construction. A study of the construction of garments. Good selection of materials, design and cost of the garments are considered.
Prerequisite, Home Economics 102.
Second year, first semester, three hours per week. 3 units.
109. Family Health. Information on good health for the family. Those illnesses and dangers which commonly threaten family welfare are considered. Each individual of the family is studied. The mother through pregnancy and child-birth is given special attention, also the infant.

Miss Douglass.
Second year, first semester, two hours per week.
2 units.
206. Child Development. The physical and mental development of the child. The periods of pre-natal and infancy are reviewed, and the pre-school age and adolescent periods are thoroughly studied. Some experience is offered with children.
Prerequisite, Home Economics 109.
Miss Douglass.
Third year, second semester, three hours per week.
3 units.
207. Food for the Family. Proper menus are planned, prepared, and served. Attention is given to the selection of food with reference to the needs of the body, to the hygienic and palatable preparation of food, to social usages in serving, and to hospitality in the home. Fee, $\$ 3.00$.
Prerequisites, Home Economics 101, Home Economics 106.
Miss Douglass.
Third year, first semester, three hours per week. 3 units.
208. Home Economics Education. The special content and the special methods to be used in the teaching of home economics.
Prerequisites: Home Economics 106, 107, 108.
Miss Douglass.
Third year, second semester, three hours per week. 3 units.
209. The Family. The family in its historical development and in its modern setting with regard to outstanding changes and problems.

Miss Douglass.
Third year, first semester, three hours per week.
3 units.
210. Student Teaching. Opportunity is offered to teach home economics one semester to training school students. This teaching is supervised by a specialist in the Department of Home Economics. Prerequisite, Home Economics 208.

Miss Douglass.
Fourth year, first or second semester, five hours per week. 3 units.
211. Advanced Clothing. This course offers an opportunity to construct special clothing problems of difficulty, to further study of good style and design, and to make illustrative material for practice teaching in clothing.
Prerequisites: Home Economics 102, Home Economics 108.
Miss Douglass. Fourth year, second semester, six hours per week. 3 units.
212. Advanced Nutrition. Special problems in diet and nutrition with emphasis upon those deficiencies which may arise from local conditions. Fee, $\$ 3.00$.
Prerequisite, Home Economics 207.
Miss Douglass.

## 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.

## THE GROUP ELECTIVE FOR THE FOUR YEAR DEGREE CURRICULUM IN ELEMENTARY EDUCATION

Units
Drawing Courses ..... 6
Electrical Courses ..... 6
Wood Working Courses ..... 6
Machine Shop Courses. ..... 6
24
THE TEACHING MAJOR FOR THE FOUR YEAR PRESECONDARY CURRICULUM
Freshman Year Units
Engineering Drawing ..... 3
Elementary Cabinet Making ..... 3
Descriptive Geometry ..... 3
Advanced Cabinet Making. ..... 3
12
Sophomore Year ..... Units
Wood Turning ..... 3
Mechanism ..... 3
Machine Shop Practice. ..... 3
Job Analysis ..... 3
12
Junior and Senior Years ..... Units
Auto Ignition ..... 6
Electrical Construction ..... 6
Direct Current Electricity ..... 6
Supervision and Administration of Industrial Arts ..... 3
ADDITIONAL COURSES REQUIRED IN OTHER DEPARTMENTS
Mathematics
Units
College Algebra ..... 3
Trigonometry ..... 3
Analytical Geometry ..... 3
Differential Calculus ..... 3
12
MINORS FOR STUDENTS NOT MAJORING IN THE INDUSTRIAL ARTS DEPARTMENT
Drawing MinorUnits
Engineering Drawing ..... 3
Descriptive Geometry ..... 3
Elementary Mechanism ..... 3
Machine Design ..... 3
Architectural Drawing ..... 315
Woodworking Minor
Units
Elementary Cabinet Making ..... 3
Advanced Cabinet Making ..... 3
Carpentry ..... 3
Carpentry ..... 3
Wood Turning ..... 315
Mechanics Minor
Units
Machine Shop Practice ..... 3
Machine Shop Practice ..... 3
Pattern Making ..... 3
Foundry Practice ..... 3
Sheet Metal ..... 3

## Electrical Minor

## (For students who have had a year of physics and mathematics through calculus.)

Units
Auto Ignition....-...................................................................... 3
Auto Ignition.......................................................................... 3
Electrical Construction......................................................... 3
Electrical Toy Construction-................................................ 3
D. C. Electricity ................................................................... 3
D. C. Machinery .................................................................. 3

18

## Electrical Minor

(For students who have had a year of physics and 3 units each of
college 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
Group electives and teaching majors and minors for curricula completed previous to September 1, 1936, will be approximately as outlined above or may be modified in conference with the head of the department.

## DESCRIPTION OF COURSES

Ind. Art 103. History of Architecture 101. A history of architecture as developed in the ancient cultures of Egypt, Mesopotamia, India, Greece, and Rome. Also medieval and modern types. Two lectures a week and three hours laboratory work.

First year, first semester, two lectures, three hours
laboratory each week.
3 units.
105. Architectural Drawing 111. A course 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.

[^4]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 fundamentals 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 each 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.
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.
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.

3 units.
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 Iaboratory 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. 201, 202. 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 will include 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 centinuation of I. Arts 101. Combined laboratory and class work consists of the study of repairing, adjust-
ing, 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, electrical toys, 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.

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 estimating 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.
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.
204. Direct Current Machinery 223. Includes a study of the construction of direct current dynamos, and their characteristics; commutation, armature reaction, commutating poles and compensating windings; losses and efficiency; ratings; parallel operation; starting and controlling devices.
Prerequisites I. Art 203 and 203a.
Mr. Ross.
Third year, second semester, three hours a week,
8 units.

204a. Direct Current Laboratory 233. A laboratory course given in conjunction with I. Art 204. Experiments include operation of shunt, series, and compound generators and motors; characteristic curves; losses and efficiency; parallel operation. Practical problems and applications stressed. Concise and intelligent reports required. Laboratory fee, $\$ 2.00$.
Prerequisite, 1. Art 203a.
Mr. Ross.
Third year, second semester, three hours laboratory. 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.
252. Alternating Current Machinery 263. Includes a study of transformers; induction motors; alternating current generators; synchronous motors; synchronous converters; motor-generator sets; rectifiers; single phase motors; switching and protective devices; starting and controlling devices; motor applications.
Prerequisite, I. Art 251 and 251a.
Mr. Ross.
Fourth year, second semester, three hours lecture. 3 units.
252a. Alternating Current Laboratory 273. A laboratory course given in conjunction with I. Art 252. An experimental study covering operation, characteristic curves, losses and efficiency of single and polyphase motors and generators; polarity, regulation, and efficiency of single and polyphase transformers. Practical problems and applications stressed. Concise and intelligent reports required. Laboratory fee, $\$ 2.00$.
Prerequisite enrollment in I. Art 252.

## Mr. Ross.

Fourth year, second semester, three hours laboratory. 1 unit.
107 Forge 114. The content of this course combines a thorough study of, and practice in the elements of forging; drawing, bend-
ing, 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 unirs.
108. Agricultural Mechanics 104. Designed to meet the needs of students of agricultural and farm management. Laboratory fee, $\$ 2.00$.

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. Ross.
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.
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, $\$ 2.00$.

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, $\$ 2.00$.

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, $\$ 2.00$.
Prerequisite I. Art 116.
Mr . Ross.
Second year, first semester, two hours lecture, four 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.

