A SCHOOL OF AGRICULTURE, MECHANICS, AND HOUSEHOLD ARTS ADMITTING PUPILS UPON COMPLETION OF THE EIGHTH GRADE

CALIFORNIA POLYTECHNIC SCHOOL



CATALOGUE 1910-11 ANNOUNCEMENTS 1911-12

SAN LUÌS OBISPO MAY, 1911

SACRAMENTO

W. W. SHANNON - - - - - - SUPERINTENDENT OF STATE PRINTING 1911

CALENDAR, 1911-12.

Entrance ExaminationsTuesday, September	12,	1911
RegistrationTuesday, September	12,	1911
Instruction beginsWednesday, September	13,	1911
Regular meeting, Board of TrusteesSaturday, October	28,	1911
Thanksgiving recess Thursday and Friday, November 23 and	24,	1911
First Term endsFriday, December	15,	1911

CHRISTMAS RECESS.

Second Term registration	Tuesday, January 2, 1912
Instruction begins	.Wednesday, January 3, 1912
Washington's Birthday	Thursday, February 22, 1912.
Second Term ends	Friday, March 22, 1912

SPRING RECESS-

Third Term registrationMonday, April 1, 1	.912
Instruction begins, Tuesday, April 2, 1	.912 ⁻
Regular meeting, Board of TrusteesSaturday, April 27, 1	.912
Memorial Day	.912 ⁻
Graduation DayFriday, June 7, 1	912

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(Arranged in order of appointment.)

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WILLIAM P. JOPLIN......Engineer

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.

"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." The school aims to supply a need which is felt not only in California, but also in every other state in the Union. That need is an institution which will give 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. In this present day, when science is doing so much to unravel the mysteries concerning plant and animal life, it is important that the State provide a school where the facts and principles unfolded by science can be demonstrated to the boy and girl, who will return to their home and make its life more attractive, more livable, and more remunerative. In performing this service the school has in its seven years of activity demonstrated its efficiency in training its pupils for useful citizenship.

BUILDINGS AND EQUIPMENT.

The Farm and Grounds consist of 310 acres of land, the most of which is rolling and typical of a large portion of the coast counties. Thirty acres of rich and level land were added by means of appropriation made by the legislature of 1907. The farm has a full equipment of tools and machinery, including grain drills, manure spreader, corn harvester, silage cutter, and the like. It is stocked with Jersey and Shorthorn 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.

School and Farm Buildings. The main buildings are two stories in height, with a well-lighted basement. The administration building contains the main office, assembly hall, library, class rooms, and laboratories. The household arts building contains sewing-rooms, kitchen, dining-room, pantries, botany laboratory, class rooms, and instructors' offices. The other buildings are a power house, carpenter shop, forge shop, machine shop, pumping plant, dairy barn and silo, creamery, propagation house, greenhouse, incubator cellar and poultry houses, swine houses, tool sheds, hay barns, and cottages for employees.

Dormitories. The boys' dormitory is a new building providing single rooms for forty-five boys and suites of rooms for faculty members. Commodious baths, a large sitting-room with fireplace, steam heat, and electric lights are features of the building.

The girls' dormitory, a modern building, steam heated and electric lighted, offers a delightful home on the school farm for a limited number of girls and members of the faculty.

Further improvements in both buildings are to be made during the summer of 1911. Dormitory accommodations are insufficient to provide for the entire number of students in attendance at the school. Additional information concerning the dormitories will be found on page 22, under the heading "Dormitory Residence."

Dining Hall. A building 30 by 80 feet, with pantries and kitchen in addition, erected at a convenient location, serves as a central dining hall for faculty and student residents of the school dormitories. Further improvements in the building and equipment have been made possible by means of appropriation of the legislature of 1911.

Creamery. The creamery occupies a new building 40 by 60 feet with engine and boiler room in addition. The building contains independent heat and power, separators of various standard makes, pasteurizer, cream ripener, churns, cheese making apparatus, a complete refrigerating plant of 6-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 throughout the entire year.

Shops. Three fully equipped shops, 40 by 100 feet, furnish opportunity for training in wood and iron working. 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



Power Plant With Mechanical and Electrical Laboratory.

contains sixteen double down-draft forges of the latest pattern, accommodating a class of thirty-two men. 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 machinery of the various shops is motor driven, electric power being supplied from a complete plant owned by the school and operated in part by student engineers.

