Volume 32 JUNE, 1917 Number 1

BULLETIN

OF THE

TEMPE NORMAL **SCHOOL**

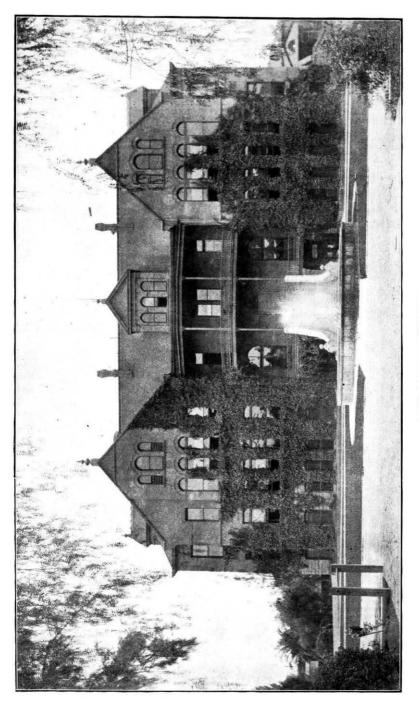
OF

ARIZONA

AT

TEMPE, ARIZONA





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Calendar 1917-18

1917

First Semester Degins	September 10
Entrance Examination and Classification	September 10-11
First Quarter ends	November 9
Second Quarter begins	November 12
Thanksgiving Vacation	November 29-30
Christmas Vacation begins	December 22
School re-opens	January 3
1918	
First Semester ends	January 18
Second Semester begins	January 21
Entrance Examination and Classification	January 21-22
Third Quarter ends	March 29
Fourth Quarter begins	April 1
Examination and Commencement Exercises	June 2-7

Boards and Officials

NORMAL BOARD OF EDUCATION Hon. C. O. Case, Supt. Public Instruction.......Phoenix Chas. C. Woolf, LL. B.....Tempe Dr. B. B. Moeur, Secretary.....Tempe OFFICIAL BOARD OF VISITORS Dwight B. Heard......Phoenix B. A. Packard......Douglas C. G. Jones.....Tempe OFFICERS OF ALUMNI ASSOCIATION Parley L. Blake, '11, President......Tempe Leonard Hilbers, '16, Vice-President.....Tempe Miss Anna E. Blount, '13, Secretary.....Tempe Miss Flora M. Thew, '13, Treasurer.....Tempe STATE BOARD OF EDUCATION Hon. C. O. Case, Supt. Public Instruction.......Phoenix Dr. R. B. von KleinSmid, President, University of Arizona......Tucson Dr. A. J. Matthews, President, Tempe Normal School.....Tempe Dr. R. H. H. Blome, President, Northern Arizona Normal School Flagstaff S. C. Heywood, County Superintendent Schools......Safford H. E. Matthews, City Superintendent Schools Mesa John D. Loper, City Superintendent Schools......Phoenix STATE BOARD OF EXAMINERS Hon. C. O. Case, Superintendent Public Instruction......Phoenix

Faculty 1917-18

A. J. Matthews, LL. D., Syracuse UniversityPresident
F. M. Irish, AssistantPhysical Science and Military Drill
W. J. Anderson, B. S., National University, ChicagoArt
George M. Frizzell, B. Pd., State Normal School, Warrensburg, Mo
James F. Hall, A. M., Harvard UniversityAncient Language
A. B. Clark, Chicago Normal SchoolManual Training
Edith Salmans, B. S., Ohio Wesleyan UniversityModern Languages
Lillias D. Francis, Pratt Institute
James L. Felton, A. M., University of ChicagoEnglish
Ira D. Payne, A. B., Stanford University
Ruth M. Wright, Pratt Institute, Library SchoolLibrarian
John B. Griffing, A. M., Columbia UniversityAgriculture
Anna R. Stewart, Tempe Normal School
John R. Murdock, B. S., Normal School, Kirksville, Mo
R. B. Beckwith, A. B., Olivet CollegeBiological Science
R. B. Beckwith, A. B., Olivet CollegeBiological Science George H. Schaeffer, A. B., Pennsylvania State College Assistant Instructor and Athletic Director
George H. Schaeffer, A. B., Pennsylvania State College
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George H. Schaeffer, A. B., Pennsylvania State College
George H. Schaeffer, A. B., Pennsylvania State College

Faculty---Continued

TRAINING SCHOOL
Ira D. Payne, A. B., Stanford UniversityDirector
CRITIC TEACHERS
Mary E. McNulty, Tempe Normal School
Theresa Anderson, B. Pd., Michigan State Normal College
Amanda L. Zeller, National Kindergarten College, Chicago
Helen C. Roberts, Tempe Normal School
ADMINISTRATIVE OFFICERS
A. J. Matthews President Laura Dobbs Secretary and Accountant Amelia Kudobe Records of Students Anna H. Ridenour Preceptress of Girls' Dormitories Mrs. Erma E. Crawford Assistant Preceptress
L. C. Austin General Foreman J. A. Bloys Head Janitor J. G. Newton Engineer Robert Krause Chef Mrs. R. N. Krause Matron of Dining Hall

The Tempe Normal School of Arizona

General Information

ESTABLISHMENT AND PURPOSE

By an Act of the Legislative Assembly of Arizona, approved March 10, 1885, provision was made for the establishment of a Normal School at Tempe, Arizona. The act states the purposes for which this institution was founded to be "the instruction of persons, both male and female, in the art of teaching, and in all the various branches that pertain to a good common school education; also to give instruction in mechanical arts and in husbandry and agricultural chemistry, in the fundamental laws of the United States and in what regards the rights and duties of citizens."

LOCATION

It would be difficult to find a location for a school of this kind more favorable than Tempe, a town of 1,800 inhabitants, distant only twenty minutes' ride from Phoenix, the capital of Arizona. Lying near the center of population of the state, Tempe is conveniently reached by rail over the Arizona Eastern, which gives direct connection with the main lines of the Southern Pacific and Santa Fe systems, thus bringing even the most distant counties within from eight to twenty hours' journey. The convenient railway connections are appreciated by those students who desire to make the most of their holiday vacations. The fertile fields of the Salt River Valley surround the town, delighting the eye with their perpetual verdure and insuring an unfailing supply of fresh fruits and vegetables. The climate during the whole school year is not only delightful but wholesome and conducive to study. Snow is unknown and outdoor athletics and field excursions are carried on throughout the year.

Parents will derive satisfaction from the knowledge that the moral and social atmosphere is all that could be desired. The residents of the community are thrifty and industrious Americans, most of whom have come hither from the middle and eastern states. These people are actively interested in the welfare of the Normal School and pride themselves upon surrounding the students with wholesome influences. As the sale of liquors is prohibited in Arizona, the undesirable influence of the saloon is entirely eliminated. The absence of the distractions of a large city is a distinct advantage to the student who wishes to make the most of his time and opportunities.

THE CAMPUS

The campus is one of the most beautiful spots in the state. It 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. Thirteen substantial buildings are well distributed over the grounds, and to the picture one must add the view of the distant mountains with their ever-changing lights and shadows and wonderful coloring. Ample facilities for outdoor recreation are provided in numerous tennis courts of approved construction, basketball courts, athletic field, running track, and baseball diamond. The school gardens afford the necessary training for the students in agriculture, and at the same time provide fresh vegetables for the table.

Thirty acres adjoining the campus have been rented for a term of years, thus affording ample opportunity for experimental work in all lines of agriculture, stock breeding, etc.

Description of Buildings

MAIN BUILDING

There is a central group comprising the main building, science hall, and auditorium which enclose a quadrangle of green sward in the center of which is a fountain containing various water plants. The first named of these buildings, which are all of red brick and stone, was erected in 1894. Its three stories give ample space for lecture rooms for the academic subjects, a large assembly hall with a seating capacity of three hundred and a library capable of housing ten thousand volumes and seating a hundred readers. The building is well lighted and ventilated and supplied with sanitary drinking fountains on each floor. Works of art, trophy cases and pictures, the gifts of the several graduating classes, adorn the halls. The basement has several large rooms which are now used by the student paper and for armory purposes.

SCIENCE HALL

One of the newest and best equipped buildings on the campus is the science hall, 92x70 feet, a commodious two-story structure. It provides on the first floor to the right and left of the entrance three large well-appointed rooms for the offices of the president and secretary of the faculty. The rest of the floor is given up to the laboratories for physical, chemical and earth sciences. The laboratory for physiography and geography is very fully equipped with maps, charts, modeling tables, relief models, etc. A thermometer shelter containing a thermograph and a full set of thermometers is located close by on the campus.

The laboratories for chemistry and physics are spacious and well supplied with all the necessary apparatus, including side tables, sinks and special apparatus for distilling water. Each table is equipped with gas, electricity and water. Between these rooms is a lecture theatre fitted with a projection lantern, electric generator, switchboard for control of demonstration currents, draft chambers and demonstration table. There are other small rooms devoted to photographic work, repair work and storage of stock.

The laboratories for biology and physiology are situated on the second floor. They have, beside the necessary equipment for work in these sciences, a large aquarium for the collection and preservation of specimens for class use, a microtome and a paraffin bath for the preparation and mounting of microscopic slides and a centrifuge for analysis of liquids. The lecture theatre is conveniently placed and is equipped with projection apparatus with microscopic attachments.

There is also on this floor a museum with a working collection representative of the fauna and flora of Arizona and of its mineral resources.

AUDITORIUM AND GYMNASIUM

The auditorium, 72x100 feet is by far the best of its kind in the state. With the balcony it has a seating capacity of one thousand. The acoustic properties, the means of ventilating, heating and emptying the building are everything that can be desired. The stage and stage properties are of the best and enable the school to stage the largest companies that come to the valley. The school and the community are treated each year to a number of high class entertainments that bring to us some of the best talent on the stage and platform today.

The gymnasium is fitted up with the usual apparatus, lockers, dressing-rooms and shower baths. Two galleries provide seating capacity for two hundred spectators, while as many more can be seated on the floor of the gymnasium.

TRAINING SCHOOL

This building is located close to and south of the central group. It has a floor space of 120x136 feet and contains two offices, eleven classrooms and a large double assembly, all on one floor. The classrooms are so arranged that easy access is had from each to the assembly. A fully equipped kindergarten department is housed in this building. A marked feature is the lighting and ventilation of all the rooms. The play activities of the pupils are carried on under the supervision of the teachers. There is a separate playground with special equipment for this school. Besides the usual furniture of the school, there is a library of over 700 volumes suited to the work of the grades, two pianos, a grafanola and a reflectoscope.

INDUSTRIAL ARTS BUILDING

This building, 130x135, is three stories, including a basement, and constructed of concrete faced with cream pressed brick. The lower or main floor is taken up entirely with the

manual arts. On the left of the re-entering court is the office and library and draughting room. Behind these is placed the lumber supply room, woodshop, pattern shop, and machine room. On the left of the court there are rooms for textiles, book binding and printing, finishing woodwork and a lecture theatre for the use of all departments housed in this building. This lecture room is equipped with improved apparatus for the projection of lantern slides and opaque objects upon an aluminum-coated screen. A portion of the north wing is devoted to laboratory and classroom space for the work in agriculture.

The south half of the upper floor is devoted to the work in household arts. This department includes an office, a classroom, two sewing rooms, a fitting room, cooking room and a laundry. On the north side of this floor are located the rooms of the art department. These include two drawing rooms with north light, clay modeling rooms and glazing and casting rooms and the offices of the instructors.

The basement provides for work in sheet metal, forging and foundry, also large stock rooms and storage space. The building is provided with an elevator for the convenient handling of heavy material.

DORMITORIES

These buildings are models of comfort and attractiveness. The present dormitory for young men is a two-story structure with basement. Baths and toilets are provided on each floor. There are in all about twenty rooms, each intended to accommodate two students. Each room is furnished with two beds, bedding, hot and cold water, electric light and steam heat. A large sleeping porch, which will allow all of the boys to sleep outdoors, has been added recently, and several two-room bungalows have been erected near by for the use of those young men who prefer such accommodations. These are steam heated, electric lighted and provided with running water. A member of the faculty lives in the dormitory and exercises supervision over the young men at all times.

A new dormitory for young men is to be erected this summer and will be ready for occupancy by the beginning of the second semester. This building will be a thoroughly modern, fire-proof structure and will embody all the improvements suggested by years of experience in the administration of the other dormitory buildings. This building will accommodate about seventy.

The main dormitory for the girls will accommodate about 135, with two in each room. The rooms are fitted up similarly to those of the boys' dormitory. In addition the girls have the use of two large parlors and a sitting room. A piano is also provided for their entertainment. The outdoor sleeping porch for this building is in the form of a wing, open on three sides to the air and two stories in height. It is screened all round, fitted with storm curtains, and affords room for all occupants of the building, who are thus enabled to sleep comfortably in the open air the entire year.

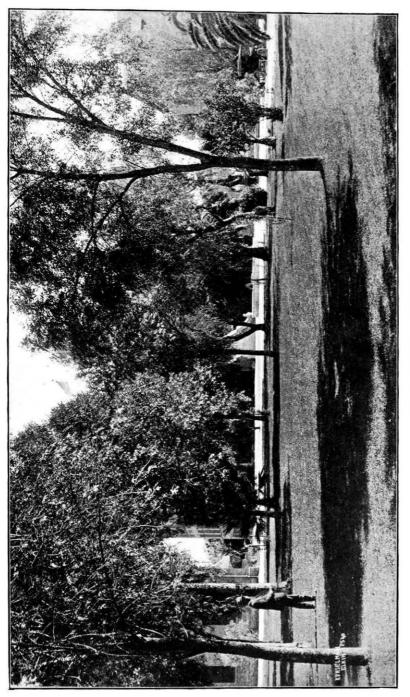
Across the way and west of the present dormitory a group, consisting of five units, arranged around a patio, will be erected in the near future to meet the growing needs for accommodation for the girls. Each unit will house about thirty-five, and will be furnished after the same style as the main dormitory. Experienced preceptresses are in charge of each building to look after the comfort and needs of the girls in every way. Two of these units have been completed and are now occupied.

DINING HALL

Situated very conveniently to the dormitories is the dining hall. It has a seating capacity of two hundred, and is particularly for non-resident students. Everything that the market affords in the way of fresh fruits, vegetables and meats and all that the culinary art can provide is furnished to students and members of the faculty alike. It is in charge of a specially trained matron who is responsible for the cleanliness and efficiency of the service.

HOSPITAL

The new hospital building is located in a suitable section of the campus north of the President's residence. It is a thoroughly modern fire-proof structure of concrete with properly equipped examination rooms, operating rooms, girls' ward, boys' ward, 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. The addition of this building to the system greatly facilitates administration, enabling the management to provide suitable care for the inevitable cases of sickness which must occur annually among so large a body of students.



TEXT BOOKS: The necessary outlay for books and stationery varies from \$10 to \$15 per year. Examination paper, pens, ink, pencils, and the like are furnished the students without expense.

MILITARY UNIFORM AND GYMNASIUM COSTUME: The cost of these articles varies somewhat with the taste and preference of the student. The gymnasium costume usually costs from three to four dollars, and the style is fixed by conference with the director. The style of military uniform conforms to the regulations of the United States Army, but the quality is fixed by vote of the company, and costs usually in the neighborhood of twenty dollars. It should be noted that, as the uniform is worn three days in the week, it easily saves the cost of at least one civilian suit during the year and therefore is hardly to be considered an extra expense.

It will be noted from the foregoing that the State of Arizona provides the advantages of a first-class 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 trained teachers, is worthy of thoughtful consideration by those who, having completed the work of the public school or the high school, are contemplating the continuation of their education along academic or professional lines.

GOVERNMENT OF STUDENTS

Students who come from homes outside of Tempe or who are not so situated as to be able to make their homes with relatives in Tempe are advised to live in the dormitories. Students desiring to engage room and board outside the dormitories must first obtain written approval from the office, and such students must further agree to observe the faculty regulations for the government of dormitory students.

Students entering the dormitories may not leave them to board or room outside until a written or personal request is made by the parent or guardian directly to the President. The right to change the boarding or rooming place of a student on the outside is reserved by the faculty when such place is not satisfactory or does not co-operate in enforcing the regulations of the school.

It is the judgment of the faculty that the environment of all the students entrusted to their care should be the best, and it is with this end in view that strict regulations are made as to the conduct of the students both on and off the campus. It is understood always that when a student cannot and does not conform to the rules laid down for the welfare of the school such student will be asked to withdraw from the institution.

DEPARTMENTS

The school is organized into three departments, the Normal School, the Training School, and the School of Industrial Arts. The Normal School offers four courses; to those who have completed the eighth grade of the public school, a sixyear English course or a six-year classical course; a two-year course to those who have finished a four-year high school course; and a four-year academic course to those who do not expect to become teachers, and who, therefore, do not desire to pursue a professional course.

The Training School is primarily intended to give the senior class of the Normal School actual experience in teaching under the supervision and advice of trained critic teachers. The course includes the eight grades of the public school course for Arizona, and articulates directly with the first year of the Normal course; thus a pupil entering the first grade of the Training School may continue his education without interruption, to the completion of his Normal or academic work and the reception of his diploma. Students not fully prepared to enter the work of the Normal School may find it to their advantage to complete their preparatory work in the Training School.

The School of Industrial Arts offers special courses to those who do not desire to secure the regular teachers' diploma, but who wish to procure special diplomas entitling them to teach home economics, manual training, art, music, kindergarten, agriculture or commerce.

CORRESPONDENCE

Any information regarding studies, credits, expenses, etc., and requests for catalogs and announcements should be directed to the office of the President, Tempe Normal School, Tempe, Arizona. Those who contemplate attending the Normal School should write stating the time of their prospective arrival in order that they may be met at the train. In case incoming students find no one at the station to meet them, they should proceed directly to the Normal School, where they will be taken care of at the office of the President.

Admission and Graduation

Admission to the Normal department will be required to pass a satisfactory examination. Certificates from an accredited grammar school or recommendations from teachers may be accepted in lieu of such parts of this examination as the faculty may decide.

Admission to Advanced Standing: Candidates for advanced standing in the Normal department must convince the faculty that their preparation for any particular subject has been sufficiently thorough to enable them to pursue it profitably. This preparation may be shown either by an examination, by class records in the Normal School or by the certificate of accredited schools. Students who offer credentials from high schools or other schools in lieu of entrance examinations, must forward such credentials with the application for entrance or present them at the time of registration. These credentials even in the case of those holding high school diplomas or certificates, must show the character of the work done, as well as the number of weeks devoted to each subject and the number of hours of work per week.

