A VOCATIONAL SCHOOL
AGRICULTURE—MECHANICS—HOUSEHOLD ARTS

CALIFORNIA

POLYTECHNIC SCHOOL

CATALOGUE 1912-13
ANNOUNCEMENTS 1913-14

SAN LUIS OBISPO
JUNE, 1913

FRIEND Wm. Richardson, SUPERINTENDENT OF STATE PRINTING
SACRAMENTO, CALIFORNIA
1913
California Polytechnic is located on the north side of the city limits of San Luis Obispo. The farm and grounds, consisting of 311 acres, include both flat and rolling lands, all typical of a large portion of the coast counties. The Santa Lucias, the dominating ridge of the section, pass some three miles to the north and east of the school.
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Bookkeeper and Cashier, Farm Accounts

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Forge and Machine Shop Practice

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Mechanical Drawing, Mathematics, Physics

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BELLE A. WILLIAMS.

Freehand Drawing and Applied Design

ALONZO BROOKS.

Farm Foreman

JAMES M. DUFFY.

Dairyman

O. H. P. MECK.

Engineer

ALBERT D. SINCLAIR.

Grounds Foreman
LOCATION AND PURPOSE.

The California Polytechnic School is a state institution established at San Luis Obispo under an act of the legislature of 1901. Instruction was first given in October, 1903. The government of the school is vested in a board of trustees, consisting of the Governor and Superintendent of Public Instruction as ex officio members, and of five persons appointed by the Governor for a term of four years each. The school is located one and one half miles north of the center of the city of San Luis Obispo, on high ground commanding a beautiful view of town and valley.

In the language of the establishing act "The purpose of the school is to furnish to young people of both sexes mental and manual training in the arts and sciences, including agriculture, mechanics, engineering, business methods, domestic economy, and such other branches as will fit the student for the non-professional walks of life." In accordance with this commission the school offers vocational training for boys and girls of high school age along three main lines, viz: Agriculture, Mechanics and Household Arts. The aim of the instruction given in the Agriculture Department is to train the practical farmer rather than the experimenter. The subject matter and the materials of such courses as those in soils, animal husbandry, dairying, plant propagation and horticulture deal with farm problems and farm practice under present California conditions. The Mechanics Department offers courses of study and training along practical mechanical lines, enabling the student to familiarize himself with common carpentry, forge work, machine shop practice, the care and operation of boilers, steam engines, gas engines, electrical machinery, and surveying. This training in fundamentals enables the student to learn readily the details of whatever mechanical line he may later enter upon in school or industrial life. The aim of the instruction in the Household Arts Department is to train young women in the care and management of the home. Cooking, sewing, household accounts, sanitation, all are affairs of everyday life. Mastery of these sciences and arts makes the home more attractive and more livable.

While pupils fifteen years of age may be admitted upon completion of the grammar school, the Polytechnic School does not
aim to duplicate the usual high school courses. Neither is the curriculum arranged primarily with a view to satisfying the entrance requirements of the university. The student who desires to enter upon a college course and who completes the necessary preparation in the usual high school will find that his Polytechnic training has been most valuable preparation for a similar course of collegiate grade.

It will be noted that essential academic branches are required in all departments. In the technical branches the theoretical and practical sides are so adjusted that each strengthens the other. The institution offers boys and girls a training in the arts and sciences which deal peculiarly with country life—the life of the home, the farm, the orchard, the dairy, and the shop. The scope and character of the various branches taught are outlined on succeeding pages.

GROUND, BUILDINGS AND EQUIPMENT.

The Farm and Grounds.

The farm and grounds consist of three hundred and eleven acres of land, the most of which is rolling and typical of a large portion of the coast counties. The farm is equipped with a complete line of modern machinery, and is stocked with registered Jersey and Holstein cattle, Percheron and Clydesdale horses, and swine of the Berkshire and Poland-China breeds, all of which are used for class study as well as for their customary purposes.

The school grounds have been laid out and planted under the direction of expert landscape gardeners, and their beauty adds materially to the pleasure of school life. The plantings include hundreds of varieties of ornamental and economic plants, which are all available for field and laboratory study in botany and horticulture.

School and Farm Buildings.

The main buildings are all two stories in height with well lighted basements. They are located on rolling ground, which slopes gently away from the buildings, insuring good drainage and sanitation, and affording a fine view of the surrounding hills and valleys. The shops are one story buildings, each 40 by 100 feet.
The Administration Building.
The administration building contains the school offices, assembly hall, library, and several class rooms and laboratories.

The Household Arts Building.
The household arts building contains sewing rooms, kitchen, dining-room, pantries, applied design workroom, laundry, botany laboratory and herbarium, class rooms and instructors’ offices.

Boys' Dormitory.
The dormitory is a new and modern building, providing rooms for a limited number of students and faculty members. A large sitting room with fireplace, steam heat, electric lights and baths are features of the building.

Dining Hall.
A new building, with large kitchen and pantries in addition, conveniently located, serves as a central dining hall for faculty and student residents at the school.

The Creamery.
The creamery occupies a commodious building, supplied with a hot water and steam system, electric power, pasteurizer, cream ripener, churns and separators of various standard makes, cheese-making apparatus, a refrigerating plant of six-ton capacity; in fact, a complete and varied equipment, which not only provides for the manufacturing and handling of dairy products, but also affords an opportunity for comparative study of dairy apparatus. The creamery is in daily operation.

The Carpenter Shop.
The carpenter shop contains benches and tools for a class of thirty men. A planer, band saw, swinging cut-off saw, power rip saw, and turning lathes are included in the equipment.

The Forge Shop.
The forge shop contains sixteen double down-draft forges of the latest pattern, accommodating a class of thirty-two men.

The Machine Shop.
The machine shop is equipped with eight iron lathes, polishing lathe, universal milling machine, heavy planer, drill presses, shapers, power emery wheels, cut-off saw, and a variety of high grade finishing tools and measuring devices. All ma-
chinery of the various shops is motor driven, electric power being supplied from a complete plant owned by the school. The equipment of the shops, complete in every detail, is equaled by very few secondary schools in the country.

The Power House.

The power house is a commodious one story building containing the electrical and mechanical laboratories, and the power plant which furnishes power, heat and light for the school.

The Electrical Laboratory.

The electrical laboratory is equipped with a 106 horsepower Sterling water tube boiler with auxiliary apparatus; a 50 kilowatt three phase generator, direct connected to an 80 horsepower Ball engine; a 37 1/2 kilowatt three phase generator, belted to 60 horsepower Skinner engine; a switch board composed of two generator panels, one Terrill voltage regulator panel, two distribution panels and one plug panel, the latter giving a possible combination of over 800 connections for testing and experimental work. In addition to the above there is a large and varied equipment of alternating current and direct current motors and generators, meters and other auxiliary apparatus for the study of the operation and construction of electrical machinery.

The Mechanical Laboratory.