## DEPARTMENT OF FOREIGN LANGUAGES

## Dr. Cattelain (Head of the Department), Miss Wilson

It is recommended that students taking the teaching major in French shall also take a teaching minor in Spanish, and that students choosing a teaching major in Spanish shall take a teaching minor in French.

## THE GROUP ELECTIVE FOR THE FOUR YEAR DEGREE CURRICULUM IN ELEMENTARY EDUCATION

Twenty-four semester units in either or both French and Spanish, with the provision that less than 8 units in a single language will not be counted as a part of the total of 24 .

# THE TEACHING MAJOR IN FRENCH FOR THE FOUR YEAR PRESECONDARY CURRICULUM 

Freshman and Sophomore Years<br>Units<br>Elementary, Intermediate and Advanced French ............. 16<br>\section*{Junior and Senior Years}<br>Upper division electives...................................................... 16<br>32<br>THE TEACHING MINOR FOR THE FOUR YEAR PRESECONDARY CURRICULUM IN FRENCH OR SPANISH

Fifteen units to be chosen in conference with the head of the department.

Group electives and teaching majors and minors for curricula completed previous to September 1, 1936, will be approximately as outlined above or may be modified in conference with the head of the department.

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

French 101. Elementary French. A beginner's course. Selfexpression and oral drill in French practiced through the course. Scientific method of pronounciation 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.
104. Advanced French. Special stress is laid upon acquiring the fluency of the language by means of dialogues, together with a fast reading course. Texts used: Hugo's, Les Miserables and Pattou's, Causeries en France.

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


#### Abstract

Note: French students are urged to join the free conversation class carried on under the auspices of the French Club. This conversation class has proved its value by helping students to acquire a fluent use of the language.


## 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 opened 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.
104. Advanced German. A rapid reading course together with short dialogues. Texts used: Elf Neue Erzahlungen, Pattou's, An American in Germany.

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

## SPANISH LANGUAGE AND LITERATURE <br> Miss Wilson

## Lower Division Courses

Spanish 101. Elementary Spanish. This course is designed to give the beginner a good Spanish pronunciation through oral drills. The principles of grammar are illustrated by means of this drill. (Not opened to those who have had previous instruction in Spanish.) Text books used, Hills and Ford's Grammar.

Miss Wilson.
First semester, four hours a week. 4 unita.
102. Elementary Spanish. A continuation of 101 . To the study of the grammar will be added the reading of some elementary work such as El Capitan Veneno; El Abolengo or La Mariposa Blanca. Prerequisite, Spanish 101 or one year of high school Spanish.

> Miss Wilson.
> Second semester, four hours a week.

4 units.
103. Intermediate Spanish. Accuracy and facility of expression in the Spanish language, by means of reading compositions, is the aim of this course. Texts used, Mistoria de España, Doña Clarines, and others, from Romera-Navarro. Collateral readings and reports. Prerequisite, two years of high school Spanish or one year of college Spanish.

Miss Wilson.
First semester, four hours a week.
4 units.
104. Advanced Spanish. Appropriate reading and discussion are carried on for the purpose of increasing fluency of speech and improving composition. Reading material is taken from such texts as Benavente's Tres Comedias, El Sombrero de Tres Picos; and others. Prerequisite, same as for Spanish 103.

Miss Wilson.
Second semester, four hours a week. 4 units.

## Upper Division Courses

Spanish 201. The Spanish Classics. Selections from writers of El Siglo de Oro, such as Cervantes, Calderon, and others. Prerequisite, lower division courses or their equivalent.

Miss Wilson.
First semester, three hours a week. 3 units.
202. Contemporary Writers. Readings from Blasco Ibañez, Pio Baroja, Benavente, Martinez Sierra, and others. Prerequisite, lower division courses or their equivalent.

Miss Wilson.
Second semester, three hours a week. 3 units.
203. Survey of Spanish Literature to 1616. This is a general survey with lectures and illustrative readings. Barja's, Libros y Autores Clasicos, and Northrup's, Introduction to Spanish Literature are used as texts.

Miss Wilson.
First semester, three hours a week.
3 units.
204. Survey of Spanish Literature from 1616 to 1898 . Lectures, illustrative readings, discussions and reports. A study of Barja's, Libros y Autores Modernos.

Miss Wilson.
Second semester, three hours a week. 3 units.
205. Spanish Grammar and Composition. A review of principles of grammar with Ramsey's, Grammar as a text, and free composition.

Miss Wilson.
First semester, two hours a week.
2 unit 3.
206. South American Literature. A study of the major works of the literature with special attention to Sarmiento, Jose Hernandez, Jose Marti, Rodo, and Ruben Dario.

Miss Wilson.
Second semester, three hours a week. 3 unfts.

## DEPARTMENT OF MATHEMATICS

## Dr. Wexler (Head of the Department), Miss Haulot

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 elementary principles of analytic geometry and the calculus.

Students who look forward to industrial or commercial research of mathematical character, or to the teaching of mathematics, should major in mathematics. Those planning to major in mathematics should consult the head of the department at the earliest possible date.

A star (*) prefixed to the number of a course indicates that the course cannot be taken without the previous consent of the instructor.
THE GROUP ELECTIVE FOR THE FOUR YEAR DEGREE CURRICULUM IN ELEMENTARY EDUCATION
Freshman Year ..... Units
Trigonometry ..... 3
Sophomore Year
Analytic Geometry ..... 3
Differential Calculus. ..... 3
Arithmetic ..... 2
Junior and Senior Years
Integral Calculus ..... 3
Electives ..... 7
10
Total ..... 24
THE TEACHING MAJOR FOR THE FOUR YEAR PRESECON- DARY CURRICULUM IN MATHEMATICS
Freshman Year
Units
College Algebra ..... 3
Trigonometry ..... 36
Sophomore Year
Analytic Geometry ..... 3
Differential Calculus ..... 36
Junior and Senior Years
Integral Calculus ..... 3
Upper Division Electives ..... 15
18
Total ..... 30
TEACHING MINOR FOR THE FOUR YEAR PRESECONDARY CURRICULUM
Fifteen units to be chosen in conference with the head of the department.
Group electives and teaching majors and minors for curricula completed previous to September 1, 1936, will be approximately as outlined above or may be modified in conference with the head of the department.

## DESCRIPTION OF COURSES

Math. 100. The Teaching of Arithmetic. A course designed to give the prospective teacher knowledge of new methods and practical applications of the principles of educational psychology to the
teaching of arithmetic. Required of all students in the elementary school curricula. Students are advised not to take this course in the freshman year. Does not count in mathematics major and minor.

Dr. Wexler, Miss Haulot.
Either semester, two hours a week.
2 units.
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.
First semester, three hours a week.
3 units.
*112. College Algebra. Arithmetic and geometric progressions, permutations and combinations, the binomial theorem, complex numbers, determinants, the theory of equations, infinite series.
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. Wexler.
First or second semester, three hours a week. 3 units.
*201. Analytic Geometry. A study of the conic sections by the methods of analytic geometry.
Prerequisite, Math. 120.
Dr. Wexler.
First semester, three hours a week. 3 units.
*222. Differential Calculus. The theory and applications of the fundamental concepts of the calculus.
Prerequisite, Math. 201.
Dr. Wexler.
Second semester, three hours a week. 3 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, three hours a week.
3 units.
*232. Advanced Calculus. Partial differentiation, double and triple integrals; general methods of integration; applications.
Prerequisite, Math. 231.
Dr. Wexler.
Second semester, three hours a week. 3 units.
*202. Plane and Solid Analytic Geometry. Loci problems with auxiliary variables; conjugate diameters, the general equation of the second degree, a brief introduction to analytic geometry of three dimensions.
Prerequisite, Math 201.
Dr. Wexler.
Second semester, three hours a week.
3 units.
*221. The Theory of Numbers. Divisibility of integers, congruences, residucs, 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. Selected Topics in Mathematics. In this course 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.