Admission for High School, Graduates: Graduates from high schools maintaining a full four-year High School course will be admitted to a special two-year professional course. Provided, that the High School course pursued conforms to the academic requirements of this Normal School. Graduates from such a course will receive a diploma which will entitle them to teach for life in the public schools of Arizona, California and other states, and will entitle them to at least one year's credit on a university or college course.

Time of Admission: Students will find it greatly to their advantage to enter the Normal School at the beginning of each semester; but they will be admitted at any time by special arrangement of work.

GRADUATION: 1. In order to receive a diploma from this institution, a student must have attained the age of 18 years.

2. No student will be admitted to senior standing who has five hours work per week for the year, in addition to the

regular senior course, or its equivalent, without the consent of faculty.

- 3. Candidates for graduation must have completed at least one full year's work in this school, and, in addition to the required standing in scholarship, must give satisfactory evidence of a good moral character and the executive ability necessary to the proper management of a school.
- 4. Students from other institutions applying for senior standing must have completed a four-year high school course, and in addition thereto must have completed some of the required professional units in a college or normal school and have had some experience in teaching in the public schools.
- 5. The diploma entitles the holder to teach in the public schools of Arizona during life without examination. It is also accredited in the State of California and in several other states.

Examination and Reports: Students must attend such examinations as may be required during the year, and such other examinations as may be required by the faculty or Board of Education upon entering or before graduating from the Normal School, but final grades are based upon both class standing and examination. Examinations are written or oral and are conducted by the instructors in charge of the several subjects. Examinations are held at irregular intervals, generally without notice and occupy only the length of the usual recitation period.

A quarterly report is made to every student showing his standing in each subject studied, and a copy of this report is forwarded to the parent or guardian. Standings are indicated by letters. A student who satisfactorily completes a subject is assigned a grade C; A and B are assigned for grades of excellence above passing; D indicates a condition to be removed; and E indicates a failure, and that the work must be repeated.

Semester grades only are effective in determining the student's standing.

COURSE OF STUDY

To Secure Regular Normal Diploma

REGULATIONS OF STATE BOARD: In conformity with the law requiring the normal schools of Arizona to maintain uniform courses of study for the purpose of securing the regular normal diploma to be approved by the State Board of Educa-

tion, the following regulations were approved by said Board of Education:

- 1. The minimum length of the school year shall be thirty-eight (38) weeks, exclusive of summer school.
- 2. There shall be three regular courses of study leading to graduation for the purpose of securing a diploma to teach in the schools of this state.
- (a) A minimum English course of six years for those who have completed the eighth grade of the public schools.
- b) A minimum classical course of six years for those who have completed the eighth grade of the public schools.
- (c) A minimum course of two years for graduates from a four-year high school course.
- 3. Students who are graduates from a four-year high school course, accredited by the Normal School, and in addition thereto have taken some professional work in a college, university or normal school, and who have one year's experience in teaching in the public schools, may receive credit on the two years' course, but in all such cases students will be required to take at least one year's work in residence before receiving a Normal diploma.

In order to simplify the arrangement and uniformity of the course the work is reduced to units. The term unit is used to denote a subject studied through one school year with five class exercises or periods per week, two laboratory periods to equal one class exercise. The school year is divided into two semesters, each of nineteen weeks. A recitation period is 45 minutes. A minimum of twenty-five units is required for the Normal diploma, as shown below.

UNITS REQUIRED IN THE SIX-YEAR PROFESSIONAL COURSES

English	3	units
Physics, 1; Chemistry, 1; or ½ unit of each	1	unit
Biology, including Physiology	1	unit
U. S. History and Civies	1	unit
Ancient and Medieval History	$1\frac{1}{2}$	units
Algebra	1	unit
Geometry	1	unit
Music	1	unit
Drawing	1	unit
Agriculture	1	unit

Home Economics or Manual Training	1	unit
Psychology, ½; Pedagogy, ½	1	unit
Teaching Practice, 1; Methods, 1	2	units
History of Education, 1/2; Ethics and Sociology, 1/2	1	unit
Review of common branches:		
Arithmetic, ½; Grammar, ½	1	unit
Geography, ½; Reading, ½	1	unit
School Law and School Economy	1/2	unit
Units to be assigned in course to meet requirements for		
graduation	5	units
Total	25	units

In addition to the above units, all students registered in the Normal School are required to take physical training or military drill at least two periods per week during the entire period of attendance.

UNITS REQUIRED IN THE TWO-YEAR PROFESSIONAL COURSE

Psychology, ½; Pedagogy, ½	1	unit
History of Education, 1/2; Ethics and Sociology, 1/2	1	unit
Methods	1	unit
Teaching Practice	1	unit
School Law and Commercial Law	1/2	unit
Music	1	unit
Drawing	1	unit
Arithmetic, ½; Grammar, ½	1	unit
Geography, ½: Reading, ½	1	unit
Playground Supervision	1/2	unit
Elective	1	unit
Maka 1		

In addition to the above all students entering this course are required to take physical training or military drill during the entire period of attendance.

ACADEMIC COURSE

A four-year academic course is offered, open to those who have completed the work of the common schools but who do not wish to prepare themselves for teaching. This course re-

quires for its completion a minimum of fifteen units as shown below.

Required units:

Home Economics 2
Music 1

English History and Civics Mathematics Science Languages	2 2½ 2	units units units units
Electives		
Electives offered:		
Latin 4 Spanish 3 German 2 English 1 Mathematics 1 Science 1		
Vocational Subjects:		
Commerce 4 Manual Training 2 Art 2 Maximum number of cree	lits	

In addition to the above, all students entering this course are required to take physical training or military drill during the entire period of attendance.

Agriculture ______ 2 allowed from this group, 3.

Students desiring to enter the academic course must register for same not later than the beginning of the academic senior year. Transfers will not be made within that year.

Academic students must complete in this Normal School at least one full year's work of not less than four academic units in addition to the physical training or military drill.

For convenience in reference, the courses offered are designated as follows:

- Course A. A six-year professional course open to those who have completed the work of the grammar school.
- Course B. A six-year professional course arranged to include the languages, Latin, German and Spanish.

 This course is also open to those who have completed the regular grammar school course.

- Course C. A two-year professional course open to graduates of a four-year high school course.
- Course D. A four-year academic course for students who do not desire to prepare for teaching.

Special Courses in School Art, Industrial Arts, Home Economics, Kindergarten Training, Agriculture, Commerce. These courses are provided for those who wish to specialize along some particular line of work with a view to qualify as a special teacher.

Students completing courses A. B, or C receive the regular Normal diploma which is granted for life and entitles the holder to teach without examination in the public schools of Arizona, California, Oregon, Washington, Montana, Idaho, Michigan, New York, and, in fact, in any state in which credentials of any kind are accepted. As such diplomas represent four years of academic and two years of professional work, the holders are usually accredited with one year's work on college and university courses.

Graduates from Course D receive a diploma equivalent to a high school diploma. This diploma represents four years (16 units) of high school work and admits the holder to Freshman standing in a college or university. This diploma does not entitle the holder to teach.

Graduates from the special courses are granted diplomas which entitle the holder to teach the special subject for which the diploma is granted in any of the public schools of the state.

A candidate for any diploma must make his candidacy known not later than the beginning of that school year at the close of which he expects to graduate, and must at the same time state for what diploma he is a candidate.

Diplomas are awarded by the Normal Board of Education upon the recommendation of the faculty and no diploma will be awarded to any person until all the work prescribed by the course and pursued by the student has been satisfactorily completed. The regular graduations occur in January and June, but the diplomas are awarded whenever the work of the course has been satisfactorily completed. Mid-year graduates are classified as members of the class of the following June.

COURSE A

SIX-YEAR PROFESSIONAL COURSE FOR THOSE WHO HAVE FINISHED THE GRAMMAR SCHOOL

FIRST YEAR

First Semester Hrs English 1 and Library Algebra 1 Agriculture 1 Art 1	5 5 5	Second Semester Hr English 1 and Library	5 5 5
SECO	ND :	YEAR	
English 2 and LibrarySpelling and Word Analysis Biology 1	5 5 5	English 2 and Library	5 5
THIE	RD Y	EAR	
English 3	5 5	English 3	б 5
FOUR	TH	YEAR	
Modern History 2 Geometry *English 4 *Arithmetic 2 Elective	5	U. S. History 3	5 5
JUNI	OR Y	EAR	
Psychology	5 5 2	Pedagogy Physiology Geography Music 2 Writing	5 5 2

SENIOR YEAR

First Semester	Hrs.	Second Semester	Hrs.
Methods	5	Methods	5
Teaching	5	Teaching	5
Ethics	5	History of Education	5
Agriculture	2	Agriculture	2
*Commercial Law	1	*Commercial Law	1
*School Law and School	Econ-	*School Law and School I	Zcon−
omy	4	omy	4
English 6 (Special Eng	lish) 3		

*Course repeated; half of class takes this work the first semester, the other half the second semester.

- (a) Physical training or military drill required throughout the course.
- (b) English (6) is a special course designed for students who are deficient in English in any of the advanced grades.
- (c) Students who desire to emphasize any of the vocational subjects, without forfeiting their regular diploma, may do so by substituting five (5) hours per week of the subject for music and writing in the junior year and (3) hours per week for agriculture and commercial law in the senior year.

COURSE B

SIX-YEAR PROFESSIONAL FOREIGN LANGUAGE COURSE FOR THOSE WHO HAVE FINISHED THE GRAMMAR SCHOOL

FIRST YEAR

First Semester	Hrs.	Second Semester	Hrs.
Latin	5	Latin	5
English 1 and Library	5	English 1 and Library	5
Algebra 1	5	Algebra 1	5
Art 1	5	Manual Training 1 or Hon	ne
		Economics 1	5
	SECOND	YEAR	
Latin or Spanish	b	Latin or Spanish	5
English 2 and Library	5	English 2 and Library	5
Biology 1	5	Biology 1	5
Algebra 2	Б	Arithmetic 1	5
*Music 1	5	*Music 1	5

THIRD YEAR

First Semester	Hrs.	Second Semester	Hrs.
Latin, German or Spanish	h 5	Latin, German or Spanis	sh 5
English 3	5	English 3	б
Physics 1	5	Chemistry 1	5
Manual Training 2 or F	Iome	Art 2	5
Economics 2	5	•	
	FOURTH	YEAR	
Latin, German or Spanish	h 5	Latin, German or Spanis	sh 5
Modern History 2	5	U. S. History 3	5
Geometry	5	Geometry	5
*English 4	_	*Arithmetic 2)	
*English 4 *Arithmetic 2	5	*Arithmetic 2 } *English 4 }	5
	JUNIOR	YEAR	
Psychology	5	Pedagogy	5
Science of Government	5	Physiology	5
Physiography	5	Geography	5
Music 2	2	Music 2	2
Writing 2	2	Writing	2
	SENIOR	YEAR	
Methods	5	Methods	5
Teaching	5	Teaching	5
Ethics	5	History of Education	5
Agriculture	2	Agriculture	2
*Commercial Law	1	*Commercial Law	1
*School Law and School B	Con-	*School Law and School	Econ-
omy	4	omy	4
English 6 (Special English	sh) 3		
*Course repeated: half	of class t	takes this work the first se	mester.

- *Course repeated; half of class takes this work the first semester, the other half the second semester.
- (a) Physical training or military drill required throughout the course.
- (b) English (6) is a special course designed for students who are deficient in English in any of the advanced classes.
- (c) Students who desire to emphasize any of the vocational subjects, without forfeiting the regular diploma, may do so by substituting five (5) hours per week of the subject for music and writing in the junior year and three (3) hours per week for agriculture and commercial law in the senior year.

COURSE C

A TWO-YEAR PROFESSIONAL COURSE FOR GRADUATES OF A FOUR-YEAR HIGH SCHOOL COURSE

JUNIOR YEAR

First Semester F	irs.	Second Semester Hr	ъ.
Psychology	5	Pedagogy	5
*Arithmetic 2)	_	*English 4	_
*Arithmetic 2 } *English 4	5	*English 4 *Arithmetic 2	D
Reading		Geography	
Music	2	Music	2
Art 1 A	2	Art 1 A	2
Elective	5	Elective	5
Writing	2	Writing	2
SEI	NIOR	YEAR	
Methods	5	Methods	5
Teaching	5	Teaching	Б
Ethics and Sociology	5	History of Education	5
*School Law and School Econ	-	*School Law and School Econ-	
omy	4	omy	4
*Commercial Law	1	*Commercial Law	1
*Playground Supervision	5	*Playground Supervision	5
Music	2	Music	2
Art 2 A	2	Art 2 A	2
English 6	5		

*Course repeated; half of class takes this work the first semester, the other half the second semester.

- (a) Physical training or military drill required throughout the course.
- (b) English (6) is a special course designed for students who are deficient in English in any of the advanced classes.
- (c) Students who desire to emphasize vocational subjects, without forfeiting the regular diploma, may do so by substituting five hours per week of the desired subject for the elective in the junior year and three hours per week for music and drawing in the senior year.

COURSE D

Students registering for Course D will arrange their schedule of work by consultation in the office, the subjects being selected in accordance with the outline presented on page 14.

Special Vocational Courses

Six special courses are now offered which lead to graduation and to a special diploma entitling the holder to teach or supervise a special line of work in the public schools of the State.

- (a) School Art,
- (b) Industrial Arts,
- (c) Home Economics,
- (d) Kindergarten Training,
- (e) Agriculture,
- (f) Commerce.

Candidates for admission to any of the above courses must qualify under one of the following conditions:

- (1) Students pursuing the six-year Normal Course must have completed the 15 units required in the first four years of said course, including the unit of vocational work corresponding to the special line selected.
- (2) Graduates from a full four-year academic course must present recommendations for special training and ability along the line of the particular vocational course selected. These references must be signed by the instructor under whom the special work has been taken and by the principal of the high school or academy, and the candidate must file with the head of the department a description of the courses pursued, a statement of grades received, and, where practicable, samples of work done.
- (3) Candidates who are not graduates of any high school, but who have to their credit work equivalent to that required in the first four years of Course A, page 16, may be admitted to any of these courses under such conditions as the heads of the respective departments may require.

SPECIAL COURSE IN ART

A COURSE IN SCHOOL ART FOR THE TRAINING OF DEPARTMENTAL TEACHERS AND SUPERVISORS

JUNIOR YEAR

First Semester	Hrs.	Second 8	Semester	Hrs.
Psychology	5	Pedagogy		5
Drawing and Painting 1	5	Drawing a	nd Painting 2	5
Art History 1	1	Art Histor	у 2	1
Composition and Design 1	5	Compositio	n and Design 2	5
Mechanical Drawing	4	Art Crafts	1	4
Academic Elective	5	Academic I	Elective	5
	SENIOR	YEAR		
Methods and Teaching	5	Methods a	nd Teaching	5
Art History 3	1	Art Histor	у 4	1
Costume Design	4	Interior De	ecoration	4
Composition and Design 1	5	Illustration	l	2
Drawing and Painting 3	5	Drawing a	nd Painting 4	5
Academic Elective	5	History of	Education	5
		Art Crafts	2	3

SPECIAL COURSE IN MANUAL ARTS

A COURSE IN MANUAL ARTS FOR THE TRAINING OF DEPART-MENTAL TEACHERS AND SUPERVISORS

JUNIOR YEAR

First Semester H	rs.	Second Semester Hrs	3.
Psychology	5	Pedagogy	б
Academic Elective	5	Academic Elective	5
Composition and Design 1	5	Pattern Making	5
Turning and Lathe Practice	5	Case and Cabinet Construction	Б
Mechanical Drawing 2	5	Mechanical Drawing and Sheet	
		Metal :	Б
SEN	IOR	YEAR	
Methods and Teaching	. 5	Methods and Teaching	5
Academic Elective	5	Machine Design	5
Forge and Foundry Work	. 5	History of Education	5
Architectural Drawing	. 5	Interior Decoration	4
Machine Shop	. 5	Economics of Manual Train-	
		ing, Shop Courses and Prac-	
		tices	5
		Art Crafts (2)	

SPECIAL COURSE IN HOME ECONOMICS

A COURSE IN HOME ECONOMICS FOR THE TRAINING OF DEPART-MENTAL TEACHERS AND SUPERVISORS

JUNIOR YEAR

First Semester Hrs. Psychology 5 Composition and Design 5 Biology 2 5 Household Chemistry 5 Home Economics 11 5	Second Semester Hrs. Pedagogy 5 Geography or Acad. Elec 5 Physiology 5 Household Chemistry 5 Home Economics 12 (Foods) 5
SENIOF	YEAR
Method and Teaching 5	Method and Teaching 5
Ethics or Acad. Elec 5	History of Education 5
Home Economics 21 (Foods) 5	Home Economics 22 5
Home Economics 23 (Clothing) 5	Home Economics 24 5
ing) 5 Costume Design 5	Home Economics 26 5

SPECIAL COURSE IN AGRICULTURE

A COURSE IN AGRICULTURE FOR THE TRAINING OF SPECIAL TEACHERS AND SUPERVISORS

JUNIOR YEAR

First Semester	Hrs.	Second Semester	Hrs.
Psychology	5	Pedagogy	5
Academic Elective	5	Academic Elective	5
Bacteriology	5	Physiology	5
Animal Husbandry	5	Animal Husbandry	5
Agricultural Chemistry	5	Agronomy	5
	SENIOR	YEAR	
Methods	5	Methods	5
Teaching	5	Teaching	5
Ethics	5	History of Education	5
Horticulture	5	Dairying	5
Rural Economics	3	Rural Economics	3
Agricultural Education	2	Agricultural Education	2
TELEGRAPHICA ENGINEERING		118110ditatat madeatton	

SPECIAL COURSE IN KINDERGARTEN TRAINING

A COURSE FOR THE TRAINING OF KINDERGARTEN AND PRIMARY TEACHERS AND SUPERVISORS

JUNIOR YEAR

First Semester	Hrs.	Second Semester	Hrs.
Psychology	5	Pedagogy	5
Reading	5	Physiology	5
English Grammar 4		Literature	2
Music		Juvenile Literature	2
Drawing	2	Music	2
Kindergarten Theory a	n đ	Drawing	2
Technics		Sociology	2
		Kindergarten Theory an	ı d
		Technics	5
S	ENIOR	YEAR	
Methods	5	Teaching	15
Teaching	5	History of Education	5
Ethics	5	Maternal Efficiency (2)	
Public Speaking (2)		Kindergarten Theory	5
Public Speaking (2) Literature (1)	5	and Technics (3)	
Nature Study (2)		,	
Kindergarten Theory a	n d		
Technics			

SPECIAL COURSE IN COMMERCE

JUNIOR YEAR

First Semester	Hrs.	Second Semester	Hrs.
*Psychology	5	*Pedagogy	5
Bookkeeping A		Economics of Business.	5
Shorthand 1		*Accounting A	5
Stenotype 1	5	Shorthand 2	E
Typewriting 1	5	*Commercial Geography	5
Economics 1		Stenotype 2	5
Commercial Arithmetic	3 5	Typewriting 2	5

SENIOR YEAR

First Semester	Hrs.	Second Semester	Hrs
*Methods and Teaching	5	*Methods and Teaching.	(
Accounting B	5	*Accounting C	E
Shorthand 3	5	Shorthand 4	1
*Business Organization	5	Stenotype 4	
Stenotype 3	5	*Corporation Finance	
Commercial Law 1	5	Industrial Management	
Typewriting 3	5	Typewriting 4	1
Psychology of Comme	rcial	Business Statistics	
Subjects	5		

Required subjects are starred. A minimum of 25 hours per week must be made up from the electives.