Laboratories are well equipped with instruments and apparatus for work in general and agricultural chemistry, physics (including photometry and X-ray apparatus), drawing, electricity, land surveying and irrigation, botany and plant propagation, horticulture, dairy and creamery, sewing, cooking, and poultry incubation and brooding.

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The School 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.

Contemplated Improvements. Appropriations granted by the legislature of 1911 make possible greatly improved facilities in various lines of the school's work. Fifteen thousand dollars will be expended for additional school furniture, laboratory apparatus, and shop equipment. Another fund provides for the addition to the power plant of a seventy-five horse power steam engine and a fifty kilowatt alternating current generator, together with switchboards and the various accessories of a modern plant. Another appropriation provides for the purchase of additional farm machinery, implements and live stock. The water and heating systems will also be extended and improved. Additions and improvements in the central dining hall and kitchen and in both the boys' and the girls' dormitories are to be made during the summer of 1911.

THE COURSES OF STUDY.

Three main lines of work are undertaken by the school, viz.: Agriculture, Mechanics, and Household Arts. In all courses the work is about equally divided between class room and laboratory or shop. A student entering upon a certain course of study is expected to continue the same course throughout the year. The regular courses of study are three years in length, upon the completion of which the student is given a diploma stating the course of study and training pursued. It has this year been found necessary to postpone the inauguration of the optional fourth year of work referred to in the catalogue of May, 1910.

The subjects to be covered and the courses of training to be pursued during the year 1911-1912 are outlined on the following pages. The first, second, and third terms of the school year are indicated by *a*, *b*, and *c*, respectively. Each school day is divided into nine 45-minute periods. Figures denote the num-

ber of periods devoted to the subject per week. When the periods are the same for the three terms, the number is given but once.

AGRICULTURE.

First Year.

Mathematics I, 5. Agriculture I, 7. Physical Geography, 5. Plant Propagation, a2, b2, c6. English I, 5. Drawing, 4. Farm Mechanics, a5, b5. Carpentry, 5.

Second Year.

Mathematics II, 5. Chemistry I, 7. Animal Husbandry I and II, 6.

Mathematics III, 5. Agronomy, 5. Horticulture, 6. Animal Husbandry IV and V, 3. Agricultural Chemistry, 5.

Mathematics I, 5. Mechanical Drawing, 5. Carpentry, 10. Forge, 4.

Mathematics II, 5. Mechanical Drawing, 5. Physics and Electricity, 4. Chemistry I, 7.

Mathematics III, 5. Surveying, 4. Machine Shop, 8.

Mathematics I, 5 Physical Geography, 5. Physiology, 3.

Mathematics II, 5. Chemistry I, 7. Domestic Science I, 3. Cooking Laboratory, 8. History Reading Course, b5.

Domestic Science II, 3. Cooking Laboratory, 8. Home Management, b2, c5. Botany, 6. Dairying, b4. Approved Elective, 5 to 10 periods per week, first and second terms.

English II, 5. Dairying, 7. Agricultural Botany, 7.

Third Year.

History and Civics, 5. Animal Physiology, a3. Physics, b5, c5. Elective, 4.

MECHANICS.

First Year.

English I, 5. Physical Geography, 5. Freehand Drawing, 5.

Second Year.

English II, 5. Forge, Foundry and Pattern Making, 8. Machine Shop, 4.

Third Year.

History and Civics, 5. Physics and Steam and Electrical Ma-chinery, 13.

HOUSEHOLD ARTS.

First Year.

English I, 5. Freehand Drawing, 6. Sewing and Dressmaking, 11.

Second Year.

English II, 5. Applied Design, 4. Millinery and Dressmaking, *a6*, *c4*. Gardening, c4.

Third Year.

History and Civics, 5. Applied Design, 4. Sewing, c5.

SUBJECT-MATTER COVERED.

English, Mathematics, History, and Civics are the academic subjects common to all courses. Careful instruction in these subjects is considered essential. Since these branches are found in every high school, suffice it to say that the subject-matter taken up corresponds to the field covered by the high school curriculum, except that history is confined largely to the United States.

AGRICULTURE.

First Year.

Agriculture I. First principles of agriculture. Includes elementary studies in soils, fertilizers, moisture conservation, farm implements, cultivation, crops, and a brief history of the development and growth of agriculture as a science. The aim of the course is to give a knowledge of the important position of the farmer in the affairs of the world, and to build a broad foundation for the courses to follow. Instruction is by recitations, talks, field and laboratory work, excursions and library reference work.