# DEPARTMENT OF MUSIC 

## Miss Sather (Head of the Department), Miss Gerrish, Miss Norton, Mr. Hoyer

Students who elect to major in music will be tested to determine their fitness for this field and their probable success in this type of work. Every music major should plan to acquire experience in band or orchestra and in some choral organization. The glee clubs, chorus, band, and orchestra are doing outstanding work in the community and in the state, and will afford worth-while experiences.

All music majors are required to have two years of piano and two years of voice or show that they have had the equivalent of these. These should be taken in the freshman and sophomore years.

## DESCRIPTION OF COURSES

Music 100. Sight Singing and Rudiments of Music. This course includes the singing of many songs; study of music notations, major and minor; primary triads; common rhythmic types; musical terms, syllable singing, and part singing.
Required of all candidates for graduation.
Miss Sather, Miss Gerrish.
First year, either 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. Required of all who expect certification to teach. Prerequisite, Music 100.

Miss Gerrish.
Second year, either semester, two hours a week. 2 units.
102. Ear Training and Melody Writing. Special attention to the development of potential ability in aural recognition together with its later written expression. Emphasis is laid upon harmonic substructure of melody and upon individual effort.
Required of all music majors.
Miss Norton.
First year, second semester, three hours a week.
3 units.
103. Harmony I. A study of scale forms, intervals, chord structure and inversions, dominant seventh, cadences. Simple harmonization of section and phrase, close and open position, embellishing tones, subdominant harmony. Free composition. Keyboard work throughout. Required of all music majors.
Prerequisite, Music 102 or equivalent preparation.
Miss Norton.
Second year, first semester, three hours a week.
3 units.
104. Harmony II. A continuation of Harmony I. Subdominant, șupertonic, submediant, and mediant harmony. Bytones; dominant ninth. Relation of harmony and rhythm. Analysis and free composition. Keyboard application throughout. Required of all music majors.
Prerequisite, Music 103 or equivalent.
Miss Norton.
Second year, second semester, three hours a week. 3 units.

105, 106. Applied Music. Voice. (Private Instruction.) Voice building for singers or speakers, adaptable to the needs of beginners or those working on repertoire. Attention is given to resonance involving tone production and placement; diction, involving vowel and word formation; support, involving breath, poise, and style; interpretation. Arrange lessons with head of department. $\$ 2.00$ per lesson or two lessons for $\$ 3.00$.

Mr. Douglas Russell.
Any year, either semester, two half hour lessons a week.
1 unit.
107, 108. Applied Music. Piano. Private lessons in piano. Students who have had no previous instruction in piano should begin this work in the freshman year. It is essential that they learn to play before entering a course in harmony. To be arranged with the head of the department.

Mrs. Hazel Harvey Quaid.
Either semester, two half hour lessons a week.
1 unit.
211, 212. Music Education. For students majoring in music and preparing to become special teachers or supervisors. Consideration of standards, materials, individual differences, psychological implications, problem of interest. Practice in handling rote singing, sight reading, part work, appreciation lessons, and assembly singing. Introduction to conducting.
Required of all music majors.
Miss Gerrish, Music 211.
Miss Norton, Music 212.
Third year, two semesters, three hours a week. 3 units each semester.
150. Mixed Chorus. Open to all men and women who have a good sense of pitch and who are interested in chorus work. Those who sing little or much may apply. It is hoped to develop a chorus of a hundred voices. Interesting choral effects are worked out and a capella work is done.

Miss Sather.
Any year, either semester, two hours a week. $1 / 2$ unit.
151, 152. Women's Glee Club. This organization is open to women students who can qualify. Individual try-outs are given all who apply to the director. A varied repertoire of songs is worked up with much attention to tone quality, interpretation, shading, blending, enunciation and stage presence. Apply in the fall. Continues through two semesters.

Miss Sather.
Any year, two semesters, four hours a week. 1 unit each semester.
153, 154. Men's Glee Club. This organization is open to men students who qualify. Individual try-outs are given upon application to the director. Here also a varied repertoire is prepared and many songs are studied and learned with training in good tone
quality, blending, interpretation, enunciation, shading, and stage presence. Apply in the fall. Continues through two semesters. Miss Sather.
Any year, two semesters, four hours a week. 1 unit each semester.
201. Harmony III. Modulations to related and unrelated keys, chromatic harmonies, augmented sixth and Neapolitan sixth. Analysis and introduction to form.
Prerequisite, Harmony I and II or equivalent. Required of music majors.

Miss Norton.
Third year, first semester, three hours a week.
3 units.
202. Appreciation and History. A course designed to develop musical judgment, taste, and response to the aesthetic significance of music. Relation to social development from primitive times to the present. Illustrations through the use of records and radio programs.
Prerequisite, Music 109.
Miss Gerrish.
Third year, second semester, three hours a week.
3 units.
206. Choral Ensemble and Conducting. Designed to give music majors and those with special musical talent and training an opportunity to learn part songs of merit, to develop the voice further, to learn the fundamentals of conducting, and to have practical experience in conducting a vocal group.
Prerequisite: Mus. 100, Sight Singing; Mus. 102, Ear Training; Mus. 103, 104, Harmony.

Miss Suther.
Third year, second semester, three hours a week. 3 unita.

## Courses in Instrumental Music

207. Orchestration and Conducting. Offered in the fourth year to specially prepared students in music. Those who take this course should be registered in the college concert orchestra. Includes much written work in arranging music for small instrumental ensembles and practical experiences in conducting. Prerequisite, Music 201. Harmony III.

Mr. Hoyer.
Fourth year, first semester, three hours a week. 3 unlts.
161, 162. Beginner's Orchestra. Students who have not yet acquired the degree of proficiency necessary for registration in the college concert orchestra.or concert band, but desire experience in orchestral work, may register in the beginner's orchestra. Application for enrollment should be made to the director.
Prerequisite, Music 107 or 108 , or equivalent.
Mr. Hoyer.
Either semester, two hours a week. $1 / 2$ unit each semester.

165, 166. Concert Orchestra. The college concert orchestra is symphonic in character and consists of a select membership of about thirty-five. Only works of the highest type are selected for study by this orchestra. Only qualified students are admitted to the concert orchestra. Applicants see the director.

Mr. Hoyer.
Either semester, five hours per week. 1 unit each semester.
163, 164. Concert Band. As a military unit, the band is drilled in marching and fancy formations. The uniform adopted for the band consists of white flannel trousers, white woolen sweater, and white officer's cap. 'The band plays for all college athletic contests, and furnishes music upon other public occasions. Applications for membership must be made to the director in person.

Mr. Hoyer.
One semester, five hours a week. 1 unit each semester.

## DEPARTMENT OF PHYSICAL EDUCATION

## Mr. Lavik, (Head of the Department), Miss Murphy, Miss Marten, Miss Anderson, Mr. Macomber, Miss Durham.

The Department offers a four year major in physical education which qualifies graduates to teach in both the elementary and high schools of the state. Students who desire to select this major should possess not only outstanding physical ability but high standard of health as well.

All students before registering for any physical activity class should present to the department a record of a recent physical examination in order that their activities may be adjusted to their individual needs. All students are required to take a physical activity course each semester.