Palmer writing is required of all students in this course until a satisfactory attainment of form and speed is acquired.

Analysis of the Course of Study

Introduction: The primary aim of a Normal School is the training of teachers, and this is made prominent throughout all the courses except the academic course. In each department the teacher not only teaches his class, but he discusses with the students the method of presentation and requires them to note his plan of work in all parts of the subject. Thus the teaching idea is made dominant in the minds of all Normal students from the beginning of the course by making every subject a study in method all the time. The relation between the professional and academic work is maintained during the senior year by the student teachers consulting frequently with the members of the Normal School faculty who have charge of the subject which they are teaching in the Training School. The members of the Normal School faculty are also expected to prepare outlines of work for special lessons, and lectures pertaining to the methods of teaching their special subjects and to present the same to the senior class.

AGRICULTURE

MR. GRIFFING

Agriculture is presented primarily from the educational standpoint. Not only are lines of work given to prepare every prospective teacher for teaching nature study and agriculture in the elementary schools, but special courses are offered to those who desire additional preparation in this line, and a two-year course prepares students for the work of special teachers of agriculture.

For the indoor work there is an adequate laboratory equipment both for demonstration of fundamental principles by the instructor and for experiment by the pupil. Elaborate sets of slides for the stereopticon, and photographs or prints for the balopticon, make it possible for nearly every phase of agricultural work to be presented by illustration.

For outside work, which the climate permits during every month of the school year, fifty acres of land are available. This is used for school gardens, demonstration and experiment with various crops, and to the production of livestock and their products. The dairy, hog-lot, and poultry yard, not only supply fresh milk, meat, and eggs to the dining hall, but furnish an opportunity for first-hand study of the best possible types of Holstein-Friesian individuals of advanced registry stock selected for perfection of type, and headed by "Sir Korndyke Johanna Phoenix," the grand champion at the Arizona State Fair in 1916. In the hog-lot the Duroc-Jersey breed of swine is represented by a number of individuals of outstanding merit and headed by "Tempe Chief," a son of the famous "Select Chief," the Grand Champion of the Missouri Valley.

Acriculture I. Elementary Agriculture. This course is designed to give a general survey of all phases of agriculture for the benefit of those who cannot make a more detailed study of the subject, and to furnish a foundation for the work of the teacher. Emphasis will be placed on fundamental principles as applied to local conditions. Some of the topics taken up will be as follows: Origin and kinds of soils, movements of soil moisture, the plant in its relation to the soil, tillage and cultivation, irrigation, drainage, water conservation, soil improvement, field crops, gardening, horticulture, farm stock, dairying and poultry. Each member of the class is required to make a garden and to take part in such activities about the field or campus as may have a special bearing upon the subject. First year, five times a week.

AGRICULTURE 2. Animal Husbandry. A study of breeds of stock, stock judging, diseases of farm animals, animal improvement, composition of feeds, and the care and feeding of animals.

Text-book: Harper's Animal Husbandry, The Macmillan Co.

Five times a week throughout the Junior year.

AGRICULTURE 3. AGRICULTURAL CHEMISTRY. This course is based upon previous work in chemistry and consists of the practical application of chemistry to the various phases of agricultural work. The composition of plant and animal bodies; the reactions in plant and animal life processes; the composition of feeds and their relation to the needs of the animal body; the chemistry of soils, of fertilizers and of alkalies; and the chemistry of dairying are some of the subjects taken up.

Literature: Snyder, Chemistry of Plant and Animal Life, Orange Judd Co.; Henry, Feeds and Feeding, published by author, Madison, Wis. Bulletins from U. S. and State.

Junior year, first semester, five times a week.

AGRICULTURE 4. AGRONOMY. In this course an intensive study is made of soils in both the field and laboratory. Fertilizers, crop rotations, irrigation, drainage, and dry farming are taken up in detail. In the last part of the course each one of the field crops is studied in turn with special emphasis upon crops grown in Arizona. Plant diseases are given careful consideration.

Literature: Burkett, Soils, Orange Judd Co.; Wilson and Warburton, Field Crops; current literature; bulletins from the State and U. S.

Junior year, second semester, five times a week.

AGRICULTURE 5. DAIRYING. Dairying will be taken up largely from the standpoint of milk production in the farm dairy. Types of dairy cattle, herd improvement through selection and grading, herd testing, testing for advanced register, dairy bacteriology, use of dairy equipment, and dairy sanitation are some of the subjects considered.

Text-book: Wing's Milk and Its Products, The Macmillan Co.

Senior year, second semester, five times a week.

AGRICULTURE 6. HORTICULTURE. Two lines of work are taken up in this course, vegetable growing and the study of the production of fruits. The truck crops best adapted to Arizona climates are studied carefully in their relation to school gardening. Fruits adapted to this climate are given special attention, and actual practice is given in grafting, budding, setting young trees, pruning and spraying.

Literature: Wickson, California Fruits and How to Grow Them, Pacific Rural Press, San Francisco; and California Vegetables, by the same author. Bulletins and current magazines.

Senior year, first semester, five times a week.

AGRICULTURE 7. AGRICULTURE EDUCATION. This course presents methods of teaching elementary agriculture. During the first part of the year, a review will be made of the fundamental principles of elementary agriculture similar to the work

outlined in Agriculture 1. This work will be supplemented with actual practice in making school gardens. Attention will be given to the performance of simple laboratory exercises that can be performed in any school room. The management of school gardens, the direction of field trips and observations, the collection of specimens of local weeds, insects, plant diseases and other material for use in the school room will be taken up. Special attention will be given to the study of recent movements in agricultural education, community work, the organization of boys' and girls' clubs and the specific agricultural problems of Arizona. The work in the class room will be supplemented by actual practice in teaching the grades of the training school.

Literature: Parson, School Gardens, Sturgis and Walton; Hemenway, How to Make a School Garden, Doubleday, Page and Co.; Warren, Elements of Agriculture, Macmillan Co.; Hilgard and Osterhout, Agriculture for Schools on the Pacific Slope. Macmillan Co.; Davis, Rural School Agriculture, Orange Judd Co.; Bulletins and current literature.

Required for all Seniors in the professional course, twice a week throughout the year.

AGRICULTURE 8. RURAL ECONOMICS. The social and economic problems of rural life, a history of recent movements for the betterment of rural conditions, community co-operation and activity, and the relation of the rural school to community problems are some of the subjects taken up.

Text-book: Gillette's Constructive Rural Sociology, Sturgis and Walton Co.

Senior year, three times a week, throughout the year.

ART DEPARTMENT

MR. ANDERSON; MRS. AVAKIAN

The aim here is two-fold: First, to develop in the student the power to know and the ability to express, in the several media, facts of form; to familiarize him with the science and art of color in producing relations of harmony; to train in the appreciation of good composition and design so that art and industry may be brought into close relationship. Second, to qualify graduates to act as teachers or supervisors of drawing and of art education.

- ART I. First year, first semester, five hours. Synthetic study of principles of design developed through problems in line, tone, and color and their importance as factors controlling the wise selection and fine arrangement of dress, furniture and interiors. Special emphasis upon laws of color harmony. Work from nature and still life. Appreciative study of masterpieces.
- ART 2. Third year, second semester, five hours. Study of design as related to function, material and tools in such problems as tile and pottery making, block printing for surface decorations, booklet making. Advanced work from nature and still life. Study of masterpieces with addition of historical viewpoint.

FOR HIGH SCHOOL GRADUATES

ART 1a. Junior year, first semester, five hours. Principles of design, color theory and color harmony, perspective, drawing and printing from objects and nature, block printing, stenciling, lettering, construction problems, clay modeling and pottery, study of masterpieces of art, story and legend in terms of art. The practical application of the work is emphasized.

ART 2a. Junior year, second semester, five hours. Continuation of Art 1a, with more advanced problems, discussion and planning of courses of study in art; making of an art note book.

SPECIAL COURSE IN ART

A COURSE IN ART FOR DEPARTMENTAL TEACHERS, COVERING JUNIOR AND SENIOR YEARS

Fifteen hours in each of these years will be devoted to departmental, and ten hours to academic and professional work. See outline for the entire course.

Drawing and Painting I: Junior year, first semester, five hours. This will include drawing and painting from still-life, plant, and landscape in pencil, charcoal, brush and ink, crayon and water colors, memory drawing, composition, pose drawing for poster effects.

Drawing and Painting 2: Junior year, second semester, five hours. Continuation of Course 1. Study from still-life

and cast in charcoal and wash, painting of plant, landscape and figure in water color, practice in work adopted to the grades, blackboard drawing.

Drawing and Painting 3: Senior year, first semester, four hours. Critical study of drawings and paintings by noted artists, study of color harmony from Japanese prints, drawing from life and cast in charcoal and wash, painting in water colors, illustrative drawing and painting.

Drawing and Painting 3: Senior year, second semester, five hours. Continuation of Course 3. Groups, interiors, land-scape and figure composition in charcoal, pencil, crayon, water colors and oils, outdoor work.

ART HISTORY I: Junior year, first semester, one hour. Study of masterpieces of architecture, sculpture, painting and crafts irrespective of country or period for the formation of correct standards of criticism and appreciation.

ART HISTORY 2: Junior year, second semester, one hour. Historical development of the "space arts" as influenced by race, climate, natural resources, religion, and thought of various countries and periods, primitive, Egyptian, Assyrian, Greek and Roman Art.

ART HISTORY 3: Senior year, first semester, one hour. Early Christian and mediæval art in Europe and Asia.

ART HISTORY 4: Senior year, second semester, one hour. Modern art and its tendencies.

Composition and Design 1: Junior year, first semester, five hours. Principles of design developed through creative exercises aiming for fine arrangements in line, notan, and color, using plant, animal, and abstract motifs. Study of color theory and its bearing upon color harmony.

Composition and Design 2: Junior year, second semester, five hours. Work correlated with Art Crafts 1, design applied to textiles, relation of design to material—its limitations and possibilities.

Composition and Design 3: Senior year, first semester, five hours. Continuation of Course 2. Advanced problems in design and working designs for Art Crafts 2.

MECHANICAL DRAWING: Junior year, first semester, four hours. See Courses 3 and 4 under Manual Training.

ART CRAFTS I: Junior year, second semester, four hours. Stenciling and wood-block printing; elementary bookbinding, laced and sewed books, cardboard construction; study and adaptation of design to material; leather modeling to include tooling, coloring and constructive problems.

ART CRAFTS 2: Senior year, second semester, three hours. Clay modeling and pottery, including glazing and firing; art metal work.

INTERIOR DECORATION: Senior year, second semester, four hours. Application of the principles of design and color to the home; history of furniture, problems in architectural detail, house decoration, interior plans and arrangement, discussion of carpets, draperies, wall finishes, lighting, site, and sanitary conditions.

COSTUME DESIGN: Senior year, first semester, four hours. Problems aiming for fine arrangements of lines, tones and colors in costume. Variations of lines and proportions of human figure studied with a view to the intelligent application of principles. Solution of problems dealing with individual needs.

ILLUSTRATION: Senior year, second semester, three hours. Illustrations as book decorations harmonizing in treatment with the printed page and subject-matter. The combination of pictorial interest with decorative elements. Reproductions from work of noted illustrators. Original illustrations made for passages from literature. Mediums used: charcoal, crayon, pen and ink, and water colors.

METHODS AND TEACHING: Senior year, five hours. This work will include: practical teaching in the different grades and under criticism, discussion and planning of different courses of study in art, comparison of the different methods, relation of art to other subjects.

RECOMMENDATION COURSE

In order to secure a recommendation in art, special work in this subject may be elected in courses (A) and (C) of the junior and senior years.

The work of this course will consist of a more intensive study of the subject, together with methods of presentation to enable the student to take charge of art in addition to the regular grade teaching.

COURSE A

Art may be substituted for music and writing in the junior year, and for agriculture in the senior year.

COURSE C

Art may be substituted for the elective in the junior year, and for music and Art 2 in the senior year.

FOR SPECIAL RECOMMENDATION

ART 3: Junior year, two semesters, four hours. Principles of composition, representation from objects and nature, color harmony, elements of bookbinding, different methods of stenciling, lettering, illustration, plant analysis for design, clay modeling, color schemes for room interiors, relation of design to various handicrafts.

ART 4: Senior year, two semesters, two hours. More advanced problems in design, composition, review of processes and methods of work, representation, use of brush, pencil, crayon and color in the grades, the making of an art note book to be printed, illustrated and bound by each student.

BIOLOGY

MR. BECKWITH

The department of Biology occupies the second floor of the Science Building. It consists of a museum, a lecture and recitation room, a large laboratory for Zoology and Botany, a laboratory for Bacteriology and a darkroom for photography.

The equipment is modern and up-to-date. During the past two years a large amount of apparatus has been placed in the laboratories and the department is now in a position to conduct courses that are not hampered by the want of necessary equipment or apparatus.

The purpose of the work conducted in this department is to give thorough instruction in a limited number of courses, suited to the needs of elementary students in science.

GENERAL BIOLOGY: Second year; three recitations and four laboratory periods per week; required of all students not

presenting entrance credits in Biology. Textbook: Hunter, A Civic Biology, American Book Co., \$1.25.

This course, which is the first science taught in the Tempe Normal School, endeavors to teach students to solve problems and to think logically in so doing. It is, therefore, intended as a basis on which to build more advanced courses in science.

The subject matter is equally distributed between the plant and animal kingdoms. Some of the fundamental principles of biology are emphasized and an effort made to apply them to the life of the individual. Experimental demonstrations by the instructor and laboratory work by students make the work interesting and concrete.

BIOLOGY 2: Junior year, first semester only; required of students taking special work in Home Economics or Agriculture; eight hours of laboratory work and recitation per week; credit, 5 hours. Textbook: Buchanan and Buchanan, Household Bacteriology, Macmillan Co., \$2.25.

The work in this course will be the study of microörganisms, with special reference to bacteria, yeasts, and molds. Such questions as sterilization, preservation of foods, fermentation, chemical synthesis brought about by microörganisms and microörganisms in their relation to health will be emphasized.

BIOLOGY 3 (Physiology): Junior year, second semester only, five hours per week, credit, five hours. Textbook: Stiles, Human Physiology, W. B. Saunders Co., \$1.90.

The work, in this course, is so shaped as to suit the needs of students who may be required to teach physiology in the graded schools.

The human body is regarded as a mechanism and the interrelation of its parts so far as function and structure may be concerned is the basis of the course.

COMMERCE

MR. SEXTON

The aim of this department is not to develop the technical side of commercial education alone but to widen the horizon of its students and to inculcate the highest form of commercial ethics and thus render its students more responsive to civic and social obligations. While the training of teachers is the

prime aim of the course, it is also arranged to meet the needs of those students who are preparing for a business career and who desire a practical and scholarly training for business. Certificates of accomplishment will be given students who do not complete the course.

The Department of Commerce is located in spacious quarters in the new Industrial Arts Building, where modern equipment of every kind has been provided. A suitable addition has been made to the library for the use of this department.

In the work of the department frequent trips will be made to the homes of the industries of the neighborhood and successful business men with a broad view of business will be called in to give talks to the students.

BOOKKEEPING A: The general principles of bookkeeping are taken up with a view of preparing the student for the work of accounting. This course is required of all students who are candidates for the commerce diploma and is open to all students beyond the second year with the consent of the office.

ACCOUNTING A: This course will give the student a thorough knowledge of the fundamental principles of accounting and an ability to apply them. Beginning with a single entry set of books, the principles are developed until a modern accounting system has been worked out. Short sets are used and particular attention paid to the classification of accounts, the making of, opening, closing, and adjusting journal entries and the preparation of financial statements. Necessary preparation, Bookkeeping A or an equivalent.

Accounting B: This course is a continuation of Accounting A, and is based largely on problem work, taken from Civil Service and C. P. A. examinations. This deals with the preparation of such statements as the Statement of Affairs, the Realization and Liquidation Account, etc. Branch Agency, and the elements of Cost Accounting, are a part of this course. Necessary preparation, Accounting A or an equivalent.

ACCOUNTING C: A continuation of Accounting B. Special problems and accounts are considered, such as Executorship and Trustee Accounts, Mergers and Amalgamations, Joint Ventures, etc. More advanced problems for the work of the student are used which are drawn largely from C. P. A. examinations. The Income Tax Law is studied in detail from the accounting view-point. Necessary preparation, Accounting B or an equivalent.

Shorthand I: Elementary work in shorthand for beginners. A thorough knowledge of the fundamental principles of shorthand may be gained in this course. Open to any student who has completed two regular years of high school work.

Shorthand 2: Additional drill in principles. Practice in writing letters, legal papers, and miscellaneous matter for the purpose of acquiring a large, general shorthand vocabulary. Necessary preparation, Shorthand I or an equivalent.

Shorthand 3: Additional practice for the purpose of increasing speed and accuracy. Actual business correspondence and reports. Dictation planned to give a broad vocabulary and some knowledge of technical terms. As far as possible actual correspondence will be given. Necessary preparation, Shorthand 2 or an equivalent.

SHORTHAND 4: Special dictation for students to acquire a maximum speed. Actual correspondence and report work. Necessary preparation, Shorthand 3 or an equivalent.