The mechanical laboratory is equipped with four gas and gasoline engines, one crude oil engine and an assortment of power pumps of high and low pressure which, with the power machinery of the electrical laboratory, affords a means of studying the construction, installation and operation of power plants and pumping machinery.

The Foundry.

The foundry will be equipped with a cupola furnace for melting cast iron and brass, and with the flasks, molding-tools, and accessories necessary for instructing a class of twenty students.

The Other Buildings.

The other buildings are a dairy barn and silo, a plant propagation house, greenhouses, and lath houses, an incubator cellar, poultry houses, swine houses, a pumping house, tool sheds, hay barns and cottage for employees.
Laboratories.
The laboratories are well equipped with instruments and apparatus for work in general and agricultural chemistry, physics (including photometry and X-ray apparatus), freehand and mechanical drawing, electricity, land surveying and irrigation, physical geography, botany and plant propagation, crops, horticulture, dairy and creamery, sewing, cooking and applied design.

The School Library.
The library now contains about two thousand volumes, and this number is being steadily increased. In addition to a good collection of standard English works, there are included standard present-day works on agriculture, horticulture, animal husbandry, the household arts, electricity, and various mechanical lines. Besides the general reference works the reading room is supplied with many technical and popular magazines, daily papers, and a file of government and state agricultural publications. These are accessible at all times to students.

COURSES OF STUDY.
Three principal lines of instruction are undertaken by the school, viz: Agriculture, Mechanics, and Household Arts. In all of these lines the time given to instruction is about equally divided between recitations and lectures in the class room and practical work in the shop, field, and laboratory. The courses of study are of two general kinds: the regular courses of four years' length, and such short courses as may be outlined and announced from time to time.

REGULAR COURSES.
A student registering for a stated course of study is expected to continue the same course throughout the year. Those completing the regular courses are granted diplomas of graduation, stating the kind of instruction and training received.
To the present time the regular courses have been three years in length. The following four year outline is now presented for the first time. The development of the school may bring some changes and improvements, especially in the third and fourth years of the courses. Therefore the following outline is issued subject to such minor modifications as the experi-
ence of the next few years may suggest. The number of periods of instruction in the third and fourth year studies have not yet been definitely fixed, but their aggregate will be about the same as in the first and second years.

In the following outline the titles of studies are given, together with the time per week required for each. A fuller description of the studies appears on succeeding pages.

Each school day is divided into nine 45-minute periods. The first number after a subject denotes the periods per week devoted to class room instruction; the second number, the periods used in field, shop or laboratory. The school year is divided into three terms. The first, second and third terms are indicated by \( a \), \( b \), and \( c \), respectively. When the number of periods is the same for the three terms the term letters are omitted. One period in class room or two periods in field, shop or laboratory, carried with passing grades throughout the year, constitutes a unit of credit.

### AGRICULTURE.

#### First Year.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Periods per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics I</td>
<td>5–0</td>
</tr>
<tr>
<td>Physical Geography</td>
<td>3–0</td>
</tr>
<tr>
<td>Mechanical Drawing I</td>
<td>0–5</td>
</tr>
<tr>
<td>Animal Husbandry I</td>
<td>0–2</td>
</tr>
<tr>
<td>Farm Practice</td>
<td>0–4</td>
</tr>
<tr>
<td>English I</td>
<td>5–0</td>
</tr>
<tr>
<td>Freehand Drawing I</td>
<td>0–5</td>
</tr>
<tr>
<td>Farm Carpentry</td>
<td>0–4</td>
</tr>
<tr>
<td>Plant Propagation</td>
<td>2–4</td>
</tr>
<tr>
<td>Physical Training I</td>
<td>0–2</td>
</tr>
</tbody>
</table>

#### Second Year.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Periods per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics II</td>
<td>5–0</td>
</tr>
<tr>
<td>Chemistry I</td>
<td>3–4</td>
</tr>
<tr>
<td>Animal Husbandry II</td>
<td>2–2</td>
</tr>
<tr>
<td>Dairy I, ( a, b )</td>
<td>2–4</td>
</tr>
<tr>
<td>Zoology c</td>
<td>2–4</td>
</tr>
<tr>
<td>English II</td>
<td>5–0</td>
</tr>
<tr>
<td>Botany I</td>
<td>2–4</td>
</tr>
<tr>
<td>Farm Mechanics</td>
<td>0–4</td>
</tr>
<tr>
<td>Physical Training I</td>
<td>0–2</td>
</tr>
</tbody>
</table>

#### Third Year.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Periods per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group electives: Animal Industry group; Animal Husbandry III, Dairy II, Animal Physiology; Plant Industry group; Farm Motors, Gardening.</td>
<td></td>
</tr>
<tr>
<td>General Electives: Two to three units.</td>
<td></td>
</tr>
</tbody>
</table>

#### Fourth Year.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Periods per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Studies: Surveying and Irrigation, Agronomy II and III, United States History and Civics.</td>
<td></td>
</tr>
<tr>
<td>Group Electives: Animal Industry group; Animal Husbandry IV, V, and VI, Dairy III; Plant Industry group; Soil Physics, Economic Entomology, Horticulture II.</td>
<td></td>
</tr>
<tr>
<td>General Electives: Five to seven units.</td>
<td></td>
</tr>
</tbody>
</table>

General Electives may be chosen from the following: English III, General History, Agricultural Chemistry II, Dairy Chemistry, Animal Husbandry VII. An elective may be selected from the studies of the Mechanics course with the approval of the heads of departments.
## MECHANICS.

### First Year.
- Mathematics I: 5–0
- Physical Geography: 3–0
- Mechanical Drawing I: 0–5
- Forge I: 1–4

### Second Year.
- Mathematics II: 5–0
- Physics I: 5–2
- Mechanical Drawing II: 0–5
- Forge II: 0–4
- Foundry I: 1–4

### Third Year.
- Mathematics III.
- Chemistry I.
- Mechanical Drawing III.
- Strength of Materials.

### Fourth Year.
- Surveying.
- Hydraulic and Pumping Machinery.
- Patternmaking III.
- Machine Shop III.

## HOUSEHOLD ARTS.

### First Year.
- Mathematics I: 5–0
- General Science: 3–2
- Physiology: 9–2

### Second Year.
- Mathematics II: 5–0
- Chemistry I: 3–4
- Sewing II: 0–4
- Drawing II a, b: 0–6

### Third Year.
- General History.
- Physics I.
- Applied Design I.

### Fourth Year.
- United States History and Civics.
- Botany I.

**Electives, 10 to 12 units.**

*Studies from which Electives may be selected: Sewing III, Dairying I, Mathematics III, Woodwork, Mechanical Drawing I, Plant Propagation, English IV, Horticulture I, Agronomy I, Domestic Chemistry.*
THREE YEAR COURSES OF STUDY.

The following outline of studies will be in effect for the next two years and will be pursued by those students who have completed one or more years of the three year courses, or who enter during the year 1913-14 with one or more years' advance standing.

AGRICULTURE.