## RECOMMENDED SEQUENCE OF ACTIVITIES FOR ALL STUDENTS



## Women

1st year-Sports Survey or Athletics ..... 1
2nd year-Dancing 1 semester-Elective 1 semester ..... 1
3rd year-Individual Sports 1 semester-Elective 1 semester ..... 1
4th year-Elective ..... 1
THE GROUP ELECTIVE FOR THE FOUR YEAR DEGREE CURRICULUM IN ELEMENTARY EDUCATION
Freshman Year
Units
Activities ..... 1
Hygiene, P. E. 100 ..... 2
Sophomore Year
Activities ..... 1
Physiology, Biol. 120 ..... 3
Junior and Senior Years
Activities ..... 2
Growth and Development of the Child ..... 2
Theory of Physical Education, P. E. 210 ..... 3
Methods and Techniques Courses ..... 8
Additional Theory Courses in Health or Physical Education ..... 224
THE TEACHING MAJOR FOR THE FOUR YEAR PRESECOND-
ARY CURRICULUM AND THE SPECIAL CREDENTIAL IN PHYSICAL EDUCATION
Freshman YearUnits
Activities ..... 2
Hygiene, P. E. 100 ..... 2
Sophomore Year
Activities ..... 4
Physiology, Biol. 120 ..... 3
Anatomy, Biol. 238 ..... 3
First Aid, P. E. 231 ..... 1
Junior and Senior Years
Activities ..... 2
Growth and Development of the Child ..... 2
Theory of Physical Education, P. E. 201 ..... 3
Methods and Technique Courses ..... 8
Mental Health or School Health ..... 2
Demonstration and Observation Teaching ..... 2
Additional Theory Courses in Physical Education. ..... 2

## THE TEACHING MINOR FOR THE FOUR YEAR PRESECONDARY CURRICULUM

Fifteen units to be chosen in conference with the head of the department. Group electives and teaching majors and minors for curricula completed previous to September 1, 1936, will be approximately as outlined above or may be modified in conference with the head of the department.

## DESCRIPTION OF COURSES

## Activity Courses

100. Hygiene. A course dealing with physical and mental well being. Required of all students during the freshman year.

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

Staff.
First year, two semesters, two hours a week. $1 / 2$ unit each semester.
111, 112. Sports Survey Course. (Men.) Required of all freshman men not registered for athletics.

Staff.
First year, two semesters, five hours a week $1 / 3$ unit each semester.
113, 114. Athletics. (Men.) An advanced course open to men who are accepted as candidates for college teams.

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

Miss Marten.
First year, two semesters, four hours a week. $1 / 2$ unit each semester.
110. Elementary Clogging. Simple buck, waltz, clog and soft shoe routines leading up to original routines by students.

Miss Marten.
Second year, either semester, two hours a week.
$1 / 2$ usit.
117. Folk Dancing. National dances of American and foreign origin.

Miss Marten.
Second year, first semester, two hours a week. 1/2 unit.
123, 124. Tumbling. Beginning and advanced sections for men and a separate beginning section for women.

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

## 125, 126. Boxing. (Men.)

Second year, two semesters, two hours a week. $1 / 2$ unit each semester.
127, 128. Wrestling. (Men.)
Second year, two semesters, two hours a week. $1 / 2$ unit each semester.
120. Golf. (Open to both men and women.) Beginning and advanced sections.

Staff.
Either semester, two hours a week. $1 / 2$ unit.
130. Tennis. (Open to both men and women.) This course will be divided into beginning, intermediate, and advanced sections.

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

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

## Theory Courses

201. Theory of Physical Education. Required of all majors in physical education.

Miss Marten.
Third year, first semester, three hours a week. 3 units.
Biol. 238. Anatomy. Human anatomy with special emphasis on the anatomy of muscles and joints and application to the movements involved in exercises and sports.
Prerequisite, Biol. 120, Human Physiology.
Mr. Irish.
Second semester, three hours a week. 3 units.
P. E. 231. First Aid. The first aid treatment of the accidents and emergencies which occur most frequently in the school and on the playground.

Miss Durham.
Second year, first semester, one hour a week. 1 unit.

Educ. 205. Play Education for the Kindergarten-Primary Grades. This course may be substituted by kindergarten-primary majors for one semester in place of Organization of Physical Education. Prerequisite, Growth and Development of the Child.

Miss Lutz.
Third year, first semester, three hours a week. 3 units.
230. School Health.

Miss Durham.
Third or fourth year, second semester, two hours a week. 2 units.
250. Growth and Development of the Child. Required of all students in their third year.

Third year, either semcster, two hours a week. 2 units.

## Methods Courses

215, 216. Methods in Physical Education. Required of all physical education majors. Methods and techniques in individual sports, dancing, tumbling, group and team games.

Staff.
Third year, two semesters, three hours a week. 2 units each semester.
217, 218. Coaching. (Men.) Theory of coaching major sport activities with practical experience in the conduct of high school boys' sports.
Prerequisite, P. E. 113, 114, Athletics.
Third or fourth year, hours and credits to be arranged.
207, 208. Coaching (Women.) Theory of coaching major sport activities with practical experience in the conduct of high school girls' sports.
Prerequisite, P. E. 103, 104, Athletics.
Miss Marten.
Third or fourth year, two semesters, two hours per week.

1 unit each semester.
219. Methods in Pageantry.

Miss Simpson.
First semester, two hours a week.
1 unit.
221, 222. Playground Methods. Required of physical education majors in the junior year.

Miss Murphy.
Third year, two semesters, two hours a week. 1 unit each semester.
260. Methods in Campfire Leadership.

Miss Anderson.
Either semester, one hour a week. 1 unit.

## 252. Methods in Scouting.

Mr. Macomber.
Second semester, two hours a week.
2 units.
204. Playground Activity. Required of all third year men and women. This course includes a study of playground problems, suitable games and practice and presentation of the games.

Miss Murphy.
Third year, either semester, two hours a week.
1 unit.

# DEPARTMENT OF PSYCHOLOGY 

Dr. Grimes (Head of the Department)<br>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. Dr. Grimes.
Third 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 semegter, 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 Hygiene. A study of the principles of mental hygiene and their application to the personal needs of school children. Deals largely with the emotions, hereditary tendencies, types, causes, and educational treatment of mental instability and defects of personality.

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.
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 SCIENCE

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

The department of science offers courses in the following fields: Agriculture, Biology, Chemistry, Geography, 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, Physical Education, etc.
(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.

## THE SCIENCE GROUP ELECTIVE FOR THE FOUR YEAR DEGREE CURRICULUM IN ELEMENTARY EDUCATION

The following courses are required of all students taking their group elective in science.

## First and Second Years

*Biology 100, **Physics 100, **Chemistry 100.
*Students may substitute Biology 111 or 122 if they have completed high school biology.
**Students may substitute Chem. 101, 102, or Physics 101, 102, if they have completed courses in high school chemistry or physics.

## Third and Fourth Years

On the completion of the work required for the first and second years the student should arrange a conference with the Head of the Science Department and the instructor representing his major interest to select twelve or more hours that will best meet his particular needs.

## THE PRE-SECONDARY MAJOR FOR THE FOUR YEAR CURRICULUM IN PHYSICAL SCIENCE

## Required Courses

Chemistry 101, 102, Physics 101, 102, are required of all students majoring in physical science. After completing the above courses the student may emphasize either chemistry or physics, or both. To complete the major, twenty-four hours (twelve hours of which must be upper division) should be selected from the courses listed below with the approval of the staff.