STENOTYPE I: Stenotypy is a method of reporting speech by a means of a machine known as the Stenotype. The process is more easily learned than shorthand and probably insures more accurate results. This course is for beginners, so planned that the student shall attain a complete mastery of the system and a fair degree of speed. Only those students who show the necessary aptitude will be allowed to continue the course. Open to any student with the consent of the office.

Stenotype 2: Continuation of the work of Stenotype I. Miscellaneous dictation, copying and actual correspondence is given throughout the semester. Necessary preparation, Stenotype I or an equivalent.

STENOTYPE 3: Speed dictation in miscellaneous matter. Practical work is given as far as possible to bring the student as nearly as possible under actual conditions. Necessary preparation, Stenotype 2 or an equivalent.

Stenotype 4: Continuation of Stenotype 3. Necessary preparation, Stenotype 3 or an equivalent.

TYPEWRITING I: Instruction in the care and use of the typewriter; exercises for the development of the proper wrist and finger movement and for the complete mastery of the key board by the sense of touch. Open to any student with the

consent of the office. Required of all students of stenotype and shorthand.

TYPEWRITING 2: Practice in letter writing, the use of carbon, tabulation and writing on cards. This course completes a working knowledge of the typewriter. Open to all students who have Typewriting 1 or an equivalent. Required of all students of stenotype or shorthand.

TYPEWRITING 3: Practice in the transcription of short-hand or stenotype notes, miscellaneous copy and dictation for the attainment of speed and accuracy. Open to all students with the necessary preparation.

TYPEWRITING 4: Continuation of Typewriting 3 for the development of a maximum speed that is consistent with the individual capacity, accuracy being the standard. Necessary preparation, Typewriting 3 or an equivalent.

COMMERCIAL ARITHMETIC: Review of the fundamental processes with a view of the attainment of the practice level in speed and accuracy; a general review of arithmetic through percentage and the simpled applications of percentage; the empirical use of such formulae as are useful; graphs and the use of notes, drafts, bills of lading, etc.

Economics 1: This course includes the theory of economics of consumption, production and distribution. It is a general introduction to the fundamental principles of economics designed to give the student power to apply these principles to actual conditions. Open to all students beyond the second year.

Economics of Business: Economic basis of business; types of business organization; interior organization; analysis of costing; factory efficiency; efficient business methods; labor efficiency; buying, selling and advertising; money and credits; trade marks and copyrights; patents and trade names. Necessary preparation, Economics 1 or an equivalent.

Business Organization: Function of organization and management; standards of efficiency; objects of a business enterprise; the development of organization and management; location of a business; organization related to ownership and operation; special systems of organization and management; seelcting employees; socialization of business. Necessary preparation, Economics 1.

Corporation Finance: The corporation in modern business; legal organization; finance and the corporation; corporate promotion and the promoter; underwriting; capitalization; earnings, expenses and surplus; manipulation; insolvency, receivership and reorganization; state regulation. Necessary preparation, Economics 1 and Accounting 1 or equivalent.

Business Statistics: Finding problems that lend themselves to statistical study; gathering and use of material; preparation of the material; interpretation of the material and the preparation of reports. This course is divided equally between theory and laboratory work where actual problems are carried through to a finished product and the problem presented both graphically and in tabular form with the possible deductions. Open only to seniors of the special course in Commerce.

COMMERCIAL LAW: Elementary law; law in general; legal terminology; composition of American law; system of reported decisions and opinions; details of the following subjects: Contracts, Sale of Goods, Credit and Loans, Negotiable Instruments, Agency, Partnership, Joint Stock Companies, Corporations, Real and Personal Property.

ENGLISH

MR. FELTON; MISS PILCHER; MISS HALL

Instruction in English aims to secure a knowledge of correct forms of expression, an appreciation of good literature, and ease and facility in expressing thought in oral and written forms. To accomplish these ends courses are given in word analysis, grammar and analysis, rhetoric, composition, theme writing, reading and literature. The work done in these courses is based on the requirements for college and university entrance as outlined by the American Board of College Entrance.

English I. Rhetoric and Composition—First year. The aim of this course is to give the students power to write simple and clear, correct, forcible English. Theme writing is required from the first. In order that a suitable freedom of expression may be developed most of the themes are based upon personal experience and observation. High standards in clearness, correctness and force are rigidly required. Some

attention is devoted to the technical side of rhetoric. Exercises for the improvement of diction, unity and coherence, together with the principles governing their application, are supplemented with the regular theme requirements. Narration, with special observation of plot and orderly sequence, is studied. Description, exposition and very simple argumentative discourse follow the study of narrative. All papers are discussed and corrected in class or by individual consultation with the instructor. Selections from our best modern prose writers are studied as models for the study of imagery, plot and character delineation.

Clippinger's English Composition, Silver Burdette & Co., \$1.00, is used as a textbook.

Spelling and Word Analysis: As words are of no use to us any further than they are understood, the study of spelling and word analysis is a preparation for work in every subject. The purpose of the course is two-fold: to teach written spelling and to enlarge the student's vocabulary. lected for study in this course will come from two sources: words misspelled in the themes written by the class in their rhetoric and composition, and words which are to be studied with regard to their analysis and use. As a preparation for this work phonetics, interpretation and diacritical marks as used in Webster's Dictionary and syllabification will be studied. The words chosen for analysis will be those that are, or ought to be, in the student's vocabulary. By frequent contests and by dictated exercises in which the commonly misspelled words will often occur, the correct spelling of these words will be fixed in the memory not only as isolated words but as they occur in sentences. Required of first year students.

English 2. Composition and English Literature—Second year, first and second semester. The work of the first semester of the second year is a continuation of the study of the first year in composition and rhetoric. Higher standards of expression, both oral and written are expected, and the acquirement of correctness and fluency of diction are insisted upon. Students needing further practice in the art of simple theme writing will be expected to continue this course during an additional semester.

In the second semester the study of English Literature is taken up. This course has three main purposes: first, to give a general view of the origin and growth of English literature; second, to develop in the student an appreciation of the best

literature of the different periods by a thoughtful interpretation of selections from each, and collateral readings from which reports are made; third, to exercise the student in collecting, arranging and presenting material in the form of well wirtten papers. Selections from Chaucer, Bacon. Shakespeare, Milton, Pope, Goldsmith, Burns, Carlyle and Tennyson are read and discussed in class. Instruction in the use of the library is given. Textbook: Howe, English Literature, D. C. Heath & Co.; Manly, English Prose and Poetry, Ginn & Co., \$2.00.

English 3. American Literature—Third year, second semester. Appreciation and enjoyment of the best that has been written by American authors, together with a thorough comprehension of the place of literature in the life and thought of the nation, is the aim of this course. The characters of the individual authors, particularly of the New England group, are studied. Collateral readings and instruction in the use of the library are required. Last year the following classics were read: Emerson, Selected Essays; Poe and Irving, Short Stories. Besides these general studies, the individual students select novels by the best of American fiction writers. read them carefully, and make oral and written reports upon them in class. Composition, based upon phases of literary development, and upon the classics read, is required throughout the year. Textbooks: Howe's American Literature, D. C. Heath & Co.; The Chief American Poets, Houghton, Mifflin & Co., \$1.75.

English 4. Word Analysis, Grammar and Methods—Junior year. First or second semester. This course aims at the complete mastery of English sentence structure, and the essentials of English etymology. Drills in parsing and analysis are required. The variant terminology of English grammars in common use is compared and tabulated, and methods of teaching the subject in a plain, logical manner are presented. Each student uses a selected text and a general comparison of authorities is made. The course includes work in spelling and word analysis, which is discussed before the class in order to give practical illustrations of the methods of teaching these subjects in the public school. Textbooks: Webster's Academic Dictionary, American Book Company, \$1.50. Any modern grammar.

English 1. General Literature and Advanced Composition—Five hours a week, second semester, Junior year. The classes are given constant practice in forcible and artistic theme writing, together with studies of the best English and American prose. Materials are selected from the student's own experience, from current periodicals and library references. Especial attention is given to exposition and argumentation, both in the themes written and assignments read.

English 6. Special English—Senior year, first semester. The class recites three times a week, being devoted largely to the acquirement of ease and finish in discourse, both spoken and written. Written composition is practiced throughout the semester. Themes are carefully read and corrected, individual attention being given to each student's needs. A high standard of excellence in composition is demanded of graduates from the Tempe Normal School. This course affords an opportunity for practice in writing to such students as may need further training.

GERMAN

MISS SALMANS

The course in German is provided to fill the needs of those students who wish to pursue more advanced work after leaving the normal. Two years of German are accepted as two units by the leading universities of the United States. The two-year course is elective in the first and second years.

ELEMENTARY GERMAN—Essentials of grammar, reading and conversation. Conducted as far as possible in German. The syntax and idioms are acquired by repeated exercises and dictation. Textbooks: Allen and Phillipson, A First German Grammar, Ginn and Co.; Hempl, Easiest German, Ginn and Co.; Zschokke, Der Zerbrochene Krug, American Book Co.; and a simple play by Benedix or other equally easy author.

ADVANCED GERMAN—Constant review of grammar, composition, and sight reading. Much stress is laid on the correct use of the idioms. German is the language of the class. Textbooks: Ball, German Drill Book, D. C. Heath and Co.; Storm, Immensee, Scott, Foresman Co.; Allen, First German Composition, H. Holt and Co.; Hillern, Hoeher als die Kirche, Chas. Merrill Co.; and a standard drama.

GEOGRAPHY

MR. HIATT

The purpose of the courses of this department is essentially the preparation of teachers for the public schools, but, while this viewpoint predominates, all of the courses are sufficiently enriched to give the student the necessary information to appreciate the subject in its fullest and broadest sense.

GEOGRAPHY I

Course A. First semester. This course is essentially a study of physiography and physiographic processes with applications. A close study of land, water, and air are made from the standpoint of an applied rather than a pure science. The purpose of the course is to train students in the elements of geography and equip them with a few fundamental principles from which deductions may be drawn and applications made. Text—Elements of Geography: Salisbury, Barrows, and Tower.

GEOGRAPHY II

REGIONAL GEOGRAPHY. (Required of all students in Courses A. B and C.)—This course covers the geography of the most important portions of the earth. In this course the teaching of the subject receives special emphasis. The work is begun with "Home Geography" and expanded according to the requirements of the state course of study. Text—That used in the Training School.

GEOGRAPHY III

This course corresponds very closely to Geography 1, but is offered as an academic elective to juniors who are not required to take physiology.

HISTORY AND SCIENCE OF GOVERNMENT

MR, MURDOCK

COURSE I. ANCIENT HISTORY—A rapid survey is taken of European history from the earliest time to the opening of the Eighteenth Century. Just enough attention is given to the oriental peoples to note their influence upon the institutions of Europe. This course is of high school rank, those enrolled in it being chiefly second year students. Considerable outside reading is required in source books and reference,

such as Davis's "Readings," and in original sources, such as Herodotus and Plutarch. In this work, history is closely correlated with geography. Time: First and second semester of the second year. Text: Robinson and Breasted, "Outlines of European History," Part 1, Ginn and Co., \$1.50.

COURSE 2. MODERN HISTORY—In view of the fact that more has taken place of great moment to mankind during the last two centuries than during any two preceding milleniums, an intensive study is given to this period. Students are taught to discriminate the important from the unimportant and to grasp the significance of movements and periods. Those who have taken this course should be able to read the modern newspaper and magazine more intelligently. Time—First semester, third year. Text—Robinson and Beard's "Outlines of European History," Part 2, Ginn and Co., \$1.50.

Course 3. American History—Since a knowledge of American history is a requisite for the highest type of citizenship, more importance is attached to this course. The students are older and more is expected of them. Little attention is paid to the narrative phase, but great emphasis is laid upon the origin and growth of political institutions and the development of our economic life. An abundance of material in American literature, chiefly political orations, is drawn upon to furnish a clearer understanding of the subject. Such reference works as the Epoch Series and The American History Series are used as references. Time: Second semester, third year. Text: Muzzey's, "American History," Ginn and Co., \$1.50.

Course 4. Science of Government-This course aims to be what its title would indicate—a study of the underlying principles of government in America with a view of understanding the spirit of our institutions. Sufficient attention is paid to details to enable the student to know what is expected of a citizen, but greater stress is laid on the appreciation of the duties and possibilities of citizenship in our democracy. Though the work is of high school rank, we make use of some college references. On our library shelves are such references as Bryce's "American Commonwealth," Kaye's, Beard's, Reinsch's Readings and Woodrow Wilson's standard works. In our magazine room are bound volumes of the leading periodicals available to the students through the "Readers' Guide." Time: First semester, junior year. Text: Guitteau's, "Government and Politics in the United States," Houghton, Mifflin & Co., \$1.00.

HOME ECONOMICS

MISS FRANCIS; MISS STEWART

There are three courses offered in home economics, one required of students in the first and third years, another a specializing course for training teachers in those branches of home economics usually taught in grammar schools. A special diploma is granted upon the satisfactory completion of this course. A third course is open to those not wishing to sacrifice the regular diploma for the home economics diploma but who wish more work in that field than it is possible for all students to take. A special recommendation will be granted to students who satisfactorily complete this course.

HOME ECONOMICS I. TEXTILES, BUDGETS, CLOTHING—First year, five periods, second semester. Text: L. I. Baldt, Clothing for Women, Lippincott, \$2.00.

A. Prerequisite—Clothing as given in the sixth, seventh and eighth grammar grades, or its equivalent.

Textiles—A brief course in textiles is given during the first quarter of the year, to give the students a knowledge of the major textile fibers and materials as all intelligent purchasers of textile materials should possess.

Clothing—Students purchase their own materials and are given work in the adjustment and use of commercial patterns, drafting patterns to their own measures, the fitting and making of garments, chiefly by machine. Where possible, work in ornamental stitches is given, and one hand made article, such as a bag or table runner, is made and a suitable design worked out in cross stitch or other embroidery.

Budgets—A consideration of the relation of the income to clothing, budget-making.

B. For those who have had no previous work in school. The course is changed to meet the needs of the students but in general is as follows:

Textiles—The same as A.

Clothing—Work in garment making, similar to A, but less difficult and with more hand sewing provided; also repair work.

Home Economics 2. Food, Household Management—Third year. Five periods first semester. Text: Kinne & Cooley, Foods and Household Management, Macmillan, \$1.10.

A. Prerequisite—Foods as studied in the seventh and eighth grammar grades.

Foods—Principles of food cookery, preparation of foods of all classes. Source, cost, composition, caloric values, digestion of foods. Dietaries, marketing, serving meals. Laundry work and household management.

B. For those who have had no previous work in school. The work is similar to that in A, the chief difference lies in the larger number of foods cooked and in the selection of those foods.

COURSE II

A course in home economics for the training of teachers. See page 20 for general information and page 22 for the outline of the entire course.

Prerequisite—Home Economics I and 2 or equivalent, all subjects necessary for entrance to the junior year, including physics and chemistry. It is important that applicants for this course should fulfill these requirements.

Home Economics II: Junior year, first semester, five hours.

Textiles—First quarter.

Development, production, manufacturing, uses, examination and identification of textile fibers and materials. Adulterations, hygiene and selection of materials, economic and sociological aspects of the textile industry.

Text: Woolman and McGowan, Textiles, Macmillan, \$2.00, supplemented by a well selected list of reference works.

Clothing—Second quarter. Hand and machine problems, use of machine attachments, adjusting commercial patterns. Application of decorative stitches made in the composition and design course. Repair work, sewing methods, courses of study. Text: L. I. Baldt, Clothing for Women, Lippincott, \$2.00.

HOME ECONOMICS 12: Junior year, second semester, five hours.

Foods—Principles of food cookery through laboratory experiments with the foodstuffs, accompanied by practice in the preparation and preservation of foods. Source, manufacture, selection and cost. Nutritive value and digestion. Methods of teaching foods and courses of study. Text:

Forster and Weigley, Foods and Sanitation, Row, Peterson and Co., \$1.40.

HOME ECONOMICS 21: Senior year, first semester, five hours.

Prerequisite—Home Economics 12.

Foods—Continuation of course 12.

Home Economics 23: Senior year, first semester, five hours.

Prerequisite—Home Economics 11.

Clothing—Continuation of course II. The emphasis is placed on hand problems and machine made garments suitable for elementary classes.

Home Economics 22: Senior year, second semester, seven hours.

Prerequisite—Home Economics 21.

Nutrition—Principles of human nutrition. Composition, fuel value, caloric, protein and mineral requirements of foods. Digestion, metabolism, dietaries. Laboratory work in caloric value of foods, infant and invalid diet. preparation and service of meals. Text: H. C. Sherman, Chemistry of Food and Nutrition, Macmillan, \$1.50, and M. S. Rose, A Laboratory Hand-Book for Dietetics, Macmillan, \$1.10.

Home Economics 24: Senior year, second semester, five hours.

Prerequisite—Home Economics 23.

Clothing—Drafting, fitting in paper cambric, the making of a tailored shirt waist, and a lingerie dress. Special problems.

Home Economics 26: Senior year, second semester, five hours.

Shelter and Household Management—The house; situation, construction, sanitation, heating, lighting, ventilating, furnishing and care. Economics of the household. Laundry, Emergencies.

School Organization and Administration—School equipments and supplies. The relation of home economics work to school and home life. Visiting schools and other field work. Special problems. Text: Isabel Berier, The House, American School of Home Economics, \$0.75.

COURSE III

Open to Junior students who wish to secure the regular Normal diploma and a Special Recommendation in home economics. See page 17 (c).

Prerequisite—Home Economics 1 and 2 or similar work, chemistry, and general subjects for entrance to the junior year.

Home Economics 31: Junior year, first semester, five hours.

Textiles—Similar to Home Economics 11, page 44.

Clothing—Hand and machine sewing, use of machine attachments, adjustments of commercial patterns. Repair work application of simple ornamental stitches. Discussion of problems with special reference to the elementary country school without a special teacher. Text: L. I. Baldt, Clothing for Women, Lippincott, \$2.00.

HOME ECONOMICS 32: Junior year, second semester, five hours.

Foods—Similar to Course 12. Text: Forster and Weigley, Foods and Sanitation, Row, Peterson and Co., \$1.40.

HOME ECONOMICS 41: Senior year, first semester, three hours.

Prerequisite—Home Economics 12 or 32.

Foods—Cookery, marketing, serving. Production, cost, nutritive value and digestion of foods.