Second Year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics II</td>
<td>5-0</td>
</tr>
<tr>
<td>Chemistry I</td>
<td>3-4</td>
</tr>
<tr>
<td>Animal Husbandry I and II</td>
<td>2-4</td>
</tr>
<tr>
<td>English II</td>
<td>5-0</td>
</tr>
<tr>
<td>Dairy I</td>
<td>3-4</td>
</tr>
<tr>
<td>Agricultural Botany</td>
<td>3-4</td>
</tr>
<tr>
<td>Physical Training</td>
<td>0-2</td>
</tr>
</tbody>
</table>

Third Year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics III</td>
<td>5-0</td>
</tr>
<tr>
<td>Agronomy</td>
<td>1-4</td>
</tr>
<tr>
<td>Horticulture</td>
<td>2-4</td>
</tr>
<tr>
<td>Animal Husbandry IV and V</td>
<td>3-0</td>
</tr>
<tr>
<td>Agronomy</td>
<td>5-0</td>
</tr>
<tr>
<td>Physical Training</td>
<td>0-2</td>
</tr>
<tr>
<td>Elective, 2 units.</td>
<td></td>
</tr>
</tbody>
</table>

MECHANICS.

Second Year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics II</td>
<td>5-0</td>
</tr>
<tr>
<td>English II</td>
<td>5-0</td>
</tr>
<tr>
<td>Foundry a, b</td>
<td>0-4</td>
</tr>
<tr>
<td>Chemistry I</td>
<td>3-4</td>
</tr>
<tr>
<td>Machine Shop I</td>
<td>0-4</td>
</tr>
<tr>
<td>Mechanical Drawing II</td>
<td>0-5</td>
</tr>
<tr>
<td>Forge II c</td>
<td>0-4</td>
</tr>
<tr>
<td>Physics I</td>
<td>3-2</td>
</tr>
<tr>
<td>Carpentry II</td>
<td>0-4</td>
</tr>
<tr>
<td>Physical Training</td>
<td>0-2</td>
</tr>
</tbody>
</table>

Third Year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics III</td>
<td>5-0</td>
</tr>
<tr>
<td>Surveying</td>
<td>0-4</td>
</tr>
<tr>
<td>Machine Shop II</td>
<td>0-8</td>
</tr>
<tr>
<td>United States History and Civics</td>
<td>5-0</td>
</tr>
<tr>
<td>Physics II</td>
<td>2-4</td>
</tr>
<tr>
<td>Steam and Electrical Machinery</td>
<td>3-4</td>
</tr>
</tbody>
</table>

HOUSEHOLD ARTS.

Second Year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English II</td>
<td>5-0</td>
</tr>
<tr>
<td>Domestic Science I</td>
<td>3-7</td>
</tr>
<tr>
<td>Sewing II a, b</td>
<td>0-5</td>
</tr>
<tr>
<td>Applied Design I</td>
<td>0-4</td>
</tr>
<tr>
<td>Mathematics II</td>
<td>5-0</td>
</tr>
<tr>
<td>Chemistry I</td>
<td>3-4</td>
</tr>
<tr>
<td>General History</td>
<td>2-0</td>
</tr>
<tr>
<td>Home Gardening c</td>
<td>0-4</td>
</tr>
<tr>
<td>Physical Training</td>
<td>0-2</td>
</tr>
</tbody>
</table>

Third Year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English III</td>
<td>5-0</td>
</tr>
<tr>
<td>Botany</td>
<td>2-4</td>
</tr>
<tr>
<td>Applied Design II a b</td>
<td>0-6</td>
</tr>
<tr>
<td>United States History and Civics</td>
<td>5-0</td>
</tr>
<tr>
<td>Domestic Science II</td>
<td>3-7</td>
</tr>
<tr>
<td>Sewing III c</td>
<td>0-6</td>
</tr>
<tr>
<td>Physical Training</td>
<td>0-2</td>
</tr>
</tbody>
</table>

Elective, 5 units.
SHORT COURSES.

In past years a limited number of short courses in Agriculture and Household Arts subjects have been given and the plan of instruction contemplates a repetition of such courses from time to time. All short courses are announced by special circulars. Personal letter will be sent at any time in response to inquiry.

ONE YEAR COURSE IN DAIRY HUSBANDRY.

This course is designed for those who desire to specialize in dairy farming and creamery operation, and who can not take the regular four year course. An applicant must be at least eighteen years of age and should have preparation equivalent to completion of the eighth grade of the grammar school. The calendar of the course is the same as that for the regular course and is found on page 32.

Instruction will be given in farm dairying, creamery operation and management, dairy and creamery machinery, live stock judging, breeds of live stock, live stock management, elementary veterinary science, forage crops and soil fertility. In addition to the laboratory work required in the above courses, each student will spend one day each week in practical work in the creamery. If sufficient preparation is shown the student may elect in addition to the above a limited amount of work in the regular agriculture or mechanics course. When the year's work is satisfactorily completed the student will receive a certificate stating the course of study and training pursued.

The school receives frequent inquiry for practical men who have received special training in dairy husbandry. The fees and expenses are the same as for students in the regular courses. See page 25. Inquiry regarding this or other short courses will be cheerfully answered by personal letter.
STUDIES COMMON TO ALL COURSES.

Each regular student is required from the time of his registration to carry at least one course in English or history until these subjects have been completed as outlined in his course of study.

English I and II. English composition, rhetoric, and literature, equivalent to the first two years of high school English. The subject is taught with especial reference to the needs of polytechnic students.

U. S. History and Civics. A year course in the history and government of the United States, taught with the special object of developing in the student the responsibilities of citizenship.

Mathematics I. A year in elementary algebra, with a review of arithmetic.

Mathematics II. A year in plane geometry.

Mathematics III. Two terms of plane trigonometry and one term of advanced algebra, Agriculture and Mechanics courses.

The mathematics classes are taught with especial reference to the needs of the courses.

Chemistry I. Prerequisite, Mathematics I. A course in general inorganic chemistry, including elementary chemical theory and calculation. A study of the common elements and their compounds, with emphasis upon the economic importance of each. Special attention is given to the chemistry of the home, the farm, and the shop, class room and laboratory instruction.

Physical Geography. A study of the physical features of the land, its changes, and the effects upon soil conditions; climatic conditions, and their relation to plant growth; how to read and interpret maps. Instruction by recitation, laboratory, and field observations, Agriculture and Mechanics courses.

Physics I. Prerequisite, Mathematics I. The course includes class room and laboratory instruction in the mechanics of solids, liquids and gases, simple measurements, and the fundamental laws of heat, light, sound, invisible radiations and electricity. Special attention is given to the preparation of the students of the various departments that they may be fitted for the studies coming later in their courses. The laboratory is fully equipped with up-to-date apparatus.