Physical Geography. Study of physical features of land, erosion, etc., and effect upon soil conditions; climatic conditions and their relation to plant growth; how to read and interpret maps. Recitations, lectures, and field observation.

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

Drawing. Pencil drawing from plants, fruit, flowers, and still life with study of light and shade; perspective drawing.

Working drawings of common farm buildings.

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

Carpentry. Care and use of tools, bench and machine work; practical work in the shop and in the construction of buildings, including a course in wall and roof framing.

Second Year.

Chemistry I. A course in general inorganic chemistry, including elementary chemical theory and calculations. A study of all the common elements and their compounds, emphasizing the economic importance of each.

Animal Husbandry. Live stock judging, study of market and breed types of domestic animals, actual animals being used as illustrations. Study of breeds; origin and development of



A Study in Porcine Quality.

the various breeds of live stock with reference to special uses and peculiar adaptabilities of each breed. Live stock management; modern methods of growing, handling, and marketing live stock; lectures and practical work.

Dairying. Recitations, lectures, and practical work. Study and practice of the production and handling of milk; tests for composition and adulterations; manufacturing and handling of milk products.

Agricultural Botany. General course in practical botany; class room, laboratory, and field work. First term: seed germination, seed testing, study of roots, stems, and leaves, flowers and fruit. Second term: study of type plants with compound microscope, tracing the development of the algæ, fungi, bacteria, mosses, ferns, and seed plants. Third term: field work with weeds, grasses, wild plants, plant breeding, plant societies, and economic botany.

Third Year.

Agronomy. (a) Farm Crops.—A study of the principal field crops of California,—their characteristics, value, the preparation of the soil, cultivation, fertilization, harvesting, and marketing. (b) 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 class of stock is producing at a profit or a loss. Without an accurate set of accounts no farmer can tell how his business is prospering.



A Group of Prize Percherons.

(c) Farm Management.—A general study of the economics of the farm. The course considers the market, transportation,—including good roads,—rural communication, coöperation, organization, and other topics of vital importance. It



Marquis' Foxy Belle, 219313. (20 lbs. butter in 7 days.)

considers the social life of the farm home, the rural school, modern farm conveniences, the relation of the boy and the girl to the farm, and the home and schoolhouse as social centers. Library research work and the preparation and reading of papers

on live economic topics are required.

Horticulture. Class work and lectures supplemented by practical work in the field. Laying out, planting, cultivating, irrigating, pruning, spraying of orchards; study of California fruits, their history, special care, varieties, commercial importance and products.

Animal Husbandry. Principles of breeding. Heredity; successful stock breeding operations investigated. Nutrition.



A Coming Clydesdale.

Study of composition of foodstuffs; needs of the animal body, digestion and assimilation. Methods of curing and handling feeds; compounding rations. Course supplemented by actual feeding experiments.

Agricultural Chemistry. A study

of the relation of the science of chemistry to modern agriculture. It includes a study of 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.

Animal Physiology. Elementary physiology with special reference to the common diseases of domestic animals.

Physics. General first course in class and laboratory work covering mechanics, heat, electricity, sound and light. Special attention is given the first three topics.

Elective. Surveying, shop work, chemistry, dairying, or other work as may be advisable for the student to pursue.

MECHANICS.

First Year.

Mathematics I, English I, and Physical Geography as noted under academic subjects and Agriculture, first year.

Mechanical Drawing. General instruction in the use of instruments; plates in freehand and mechanical lettering, solution of problems in geometrical construction, with simple plates in mechanical drawing and furniture design.

Carpentry. A practical course in bench and machine work. Models of joints commonly used in carpentry and joinery. Actual work both in and out of the shop. This course includes grinding and sharpening of tools, saw filing, and work with steel square as applied to roof framing. Forge Work. Practice in iron and steel work, including drawing, upsetting, drilling, welding, tempering, and orna-

mental iron works. Lathe tools and other pieces are made to be used in the machine shop.

Freehand Drawing. Pencil drawing from still life; study of light and shade; perspective sketching in pencil; perspective sketching from working drawings of parts of machinery and architectural ornament; pencil drawings of geometric solids; lettering and design.

Second Year.

Mechanical Drawing. Development of surfaces, sheet metal drafting, isometric and cabinet projections, working drawings of machine parts, tracings, and blue prints.



Forge Models.

Physics and Electricity. Class and laboratory work in mechanics of solids, liquids, and gases, fundamental laws and principles of electricity, batteries, simple measurements, etc., with a special view to preparation for the mechanical work of the following year.