Chemistry 131, 142, 211, 212, 262, 270, 282, 291.
Physics 105, 116, 121, 123, 201, 202, 204, 212, 291.
Additional Courses Required (Prerequisites) or Suggested
Mathematics 107, 120, 201, 222, 231; Geology; French 101, 102; German 101, 102; Biology 111, 122; Ind. Arts 101, 102, 154, 203, 115, 116.

## THE PRE-SECONDARY MAJOR FOR THE FOUR YEAR CURRICULUM IN BIOLOGICAL SCIENCE

## Required Courses

Biology 111, 122; and Chemistry 101, 102 are required of all students majoring in the Biological Sciences. To complete the major, twenty-four hours (twelve of which must be upper division) should be selected from the courses listed below with the approval of the staff.

Biology 112, 120, 202, 204, 206, 211, 212, 222, 238.

## Additional Courses Suggested

French 101, 102; German 101, 102; Geology; Agriculture 108, 132 ; Chemistry 182, 282; Physics 100 or 101, 102.

## THE TEACHING MINOR FOR THE FOUR YEAR PRE-SECONDARY CURRICULUM

Twelve 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.

## Recommendations for Students Majoring in Other Departments

All Departments: Biology 100, 132; Phýsics 100, 105; Chemistry 100, 182; Geography 100; Gcology.
Home Economics: Chem. 101, 102 or 100, 182, 262, 282; Physics 100; Biology 100, 120, 202, 204.
Physical Education: Biology 100, 120, 202, 204, 238; Physics 100; Chemistry 100, 182.
Industrial Arts: Physics 101, 102, 201, 202; Biology 100; Chemistry 101, 102, 262.
Social Studies and Commerce: Courses in Geography, Biology 100, 204.

Kindergarten and Primary: Biology 132.

## AGRICULTURAL DIVISION

A suggested Curriculum for Students intending to transfer to an Agricultural College for a Degree in Agriculture.

## First Year

$\begin{array}{lrlr}\text { First Semester } & \text { Units } & \text { Second Semester } & \text { Units } \\ \text { English } 101 & \text {.................................................. } 3 & 3\end{array}$
Chemistry 101 ........................ 4 Chemistry 102 ........................ 4
Botany, Biology 111 .............. 4 Zoology, Biology 122 ............... 4
Animal Industry, Agric. 107.... 4 Plant Industry, Agric. 108 .... 4
Physical Education .................. 1 Physical Education ................ 1
$16 \quad 16$
Second Year
Social Science 131 .................. 3 Psychology 100 ....................... 3
Physics 101 .-.......................... 4 Physics 102 ............................. 4
Organic Chemistry 181 or 2014 Plant Physiology 208 ............ 4
Bacteriology, Agric. 203 ........ 3 Dairy Husb'y, Agric. 104 or Poultry Husb'y, Agric. 1063 Agric. Mechanics, Indus. Arts 132 .............................. 3

NOTE. The preceding curriculum covers two years of a fouryear State course in vocational agriculture designed to qualify the candidate for teaching agriculture under the provisions of the Smith-Hughes Act. For those students who plan to take one or two years in general agriculture as a preparation for practical farming, the courses offered in the preceding curriculum are recommended, with substitutions arranged with Head of the Department. A demonstration farm adjoining the campus is fully equipped with modern implements and stocked with the best types of pure bred stock of the principal breeds. The country adjacent to Tempe supports a wide variety of agricultural industries and offers opportunity for instructive field trips.

Well ordered and equipped laboratories make possible a thorough training in the chemical, physical, and bacteriological testing of milk, soils, and food products.

## DESCRIPTION OF COURSES

## Lower Division Courses

Agric. 110. Agricultural Projects and Correlations. This course is intended to give the students such a knowledge of the general principles of agriculture as will enable them to teach the subjects of the rural schools in terms of the community life and industries. It endeavors to prepare the teacher to give the boys and girls intelligent interest and advice in their home problems and projects. The student is given opportunity to conduct agricultural projects and allied projects in the training school. Laboratory fee, $\$ 1.00$. Required in the elementary teachers' course.

Mr. Ostrander.
Second year, either semester, two hours lecture and four hours laboratory and field work.

3 units.
104. Dairy Husbandry. A study of dairy breeds, problems, and practices. Special attention is given to the production and marketing problems of Arizona. Elective.

Mr. Ostrander. Alternating with Poultry Husbandry. Not given in 1933-34. Three hours per week. Second semester.

3 units.
106. Poultry Husbandry. The same principle is followed for the Poultry Husbandry course as is outlined for Agriculture 104. Elective.

Mr. Ostrander.
First or second year, second semester, three hours per week. Given in 1933-34.
107. Animal Industry. Includes a general study of farm animalstheir breeding, feeding, and management. Judging of live stock and field trips are emphasized. Elective.

Mr. Ostrander.
First year, first semester, four hours lecture or its equivalent in laboratory and field work per week. 4 units.
108. Plant Industry. A general course, dealing with the major problems of agriculture, such as principles of permanent agriculture; the basic factors of crop production; producing areas; crop improvement, management and marketing. Laboratory fee, $\$ 1.00$.

Mr. Mortensen.
First year, second semester, three hours lecture and two hours laboratory per week.

4 units.
131. Principles of Horticulture. A study of the fundamental principles of propagation and growth of trees, shrubs, and ornamental plants. Observation, demonstration, and practice in handling the leading horticultural crops of the southwest.

Mr . Mortensen.
Second year, first semester, two recitations and two hours laboratory per week. Given in 1934-35 and alternating years. Laboratory fee $\$ 1.00$.

3 units.
133. 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, concurrently.
Mr. Mortensen.
Third year, first semester, two hours lecture and two hours laboratory. Laboratory fee $\$ 1.00$. Given in 1933-34 and in alternate years. 3 units.

## Upper Division Courses

203. General Bacteriology. Emphasis upon the fundamental principles of bacteriology with 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. Required in some courses. Laboratory fee, $\$ 2.00$.
Prerequisite, Biology 100, or its equivalent.
Mr. Ostrander.
Third year, first semester, one lecture and two two-hour laboratory periods per week.

3 units.
204. Animal Genetics. The elementary principles of heredity and their applications to animal breeding and human welfare. This course alternates with Animal Nutrition. Not given in 1933-34. Prerequisite, Biology 100, or equivalent.

Mr. Ostrander.
Third or fourth years, second semester, three hours of lecture or its equivalent per week.

3 units.
206. Animal Nutrition. 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. Elective.
Prerequisites: Animal Industry 107, and General Chemistry. This course alternates with Animal Genetics 204. Given in 1933-34.

Mr. Ostrander.
Third or fourth year, second semester, two hours of lecture and six hours of laboratory and observation per week.

3 units.
222. General Entomology. See Biology 222.
224. Comparative Anatomy of Vertebrates. See Biology 224.

## BIOLOGICAL SCIENCES

## Lower Division Courses

Biology 100. General Biology. A study of fundamental life structures in plants and animals, emphasis being placed on similarities rather than differences in the various forms of life. The student is expected to master the most important biological facts and principles, especially as they apply to problems of human affairs. Laboratory fee, $\$ 2.00$.

Mr. Mortensen.
First year, cither semester, two hours lecture, three hours
laboratory por week.
3 units.
111. General Botany. A course in elementary botany, designed to give a broad survey of the plant kingdom. The make-up of a typical flowering plant is studied in some detail, as regards its structure and physiology, after which special attention is given to the morphology of the Fungi, Algae, Bryophytes, and Pteridophytes. Laboratory fee, $\$ 2.00$.

Mr. Mortensen.
First semester, three hours lecture, three hours laboratory per week.