Surveying and Irrigation. Prerequisites, Mathematics II, Mechanical Drawing I. Studied in conjunction with Mathematics III. Instruction is divided between field work and the drafting room. Students learn the use of the instruments, the laying out of foundations, running ditches to grade, setting cross-section stakes, with the calculation of the earth to be removed, field surveying, including the transfer of field notes to neat form in the drafting room. Special attention is given to the design and construction of irriga-
tion ditches, dams and flumes. The large school farm offers an excellent field for practical work. This is supplemented in the spring term by a week of camp life devoted entirely to solving such field problems in land surveying and laying out irrigation systems as cannot be worked out in the half-day periods of the regular school sessions. The equipment includes high-grade transits, levels, clinometers, barometers, chains, tapes and other apparatus sufficient for a class of twenty-five. Required in Agriculture and Mechanics courses.

**Freehand Drawing I.** Work in pencil, charcoal, water color, and ink; study of form and proportion in pencil drawings of geometric solids, still life and plant forms; light and shade in pencil and charcoal; study of the principles of perspective. Mechanic students give special attention to perspective sketching from machine models, interiors and exteriors of buildings, freehand lettering and poster design. Agricultural students devote much time to perspective sketching from furniture and buildings; to study of plant forms in pencil and color; and to freehand lettering. Household art students devote much time to general drawing in pencil and charcoal; study of color and color schemes; the use of color in drawing of plant forms, sketches of interiors, and elementary design; freehand lettering.

**Mechanical Drawing I.** General instruction in the use of instruments; plates in freehand and mechanical lettering; solution of problems in geometrical construction and orthographic projection; and preparation of working drawings. A text-book will be used and occasional examinations given; Agriculture and Mechanics courses.

**Physical Training I and II.** Required of all first and second year students. No one is excused without a certificate of disability from a physician or the recommendation of the instructor. A physical examination is given at the beginning of the course which aids the instructor in assigning work for the proper development of the body and the preservation of health. There are separate departments of instruction for boys and girls. Each student is required to procure the regulation gymnasium costume. The course consists of instruction in marching, calisthenics, light gymnastics, folk dances and wholesome games. Training in regular school athletics under the direction of a faculty member may be taken as a part of the second year work.

**AGRICULTURE.**

**Agronomy I.** Soils and Fertilizers. Prerequisite, *Chemistry I.* A study of the chemistry, physics and biology of the soil. It includes a study of the common minerals and mineral elements and their relations to soils and plant food; the effect of heat, moisture, cultivation and cropping on the relation of the soil to the plant; bacteria in their relations to the plant food of the soil; alkali, irrigation, drainage and crop rotation; the sources and use
of commercial fertilizers and the effects of their application to soils and crops. Class room, field and laboratory.

**Agronomy II and III.** Farm practice. Prerequisites, *Agriculture I, Chemistry I, and Botany.* First term: farm crops. A study of the principal field crops of California, their characteristics, values, preparation of the soil, cultivation, fertilization, harvesting and marketing. Second term: farm accounts. A practical study of the best methods of recording the transactions of the farm so that the farmer can tell whether any crop or herd of stock is producing at a profit or loss. Without an accurate set of accounts no farmer can tell how his business is prospering. Third term: rural economics and form management. A general study of the economics of the farm. The course considers the market, transportation—including good roads—rural communication, co-operation, organization, and other topics of vital importance. It considers the social life of the farm home, the rural school, modern farm conveniences, the relation of the boy and girl to the farm, and the home and schoolhouses as social centers. Library research work and the preparation and reading of papers on live economic topics are required.

**Soil Physics.** Prerequisites, *Chemistry I, Agronomy I.* A field and laboratory course consisting of studies in soil sampling and mechanical analysis; comparison of soil types by such physical properties as specific gravity, water retention, capillarity, color and organic content; the physical effects of mulches, rotation and cropping; soil judging.

**Plant Propagation.** A course in elementary plant propagation, teaching the student how to grow ordinary plants by seeds, cuttings, bulbs, budding and grafting, with practical work in the laboratories, garden, greenhouse and field.

**Agricultural Botany.** A general course in practical botany, with instruction in class, laboratory and field. First term: seed germination, seed testing, and a study of roots, stems, leaves, flowers and fruit. Second term: a study of type plants with the compound microscope, tracing the development of algae, fungi, bacteria, mosses, ferns and seed plants. Third term: a field study of weeds, grasses, wild plants, plant breeding, plant societies and economic botany. The extensive flora of the school gardens and grounds offers a very interesting and profitable field for botanical study.

**Gardening.** Prerequisite, *Plant propagation.* In this course a study is made of vegetable soils and their tillage, crop successions and rotations, irrigation, application of manures and commercial fertilizers, seeds and seed growing, construction and operation of hot beds and cold frames, and other problems connected with the handling of a vegetable garden.

**Horticulture I.** Prerequisites, *Agriculture I, Botany.* A year's course including instruction by recitations, lectures and laboratory work, supplemented extensively by practical work in the orchard.
Especial attention is given to California fruits, their history, varieties, insect and plant diseases, care and commercial importance. The orchard work emphasizes such important phases of the fruit industry as laying out, planting, cultivating, irrigating, pruning, budding, grafting, and spraying.

**Horticulture II.** A continuation of the work outlined under Horticulture I, designed for students who wish to make a special study of California fruits. The best practices of commercial horticulture are taught in the orchard and laboratory.

**Agricultural Chemistry I.** Prerequisites, *Chemistry I, Agriculture I.* A study of the relation of the science of chemistry to modern agriculture. It includes the chemistry of plant and animal life, together with the analysis of soils, fertilizers, cattle foods, dairy products, irrigation waters, and other substances of interest to the farmer.

**Agricultural Chemistry II.** Elective. A continuation of agricultural analysis, as outlined under Agricultural Chemistry I, intended for those who wish to do special work in this line.

**Dairy Chemistry.** Elective. Prerequisites, *Chemistry I, Dairy I and II.* A study of the chemistry of milk, butter, cheese, and other dairy products, including their chemical analysis. This course is intended especially for those who wish to follow commercial creamery work.

**Zoology.** An elementary consideration of the various orders of animal life designed to prepare the student for the courses in animal industry that are to follow. Instruction by recitation and laboratory.

**Economic Entomology.** A study of both the beneficial and harmful insects of the farm and orchard; with special instructions in the preparation and application of sprays and other remedies for insectful insects of the farm and orchard; with special instruction in the orchards and fields.

**Animal Husbandry I.** Live stock judging. Especial attention is given to the market types of the various classes of farm animals. Actual practice is given, beginning with score card work and leading to comparative judging. The herds of animals owned by the school, and other available herds, are used.

**Animal Husbandry II.** Study of breeds. In this course the judging work is continued and is supplemented by lectures and textbook. The history and development of the different breeds are thoroughly gone over and especial attention is paid to the adaptability of each breed to various conditions.

**Animal Husbandry III.** Live stock management. Prerequisites, *Animal Husbandry I and II.* A study of the most successful methods of handling live stock under various conditions, both for breeding and for market purposes.
Animal Husbandry IV. Principles of breeding. A study of the principles of heredity with their application to the breeding of farm animals, followed by a study of the methods of the most successful stock breeders.