HOME ECONOMICS 42: Senior year, second semester, three hours.

Prerequisite—Home Economics 31 or 11.

Clothing—Drafting of simple patterns, fitting, making of garments and other useful articles, and teaching methods.

Note—Work to be submitted to the department, see page 20 (2), should be filed in the Home Economics office before registration.

INDUSTRIAL ARTS

MR. CLARK AND MR. RYAN

The Industrial Arts building is of modern fireproof construction and furnished with the best of commercial machinery. Each shop room is arranged to form a distinct unit and has its own special equipment. The woodworking shops, located on the first floor, are provided with band saws, jointers, turning lathes, planer, mortising machine, circle saws and grinders, besides the necessary outfit for bench work. The machine shop, likewise on the first floor, is equipped with engine lathes, shaper, drill presses, milling machine, grinders and an excellent assortment of tools. In the basement are located the forge shop, sheet metal shop and foundry each of which is provided with a very fine equipment.

The aim of the work is to increase industrial efficiency and to train teachers of industrial arts.

Two courses are offered, the academic and the professional and instruction in manual training is given to the three upper grades of the training school. The academic is given in the first and third year of the regular courses and the professional in the junior and senior year.

TRAINING SCHOOL COURSE

The training school pupils are taught the essentials of woodworking and simple construction throughout the sixth, seventh and eighth grades. A series of well graded problems is offered, and this course affords the students of the professional industrial arts course ample opportunity for observation and practice teaching.

ACADEMIC COURSE

INDUSTRIAL ARTS I and 2: In the academic course may be taken in either wood work or metal work, but prefreence is given wood work unless it is evident that metal working would be of more value to the student.

Woodworking courses I and 2 are offered. These allow considerable latitude as to specific articles but insist upon certain essentials of good design, construction and finish. The problems are made the foundation for discussion of woods and other materials as related to constructive uses, and the making and application of practical finishes and wood preservatives. Text: King's series. First year, second semester; third year first semester, five hours a week.

Metalworking courses are offered as listed under the professional course.

While the theoretical and educational values are not lost sight of, the trade or vocational side of the shop is kept largely in mind, that those who elect the work may be fitted in a measure for positions in the trades.

PROFESSIONAL COURSE

INDUSTRIAL ARTS: Students electing this course will be given shopwork and special instruction and lectures on the scope and intent of industrial work as related to the public school. They will also be required to make thorough preparation in mechanical drawing. In each shop course students make a series of projects which acquaint them with commercial practices and develop efficiency in the use of the respective tools.

Graduation in the professional course certifies students for positions in manual training or enables them to embody manual arts work in the general school curriculum. The following will be offered: Prerequisite, Industrial Arts 1 and 2 or equivalent.

Wood Turning: This will comprise a study of lathe, lathe tools, jigs, woods for turning, action of wood fiber in turning, turning between centers, chucking, face plate turning, building up stock, etc. Mechanical Drawing 2 required. Junior year, first semester, five hours a week.

CASE AND CABINET CONSTRUCTION: Consisting of a study of design, ornamentation, screens, finishes and values. Junior year, second semester, five hours a week.

PATTERNMAKING: This will involve a study of cores, core prints, draft, allowance for shrinkage and finish, building up stock, making core boxes, etc. This course is related to that Foundry Practice in which the student makes castings from his various patterns. Junior year, second semester, five hours a week.

ART CRAFTS 2: Senior year, second semester, three hours a week. See Special Art Course.

INTERIOR DECORATION: Senior year, second semester, four hours a week. See Special Art Course.

MECHANICAL DRAWING 2: An elementary course involving free hand lettering, orthographic projection and a small amount of cabinet and isometric projection. Junior year, first semester, five hours a week.

MECHANICAL DRAWING 3: This is a course in practical intersections and developments as related to sheet metal work. The second quarter of this course is spent in the sheet metal shop where the accuracy of the drawing work is tested by building the articles designed. Junior year, second semester, five hours a week.

ARCHITECTURAL DRAWING: (Prerequisite Mechanical Drawing 2). This course consists of a study of room arrangement and requires the designing, drawing and tinting of an original set of house plans. Senior year, first semester, five hours a week.

MACHINE DESIGN: This covers the elementary design of gears and cams and includes one problem in combined mechanism and design for strength. Senior year, second semester, five hours a week.

MACHINE SHOP: (Prerequisite, experience in woodworking). In this course each student machines the castings, cuts the gears and builds a small gas engine. Special work in toolmaking is also offered those desiring it. Senior year, first semester, five times a week.

Force and Foundry Practice: The class will make a series of simple forgings and castings which are graded and selected to cover the fundamental principles. Part of the work will consist of a study of foundry and cupola management, heat treatment and manufacture of steel and wrought iron. Senior year, first semester, five hours a week.

Shop Courses and Practices 4B: General review of the manual arts work with reference to actual shop practice, study of methods, courses, drawing, equipment, supplies, etc. Review of history and development of industries and manual training, industrial and vocational institutions. Much reference work will be assigned and thorough papers required upon topics allotted. Senior year, second semester, three hours per week.

ECONOMICS OF MANUAL TRAINING 4C: This is a lecture series on shop equipment, cost and maintenance. Students are required to gather and compile data upon the subject. Senior year, second semester, two periods a week.

A complete tabulation of the work necessary for graduation in the Professional Industrial Arts Course will be found on page 21.

There is a growing demand for teachers qualified to take charge of Manual Training in the rural schools. For this reason students will be permitted to make certain substitutions in the junior and senior years of either Course A or Course C. This will allow them to take five hours Manual Training per weeking during their junior year and three hours during their senior year, and upon its satisfactory completion will entitle them to a special letter of recommendation as a teacher of Manual Training for rural districts.

LATIN

MR. HALL

The course in Latin begins the first year and extends over the first four years of the Normal course. Each of the four classes recites five periods a week for forty weeks each year, making 200 hours. The department is well equipped with a full set of Kiepert's wall maps and illustrative photogravures. The school library contains all the latest and most authoritative works of reference on classical antiquities in general, including history, geography, Roman life, topography, art, archæology, and literature. The reading room receives all the principal journals and magazines devoted to the classics. In fine, the equipment of the Latin department is one of the best in the southwest.

The course in Latin provides for two classes of students: the Normal, student proper, who is preparing to teach in the public school system, receives a broader training, becomes a better master of English, and does better work as a teacher; secondly, the academic student is better prepared to enter college having four units to his credit of sixteen generally required for admission to the universities of Arizona and California.

In conformity with the report of the Commission on College-Entrance Requirements in Latin appointed by the

American Philological Association, the amount and range of the reading required in this course for the full four years' work in Latin shall not be less in amount than Cæsar, Gallic War I-IV; Cicero, Orations against Catiline, for the Manilian Law, and for Archias; Vergil, Aeneid I-IV. But in range this amount or its equivalent may be selected from the following authors and works: Cæsar, Gallic War and Civil War, and Nepos, Lives; Cicero, Orations, Letters and De Senectute and Sallust, Catiline and Jugurthine War; Vergil, Bucolics, Georgics, and Aeneid, and Ovid, Metamorphoses, Fasti and Tristia; Provided always that this selection shall include the following as Prescribed Reading: Cicero, for the Manilian Law and for Archias; Vergil, Aeneid i-iii and either iv or vi.

The course is outlined as follows for 1917-1918:

Introductory: Pronunciation, syllabification, and inflection with constant drills and reviews and involving oral and written practice in the simple rules of syntax, with reading and dictation to train the ear as well as the eye, accomplishes the aim of the first year—to prepare thoroughly for second year work by by the complete mastery of the fundamentals in form and expression. Considerable English grammar is reviewed and developed.

CAESAR: Riess & Janes, Cæsar's Gallic War, American Book Co., is the only text used for the second year work. Three recitations a week throughout the year in Cæsar and two in grammar and composition cover this course. The courses of these two years count for two units in all accrediting colleges.

CICERO: Harkness, Kirkland and Williams, Cicero's Nine Orations, American Book Co. The orations against Catiline, the orations for Archias and for the Manilian Law; also, if time permits, either for Marcellus, for Ligarius, and the Fourteenth Phillipic, or Merivale, Sallust's Catiline, The Macmillan Co. The class recites in Cicero four times a week throughout the year.

VERGIL: Greenough and Kittredge, Aeneid, Ginn & Co., Book i-iv will be read in the Junior year. The class recites in Vergil four times a week throughout the year. Subject matter, literary and historical allusions and prosody as well as ability to translate will be demanded in all authors read.

Grammar and Composition: Every student in the Cicero and Vergil classes must have the following books:

Nutting, Advanced Latin Composition, Allyn & Bacon; Allen & Greenough, New Latin Grammar, Ginn & Co.; Brown, Latin Word List, Ginn & Co. A thorough knowledge of all regular inflections, all common irregular forms, and the ordinary syntax and vocabulary of the prose authors read in school, with ability to use this knowledge in writing simple Latin prose, will be rigidly required of each student upon the completion of the four years' work in Latin. Third year and junior students recite once a week throughout the year upon this work.

New copies of all textbooks used in Latin will be demanded of each student and positively no second-hand copies will be allowed.

MATHEMATICS

MR. FRIZZELL; MISS HALL

Mathematics should form an important part of the course of study in a Normal School, for the logical product of such school is teachers of children, teachers who are to go into village and country and train children to become useful and competent citizens.

Since all persons should have legitimate and lucrative occupation, and since the science of mathematics is fundamental in all business calculation and in constructive work, it is readily seen that a careful study of this science is necessary to an adequate training for the duties incident to life. In the Tempe Normal School the effort is made to train the student in the manner that will best fit him for work as teacher and at the same time give him a comprehensive and thorough knowledge of the subject.

The course is presented under three heads, namely: Arithmetic, Algebra and Geometry.

ARITHMETIC 1: Arithmetic is presented the second semester of the second year and also the first semester of the junior year.

In the second year the endeavor is made to make a thorough study of the subject. Exhaustive drills are given in the fundamental operations, in fractions, decimals, proportion, etc.

Textbook: Silver Burdette Arithmetic, Third Book, Silver Burdette Co., Chicago, Ill., list price 45 cents.

ARITHMETIC 2: During the junior year exhaustive review and drill of arithmetical principles are given. The subject is presented from the teacher's standpoint and involves methods of presentation to children of the grammar grades. The subject is pursued for one semester and may be taken either semester of the school year.

Textbook: Stone-Millis, Secondary Arithmetic, Benj. H. Sanborn, Chicago, Ill., list price 60 cents.

ALGEBRA: The work in Algebra is given during the first year and the first half of the second year.

Algebra work is based on the work previously done by the student in the grammar school grades. Beginning with concrete examples and simple operations, students are led to develop and comprehend abstract and general truths.

Special attention is given to addition, subtraction, multiplication and division. Also a close study is made of fractions, the equation as a means for the solution of problems, simultaneous equations, proportion, quadratics, logarithms, etc. The subject is treated in a simple and careful manner so that a student who has mastered grammar school arithmetic can do the work in algebra in a satisfactory manner.

Textbook: Hawkes-Luby-Touton, Complete Algebra, Ginn and Co., Chicago, list price \$1.25.

Geometry: Geometry is offered in the third year of the course. In this subject the student is led to make close examination of conditions as set forth in the proposition, that he may have a clear understanding of the hypothesis. This fastens upon him a habit of close observation and prepares him to view conditions in the proper light. The aim is to give the student a thorough drill in reasoning processes and to develop the habit of demanding sufficient evidence before drawing conclusions.

Textbooks: Wentworth-Smith Plane and Solid Geometry, Ginn and Co., Chicago, list price \$1.30.

MILITARY DRILL

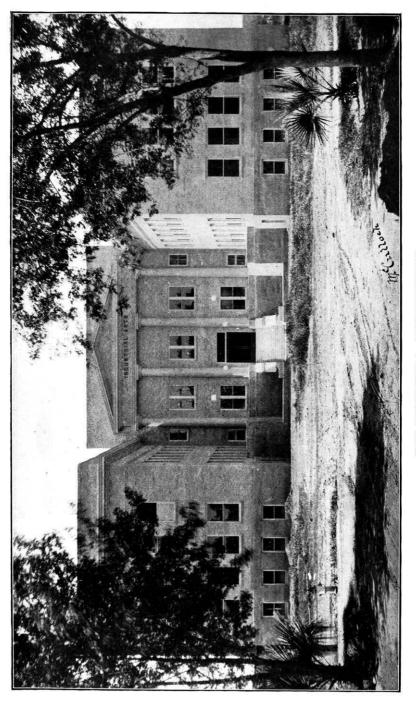
MR. IRISH

This work is intended to accomplish several important results. In the first place it is a valuable means of physical culture and training of the muscular sense. The exercise at-

tendant upon a lively drill in the open air is of a nature well calculated to overcome the effects of close application to study. to promote a healthy circulation and to prepare the mind for more vigorous effort. Again, daily attention, even for short periods, to correct position in standing and walking, gives a springy step, an erect carriage and a soldierly bearing that can scarcely be attained by any other means. Moreover, the strict discipline which is inseparable from properly conducted military work, is eminently conducive to the acquiring of orderly and systematic habits, personal neatness, prompt response to direction and self-control. At the same time the graduation of authority and division of responsibility from private to captain furnishes a valuable object lesson in government, while the actual knowledge gained makes the student a more valuable citizen, preparing him, as it does, the better to take upon himself the work of his country's defense in time of need. The objection which has sometimes been opposed to military drill because of its one-sided character is entirely met and overcome by the use of the setting-up exercises, the bayonet drill and the calisthenic exercises with and without the piece, while the attractive nature of the work gives to it that spontaneous character without which exercise is valueless.

The course, which is required of all male students who are free from physical disability, includes "the setting-up exercises" as prescribed for the United States Army, the school of the soldier, the school of the company, the bayonet exercise, calisthenic and bar-bell exercises, extended order work and battle formation for the company acting alone, the ceremonies of parade and guard mounting and the duties of sentinels. the principles of battalion movements are explained and outlined in order to illustrate the relation of the company to larger bodies of troops. Opportunity is given for instruction in military map reading and map maneuvers.

By an act of the First Legislative Assembly of the State of Arizona, the military organization of the Normal School of Arizona is made a part of the National Guard of this State, to be known as the Normal School Cadet Company. The military instructor holds the rank of captain and commissions are issued to the student officers of the company. Upon graduation from the institution, or being honorably dismissed therefrom, such officers may resign their commissions or hold the same as retired officers of the Cadets, liable to be called into service by the Commander-in-Chief in case of war, invasion, insurrection or rebellion.



The members of the company are not enlisted, and membership in the company does not entail any obligation to enter military service, although in case of war, members of military age are free to volunteer their services if they so desire.

Under the law above mentioned, the requisite ammunition and accessories for a course in target practice will be furnished to the institution each year. The company target range is situated within a mile of the campus in a safe location, and much interest is taken in this important work, a large per cent of the young men annually qualifying as marksmen or sharp-shooters under the regulations prescribed for the National Guard.

The company is affiliated with the National Rifle Association, and has been fully equipped with new Springfield rifles. A gallery range has been established in one of the buildings to permit practice leading to participation in national matches for school teams.

Three or four days are spent each year in camp, giving practical experience in camp routine, issue of rations, guard duty, signal practice and extended order work. The uniform, which is required to be worn at all drills, is of regulation olive drab, correct in style, serviceable and comfortable. Directions for ordering the uniform will be furnished to prospective students upon application to the president. Drills will occur three times per week during the year. None are excused from the regular drills except upon the presentation of a written certificate of disability signed by a physician. Satisfactory completion of the work in this course entitles the student to one unit credit toward graduation. Three periods a week.

MUSIC

OLIVE M. GERRISH

The aims of the music department are: first, to develop an appreciation for, and love of good music, to develop the emotional nature and esthetic sense by interpretation of good music, to teach the language of music for reading and singing; and second, to prepare students who are taking the professional course for the teaching of music in the public schools.

The course includes work in appreciation, song interpretation, ear-training, theory, sight-singing, methods and practice teaching. APPRECIATION: The purpose is to acquaint students with standard vocal and instrumental compositions, and enable them to listen discriminatingly. The purpose of music, the orchestra, the opera and oratorio are taken up. For study and illustration, records of the Victor and Columbia are used, making it possible to present these subjects in a vital form, bringing within the hearing of each student the best renditions of the works of the masters.

Song Interpretation: Students are led to recognize the spirit of the compositions, and the best manner of rendering the songs taken up for class study. One of the aims here is to lead students to express their pleasure in song singing, and discover the real joy of putting their best into the rendition of them.

EAR TRAINING: This consists of the recognition and reproduction of single melodies, both vocally and upon the staff. The writing of these melodies when heard also gives needed drill in the use of the staff and all notation of music.

THEORY: Instruction in scales and key signatures both major and minor, all signs and terms in general use, in fact, all the rudiments of vocal music with the addition of some elementary harmony.

SIGHT-SINGING: The aim is to make the students self-reliant in reading, and independent in carrying any part within range. Book I, International Reader and Junior Chorus Book of the New Educational Music Course, published by Ginn & Co. are the text books used. These books are full of excellent material from the masters in music, thus keeping before the students high ideals, as well as providing interesting and pleasing material for the development of sight-singing.

METHODS: A complete course in methods is given in the senior year, in which the presentations of all problems to be taught in the grades are illustrated. The care of the child voice, the development of appreciation of rhythm, methods of teaching rote songs, and a suggestive repertoire of children's songs are only a few of these. The close correlation between the methods course and the practice teaching in the Training School affords unusual opportunity for the acquisition of theory and its application in the various subjects related to the teaching of music in the public schools.

CHORUS: One hour a week is given to chorus practice. Standard works are studied and special numbers prepared for programs and assemblies.

MUSIC I: Five periods a week. Textbooks: New Educational Music Course, Books I. II, III and IV.

MUSIC 2: Two periods a week. Textbooks: New educational Music Course, Books I, II, III and IV.

Many of our students take instruction in piano playing. There are excellent piano teachers in Tempe and Phoenix with whom such instruction may be arranged privately, and the lessons paid for, but the pianos of the school are made available to such students for the convenience of practice, and may have stated hours assigned them upon application.

INSTRUMENTAL MUSIC

In addition to the usual course in vocal music, there has been added this past year instruction in orchestral and band instruments, and it has been taken advantage of by many of our students, with and without any previous preparation and with such beneficial results to the individual student that it is determined to continue this feature of music instruction.