4 units.
112. Flowering Plants. The reproductive parts of selected gymnosperms and angiosperms are studied in detail. Fundamental principles of classification are given, illustrated by examples from the local flora which the student is required to collect. Laboratory fee, $\$ 2.00$.
Prerequisites, Biology 100 or 111.
Mr. Mortensen.
Second semester, two hours lecture, six hours 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.
122. General Zoology. The principles of animal structure and function; comparative methods of reproduction; introduction to systematic classification; geographical distribution in relation to the origin and development of animal life. Laboratory fee, $\$ 2.00$.

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

4 units.
132. Nature Study. Lectures and assigned readings on local material suitable for teaching of Nature Study in the schools. Campus excursions, personal observations, and collections of various classes of subjects will be expected of the student. Laboratory fee, $\$ 0.50$.

Mr. Mortensen.
Second semester, two hours lecture per week. 2 units.

## Upper Division Courses

203. General Bacteriology. See Agriculture 203.
204. Animal Genetics. See Agriculture 204.
205. Animal Nutrition. See Agriculture 206.
206. Plant Physiology. Study of plant functions, with special reference to agricultural practices. Offered in 1933-34.
Prerequisites, Biology 111 and Chemistry 101 or 103.
Mr. Mortensen.
Second semester, two hours lecture, six hours laboratory per week.

4 units.
222. General Entomology. A general study of insects including structure, classification and relationships. Each student will be required to complete a project including collection and special re--ort on some group of insects.
Prerequisite, Biology 100. This course alternates with Biology 224.
Given in 1933-34.
Mr. Ostrander.
Second semester, two hours lecture and two hours laboratory and field work. Laboratory fee $\$ 1.00$.

3 units.
224. Comparative Anatomy of Vertebrates. A study of the structure and development of the organ systems of vertebrates and their homology.
This course alternates with Biology 222. Not given in 1933-34.
Second semester, three hours of lecture and class demonstration. Prerequisites, Biology 100 and 120.

3 units.
238. Anatomy. Human anatomy with special emphasis on the anatomy of muscles and joints and application to the movements involved in exercises and sports.

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

## GEOGRAPHY AND GEOLOGY

## Lower Division Courses

Geography 100. Elements of Geography. A general introductory course analyzing 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, 50c.

Mr. Hoover.
Either semester, first or second year. Three recitationlecture 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.
Ejther 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.

## Upper Division Courses

201. Geography of Transportation, A geographical analysis of the trade routes of the world; railways, roads, inland waterways, ocean and air transportation. Transportation advantages of great commercial centers.
Prerequisite, Geography 100.
Mr. Hoover.
First semester, 1933-1934. Two hours lecture-rectation per week.

2 units.
202. Regional Geography. Regions of the world delimited on the basis of physical and cultural factors. The evolution or modification of economic and cultural types under the influence of natural
environment. Selected contrasting regions will be studied in some detail and similar regions compared with them and classified. Prerequisite, Geography 100.

Mr. Hoover.
Second semester, three recitation-lecture periods per week. 3 units.
203. Conservation of Natural Resources. Measure and distribution of the natural resources of the United States considered from the standpoint of their conservation and most efficient utilization. Problems of land reclamation, erosion, forestry, conservative mining, flood prevention, water supply, water power, navigation, conservation of wild life and scenery.
Prerequisite, Geography 100.
Mr. Hoover.
First semester, 1934-1935. Two recitation-lecture periods per wreek.

2 units.
204. 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, Geography 100 or Geography 251.
Mr. Hoover.
Second semester, 1934-1935. Two lecture-recitation periods per week.

2 units.
206. Field Work in Arizona Geography. Arranged especially for students taking Geography 204. Diversified sections of the state are visited on Saturdays or over week ends. Written and oral reports.
Prerequisites, Geography 100 and Geography 251. \$3.00 transportation per unit of credit.

Mr. Hoover.
Second semester, 1934-1935. Credit 1 to 2 units depending upon amount of work covered.

## GEOLOGY

Geog. 251. 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, $\$ 3.00$.
Prerequisite, Chemistry 101.
Mr. Hoover.
First semester, three hours recitation-lecture, two hours
laboratory, and a minimum total of 18 hours field work.
laboratory, and a minimum total of 18 hours field work. 4 units.
Geog. 252. Historical Geology. Principles of stratigraphy revealing the history of the earth, and the changing world geographies 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, 1933-1934. Three hours recitation-lecture and a minimum total of 50 hours laboratory and field work. 4 units. Without the field work, 3 units.

Geog. 254. 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. Fee, $\$ 3.00$.
Prerequisite, Geog. 251.
Mr. Hoover.
Second semester, 1934-1935. Two hours recitation-lecture and average of 3 hours laboratory and field work per week.

3 units

## PHYSICAL SCIENCES

## CHEMISTRY

## Lower Division Courses

Chemistry 100. Fundamentals of General Chemistry. An information course in college chemistry, presents our present day conceptions of matter and its behavior, and the part that chemistry plays in life. Especially adapted to the needs of students, who either desire a brief cultural course, or who require a knowledge of elementary chemistry in their major or minor fields. Open to all students. Fee, $\$ 1.00$, to defray cost of lecture demonstrations.

Dr. Bateman.
Either semester. Three lecture periods per week.
3 units.
Chemistry 101, 102. General College Chemistry. A foundation course for those planning further work in science. Includes a study of the common elements and their simpler compounds, and is designed to give the student training in the scientific method, and to impart a knowledge of the fundamental laws and theories of chemistry. As far as possible illustrative material is taken from the application of chemistry in everyday life. Laboratory fee, $\$ 3.00$ per semester, and breakage deposit $\$ 2.00$.

Dr. Bateman.
Both semesters. Three lecture-recitation periods and three hours of laboratory per week.

4 units each semester.
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. Laboratory fee, $\$ 4.00$, and breakage deposit.
Prerequisite, Chemistry 102, or equivalent. Offered 1934-35 and alternate years.

Dr. Bateman.
First semester. Two lecture-recitation periods and six or more hours of laboratory per week. 4 units.
142. Elementary Quantitative Analysis. A study of the fundamental principles of gravimetric and volumetric analysis with practice in stoichiometry. Analyses of such substances as limestone, alloys and various ores are undertaken. The course affords practice in the standardization of solutions of acids, bases and oxidizers. Careful manipulation of apparatus, integrity and accuracy are stressed. Laboratory fee, $\$ 4.00$, and breakage deposit.
Prerequisite, Chemistry 131 or equivalent.
Dr. Bateman.
Second semester. One to two lecture periods and six to nine 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. The laboratory work includes the study and preparation of typical carbon compounds. This course is especially adapted to the needs of students of agriculture, home economics and biology. Laboratory fee, $\$ 3.00$, and breakage deposit. Prerequisite, Chemistry 100, or 102. (Not offered in 1933-34.)

Dr. Bateman.
First semester. Three lectures and three hours of laboratory work per week.

## Upper Division Courses

Chemistry 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. Laboratory fee, $\$ 4.00$ per semester, and breakage deposit.
Prerequisite, Chemistry 102, and upper division rank.
Dr. Bateman.
Both semesters. Three lectures and three hours of labora. tory per week.

4 units each semester.
262. Applied Chemistry. Includes a brief study of the applications of chemistry in the home and community. Subjects considered are fuels, fire prevention, sanitation, textiles, paints, cellulose
products, toilet preparations, drugs, food and nutrition. Laboratory fee, $\$ 3.00$, and breakage deposit.
Prerequisite, Chemistry 100 , or 102 , and upper division rank. Offered 1933-34 and alternate years.