Animal Husbandry V. Live stock feeding. Prerequisites, Animal Husbandry I and II, Chemistry I. The principles of animal nutrition; a study of the various feed stuffs, the compounding of rations, and the economics of feeding.

Animal Husbandry VI. Advanced live stock judging. Prerequisites, Animal Husbandry I and II. This course is intended to give advanced work in judging for students who are especially interested in Animal Husbandry. Particular attention is paid to the breed types.

Animal Husbandry VII. Feeding experiments. Elective for advanced students in animal husbandry. Students plan and conduct feeding trials comparing the economy of different food stuffs for the production of pork or dairy products. This course is designed to give students a practical first-hand knowledge of feeding operations.

Animal Physiology. Prerequisites, Animal Husbandry I and II. A course in elementary physiology with especial reference to the common diseases of domestic animals.

Dairy I. Farm Dairying. A study of the fundamentals of dairying. Covers briefly the whole field of the dairy industry. Class work includes breeds of, and feeds for dairy cattle, sanitary and economical milk production, manufacturing and marketing of products, cow testing associations. Laboratory work includes farm separators, the testing of cream and milk for butter fat and for adulterations.

Dairy II. Butter making and cheese making. The manufacture of dairy products is studied in detail. Laboratory work includes, beside a great deal of practical work in the school creamery, starter making, pasteurizing, and churning, and the regular creamery tests for acidity, moisture, and salt. This course is made as thorough and practical as possible.

Dairy III. Advanced Dairying. The creamery and cheese factory by-products are studied, also ice cream making and fancy cheese making. Experimental laboratory work is carried on.

Farm Practice. Each first year student in Agriculture will be required to spend the equivalent of one half day per week in some kind of actual farm work, the nature of which will depend largely on the previous experience of the individual. The object of the work is to familiarize the student with the better modern methods of farm practice.
Farm Carpentry. The course includes the care and use of tools, with bench and machine work. Practice work is given in the joints commonly used in carpentry and joinery. Small individual projects may be executed.

Farm Mechanics. This course is intended to instruct the student in the repair work of the farm. It includes setting up, repairing, and caring for farm machinery and instruction in forge work.

Farm Motors and Power Machinery. Studied in conjunction with Physics I. A course of instruction in the construction, operation and repair of steam and gasoline engines, electric motors and generators, pumping machinery, and in the measurement of water for irrigation.

**MECHANICS.**

**Carpentry I.** A practical course in bench and machine work. Models of the joints commonly used in carpentry and joinery are made, followed by practical work both in and out of the shop. This course includes instruction in the grinding and sharpening of tools, saw filing and work with the steel square as applied to roof framing.

**Forge I.** This course gives practical work in both iron and steel, and includes drawing, upsetting, welding, drilling, tempering, and repair work. During the third term pieces may be made from original designs by the more advanced students.

**Forge II.** A course in practical toolmaking, including, for the more advanced students, the making and repairing of machine tools.

**Carpentry II and Pattern Making I.** This course includes advanced work in cabinet making; the framing and construction of buildings; particular attention being paid to the construction of models according to blue-print drawings. Elementary pattern making, including lathe work and core box making, is a part of the course. Students may be allowed to make a limited number of pieces of furniture for themselves.

**Mechanical Drawing II.** Oblique, orthographic and axonometric projection; development of patterns for tinsmith work; elementary architectural drawing with special attention paid to the development of envelopes for cornice work. More advanced work will be assigned to students desiring to specialize in this class of drawing.

**Mechanical Drawing III.** Working drawings of machine parts; the design of gas and steam engines; reinforced concrete design; tracings and blue printing. The work of this course is carried on in conjunction with “Strength of Materials” and “Mechanics and Heat Engines.”

**Strength of Materials.** Principles of stress, tension and shear, as applied in beam and building design; strength and physical properties of building materials, including timber, stone and metals. The design of beams, columns, riveted joints; reinforced concrete, and the more common problems in design, such as line shaftings.
Pattern Making II. A continuation of Pattern Making I with special attention paid to the construction of the more complex patterns of castings designed in Mechanical Drawing III.

Foundry. This course includes molding and casting in white metal, iron, bronze and brass from patterns made in Pattern Making I and from broken machine parts. Core making is also included.

Machine Work I. The course includes general instruction in the care and handling of machines, the cutting speed for various materials, the use of measuring instruments and general machine tools. Much time is given to exercise work at the lathe, shaper, drill press, and grinding machine. By prearrangement original work may be undertaken after the middle of the year.

Machine Work II. Instruction is given in gear cutting, planer work, machine and engine building, the construction of models and in general repair work. Special pieces of work are assigned to students, depending on their choice and skill.

Pattern Making III and Machine Shop III. In this course the student is to design and construct some piece of machinery, such as a gasoline engine or a wood lathe, for himself or for the school. The aim of the course is to develop confidence in the ability of the student to apply the knowledge obtained in the earlier courses. The work of designing, drafting, making the patterns and castings and finishing the machine are all left to the ingenuity of the student.

Mechanics and Heat Engines. A laboratory analysis of two cycle and four cycle gas and gasoline engines, crude oil engines and steam engines, with tests of their efficiency and a study of their construction and operation. A study of valve setting, horsepower measurement, the care and operation of steam boilers and other of the more common mechanical problems. The application of mathematics in calculating and determining the stresses and necessary sizes of machine parts.

Hydraulics and Pumping Machinery. This course consists of a study of the flow of water in pipes, ditches, flumes, and canals; the measurement of water, using the miner's inch, and the weir; the testing, operation and construction of power pumps, centrifugal pumps, and water motors. The work of the class room is carried on in conjunction with that of the laboratory.

Electrical Machinery. The theory, construction, operation and repair of alternating and direct current motors, generators, arc lights, voltage regulators, alternating current rectifiers, converters, power transmission lines, telephones, and telegraph systems. The laboratory work is of a very practical nature, dealing with the important points brought out in the class room study. Practical instruction in house wiring, line work and the operation of the school's power plant, which is located in the same building as the laboratory, is given to all students in the course.
**Engine Room Chemistry.** Prerequisite, *Chemistry I.* A laboratory course in elementary chemical analysis designed especially for mechanics students. It includes the chemistry and analysis of feed waters, boiler scales and incrustations, flue gases, fuels and oils; the fuel value of coal and oil; the viscosity and lubricating value of oils, and the solving of other of the simpler chemical problems of the engineer.

**HOUSEHOLD ARTS.**

**General Science.** An introduction to the fundamental facts in science with special reference to their relation to the home and the community.

**Domestic Science I.** Studied in conjunction with Chemistry I. The course includes a complete study of the carbohydrate foods—their source, chemical composition, cookery, digestion, and economic value. This is followed by similar consideration of the fats and proteids. In the laboratory, ranges, fuel and cleansing agents are studied and the student prepares the various foods studied in the lecture room.