The object to be attained is the establishment of a school band and school orchestra by the development of the talent of the student applying for instruction, to that point of proficiency as shall make him eligible to membership in either or both of these organizations.

With this object in view, expert instruction is given in the playing of the following instruments:

STRINGS: Violin, viola, cello and bass.

Wood-wind: Flute, piccolo, clarinet, oboe, bassoon and saxaphone.

Brass: Cornet, baritone, alto, tenor, tuba and slide.

Drums: etc.

Instruction is also given in playing mandolin, guitar and banjo.

It is required that each student applying for instruction shall provide, at his own expense, the instrument he wishes to study, keep up repairs on same, and to purchase his own music and textbooks, as directed by the teachers, instruction alone being otherwise free to the student.

It is suggested to prospective students desiring to take up work along any of the above lines and possessing the instrument they wish to play, that they bring it with them when entering school and avoid delay and expense in sending home for it.

Textbooks and studies will be prescribed by the teacher in charge, according to the individual needs of the student and the class work to be pursued.

PHYSICAL SCIENCE

MR. IRISH

Physics I: Two periods of laboratory work are accepted as equivalent to one period of lecture or recitation. A general course in elementary physics, including laboratory practice in measurements of length, mass and time, in connection with a series of exercises designed to develop the leading principles of mechanics, heat, magnetism, and electricity, with selected exercises upon the subjects of sound and light. Textbook: Millikan and Gale, First Course in Physics. Third year, first semester. Five periods a week.

Physics 2: An additional semester's course of laboratory work in electrical measurement, sound and light, accompanied by two lectures a week, is open to those who have completed Physics I, and who have shown special ability along this line. Such students may elect this course in place of the course in chemistry. Third year, second semester. Five periods a week.

Chemistry 1: Two periods of laboratory work are counted equivalent to one of lecture or recitation. The course articulates with Physics I which precedes it. The student thus begins his work in chemistry with the advantage of previous experience in laboratory work and methods and carries over with him a working knowledge of the gas laws and the constitution of matter for which he now finds application. The fundamental principles of chemistry are developed as far as possible by the student's own experiments, many of which are quantitative in character. The simple quantitative work has a tendency to increase the care and accuracy with which the

exercises are performed, but it is chiefly used to develop qualitative relations which otherwise would not appear. The exercises are so chosen as at the same time to make the student acquainted with the preparation, properties and uses of the more important chemical elements and their compounds and with the practical application of chemical laws and processes. Considerable attention is paid to the discussion of modern methods of industrial chemistry, and especially to chemistry of foods, tests for adulterants in foods, dyeing of textiles, photography, and metallurgical processes. Textbook: Brownlee and others, First Principles of Chemistry. Third year, second semester. Five periods a week.

PHYSICAL TRAINING AND ORATORY

MISS ZARTMAN

Physical Training: Instruction in Physical Training is required of all students during the five-year course. Each class recites twice per week. The training is based upon the Delsarte Philosophy of Expression and the Swedish and German system of free movements and light gymnastics. The work is conducted in the new Auditorium building, the entire lower floor of which is occupied by the gymnasium. This is furnished with sufficient apparatus for a thorough course in physical training.

The aim of the department is to acquire a symmetrical development of the body as a basis for health and grace—the lessons for the beginner deal with fundamental work, such as marching, correct standing positions and general adaptation to gymnasium rules. After this has been mastered, the regular work is taken up, which includes: Indian clubs, dumbbells, folk-dances, breathing exercises, flexing exercises to overcome stiffness, exercises to develop control of muscles and all devices in training that secure freedom of body action and expression of grace. Exercises are also given to remedy the following defects: weak abdominal muscles, stooping or uneven shoulders, incorrect poise of the head and incorrect positions of sitting or standing.

The advanced work of the junior and senior classes is a rational outgrowth of the first three years. It comprises a wider range of training in artistic and esthetic forms of physical culture, harmony in all movements of the body, and a mastery of bodily control.

Lectures are given to the senior class on health and hygiene. A course in collateral reading is outlined as a supplement to these lectures.

The results expected from the work are: first, a noble and graceful bearing habitually maintained; second, freedom from awkwardness and self-consciousness; third, ease and precision in the movements of the body; fourth, a continual and gradual development toward a symmetrical body without injury or strenuous exercises which might prove harmful, and fifth, a knowledge of the body and the rules governing its development and preservation.

As the primary object of the department is the development of the individual, as much personal attention is given to each member of each class as possible.

To secure uniformity of costume, students are advised to confer with the director at the beginning of each school year.

ORATORY: The department of Oratory embraces reading, elocution, debate, oratorical delivery, and all forms of public speaking. The courses given are as follows:

Reading First Year: The first year reading is the beginning work from the textbook, Cummock's Choice Readings, and deals with all forms of speaking. The fundamental work in English pronunciation, mastery of the articulatory organs, and steps toward becoming a distinct and natural speaker or reader. The standard of the beginning work is to be able to read naturally and distinctly, giving thought and proper expression to what is read. Special attention is given to reading intelligently from the printed page in both this and junior reading.

READING, JUNIOR: This course is arranged for those who enter the two years' course for high school graduates. It includes all of the work of the first year course in reading, but takes a broader form in method of teaching and application. The standard is distinctness and naturalness with special stress placed on expression and the interpretation of literature.

Both first year and junior reading recite five times per week, one class each week being conducted in the Auditorium for practice work and criticism.

Public Speaking: In the department of Public Speaking, the director has charge of all public work in contests, debates, plays, society programs, etc. In any one of these

the students are given assistance to present their work in a natural and creditable way. In this instruction the fundamental principles of oratory are observed. As in reading, the standard is naturalness in oratory and a thorough mastery of the thought expressed.

Standard plays are given each year. The students who are chosen to take part receive personal instruction from the coach, in dramatic principles and interpretation. Such plays as "The Return of Eve," "A Gentleman from Mississippi," "Fanny and the Servant Problem," "At Columbia," and "The Rejuvenation of Aunt Mary" have been given with decided success.

SPANISH

MISS SALMANS

The study of Spanish is gaining in importance every year. Our proximity to Mexico and the countries of South America and the rapid increase in commercial relations existing between these countries and the United States, make Spanish necessary as a means of communication for business purposes. For this reason we aim to give the student a command of the language in speaking, reading and writing; to familiarize him with the country, customs and people of Spain and Spanish America; to introduce him to Spanish literature; and to create in him such a sympathetic interest in these peoples that it will prove a means of pleasure as well as profit through life.

Spanish is an elective course. Spanish I may be taken in either the second or junior year; Spanish 2 may be taken in either the third year or in the Senior year; Spanish 3 may be taken in the junior year. High school graduates may elect Spanish.

SPANISH I: For beginners. Careful work in pronunciation introduces the work, then grammar, conversation and reading are studied. Short poems are memorized and songs are learned. As far as possible, Spanish is the language of the class room and special attention is paid to the acquisition of a practical and useful vocabulary. Textbooks: Espinosa-Allen, Elements of Spanish Grammar, American Book Co.; Remy and Roessler, First Spanish Reader, American Book Co.; Lecturas Fáciles, Silver, Burdett and Co.

Spanish 2: Translation of material from modern Spanish writers, review of grammatical principles, rapid reading, conversation. As far as possible, the class will be conducted in Spanish. Textbooks: Caballero, La Familia de Alvareda, Henry Holt and Co.; A Trip to South America, D. C. Heath and Co.; Carrion and Asa, Zaragueta, Silver, Burdett Co.; Gutiérrez, El Trovador, D. C. Heath and Co.

Spanish 3: The pupil's acquaintance with ordinary conversational Spanish is extended by the reading literature introducing Spanish customs and home life. The characteristics of the Spanish people are studied and compared with our own traits. The written work includes a special course in Spanish business and formal letters. Textbooks: Crawford, Spanish Composition, Holt and Co.; Alarcón, El Capitán Veneno, D. C. Heath and Co.; Tamayo y Baus, Lo Positivo, D. C. Heath and Co.; Lope de Vega, La Moza del Cántaro, Holt and Co.; Whittem and Andrade, Spanish Commercial Correspondence, D. C. Heath and Co.

THE PROFESSIONAL COURSES

The work in the professional courses is one of the most characteristic and vital of normal school work. These courses deal largely with the theoretical side of education but the instruction given is practical and adapted to the future work of the teacher. The purpose is not so much to train the student but to give him a grasp of the fundamental principles of psychology, pedagogy, school economy, and so forth, so that he will readily understand and appreciate the training given him in the Training School.

The work is so planned that the student may come to a thorough realization of the nobility of the profession of teaching and of the responsibility of the teacher. The courses in psychology and educational theory are closely co-ordinated with the courses in Practice Teaching.

PSYCHOLOGY. MR. FIKE: This is an elementary course combining the most important topics of both general and educational psychology and forming the basis of the courses in the theory and practice of teaching. A knowledge of biology is most desirable and those students who have not taken that science are earnestly advised to do so. It may parallel the course in psychology.

The states of infancy, childhood, and adolescence will be dealt with successively and special emphasis will be laid upon instinctive tendencies, habit-formation, memory, association, the learning process, the affective life, and the thought processes.

The equivalent of one period a week will be devoted to laboratory experiments illustrative of the theory.

Pedagogy. Mr. Payne: The course in pedagogy follows directly upon that of psychology. The chief purpose of this course is to show the principles of learning and to develop from these the principles of teaching. As the students of this course begin their practice teaching at the beginning of the senior year, the latter part of the course is devoted to the application of the principles of teaching to various subjects with practice in lesson planning. The more detailed study of methods comes during the senior year. Some time is also given to the discussion of the course of study, relative value of subjects, and the relation of the child to the curriculum. The work is given by textbook, class discussions, lectures and reference readings. Second semester, Junior year.

Textbook: Strayer, Brief Course in the Teaching Process, The Macmillan Co.

HISTORY OF EDUCATION. MR. FIKE: The course includes (1) a sketch of the history of education as outlined in the text and (2) a detailed study of the educational writings of a few of the most prominent educators from Plato to Dewey. The object will be to make the subject functional as well as cultural.

School Economy and School Law. Mr. Fike: This course accompanies practice teaching, enlightening and interpreting the experiences of the Training School. A part of the semester will be devoted to a study of the school laws of Arizona. It will also include a discussion of the most advanced ideas and laws along the line of school legislation.

The remainder of the semester will be spent in the study of the following subjects: School Architecture; School Sanitation; Heating; Lighting; Ventilation of School Buildings; Educational Hygiene; Classroom Organization and Administration; Elimination, Retardation, Promotion, and Acceleration of School Children; Discipline and Moral Training; Economical Devices; Instruction and Practice in the Technique of

Educational Measurements, including Standard Tests, Scales, and Score Cards.

Sociology and Ethics. Mr. Fire: The object of this course is two-fold: I. to furnish the student with a perspective view of the place of education in the general social scheme and relationship which the school should bear towards the other agencies of social welfare and, 2, to provide a course in which attention may be given to the understanding and solution of many perplexing social and ethical problems which arise.

THE TRAINING SCHOOL

The Training School is organized under special laws, but is conducted as a regular public school of eight grades and kindergarten. The large number of teachers makes it possible to keep classes small and give special attention to the needs of individual children.

The professional work of the Training School has two sides—the theoretical and the practical. The courses in general and special methods make up the theoretical side. The practical work consists of observation of model teaching and practice teaching in the Training School when the theoretical work is applied, thus bringing about the close relationship that should exist between the two sides of the work.

METHODS: The methods, general and special, are taught by the principal and faculty of the Training School. It is their effort to present normal school methods in such a practical way that graduate teachers will follow the prescribed course of study in an intelligent manner. Primary methods are given special attention on account of their fundamental nature.

Observation and Practice Teaching: Each senior observes model teaching and teaches in the Training School during one full year. The observation of model teaching alternates with the practice teaching throughout the year, the purpose being to give opportunity for immediate application of observed methods. All this work is done from carefully prepared plans under the supervision of the critic teacher.

Every year a large number of graduates take positions in the small schools of the state. In order to provide special training for these teachers, it is proposed to work with one of the adjoining districts in building up a model one-room rural school. In this school student teachers will be able to study rural school problems at first hand.

Actual rural school conditions will be maintained, and the equipment, heating, ventilation, sanitation, school gardens, library, etc., will be such as the average school may have with a careful expenditure of its regular income. Students will be expected to work out problems of community service as well as the problems of administration and instruction in the school itself. Such training will not only fit teachers to deal with rural school problems more efficiently, but will instill in them a better attitude toward the work and a better understanding of the importance of the school as a social force in the community.

KINDERGARTEN

MISS ZELLER

Teachers' Course in Kindergarten and Primary Work—There are two courses offered in kindergarten training, one in the junior and senior years of the regular professional courses, which grants the regular normal school diploma with a special recommendation, qualifying to teach in the kindergarten and primary departments in the public schools of the state, the other a specializing course, leading to a special diploma, the equivalent of a full two-year course in kindergarten training.

COURSE !

In this course kindergarten theory and technics will be substituted for music and writing in the junior year and agriculture in the senior year of the six-year professional course.

NATURE STUDY—This is not an analytic study, but endeavors to teach love and reverence for life as manifested in nature, by means of the care of plants and animals and excursions into the outside world.

Music—This is a short course in the evolution, interpretation and appreciation of music by means of the lecture, piano and victora.

Applicants for admission to the kindergarten training courses must qualify under one of the following conditions:

- (a) Normal students must have completed the fifteen (15) units required in the first four years of the Normal course leading to professional courses including the units of drawing and music.
- (b) Graduates from a full four-year academic course must come recommended for special training in kindergarten and primary work by the principal of the high school as to personality and moral fitness for the work.
- (c) Students not graduates of any high school but who have had work which is the equivalent, can be admitted to this course.

All candidates must be able to play and sing simple songs to meet the requirements of a good kindergarten. Those who fail to pass the musical test will be required to make up the deficiency by means of special lessons.

LIBRARY

MISS WRIGHT; MISS M'KELVY

The Library is on the first floor of the Main Building and is the laboratory for a greater part of the students' work outside of classes. It now contains 9,600 volumes, selected to meet the demands of the various courses of study, to give the students a chance to become familiar with the best that has been written and to provide wholesome and stimulating recreational reading. One hundred of the best periodicals are received currently and are a valuable asset for research work.

A children's library is located in the Training School. A careful selection of 1,200 of the best children's books gives an unusual opportunity to senior students to know juvenile literature and how to bring books and children together, a valuable factor in a teacher's equipment. This library offers an opportunity to twelve seniors each year for actual experience in the administering of a school library.

LIBRARY METHODS—The object of these courses is to familiarize students with the use of books and libraries, with special work fro the senior class on the formation of a school library.

FIRST YEAR—Structure and printed parts of the book. Classification and arrangement of the library. Use of card catalog. Encyclopedias and dictionaries. Periodical indexes.

Second Year—Periodicals. Reference books. Making a bibliography.

JUNIORS—The work outlined for the first and second years is given for the benefit of students entering in the junior year.

Seniors—Buying and selecting books with special reference to children's literature. Government documents. Mending. Use and arrangement of pictures. Some lessons to give to children on the use of books. The school library.

ATHLETICS

MR. SCHAEFFER

The games, exercises and various phases of this work are of such a nature that both girls and boys may participate in some form of exercise and all students are urged to take an active part. The athletic training is under the personal charge of a regular coach. While the students are encouraged to participate in athletics, such participation is held subordinate to the educational work of the institution. Students deficient in studies, irregular in attendance or unsatisfactory in deportment are not permitted to represent the Normal as members of its athletic teams. The work has been greatly stimulated by the presentation of three silver cups. These were given by the "Student," and stand as prizes to be contended for annually by the various classes in track, tennis, and basket ball.

Athletics has attained such success and has assumed so much importance in this institution that the Board of Education has deemed it expedient to place all athletics in charge of a man especially qualified for this work, and with this object in view an Athletic Director has been secured who has sole charge of all athletics and who devotes almost his entire time to this work. He is an athlete himself of very high rank, with exceptionally good training, who has had excellent advantages and held a prominent place in Eastern athletic circles.

FOOTBALL—The great American game, football, was introduced as one of the methods of recreation for the young men of the Normal in the fall of 1914. By the interest and enthusiasm shown in this sport there is no doubt but that football will be played each year.

Football is played not simply to develop brute strength, but to give each and every boy an opportunity to enjoy some good, vigorous recreation, and at the same time to develop him physically, mentally and morally. In order to play football each player must be in the best of physical condition and health, and with this purpose in view, very stringent training rules are adhered to, that do not permit the young man to dissipate in any form whatever. With this method of training and at the same time instilling into the youth the best of habits and methods of living, there were no serious accidents during the whole season of 1916.

The interest and popularity of this game is shown by the fact that there were always more than enough young men in suits to form at least two teams of eleven men each. The competition for the various positions on the team was so great, that the coach often had difficulty in selecting the best man for the position. This year class teams will be developed and an interesting series played.

With new suits, pads, and all of the necessary equipment, the students are all looking forward with great interest to the opening of the football season of 1917.

Basket Ball.—After the football season closes, all athletic interest is turned to basket ball. This game is played on an outdoor court and here again the rivalry is so great that there are at least two men for each position on the team that represents the Normal in match games with other teams. Besides this team, each class is represented with a team in the interclass series. This form of recreation is also one of the best for the student who spends the whole day in the class-room. During the season of 1916, this series of interclass games developed unusual interest in the sport and awakened that wholesome spirit of rivalry which is invaluable to the success of any form of athletics.

TENNIS—Several splendid courts—the best in the state—have been made and are kept up by the school. Everything is done that will enable the students to enjoy the game to the fullest during the whole school year. Each year interclass tournaments are held. This is the one branch of athletics that can and does do the most for class spirit. In addition to the interclass matches an annual tournament is held, wherein the most prominent schools of this part of the state take part.

GIRLS' BASKET BALL—The young women maintain a basket ball association whose purpose is the amusement and

recreation afforded by wholesome outdoor exercise. During the fall five teams are organized, one from each class, and these teams play a series of twenty games for the possession of the silver cup offered by the "Student." The exercise is not confined to these teams, however, for each class usually organizes at least two teams, so that the work is open to all who wish to play, and each year from sixty to a hundred girls enjoy the physical benefits of this fine game. In addition to the interclass games a limited number of match games are played with teams from other schools. Two fine courts are kept in first class condition, being well laid out and surrounded with wire netting, which reduces to a minimum the loss of time due to the ball going out of bounds. The work is under the direct supervision of a member of the faculty, who guards against over-exertion on the part of untrained players and regulates the amount of exercise according to the strength and physical condition of the individual.