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

4 units.
270. Advanced Quantitative Analysis. Includes special methods of analysis, such as water, food, ore, rock, steel, urine, etc. Time and credit to be arranged.
Prerequisites, Chemistry 102, 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. Laboratory fee, $\$ 3.00$, and breakage deposit. Prerequisites, Physiology (Biology 120), Chemistry 182, or 212. Offered in 1934-35 and alternate years.

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

4 units.
291. Elementary Physical Chemistry. A course in physical chemistry including 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. Laboratory fee, $\$ 2.00$.
Prerequisites, Chemistry 102 or 104, Physics 102, calculus. Offered in 1933-34 and alternate years.

Dr. Skinner.
Second semester. Two lectures and three hours of laboratory per week.

3 units.

## PHYSICS

## Lower Division Courses

Physics 100. Introduction to the Physical Sciences. A non-mathematical, informative course giving a knowledge of the fundamental facts within the province of the physical sciences, the scientific method of approach, the grouping and explanation of facts, and the applications of the physical sciences to daily life. The course will consist chiefly of lectures with experimental demonstrations. Physics and chemistry will be emphasized. This course is open to
all students. Fee, $\$ 1.00$, to defray cost of lecture demonstrations. Dr. Skinner. Either semester. Three lecture periods per week. 3 units.
101, 102. 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, $\$ 2.00$ per semester.

Dr. Skinner.
Both semesters. Three lecture-recitation periods and three hours of laboratory per week.

4 units each semester.
106. Descriptive Astronomy. A non-mathematical course in general astronomy. The course will include a detailed study of the members of the solar system and their characteristics, stars, constellations, nebulae, and the structure of the universe. Modern views will be stressed.

Dr. Skinner.
Second semester. Three lecture periods per week. 3 units.
116. 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. Offered in 1933-34 and alternate years.

Dr. Skinner.
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. Laboratory fee, $\$ 3.00$.
Prerequisites, Physics 102, or Chemistry 102 or 104.
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. Offered in 1934-35 and alternate years.

Dr. Skinner.
First semester. Three lecture periods per week. 3 units.

## Upper Division Courses

Physics 201. Mechanics and Heat. A more advanced presentation of mechanics and heat than is given in general physics. Intermedi-
ate mathematics will be used throughout the course. This course is recommended for students who have had calculus, or are taking calculus concurrently.
Prerequisite, Physics 102. 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. The course will include studies in direct and alternating current theory, and radio.
Prerequisites, Physics 102. Calculus is desirable. Offered in 1933. 34 and alternate years.

Dr. Skinner.
Second semester. Three lecture periods per week. 3 units.
204. Optics. A more advanced presentation of geometric and physical optics. Reflection, refraction, lenses, image formation, wave properties of light, interference, diffraction, polarization, spectro scopy, relation of light waves to matter.
Prerequisites, Physics 102. Calculus desirable. Offered 1934-35 and alternate years.

Dr. Skinner.
Second semester. Three lecture periods per week. 3 units.
211. Modern Physics. A course dealing 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 102, and College Algebra. Offered in 193334 and alternate years.

Dr. Skinner.
First semester. Two lectures per week. 2 units.
291. Physical Chemistry. See Chem. 291.
(Additional courses in electricity and radio are offered in the Department of Industrial Arts.)

## DEPARTMENT OF SOCIAL STUDIES

Dr. Wyllys (Head of the Department), Mr. Murdock
COURSES REQUIRED FOR ALL CANDIDATES FOR GRADUATION
Constitutional Government (Pol. Sci. 100) Required by law of all candidates for graduation ..... 3
Economic History of the United States (Econ. 112) Required of all candidates for graduation ..... 3
European History (Hist. 101-102) Required of all can- didates for graduation ..... 6
Sociology (Sociology 120) Required of all candidates for graduation ..... 3
THE GROUP ELECTIVES FOR THE FOUR YEAR DEGREE CURRICULUM IN ELEMENTARY EDUCATION
Freshman Year
Units
Economic History of the United States ..... 3
Constitutional Government ..... 3
Sophomore Year
European History ..... 6
Junior and Senior Years
Sociology ..... 3
Electives ..... 9
THE TEACHING MAJOR FOR THE FOUR YEAR PRESECONDARY CURRICULUMThe four required courses above, and the following depart-mental requirements:
Arizona and the Southwest (History 110) ..... 3
And any two other lower division courses in history (History 103, 104, 105, 108, 109, 113, 115, or 116) 6
Any four upper division electives (History 204, 205, 206; Pol. Sci. 201, 203, 211, 212) ..... 12
THE TEACHING MINOR FOR THE FOUR YEAR PRESECONDARY CURRICULUM
Economic History of the United States ..... 3
Constitutional Government ..... 3
Sociology ..... 3
European History ..... 6
Upper Division Electives. ..... 3

Group electives and teaching majors and minors for curricula completed previous to September 1, 1936, will be approximately as outlined above or may be modified in conference with the head of the department.

## DESCRIPTION OF COURSES

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 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.
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.

> Mr. Murdock.
> Second semester, three hours a week.

3 units.
105. 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.

[^5]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.
109. 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.

[^6]110. Arizona and 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.
Either 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. Offered in 1934-35.

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 1875. 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. Offered in 1934-35.

Dr. Wylys.
First semester, three hours a week.
3 units.
116. History of Latin 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. The history of Latin America knowledge of Spanish is desirable 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.
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
caises and leading events of the French Revolution, and the career of Napoleon Bonaparte. Open to upper division students only. Prerequisite, History 101, 102 or equivalent.

Dr. Wyllys.
First semester, three hours a week. 3 units.
206. Contemporary Europe. Beginning with a brief survey of the period since 1870 and continuing through the World War, this course then deals with the problems of post-war Europe. Stress is laid on international organization since the War, and some of the problems discussed are: the foreign relations of Soviet Russia; the development of new alliances among the new nations; international conferences and their results; contemporary imperialism; the League of Nations; and the present conditions of most of the European countries. The course is open to upper division students only.
Prerequisite, History 101, 102 or equivalent. Offered in 1934-35. Dr. Wyllys.
Second semester, three hours a week. 3 units.
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.
Prerequisites, Pol. Sci. 100 and Hist. 101, 102 or equivalent. Dr. Wyllys.
First semester, three hours a week. 3 units.
203. American Foreign Relations. This course deals not only with the machinery of American diplomacy, but also with the history and course of American foreign policies. It is designed to enable teachers to understand the underlying currents of our foreign relations and the place of the United States in world politics. The topics especially discussed are: the development of early American foreign policies; the problems of expansion and Manifest Destiny; the Monroe Doctrine and its application; the share of the United

States in international conferences; relations with the League of Nations; and relations with other countries of the New World. Open to upper division students only.
Pierequisite, History 103, 104 or equivalent. Offered in 1934-1935.
Dr. Wyllys.
First semester, three hours a week. 3 units.
211. State and Municipal Govermment. 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 rity government. In this course, the emphasis is laid on the comparative merits of the three main plans of eity government; on problems of the electorate and public opinion; and on municipal administration. Not open to lower division students. Offered in 1934-35.
Prerequisite, Pol. Sci. 100.
Mr. Murdock.
First semester, three hours a week.
3 units.
212. American Political Parties. The 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 will 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. Second semester, three hours a week.

3 units.
Econ. 110. Economic History of the United States. Analysis of the colonial and Revolutionary periods of American development; economic progress of the West; types of institutions; legislative enactments as to industrial and commercial problems; financial institutions; economic effects of the World War; problems of the present. Required of all students for graduation.

Dr. Atkinson.