**Domestic Science II.** Dietetics and Nutrition. Prerequisite, *Chemistry I.* A review of the physiology of digestion; a study of dietaries for adults, children, and the family, with special reference to cost. Diet in disease. Home nursing and emergencies. The planning and serving of meals; the preservation of fruits and other foods; making of bread, pastry, cake, and desserts. Invalid cookery.

**Domestic Science III.** Home Economics and Sanitation. This course includes a study of the sanitary construction of houses; sanitary, economical, and artistic house furnishing; systematic house keeping, buying, and keeping accounts; water supply; disposal of waste; heating, lighting and ventilation. During the spring term a course in laundering is given; methods of cleansing and agents used, hard and soft water; soap and detergents. Laundry practice includes dry cleaning and the washing of laces and embroideries.

**Sewing I.** Plain sewing. A laboratory course in the fundamental principles of hand and machine sewing, including the making of undergarments and simple dresses. A study of dress lines with the use of commercial patterns. Instruction in repairing worn or torn woolen garments, patching cotton garments, mending stockings and kid gloves. Each student is required to make one set of undergarments and two simple dresses. Textiles. A study of the beginnings of textile and allied industries; weaving and spinning; rugs and baskets; cotton, flax, silk and wool fiber. The student is instructed in judging the various commercial fabrics as to adulteration and durability. Estimates of expense of finished garments are required in all sewing courses.

**Sewing II.** Dressmaking and Millinery. A laboratory course including the making of more elaborate skirts and waists than is
required in the first course; the making of bed and table linen; the making and trimming of hats. Art needle work is planned and begun at school and finished in the home. Textiles are reviewed and a study made of the inventions for their manufacture. Each student is required to make a tailored shirt waist, a lingerie waist, a wool or silk dress and her fall and spring hats.

**Sewing III.** Elective. This course includes necessary garments for personal wardrobe; art needle work, including marking linen. An original letter or monogram is embroidered on a napkin, tablecloth or handkerchief.

**Sewing IV.** Advanced dressmaking. Each student is required to make one gown independent of the instructor's help—a graduating dress with the necessary undergarments. This dress is to be simple and made of wash material and must be finished at least one week before the close of the term. Textiles, a study of their relation to sweat shops, child labor and the Consumers' League. Woman's responsibility as a consumer.

**English III.** A course in composition and literature. The history of American literature.

**Home Gardening.** A study of plant propagation, soil cultivation, and the use of fertilizers applied to the growth of flowers and vegetables in the home garden.

**Botany.** A general course in elementary botany, including instruction on the structure, development and form of plants. The laboratory and field work includes type studies of plant groups and a collection of herbarium specimens.

**Freehand Drawing II.** Advanced instruction in charcoal and crayon drawings from still life, flowers and landscape; lettering, pen sketching and design.

**Applied Design I.** A study of color and design applied to work in cardboard, raffia, reed, embroidery, stenciling, and block printing.

**Applied Design II.** The application of design to work in embroidery, stenciling, leather, metal and jewelry; and a study of color schemes for interior decoration.

**Applied Design III.** Elective. Advanced work in leather tooling, metal and jewelry.

**Physiology and Hygiene.** A study of the human body with special reference to the laws of health.

**General History.** A class room and library course in the principal periods of the history of the world.
ADMISSION AND CLASSIFICATION OF STUDENTS.

The school is open to any boy or girl upon the conditions stated below.

Applicants must give satisfactory evidence of good moral character and good behavior.

Applicants who are at least fifteen years of age at the time of registration will be admitted without examination upon presenting a diploma of graduation from any grammar school (eighth grade) of the State. The application for admission should be accompanied by the grammar school certificate. If not possible to send the certificate at the same time it should be sent before September 5, 1913. The certificate will be returned to the applicant after the opening of school.

Applicants seventeen years of age or over who do not hold a grammar school certificate, but who submit a recommendation from their last teacher or their superintendent of schools, will be admitted upon satisfactorily passing examinations in English composition, arithmetic, United States history and geography. The subject-matter of the examinations will cover the leading facts of the grammar school course. Students applying to be admitted upon examination must send their recommendations with their application for admission. The examinations for 1913 will be held in the school buildings on Tuesday, September 9th, at nine a.m.

All applications for admission to the school must be made on the regular form as found in this circular and should be sent to the California Polytechnic School, San Luis Obispo, California, not later than September 5, 1913.

No one should apply for admission expecting to find the work easier than that of a high school. In general the courses are very different from those of the ordinary high schools, and while the work is extremely interesting to the earnest student it is also exacting and requires a liberal amount of time. One who is looking for an easy course of study and plenty of leisure will never succeed at the Polytechnic.

School is held five days a week—from Monday to Friday, inclusive. When found necessary, Saturday is used for shop, laboratory or field work. The hours for recitation, shop, field, and laboratory work are from 8:15 to 12 and 1 to 4.
Admission of Former Students.

Former students not in attendance at the school in June, 1913, will be required to make written application for readmission during the school year 1913-14. Such application should reach the office not later than September 5, 1913.

Registration and Schedule.

Registration days are September 9, 1913, January 5, 1914, and April 6, 1914. A fee of $2.00 is charged for late registration. Each student is assigned to a faculty member, who will act as his adviser in all matters pertaining to his course of study. Full directions as to the methods of making out daily schedules are given to the students on registration days. The schedule of each student must be approved by the proper faculty members.

The act of registering signifies acceptance of the regulations of the institution and the intention to abide by the same.

High School Credits.

Since the institution is of like grade to the high schools, it follows that the academic work is of a somewhat similar nature to that of the high school. A graduate of a high school will, therefore, be given credit for all studies that correspond to those of the course elected in the Polytechnic. A limited number of units credit for academic work in the high school will be allowed as substitute for an elective in the courses where electives are offered. Students who have not graduated from high school but who have been in attendance therein for one or more years may be given credit for academic work for which credentials are presented. Applicants for advanced standing should present with their application for admission a certificate of all studies completed, showing the grades and the time devoted to each study.

Regular Students.

A regular student is one who is admitted to full standing upon presentation of a diploma of graduation from a grammar school or upon passing an equivalent entrance examination and who takes one of the full courses of study as heretofore outlined. All students are advised to register as regular. The essential qualifications are easily obtained by all, and the student will receive much more benefit from attendance upon the school if he or she follows the regular course of study, which has been carefully planned by the faculty.
Special Students.

Entrants are not in any way encouraged to apply for admission as special students. However, those of mature age who are well prepared and who give evidence of their sincere desire to specialize along some particular line may be admitted as special students upon the following conditions:

They must fulfill all the requirements of admission for regular students and give additional satisfactory evidence of their ability to carry on the special work elected.

They must carry satisfactorily at least twenty-five units of school work.

Exception: Persons regularly occupied in or near San Luis Obispo, and who are qualified as above outlined, may be allowed to register with less than twenty-five units of work on approval of the Head of the Department.

GENERAL INFORMATION.

Expenses.