TRACK—This is an excellent form of athletics for the reason that it affords an opportunity for training to every student who desires exercise. The Normal School is a member of the Valley League Athletic Association, which conducts annual track meets. The Normal School easily won the championship in this league last year. This efficiency has been attained by a system of coaching that makes each boy his own trainer. As such he studies the proper method of physical development and obtains a practical knowledge invaluable to his future years. There is a fine track on the campus for distance events, and a 220-yard straight-away course for sprints. Suitable apparatus for all standard events has been purchased and all young men are urged to enter this field of athletics.

BASEBALL—This, the greatest of all of the American games, is better supported by the student body than any other form of athletics. Every boy hails the time when the baseball season opens. The Normal diamond, located on the campus, is reputed to be the finest in the state. The training quarters are provided with shower baths, while the association furnishes suits, gloves and other supplies. A new impetus has been given to all forms of athletic work by the erection upon the athletic field of a neat and commodious amphitheater which comfortably seats a large number of spectators, affording them shelter from sun and an unobstructed view of the games. Beneath the amphitheater, ample training quarters have been provided for the accommodation of the players. These quar-

ters are fully equipped with hot and cold water, showers, lockers, tables and benches and all sanitary appliances for the physical care of those taking part in athletic work. With all these conveniences and inducements offered, there is no reason why any student should neglect the important matter of physical exercise.

LITERARY SOCIETIES

The literary societies of the Normal School form an important part of the outside school activities. There are now six societies in the school, each numbering from fifteen to twenty-five members. These societies with their limited numbers form the most ideal centers for the promotion of study and group activities. Weekly meetings are held and the work accomplished is considered an important part of the work of the school. A member of the faculty acts as adviser for each society and gives advice and assistance when required. One of the most looked-for social events of the year is "All Society Night." Every society contributes a number to the program for this event and the friendly rivalry and the opportunity for the various societies to mingle socially make it a much enjoyed evening.

The Zetetic Society—An organization consisting of twenty-five young women. During the past year weekly meetings were held, and the first part of the year was devoted to a study of the Odyssey of Homer. This was followed by a study of Arizona history, ethnology, and modern resources. Musical numbers are also given upon all programs. Several very enjoyable social meetings were held during the year, and the members are looking forward with interest to the continuation of their work.

KALAKAGATHIA—This society, which has previously outlined its work along literary lines, was organized this year as Kalakagathia Camp Fire, and obtained its charter from the national headquarters of the Camp Fire Girls. The group is made up largely of junior and senior girls and the Camp Fire movement has been studied from the standpoint of guardians. A Council Fire has been held each month and the weekly meetings have been planned to include work which would be helpful to young women going out as guardians of Camp Fire groups. The programs have included out of doors

observation, first aid, hygiene, games, story-telling, Camp Fire motion songs and handicraft work.

CLIONIAN LITERARY SOCIETY—The Clionian Literary Society is limited to a membership of twenty-five young ladies, who meet weekly for mutual enjoyment in literature, art, music and friendship. During the past year, the programs were devoted to an intensive study of "Modern Movements" in Education, Art, Benevolence, Prohibition, Suffrage and Peace. Their motto is "Loyalty binds us," and the members have earnestly lived up to that worthy sentiment. They have been punctual in attendance, faithful in performance, and business-like in methods. Several evenings were given over to social enjoyment, one of the most pleasant being the annual reception to seniors.

Spanish Club—The object of this organization is to further the ability of speaking Spanish and to arouse a sympathetic interest in the Spanish and Latin-American peoples. There are twenty-five members and a very interesting year has been spent. Spanish only is spoken in the club meetings, thus affording opportunity for acquiring a practical vocabulary. Social meetings are held monthly and at each of them a play is given. A very interesting and instructive program was presented by the Latin-Americans of Phoenix, which was greatly enjoyed by all present. Any one taking Spanish in the Normal School, or having had two years of Spanish elsewhere, is eligible to membership.

The Athenian Debating Club—The Athenian Club is an old organization in this school. Because of that fact it has some "fine traditions" of which its members are pardonably proud. It does not, however, depend upon former achievement to maintain its standing. Its present membership is made up of young men who are quite able to do worthy and creditable things. The work of the club consists chiefly of debates, its programs are varied by a study of the principles of public speaking and parliamentary law. Occasionally prominent men are invited to address the club on pertinent topics. Athenians give just enough thought to social matters to add spice to their more serious affairs.

THE NORMAL DEBATING SOCIETY—The object of this organization is to give training in public speaking and parliamentary law. Programs have been held weekly, and though the work of each evening has centered about a debate upon

some public question, variety has been given by discussions of scientific achievements, readings and musical numbers. Enthusiasm in the work was stimulated not only by inter-society debates, but through competition of rival teams within the society and finally by the contest for the Sandige Debating Cup which is awarded annually to the member of the society who takes first place in the last debate of the year.

THE STUDENT

"The Tempe Normal Student" is a school paper published bi-weekly by the students of the Normal School. It serves as the medium through which school activities, scholastic, athletic and social, are made known to the public, and it furthermore encourages literary work among the students. Stories and essays of value written in the English department often find publication here and contributions from aspiring authors are always welcomed. Thus the publication gives an added zest to practical literary work and stimulates the life and spirit of the student body, all being vitally interested in its welfare.

The student body in general and the staff in particular are responsible for this publication, and they have endeavored to keep it up to literary standards and at the same time to render it spicy and entertaining.

LECTURE AND ENTERTAINMENT COURSE

A course of lectures and entertainments of the highest class has been presented each season by the lecture course committee. No profits are taken and any surplus in receipts over actual expenses makes possible more and better numbers for succeeding years. As a consequence the quality of the courses has continually been improving through the liberal patronage of the people of the community as well as the students in the schools.

In times past the committee has secured such notable attractions as follows: David Starr Jordan; Edmund Vance Cook; The Metropolitan Male Quartette; The Killarney Girls; Montraville Wood, scientist; Laurant, noted magician; The Gamble Concert Company; and the Clifton Mallory Players.

For the coming season the following attractions are listed: The Ben Greet Players; Elsie Baker, noted prima donna;

Rolla McBride, lecturer; Homeland Male Quartette; Fletcher, lecturer; The St. Claire Four, ladies quartette; and The Montague Light Opera Company.

Notwithstanding the above splendid array of attractions the prices of admission will, as usual, be nominal and within the reach of all.

YOUNG WOMEN'S CHRISTIAN ASSOCIATION

There has been established for the girls, last year, a Young Women's Christian Association, which is under the special direction of a General Secretary, who gives her whole time to the girls. The purpose of such an organization in a State Normal School is not only to help the girls to form the highest and most practical ideals and standards for their own lives, but also to train them, as community leaders, for the most efficient service. No other organization is able to be of such an influence as the Y. W. C. A. at Tempe Normal School, because it is absolutely non-sectarian, and gives alike to all girls. Moreover it is not a local organization, but a state organization, and thus is made stronger and more efficient.

The work has been most successful this year; many girls, through the efforts of the Y. W. employment bureau, have been given work, which aids them to meet some of their many financial obligations. Besides their weekly Bible classes, the girls conduct an Association meeting once a week; all the subjects that interest girls are discussed and this year they have been fortunate in obtaining some outside speakers, who have told them about many of the conditions in the foreign countries as well as in our own. Through the work of this organization, the atmosphere of the school life has been raised to a higher standard, and more years will only add to its important place in the school.

VISITORS

Visitors are welcome at all times, and educators and clergymen are especially invited to visit the school in all its departments. The faculty is always pleased to make the acquaintance of the parents of the students and to have them make a personal inspection of the school and its work. The people of Arizona are urged to recognize the fact that the Normal School belongs to them, and that the management always appreciates their interest and good will. It is well

recognized that their visitors are a valuable stimulus to faculty and students alike.

ASSISTANCE AND PRIZES

The Kingsbury Senior Assistance Fund, established by Mr. W. J. Kingsbury of Tempe, provides in a liberal way for the needs of worthy students who find themselves unable to pursue their studies by reason of a lack of means. A certain sum of money has been set aside every year from which loans may be made to students at a very low rate of interest. While the fund is primarily for the aid of the seniors, yet any student of the Tempe Normal School may, on the recommendation of the faculty, draw upon it. Six students received assistance from the fund during the past year, in amounts ranging from \$40 to \$75 each.

A fund for the aid of worthy students has been established by the Tempe Normal School Alumni Association through the active interest of some of its members. Loans from this fund will be made at a nominal rate of interest and under favorable conditions to students recommended by the faculty as being worthy of financial assistance. It is the intention of the Alumni Association to add to this fund from year to year.

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

The Moeur pin, also offered by Dr. B. B. Moeur, is awarded to the student who is considered the best teacher in all respects; teaching in the training school, professional spirit shown, and work done in professional courses. The student must have attended the Tempe Normal School for at least two years, and the work for which the pin is awarded must have been completed within the two years directly preceding the graduation. The winning of this pin is one of the highest recommendations that a student may secure from the professional standpoint.

The Harvard Club of Arizona offers to the seniors of the school a medal for the best essay on some topic connected with Arizona. The subject matter as well as the treatment must be original. Competition for this medal has resulted in much research work and the production of many valuable and interesting essays on Arizona.

Other prizes will be given during each year to encourage oratorical work in the literary societies and to foster interest in inter-society debate.

The Pacific Creamery Company of Tempe, through the courtesy of its President, Mr. J. B. Cook, expresses its interest in the Normal School by instituting an annual event to be enjoyed by the Senior Class. This consists in an automobile tour of the Valley, followed by a dinner or banquet to which the prospective graduates look forward with lively anticipation, and which is regarded as one of the most enjoyable festivities of Commencement Week.

THE ALUMNI ASSOCIATION

This association now numbers 850 members. two regular meetings each year and an annual banquet. It is earnestly desired that all the graduates of this school should show a lively interest in its welfare. Their influence on the schools of the State is already plainly seen and will doubtless increase. The faculty desires to be informed of the success of the graduates and to render them professional assistance as far as possible. The association is a valuable means toward this end. The President desires to know the permanent address of every person who has graduated from the Normal School and to be informed of any change in residence or occupation, that it may be properly recorded. The Alumni Register, together with other matter of special interest to the Alumni will appear in a later issue of The Bulletin this year. and graduates are earnestly requested to co-operate with the faculty in furnishing accurate data concerning addresses, occupation and other matters of general interest to members of the association.

TEACHERS' BUREAU

Although the management of the school cannot agree to furnish employment or find positions for students upon graduation, yet the President and members of the faculty find many opportunities for recommending teachers to good positions,

and this they are always pleased to do as they feel that the service may be of an advantage not only to the student, but to trustees and school officers as well. The President of the school, when requested, will take pleasure in furnishing to school officers detailed information in regard to the qualifications of its students and alumni to teach; he will also, when desired, put them in communication with teachers seeking employment. In order to be able to recommend a teacher intelligently to a position, the President should be given a full and detailed statement of the requirements and conditions of the position.

SUMMARY OF REGISTRATION, 1917

Normal	School	∫Men }Women	120} 330}	Total450
Training	School	}Boys }Girls	116} 147{	Total263
				713

SUMMARY OF GRADUATES

Prior to class of 1917	Total850
Number of professional graduates833 Number of academic graduates17	Total850

Register For 1916-17

Abbott, EdnaPearce
Achauer, Chas. MMayer
Adams, Alvie AlbertDragoon
Adams, Birdie ClaraDragoon
Adams, Birdie ClaraDragoon Adams, LloydDragoon
Aepli, Milton FrederickTempe
Allen, BlancheGilbert
Allen, Roscoe DeweyIllinois
Anderson, Estain Sammie. Tempe
Anderson, Estain SammieTempe Anderson, Willie OuldaTempe Andrews, Margaret EKirkland
Andrews, Margaret EKirkland
Albogast, (Mrs.) GermudeGlove
Arborn, Verda HelenBisbee
Arend, Paul MPhoenix Arnold, Harriet LeonaTempe
Arnold, Harriet LeonaTempe
Arnold, Sarah JewelTempe
Arnold, Sarah JewelTempe Austin, Anthony WarrenTempe
Austin, Harold HendrixTempe Austin, Zella AnniceTempe
Austin, Zella AnniceTempe
Barker, BlessieFeldman Barnett, Maude AdeliaGlobe
Barnett, Maude AdeliaGlobe
Barnsback ElizabethPhoenix
Barrera, Louis FredAjo
Barron, Kathryne CJerome
Barrera, Louis Fred
Barry, Nellie MaudGlendale
Bartlo, DeweyPhoenix
Bass, (Mrs.) EffieTexas
Bauer, August VictorTempe
Baxter, BerniceWickenburg Baxter, Richard KWickenburg Beaton, Violet MaePhoenix
Baxter, Richard KWickenburg
Beaton, Violet MaePhoenix
Benenato, CoraPhoenix
Benson, Gertrude ZBuckeye Bentley, Howard EugeneMayer Benton, MargueritePhoenix
Bentley, Howard Eugene Mayer
Benton, MargueritePhoenix
Berry, Aida DDos Cabezos
Bertelson, Edward ETempe
Biery, Donald HFlorence
Bishop, Francis FlorineTempe
Blanchard, Leslie BlairTempe
Blount, Alma LenoreTempe
Bockoven, Martha AdaTempe
Boldman, HazelLiberty Boldman, MonaLiberty
Boldman, MonaLiberty
Bond, GeorgeMesa
Bond, GraceMesa
Boylan, EllenTucson
Branaman, FrancesRay

Brockett, Raymond WScottsdale
Brooks, Eunice AltaTempe
Brooks, BertinaPhoenix
Brooks, Edgar ConnelPhoenix Brooks, HenriettaPhoenix
Brooks, HenriettaPhoenix
Brooks, Jennie LeePhoenix
Brown, Abbie AnnaDragoon
Brown, Ruth EllenScottsdale
Buchanan, EstherFt. Huachuca
Buerkill, AugustaIllinois
Buffington, WilfordPima
Burns, RuthGilbert
Butler, Carroll W Winkelman
Butler, Carroll WWinkelman Buzan, AliceWinkelman
Duzan, Alice
Buzan, ClaraFeldman Buzan, RoseWinkelman
Buzan, Rose
Campbell, Lila EPrescott
Carr, Edna ElvinaTempe
Carter, GeorgiaKirkland
Carter, Lola MayFairview
Carter, Myrtle MeltonTempe
Carter, Naomma EdithBuckeye
Carter, Ollie MayBuckeye
Cartwright, Stella ByrdPhoenix
Casanega, Emma MaryNogales
Celaya, Ida IsabelTempe
Chambers, Geo. W. Ft. Huachuca Chitwood, Mary Jones Tempe
Chitwood, Mary JonesTempe
Choate, Lillian HazelPhoenix Churchill, Ruth ECasa Grande
Churchill, Ruth E. Casa Grande
Clark Myrtle Tempe
Clark, Myrtle
Cole, Anna DorothyTempe
Collins, RubySuperior
Collins, SabreySuperior
Collins, Sarah HPhoenix
Colmenero, ClotildeMetcalf
Conway, Joseph WWinkelman Corbell, BeulahTempe
Corbell, BeulahTempe
Craig, Sydney Crown King
Crook, Lanier DangeTempe
Curry, Hazel CeciliaTempe
Curry, mazer Cecma,rempe
Dalam Issues Issues Issues
Daley, James LeoTempe
Daley. (Mrs.) Lena BloysMesa
Daniels, Margaret MOklahoma Davidson, Alexina MPhoenix
Davidson, Alexina MPhoenix
Davis, Irma MCalifornia
Davis, (Mrs.) Mary AGlobe

Davis, PearlPhoenix	Gaut, RuthMesa
Dennis, ThelmaTempe	Getsinger, Alma FloydPhoenix
Denton, Byrtle LillianWillcox	Getzwiller, Ida BlancheBenson
Dicus, Edith MayDouglas	Getzwiller, PierreBenson
Dodge, EstherMissouri	Gibson, Elizabeth California
Dodge, (Mrs.) Mary MMissouri	Gibson, Gladys PansyTempe
Dorsey, EugenePhoenix	Gibson, LenorePhoenix
Dorsey, Nellie MaryTempe	Gibson, Rose EttaTempe
Downing, EvaPhoenix	Gililand, FernTempe
Drake, FrancesCalifornia	Gillig, Julia GenevieveIndiana
Drake, (Mrs.) Harriet. California	Godfrey, George PTempe
Drake, MargaretCalifornia	
	Godfrey, Lucetta AnnieTempe
Draper, Howard MWickenburg	Goodwin, Gordon AustinTempe
Dubs, Anna MurielDougias	Grable, Dorothy RosePhoenix
Duke, CharleySt. Johns	Grable, VictorPhoenix
	Graham, Callie MOklahoma
Earll, MaudePhoenix	Graham, Rose LeaSafford
Eckel, Grace GoldenPrescott	Green, Gertrude Phoenix
Edwards, IcisMissouri	Green, Helen JosephinePhoenix
Eidson, BernicePhoenix	Green, Macy EllenThatcher
Elliott, MyrtleSkull Valley	Gregory, VivianYuma
Ellsworth, Para LeeFish Creek	Griffen, Horace BTempe
Emmett, Belle ElizabethGlobe	Griffin, CliffordRay
Eskridge, (Mrs.) Claudia	Grijalva, RaoulPhoenix
Nebraska	Griswold, AileenNogales
	Grosetta, LillianTucson
Faras, RoseDouglas	Guthrie, Zina JeanetteMesa
Farley, Niall PatrickPrescott	·
	Haak, (Mrs.) Mary IMichigan
Farley, Rose MaryPrescott	Hageley, TheresaQuartzsite
Faulkner, Alice MaryPhoenix	Hall, BlanchePhoenix
Ferguson, (Mrs.) IvaPhoenix	Hall, (Mrs.) GussieMissouri
Finch, Jessie BelleTempe	Hanna, FranklinTempe
Finch, Robert LeslieTempe	Hanson, Grace BarbaraTempe
Finch, WalterTempe	Harman, Marie LouiseJohnson
Finnicum, Mary IrenePortal	Harris, Irene Kingman
Fitch, DeweyServoss	Haverty, Helen Bessie Garces
Fitch, Gladys IsadoreServoss	Hayden, Helen M. Scottsdale
Fitz, Irma ElizabethClifton	Hayden, Mildred EScottsdale
Fogal, AltaTempe	Hayden, Wilford EScottsdale
Folkers, FrancesTempe	Hayes, Dallas Globe
Foreman, PaulineFlorence	Hayes, IdesGlobe
Fortson, Pearl AshlinTucson	
Foster, Helen LathropNew York	Haynes, Bessie DevineTempe
Foster, JackPima	Hedges, Hazel FrancesBenson
Foster, WinniePima	Heffelman, Malcolm ClayMayer
Fox, EugeniaPhoenix	Heffelman, RalphMayer
Fram, Alfred JamesTolleson	Henry, Anna BrownNogales
France, Donald SDos Cabezos	Hilbers, Ida CatherineTempe
Franklin, KatherineWinkelman	Holder, Cecil MayKirkland
Frizzell, FlorenceTempe	Holt, Guy John San Simon
Frizzell, Stella ETempe	Holt, Irene MinnieSan Simon
Finzaen, Stella 14tempe	Hopkins, Verna EstherRay
	Horton, Vera GladysPhoenix
Gates, Harold RPalo Verde	Houck, Martha B Montgomery
Gatlin, C. FarrisOatman	Houston, Nathaniel Lyon
Gaut, Frank BruceMesa	Ft, Huachuca