131, 132. Principles of Economics. An introductory study of economics. Elementary concepts are emphasized. Terminology and definitions are stressed. Much practical material is used to emphasize abstract principles. A complete treatment of all economic principles and required of students majoring in commerce in the four year presecondary curriculum.

Dr. Atkinson.
Both semesters, lecture three hours a week. 3 units.
Soc. 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 ung: 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.

## STATISTICS

## SUMMARY OF REGISTRATION, 1932-1933

## College

Resident Students
Regular Session

| Freshmen |  |  |  |  | Sophomores | Junior |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Men | 138 | 117 | 91 | 58 | 7 | 407 |
| Women | 145 | 125 | 140 | 67 | 13 | 494 |
|  | - | - | - | - | - | - |
| Total | 283 | 242 | 231 | 125 | 20 | 901 |

## Summer Session, 1933

Men 95
Women ........................................................................................ 145
Total ........................................................................................... 240
Extension Courses

Men
21
Women ..... 75
Total ..... 96
Training Schools
Boys ..... 441
Girls ..... 390
Total ..... 831
Total Registration
In College ..... 1237
Counted twice ..... 67
Total different students ..... 1170
In Training Schools ..... 831
GRAND TOTAL ..... 2001
Summary of Graduates, 1933
Prior to 1933 ..... 3,354
Class of 1933
Three Year Curriculum ..... 121
B.A. Degree ..... 113
234
Counted twice ..... 231

## GRADUATES, 1933

# BACHELOR OF ARTS IN EDUCATION <br> January 27, 1933 

Russell Edward Godderd Clurence Roland Johnson Florence M. MePherson

Harriet Rexroat Helty Hickson Stewart Donald R, Van Petien

May 29, 1933
Winston Kimball Larson George Theodore Lecker Trelva Lines
M. Eleanor Lively
A. Elon Lively

Edith Symns Love
Allene B. Lowry
Nell Magness
Fred Leamon McDowell
Foyd Immerson Merrill
Helen Minson
Fernard W. Muffley
Francis Clare Paddock
Felen Beth Parlasca
Richard Campbell Payne
Dorothy Brigham Pierce
Marian Pratt
Lucille Hanna Pyle
Helen Elizabeth Redden
Eloyce Redding
Marjorie Jean Regan
Dominee Girot Revello
Catherine Pine Russela
Fred Russell
Angelita Maria Salazar
Ellis A. Schuler
Winifred Lee Shartzer
Cecil H. Sims
Darcy A. Skaggs
Hazel M. Smith
Willard Paul Smith
Wm. Edward Smith, Jr.
Kathleen Spain
M. Estelle Strand

Martin Coombs Tate
Howard C. Thornburg
Verrill A. Townsend
Jewel Walker
Jack Louis Wallace
Lilla Webb
Eugene A. White
Perle White
Gladys Opal Willams

August 31, 1933
Carlos Silvas Jimenez
Jack K. Maben
Grace Pierson McKenna
Helen Frances Moore
Roland E. Pomeroy
Lena Samuels
George B. Smith
Mary Alice Stuart
Van Leslie Sullivan

# THREE YEAR DIPLOMA 

January 27, 1933

Elma Alberta Alexandor
Thelma P. Edgar Robert F. Espinoza
John Albert Freestone
Carlos Silvas Jimenez

Mary Alice Baily
Ruth Douglas Barkell
Delbert Barney
De Wayne Marquess Bradford
Arland Platt Branch
Nina M. Clark
Mary Ann Cocke
Alice R. Cords
James Freeman Cullumber
Bonnie B. Davis
Nelda George Dobson
Katherine Frances Dupree
Mamie McKinney Echols
Margaret Morris Edgar
Sarah Ellen Edgar
Rachel Marie Feliz
Edna May Flannery
Catherine Alice Flinn
Mary Marjorie Gabbard
Mavls Alberta Green
Evelyn Hilda Hampton
Verda Hatch
Emma Jean Hatcher
Helen Irene Hayduke
Ella Frances Herring
Fen S. Hildreth, Jr.
Zoe Till
Agnes Irene Holt
Ethel Mary Horner
Bertha Mae Hudson
Helen Isabelle Hunt
Catherine F. Jackson
Doris Jenkin
Ina Jespersen
Ruby Agnes Johnson
Helen Elizabeth Jordan
Mildred May Kennedy
Claudia B. Kinsey
Hildegarde Tovote Knauff
Anne Kulinovich
Ammon Land
Leonard G. La Rue
Maggie Layton
Francis LeBaron
Ruby Thelma Lloyd

Loulse Stoddard Knipe Beulah Hart Nation
Dorothy Frances Schaeffer Zoraide Stoddard

May 29, 1933
Irene Lowry
Aurora Maloy
Lucille Catherine Marcella
Mary E. McClure
Halph EarI McCullar
Rylie C. McDowell
Ora McGirk
Sarah C. McRae
Flora Garnett Miller
Shirley Marie Minckg
H. Evelyn Minsch

Ella Mae Minter
Marjorie Ellen Morgan
Helen Louise Nelson
Clare Osmundson
Hester A. Packard
Warren Le Roy Paddock
Julia Ellen Patterson
Katherine Pearce
Mabel C. Peterson
Ruth Mary Pitts
Rose Marie Poole
Donna Pearl Riggs
Jennie M. Root
Nataline Virginia Rosan
Mrs. Gladys Bearden Rumyan
Minnie C. Seaver
Mabel Celia Slaughter
Margaret Jean Speer
Rebecca Spitalny
Elizabeth Stephenson
Mignon Stevens
Florence Jane Talley
Lenora Taylor
Ruby Trammell
Marie Louise Vaughn
Juanita Mills Voelker
Mary Lee Walker
Jane Lorraine Wallace
Warren W. Wells
Nova Davis West
Gladys Nell Wight
E. Glenn Wilkins

Nancy Estelle Wilson
Levi Schanz Young

August 31, 1933

Hazel Butler
Miriam J. Clayton
Rachel A. Dana.
Eva Mae Dobson
John Reese Evans, Jr.
Dorothy Wilhelmina Gooding
Elsie Edie Goodloe
Paul F. Griffith
Margery Emily Hamar
Frances Elizabeth Hannah
Lillio Prince Hunt

Opal Charlotte Joyce Dorothy Emma Krentz Theo. C. LeBaron Nellie Catherine Lyle Beulah Ellen McFaul Helene Margaret Rosan Charlene Lane Sheldon
William T. Stamps
William Clifton Taggart
Nettie Vay Waggoner
Betty Walker

## HONORS

# Bachelor of Arts in Education With High Distinction 

Kermit Dale

Donald Van Petten

## With Distinction

Madeline Evans
James Bertram Anderson
Grace Pierson McKenna
Marie Hall Almand
Florence M. McPherson

Brenda Edith Gilpin
Sara Frost Cummins
Dorothy Brigham Pierce
M. Estelle Strand

Vienna Ione Curtiss

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[^0]:    -After June, 1936, no three year diplomas will be granted.

[^1]:    * The fundamentals requirements may be satisfied either by passing preliminary examinations or by passing courses in these subjects.

[^2]:    NOTE: Candidates for the Kindergarten-Primary certificate must present evidence of proficiency in sight reading, sight singing and piano accompaniment.

[^3]:    Miss Pilcher.
    Two semesters, three hours a week.

[^4]:    Mr. Neeb.
    First year, first semester, one lecture, six hours laboratory a week.

[^5]:    Mr. Murdock.
    First semester, three hours a week.
    3 units.

[^6]:    Dr. Wyllys.
    First semester, three hours a week. 3 units.