No tuition fees are charged. Exception: students who are not citizens of the United States are charged a fee of $20.00 per term, or $60.00 for the school year.

Students are expected to pay for the materials used in the shops and laboratories. To cover these expenses all students are charged regular laboratory fees. An extra charge will be made if the student takes a greater amount of laboratory or shop work than belongs to one year of a course. The regular fee is payable in three installments, on registration days of the three terms. An additional fee of $2.00 is charged for late registration. No portion of these fees will be returned to any student leaving the institution, voluntarily or involuntarily, after the fourth week of any term. The materials supplied for the above laboratory fees are chemicals, cooking materials, wood, gas, iron, drawing paper and the like.

At the time of registration a breakage deposit of $5.00 is required of each student. A general breakage charge of fifty cents per term is made. The portion of the remaining $3.50 not required to cover individual breakage will be returned June 12, 1914.

All purely student enterprises are under the control of the Associated Student Body, which includes all students regularly registered in school. To meet the expenses incidental to lit-
erary, journalistic, social, athletic and other student activities this organization collects from each student a small fee, which is expended only under the direction and with the approval of a member of the faculty who acts as student adviser.

The following is a tabulated statement of the fees and deposits required for the entire school year:

<table>
<thead>
<tr>
<th></th>
<th>Boys.</th>
<th>First year</th>
<th>Upper class</th>
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<tbody>
<tr>
<td>Laboratory fees</td>
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<tr>
<td>Breakage deposit</td>
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<tr>
<td></td>
<td>$23.00</td>
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Students are required to furnish their own books, drawing instruments, and special clothing, as overalls and aprons needed in the shops and laboratories, and such special apparatus as may be needed for individual use in certain laboratory courses, such as electrician's pliers and screwdriver, in the electrical laboratory.

The total cost of books, supplies and drawing instruments, together with laboratory fees, is $40.00 to $50.00 for the first year. Of this amount $15.00 to $30.00, depending upon the course of study pursued, is needed at the beginning of the school year. Drawing instruments will last during the entire course. Books and other supplies may be purchased at reasonable prices in San Luis Obispo. The total necessary expense for a nine months' year, including board, school fees, and books and material required, is about $260.00. This does not include railroad fare, clothing, and other personal items.

**Homes for Girls.**

Lady members of the faculty will give special attention to finding homes in private families for non-resident girls. Students notifying the school of time of arrival will be met at the train and given every assistance needed by the newcomer. Correspondence is invited. Address CALIFORNIA POLYTECHNIC SCHOOL.

**Dormitory Residence for Boys.**

A new building on the school premises provides a home for a limited number of boys and a part of the faculty. The price for room and board is approximately $24.00 per month. Occupants are required to furnish linen and a portion of bedding needed. Linen and towels are laundered without extra charge.
An additional deposit of $2.50 is required of each student residing in the dormitories, to pay for possible damage to his room or to the building. Each student is held responsible for the condition of his room and its furniture. The unused portion of this deposit is returnable at the end of the school year.

Detailed information concerning the dormitory is contained in a special circular which will be mailed upon request.

**Room and Board.**

The faculty each year assists students in finding suitable homes in private families. Students living outside the dormitory are required to board in places approved by the faculty. Prices for board and room range from $24.00 to $30.00 per month. Experience has proved that it is rarely ever advisable for students to “board themselves.” Such arrangement will not be permitted except upon written request of parent or guardian and sanction of the faculty.

**Self-support.**

A limited amount of employment about the school farm and buildings can be given more or less regularly to a few students who find it necessary to earn a portion of their expenses while attending the school. No remuneration will be made for manual work of any kind which carries instruction with it. Some students pay a part of their living expenses by means of employment found in San Luis Obispo, chiefly from private families, caring for lawns, gardens, or doing housework.

No student should come to school expecting to pay his entire expenses by labor during the school year. The school work occupies the most of the day, and the evenings are required to prepare the lessons for the following day.

**Reception of New Students.**

An organized reception committee, composed of old students directed by the Y. M. C. A., will meet all trains at the opening of the school year. Lady members of the faculty will give special attention to the girls. All new students will be assisted in finding their way to the school and to their new homes, in registering, and in becoming acquainted with the surroundings of the school and its activities.

**Debate and Public Speaking.**

Interclass debates and occasional debates between the Poly-
technic School and local high schools serve to stimulate interest in practical public speaking. Students in the English department are also asked from time to time to present papers on subjects of current interest. Student organizations, such as the Amapola Club, (for girls), likewise provide opportunity for practical public speaking.

Associated Student Body.

A general association, officered by students under the guidance of faculty advisers, has charge of athletics, the student publication *Polytechnic Journal*, interscholastic debates and various social activities. The object of the organization is regulation and management of student activities outside of the regular curriculum. The plan is a marked success. The student body fees are one dollar a term for boys and fifty cents a term for girls.

Playgrounds.

Separate playgrounds are maintained for girls and boys. The girls' field contains courts for basketball, tennis and other games. The boys' athletic field contains a football field, a baseball diamond, basketball and tennis courts, an excellent five-lap running track and facilities for other outdoor games and sports. Athletic games are played with the high schools in the neighboring towns, and occasionally games have been scheduled with high school teams from Los Angeles, Santa Barbara, San Jose and Alameda. All school athletics are conducted under the coaching and training of members of the faculty.

Government.

The purpose of the institution is to build sound character as well as to train the mind and the hand. To that end no cost is too high to keep the moral atmosphere of the school clean and wholesome. Any conduct that is deemed harmful to the morals of the school will lead to dismissal. Boys and girls not showing an earnest purpose in making the best use of their time and energies will be reported to parents, and if satisfactory improvement is not shown within a reasonable time they will be asked to withdraw from attendance at the school. Regular attendance at all school exercises is required. A student failing to make a satisfactory grade in at least fifteen units for a term may be asked to withdraw. One hour in recitation or two hours
in laboratory work each week for the term counts as a unit, if
the work has been satisfactorily done. Reports of the scholar-
ship of all students are mailed to parents at the end of each
term, or oftener. Hazing in any form, subject to severe punish-
ment under section 376b of the Penal Code of California, will
not be tolerated, and the Board of Trustees has ordered that
expulsion shall be the penalty for such offense.

In general, it may be said that no rule or regulation of the
school will prove a hardship to any boy or girl who comes to
the school for business and who conducts himself or herself as
a gentleman or lady.

Correspondence concerning the school should be addressed
to CALIFORNIA POLYTECHNIC SCHOOL, San Luis Obispo, Cal.

STUDENTS 1912-1913.

ABBREVIATIONS.—A, Agriculture; H, Household Arts; M, Mechanics; S, special
student. The year in the course is indicated by the numerals.