Hudson, Frances MayMissouri	McClure, LouiseYuma
Hudson, Nellie BoggsMissouri	McComb, NoraGlendaie
Hutson, Eva BellePhoenix	McCormick, EthylMiami
	McCullough, JohnBisbee
Imes, Leia LenoreMesa	McGee, George AlbertTempe
Intes, Leid Lenvie	
Irvine, Lucile GertrudePhoenix	McIntyre, Clara EGila Bend
Iverson, RenaDouglas	McPherson, (Mrs.) Blanche
Ivy, Archie WilsonPhoenix	Illinois
Ivy, Edna LenaPhoenix	
Ivy, ElizabethPhoenix	Maclay, ViolaDouglas
TVy, 12:12tibetti	Maier, Lewis B. Benson
- 1 (1)	
Jackson, ChloeTempe	Maicr, LuellaMesa
Jackson, RuthPrice	Mapes, LottieBowie
Jacobson, (Mrs.) AlbertaTempe	Markovich, Garland BTexas
Jepson, Ellen AgnesMinnesota	Marley, Rowena LGilbert
Johnson, FayeWinkelman	Marshall, InezBuckeye
Johnson, Frances WPhoenix	Martin, Vera MayTempe
Johnston, Janet LaurieTempe	Maticy, Welcome Gilbert Tempe
Jones, Maurice ETempe	Matthews, Hazel Belle Phoenix
	Meeker, LillianPhoenix
Keith, Ruth JeanMorenci	Mercer, Arthur VirgilOracle
Kellogg, Pluma DColorado	Mets, Verdell DoraMesa
Kelly, Bezz JosephineMissouri	Miller, ElsiePhoenix
Kemp, Fern HermosaWillcox	,
	Miller, Glenna Celesta Globe
Kimber, Mayme	Milier, Humilton Edward Ray
Kleinman, AnnaMesa	Miller, MayMissouri
Kleinman, Ezra TMesa	Mills, MayTolleson
Kleinman, LawrenceMesa	Mineah, Ralph DarbyGlendale
Krause, (Mrs.) R. RTempe	Minter, Clarence APhoenix
	Minter, James HowardPhoenix
Lane, Montie JohnMcNeal	Misbaugh, WilliamPhoenix
Laney, Grant Mesa	Wisbaugh, WhitahFloelita
Lange, OlgaGlobe	Mitchell, Margaret ETempe
Langridge, Ina BelleHayden	Moeur, Kelly Tempe
	Moody, William C San Simon
Latimer, Helen LeoneGlendale	Moore, Vida EvelynPhoenix
Latimer, Ruth LucileGlendale	Moores, Wilma FCalifornia
Leeson, Cecil BurtonMcNeal	Morales, AuroraWillcox
Lewis, Alta APhoenix	Morrison, Lois Myrtle Glendale
Lewis, Clarice Delroy Mesa	
Lichtfield, Agnes HelenaGlobe	Moss, Lulu VirginiaTempe
Lockling, Bret Harlow Courtland	Moss, RubyPhoenix
	Motes, Alva MFt. Thomas
Lockwood, GladysPhoenix	Mulligan, LeoKingman
Lockwood, Marion EvelynNaco	Munro, Irene E Douglas
Longan, Walter LawrenceTempe	Murchison, AlephWinkeiman
Longerot, RoseCongress	,
Longley, Ruth EdnaHereford	
Looney, Robert Nelson Prescott	Nelson, LucileBuckeye
Lorona, LeonorFlorence	Nelson, MarionDouglas
Lukin, RubyTempe	Nelson, Ruth ICalifornia
	Nettle, EvelynTempe
Lundquist, HenriettaSuperior	Newcome, Harry LWinkelman
Lusa, MildredBisbee	Norton, MariettaPhoenix
Lytle, Ruth Mabel Phoenix	
	Nottbusch, AdelphCalifornia
McCarthy, Helen MaryPhoenix	Notibusch, AdolphCalifornia
McCarthy, Helen MaryPhoenix McClendon, LavonaMesa	Nottbusch, AdolphCalifornia Obert, Elizabeth
McCarthy, Helen MaryPhoenix	Notibusch, AdolphCalifornia

Ollerton, SadieTempe	Robinson, Harry PSuperior
Orduno, RachelTempe	Robinson, Tessie MarySuperior
Oviedo, RoseTempe	Robinson, William C Superior
	Rogers, Bessie ElizabethMexico
Page, Arthur RecordHayden	Rogers, Gladys FrancesMesa
Page, Grace EdnaHayden	Rohrig, Susie ATempe
Palmer, Gladys MonaMesa	Roper, Myrtle EDos Cabezos
Palmer, SadiePhoenix	Ross, Wilbur STempe
Parkman, LaRhee APalo Verde	Rudd, Frank FMissouri
Parkman, Maisy Ione. Palo Verde	Rudd, Katharine LGlendale
Parry, Paul CranstonTempe	
Parry, Susan VirginiaTempe	Sackman, MildredPhoenix
Pate, Thomas EarlHumboldt	Sanders, CarmenNaco
Patterson, DaleWhitewater	Sanders, MamieNaco
Patterson, MargueriteTempe	Saylor, Mabel EllenTempe
Pearce, EmilyMesa	Schmidt, Laura CTempe
Pederson, Mattie JTempe	Schoshusen, Lena JessieTempe
Pendergast, Clarence C. Tolleson	Schulz, Elsie GladysTempe
Pendergast, Ralph KTolleson	Shahan, Frank LafayetteTempe
Perino, Peter Scottsdale	Shannon, Marie Wickenburg
Perkins, Fannie Duntenney	Shuck, Frank Delbert Oatman
Perkins, WandaWillcox	Shumway, ZinaMesa
Pew, AnnabelMesa	Simmons, LintonTempe
Phelps, GertrudeMesa	Simon, GladysYuma
Pinyan, RuthGlobe	Smart, Ella EmmaPhoenix
Plath, Adelene JuliaPhoenix	Smith, Ira RussellTempe
Plath, Helen LouisePhoenix	Smith, Lillian CrystalRay
Pomeroy, LeotaMesa	Smith, Margaret CScottsdale
Pomeroy, MelzaMesa	Sorey, James KarlHigley
Poor, Crystal California	Speer, RubyRay
Pratt, Linwood S. Massachusetts	Spray, Joseph ArthurSuperior
Price, Mollie Phoenix	St. Charles, FlorenceKingman
Priest, Clara Tempe	Staiger, Jake ArthurRay
Pugh, Marian VincentTempe	Standage, Beulah MayMesa
Pugh, MattieWest Virginia	Standage, VivienMesa
	Stanger, Lillian MaeMorenci
Quinn, Mary KatherineTempe	Stanton, Dimple BeatriceHigley
	Steele, Harry Kirkland Tempe
Ray, Marcus PerryTempe	Steele, MaytiePhoenix
Reasonover, Cecil PaulMescal	Stewart, Jewel CarolynTempe
Redden, Charlotte ACalifornia	Stratton, ErnestineWinkelman
Redden, Irene LillianTempe	Straughan, Ora LeeKansas
Redden, Lela BelleTempe	Stroud, MaudeTempe
Reeves, Roloff WToltec	Sturges, Harry JPhoenix
Renaud, SeraphinePhoenix	Sullivan, Emmett JohnSuperior
Richardson, AnnaNew Mexico	Sullivan, LeonaSuperior
Riddle, Helen MarMexico	Sutton, RuthPhoenix
Riebeling, Helen GracePrescott	Sweeney, ChonaFlorence
Riggins, Mary EdytheMesa	
Ristow, BernicePhoenix	Tarney, Robert EWickenburg
Ristow, WilmaPhoenix	Taylor, Mattie TerrellDouglas
Robbins, GraceyMesa	Temple, CrisseyPhoenix
Robbins, Mabel Mesa	Thiel, Nella Alma Tombstone
Roberts, Helen MWinkelman	Thomas, Elizabeth HPhoenix
Roberts, William RPalo Verde	Thomas, Grace EllenScottsdale

Thomas, Roy	White, Ellen C
Vanderhoof, Perla MScottsdale Vardaman, Wilford EScottsdale Vaughn, Clara LeeDuQuesne Ward, FlorencePhoenix	Wilson, Lottie LeePatagonia Windsor, MerrillNew Mexico Wood, Sarah GraceTempe Woolf, LenaTempe Woolf, Ruth MarieTempe
Ware, Helen Elizabeth Chandler Ware, Pauline Chandler Watkins, (Mrs.) Evelyn Jones Phoenix Webb, Emma Phoenix Wells, George Randolph Mayer Wesson, Edith V. Tempe Whalley, Regina Globe	Yates, Amos

Class of 1917

Anderson, Estain

Beaton, Violet M.
Berry, Aida
Biery, Donald H.
Bishop, Frances Florine
Boldman, Mona
Bond, George A.
Boylan, Ellen Agnes
Brooks, Jennie Lee
Burns, Ruth Adams

Carr, Edna Celaya, Ida Isabelle

Daley, (Mrs.) Marion Daniels, Margaret M. Dubs, Anna Muriel

Eckel, Grace Golden Edwards, Icis L.

Faras, Rose Mary Finch, Robert Leslie Fitch, Gladys Isadore Fogal, Alta Fortson, Pearl Ashlin Frizzell, Florence

Gibson, Elizabeth Gillig, Julia Genevieve Graham, Rose Lea Green, Macy Ellen Gregory, Jean Vivian Griffin, Clifford Grosetta, Lillian B.

Haak, (Mrs.) Mary Hagely, Theresa Harman, Ruth Marie Heffelman, Malcoim Clay Hilbers, Ida Catherine Hopkins, Verna E, Houck, Martha B, Houston, Nathaniel, Jr.

Imes, Lela Lenore

Jackson, Ruth
Jones, Maurice Elsworth
Kelly, Bezz Josephine

Langridge, Ina Belle Latimer, Ruth Lucile Longan, Walter Lawrence

McClendon, Lavona McClure, Louise E. McComb, Nora Edith

Maclay, Viola Maier, Lewis B. Maier, Luella Mae Moeur, Charles Keliy Motes, Alva Maybell Munro, Irene Elizabeth

Nelson, Lucile M. Nettle, Ruth Evelyn

Obert, Elizabeth Oviedo, Rosa

Patterson, Marguerite Pederson, Mattie J. Perkins, Fannie Pomeroy, Melza Fratt, Linwood Samuel

Reeves, Roloff W. Renaud, Seraphine Richardson, Anna Roberts, Helen Marie Rogers, Gladys Rudd, Frank Fowler

Schmidt, Laura C. Schoshusen, Lena J. Shannon, Rose Marie Simmons, Linton Talbot Steele, Harry Stewart, Jewel Straughan, Ora Sutton, Lois Ruth

Taylor, Mattie Terrell Tompkins, Hazel M. Tupper, Clyde Warren Turner, Clara Florence Turner, Stella B.

Watkins, (Mrs.) Evelyn E. White, Eunice L. Windsor, Merrill C.

Zimmerman, Erma E.

Training School Enrollment

1916-1917

Alenxander, Elaine Allen, Charles Anderson, Clarence Anderson, May Anguis, Anton V. Anguis, Amelia B. Anguis, Manuela Anguis, Narcisa. Arbizno, Leonora C. Ashley, Alice M. Ashley, Homer W. Ashley, Raymond T. Austin, L. Cedric Austin, Elsie M. Ayersman, Gladys Ayersman, Harold Ayersman, Leona M. Ayersman, Paul Ayersman, Robert Ayersman, Wilbur

Baber, Virginia Baldwin, Benjamin Baldwin, Dorothy T. Baldwin, Helen E. Barbosa, Fernando Barbosa, Philip Barbosa, Lena Barbosa, Mary Bass, Clara L. Bass, Holland Beltram, Beatrice Beltram, Robert Beltram, Mary Benites, Alfredo E. Benites, Angelita S. Benites, Fernando Bliss, Florence Bloys, Beulah Boldman, Gertrude Boldman, Marguerite Bostram, Leone Bowen, Nettie E. Bowles, Mildred E. Bowles, Ruth Bowles, William N. Brechan, Freddie

Brown, August R. Brown, Eddie R. Brown, Minnie Butler, Dorothy Butler, Thelma

Carter, Clay P. Carter, Everet Casner, Jack Casner, Winona Celaya, Laura F. Celaya, Lupe Celaya, Olivia Clark, Kenneth S. Coggeshall, Henry Coggeshall, Rowland Cole, Benjamin S. Cole, Emma L. Cole, Jack S. Collier, Horace J. Contreras, Felicita Contreras. John P. Cordes, Henry E. Cordova, Margarita Crook, Alta

Doll, Susana Doll, Edward P. Doll, Leonor A. Donahoo, Ivie G. Duron, Enrique

Enriquez, Artemisa Elias, Irene M. Enriquez, Carmelita

Felton, Conway
Felton, James B.
Felton, Helen C.
Fitz Patrick, Joseph G.
Flemming, Bethane B.
Fogal, Philip
Fogal, Gilbert P.
Forbes, James

Garcia, Mary Garrison, Mary Garrison, Dora Garrison, Minnie Gibson, Helen E. Gibson, Louise Gibson, Thelma Gonzalez, Charles Gonzalez, Dora Granillo, Sophia E. Granillo, Stella Greenman, Allen Greenmood, Arthur Griffin, Ned de K.

Haak, Herbert W.
Halpin, Robert
Hand, Ada M.
Hand, Albert
Hand, Darwin C.
Hand, David B.
Hand, Osborne
Haulot, Gertrude
Harrington, Orvilla
Hight, John
Hinkle, Allan Albert

Jensen, Carl W.
Jensen, Lloyd B.
Jerigan, Agnes
Jerigan, Lucile
Jerigan, Viola
Johnston, Miriam
Jones, Carl A.
Jones, Gertrude
Jones, Mildred P.

Kellogg, Dorothy

Lara, Jose Lara, Mary

MacLennan, F. Anita J.
Mariette, Hazel E.
Matthews, Frieda
Martinez, Elisa M.
Martinez, Francisco
McDonald, Leola
Messinger, Beatrice
Messinger, Harold
Mitchell, Martha
Moss, Charles L.
Morrow, Benjamin C.
Moss, Mary H.
Murdock, Rachael

Nance, Wilfred Navarette, Lourdes Navarro, Cruz Nelson, Arthur Nettle, Virginia Nichols, Ray Noriega, Clara Noriega, Lucy A. Noriega, Angelita Noriega, Juana Noriega, Lawrence Noriega, Lionel Noriega, Roy

Ochoa, Ana Ochoa, Juanito Ochoa, Eva O'Connor, Helen

Palomino, Josefa
Palomino, Juana
Parker, Vernon
Parker, Wilton W.
Patterson, Douglas Paul
Patterson, Dwight
Prather, Howard
Price, Joe
Pugh, Claud
Pugh, Pauline
Pine, Ellis R.

Quigado, Lupa Quihuis, Frank

Randolph, Rosa R. Redden, Evelyn Reeder, Doris Reyes, Rosa Rhymer, Hazel V. Rhymer, Nellie M. Ricioli, Alden Ricioli, Guido Ricioli, James Robbins, Edgar L. Robbles, Frances Robbins, Willie D. Robles, Eva. Rodriquez, Manuel M. Rogers, Mildred Roper, Edna E. Rosa, de la Marie Rosa, de la Salvador Ruiz, Natalia Ruiz, Juan Ruiz, Rupert

Sarrategui, Nelly M. Sarrategui, Jeanette Sarrategui, Ramon M. Sarrategui, Louisa Sarrategui, Lupe M. Saylor, Maude M. Schulz, Edith L. Schweppe, Nona Sesmore, Michael Sesneros, Marguerite Sigala, Carlos Sotelo, Josephine S. Sotelo, Aurelia A. Soza, Joe Soza, Ortensa V. Soza, Susana Shahan, Cedonia Shahan, Emma Sigala, Rogelio A. Sigala, Sofia B. Smith, Cecil Sigala, Angeline A. Smith, Ida J. Sotelo, Edith G. Stewart, Arthur Stewart, Eva M. Stewart, Frank A. Stewart, George B. Stewart, Marion I.

Teeter, Helene A. Teeter, Owen Teeter, Ronald B. Teeter, Veda

Urbano, Reynaldo

Valencia, Estella V. Valencia, Martin V. Valencia, Mercedes Valencia, Vidal Valencia, Bertita Valencia, Mario G.

Valencia, Pompeyo Valence, Claritta Valenzuela, Lena Valenzuela, John Valenzuela, Steven N. Valenzuela, Laura Valenzuela, Carmelita G. Valenzuela, Artemisa Vance, Lucile Vega, Jose Vega, Urvano Vega, Ysabel Villalabos, Josepha Villalabos, Julia Villegas, Enriquis Villegas, Louise Villegas, Ramon

Watts, Irvine Booth Webb, E. Frances Webb, Margaret L. White, Irval J. Williams, Bobby Williams, Dorothy Williams, Glen Williams, Hanen Williams, Lillian Fay Williams, Reba M. Williams, Rhea F. Williams, Sara L. White, Walter D. Windes, Gertrude E. Windes, Nora Wood, Mary M. Wood, Nolen Woolf, Dorothy Woolf, Harold Workman, Mildred E.