Ahlf, Howard E.-------------2 M-------------Santa Maria
Andrews, Winfield-------------2 A-------------San Luis Obispo
Arnold, Percy-------------2 A-------------Palms
Bagwill, Lisle E.---------1 M-------------Morgan Hill
Bailey, Paul-------------1 M-------------Weimar
Baldwin, Frank T.--------3 A-------------Bakersfield
Bardrick, Everett V.-------1 M-------------Arroyo Grande
Barnett, Eric J.--------3 M-------------Pope Valley
Bennett, Jesse L.--------2 M-------------Caliente
Bent, Ralph R.----------2 A-------------Sausalito
Berkemeyer, Mary Ann-------1 H-------------San Luis Obispo
Berry, Richard H.--------1 M-------------Visalia
Berry, Theron E.--------1 M-------------San Luis Obispo
Bissinger, George Lyon-------2 A-------------Lompoc
Bohnett, Karl Uel.--------1 M-------------Campbell
Branch, Maybelle--------1 H-------------San Luis Obispo
Brown, C. Kyle----------1 M-------------Arbolado
Brown, E. Archibald-------2 M-------------Shale
Brown, Horace--------1 A-------------Shandon
Brown, Stella---------2 H-------------San Luis Obispo
Byers, Edna L.--------2 H-------------Santa Margarita
Caldwell, Mary L.--------1 H-------------Avila
Cheda, Maude E.--------3 H-------------San Luis Obispo
Cheda, Maurice A.--------1 A-------------San Luis Obispo
Cheney, Earl F.--------1 M-------------Coalinga
Clark, G. Earl----------2 M-------------Carpinteria
Clark, I. Scranton--------2 M-------------San Luis Obispo
Clark, John K.----------2 A-------------Los Angeles
Concepcion, Alberto A.-------2 M-------------Hilo, Philippines
Cook, Arthur C.--------3 M-------------Mountain View
Cook, William F.--------2 M-------------Mountain View
Coulter, Maurice E.-------3 A-------------Oakland
<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Curl, Fred A.</td>
<td>2</td>
<td>Pasadena</td>
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<td>Daily, Wendell T.</td>
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<td>Davidson, George K.</td>
<td>2</td>
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<td>Delesseguen, Francis J.</td>
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<td>Dodge, Alice</td>
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<td>Santa Cruz</td>
</tr>
<tr>
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### Summary of Enrollment, 1912–13.

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<td>Total enrollment</td>
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**CATALOGUE AND ANNOUNCEMENTS.**

Perozzi, Bruno A. 1 M Lompoc
Perozzi, Elvira M. 2 H San Luis Obispo
Perozzi, Walter C. 3 A San Luis Obispo
Plaskett, Clarence L. 2 M Lockwood
Prince, Hazel L. 2 H San Pedro
Quintana, Ida J. 1 H San Luis Obispo
Reese, Eugene 2 M San Luis Obispo
Rice, Jay H. 2 M Santa Maria
Ridle, Ruth E. 2 H San Luis Obispo
Ross, Dana M. 1 A Etiwanda
Rowan, Grace C. 2 H San Luis Obispo
Ruiz, James A. 1 M San Luis Obispo
Ryan, James A. 1 A Los Angeles
Sandercock, Helen V. 3 H Santa Barbara
Schweizer, Joseph W. 3 A Santa Barbara
Seahach, Alma M. 2 H San Luis Obispo
Seeber, Lawrence F. 2 A San Luis Obispo
Shipsey, Catherine M. 2 H San Luis Obispo
Shirley, E. Clyde 2 M San Luis Obispo
Silacci, Donald L. 1 M Cayucos
Sinclair, Ethel M. 2 H Estrella
Skov, Edna M. 1 H Pismo
Smith, F. Owen 2 A Orange
Stalnaker, Irvin H. 1 M San Luis Obispo
Stockton, Cecil L. 3 A Ramona
Strobel, Roy 2 M Hanford
Summers, Edwin M. 1 M La Grange
Sutliff, Ramona P. 2 H San Luis Obispo
Swafford, Georgia L. 3 H San Luis Obispo
Swain, Guy T. 1 A Cayucos
Tanner, J. Rudolf 3 M Morro
Tanquary, Lilian Clemens 1 H Halcyon
Terry, Mae F. 2 H San Luis Obispo
Tognazzini, Juliet 2 H Cayucos
Tomassini, Florida 2 H San Luis Obispo
Tomassini, Luis E. 2 A San Luis Obispo
Truelove, Alta M. 3 H Pismo
Upton, Clara I. 2 H Tulare
Van Gorden, Ray M. 2 M Cambria
Wade, Lilabell 3 H San Luis Obispo
Walker, Elmer L. 3 S San Luis Obispo
Walker, Hilie 3 S San Jose
Wieland, Frank W. 1 M San Luis Obispo
Wilkins, Melvin 3 S San Luis Obispo
Williams, Charles P. 3 A La Jolla
Williams, George Thomas 3 M Jackson
Williamson, Winthrop 1 A Sunnyvale
Wilmar, Ralph 3 M San Miguel
Wylie, Denard C. 1 A Pomona
Yocum, Maurice N. 3 A San Jose
CALENDAR, 1913-14.

Registration and Entrance Examinations—Tuesday, September 9, 1913
Instruction begins—Wednesday, September 10, 1913
Regular meeting, Board of Trustees—Saturday, October 25, 1913
Thanksgiving recess—Thursday and Friday, November 27 and 28, 1913
First term ends—Thursday, December 18, 1913

CHRISTMAS RECESS.
Second term registration—Monday, January 5, 1914
Instruction begins—Tuesday, January 6, 1914
Second term ends—Friday, March 27, 1914

SPRING RECESS.
Third term registration—Monday, April 6, 1914
Instruction begins—Tuesday, April 7, 1914
Regular meeting, Board of Trustees—Saturday, April 25, 1914
Memorial Day—Saturday, May 30, 1914
Graduation Day—Friday, June 12, 1914

SAN LUIS OBISPO, a city of 5,500 people, is on the coast line of the Southern Pacific Railway, 250 miles south of San Francisco and 225 miles north of Los Angeles. There are provided six daily trains from San Francisco and five from Los Angeles. Port San Luis, ten miles distant, is the harbor from which the Pacific Coast Railway passing through the city reaches 90 miles into the interior southward. Passenger steamers of the North Pacific Steamship Company call at Port San Luis on regular schedule.

The climate of San Luis Obispo is a pleasing combination of sea and mountain air, moderate in temperature both summer and winter. The ocean shore ten to twelve miles distant and picturesque mountains surrounding the town make the home of Polytechnic School a delightful residence section of the State.

San Luis Obispo has churches representing the following denominations: Baptist, Catholic, Christian, Christian Science, Congregational, Episcopalian, Lutheran, Methodist, and Presbyterian, all of which welcome students who wish to find a church home during their residence at the school. The Catholic congregation occupies the famous Mission San Luis Obispo de Tolosa, established by Father Junipero Serra in 1772.

A free public library established in 1897 now contains over six thousand bound volumes and seven thousand unbound pamphlets and magazines. It occupies a $10,000 library building, which is the gift of Mr. Carnegie. Students in the Polytechnic School are granted equal privileges in the library with the residents of the city.