Chemistry I. Identical with Chemistry I described under Agriculture, second year.

Forge, Foundry, and Pattern Making. Practical tool making, including some repair work and the use of the power hammer. Foundry work will include molding and casting in white metal of simple pattern with use of two part and three part flasks. Pattern making includes lathe work and core box making in elementary forms. Instruction will also be given in the use of the steel square and cabinet work.

Machine Work. Exercise work with lathe, shaper, drill press, grinding machine, etc.; dressing of bearings, chipping, filing, and scraping stock to size. General instruction in the care and handling of machines, cutting speed for various materials, use of measuring instruments, and general tool room equipment.

Third Year.

Surveying. Open to all third year men for one afternoon per week throughout the year. Time is divided between field work and the drafting room. A good equipment of transits, levels, clinometers, etc., and the large school farm furnish an opportunity for the most practical work. Students learn the use of the instruments, the laying out of foundations, running ditches to grade, setting cross section stakes and calculation of the earth to be moved, determining the area of fields, and the transfer of all field notes to neat map form in the drafting room.

Machine Work. Gear cutting, planer work, machine and engine building, construction of models, and general repair work. Special pieces of work assigned to students depending on their choice and skill.

Physics. Dealing with heat, light, sound, and invisible radiations. Laboratory well equipped with up-to-date apparatus. Work is of same grade as previous year.

Steam and Electrical Machinery. The course of class room and laboratory work deals with the wiring, installing, testing, and care of general electrical apparatus, operation of steam engines, valve setting, measurement of horse power, the care of steam boilers, and the more common mechanical problems. The laboratory equipment includes a variety of generators, motors, transformers, testing instruments, steam and gas engines, etc. The laboratory work is of the most practical nature, dealing with the most important of the points brought out in the class room. The school power plant is in the same building and is operated by all men in this course.

HOUSEHOLD ARTS.

First Year.

Mathematics I, English I, and Physical Geography as noted under academic subjects and Agriculture, first year.

Physiology. Study of the human body with special reference to the laws of health.

Freehand Drawing. Pencil drawing from plants, fruit, flowers, and still life; study of light and shade; perspective drawing; charcoal, colored chalk, and water color work; lettering, poster work, and design.

Sewing and Dressmaking. Fundamental principles of hand and machine sewing applied to the making of undergarments and simple dresses; patching and darning; simple embroidery;



First Year Girls' Sewing Exhibit.

drafting and adjusting patterns; manufacture, use, identification, and price of textiles; planning of economical and tasteful wardrobes.

Second Year.

Chemistry. Elements and their compounds; chemistry of fuels; ventilation; cooking; cleaning; removing stains, etc. Designed as a course in the application of chemistry to every day life.

Domestic Science I and Cooking Laboratory. A study of

all carbohydrate foods, — their source, chemical composition, cookery, digestion, and economic value. Followed by a similar consideration of fats and proteids. Study of cleansing agents, ranges, and fuels. Notes, government



Class in Cooking.

bulletins, and reference reading. In the laboratory the student makes various preparations of the food considered in the lecture room.

Applied Design. Making and applying of designs in cardboard construction, weaving, basketry, stenciling, and embroidery; study of color schemes and elementary mechanical drawing.

Millinery and Dressmaking. Construction and trimming of hats; designing and making of patterns. Making of a wool or silk dress.

Gardening. A course designed to acquaint the student with the best garden and ornamental plants, and methods by which plants are commonly propagated and grown.

Third Year.

Domestic Science II and Cooking Laboratory. Review of physiology of digestion; composition of the body; metabolism; study of dietaries; actual making of a dietary for an adult, for a child, and for a family; planning meals at minimum cost. In the laboratory preservation of fruit; making bread, pastry, cake, desserts; invalid cookery; table setting and serving. Each girl plans, prepares, and presides as hostess at a luncheon to which she invites friends, other members of the class acting as wait-resses.

Home Management. Sanitation, home economics, house furnishing, home nursing and emergencies. Sanitary construction of houses; systematic housekeeping; sanitary, economical, and artistic house furnishings. Lectures, readings, excursions.

Laundering. Included with Domestic Science II. Methods of cleansing and agents used; water, hard and soft; methods of cleansing woolens, silks, and laces. Practical work is given with the theory.

Dairying. Handling milk; use of the Babcock test for butter fat; tests for adulterations; making and handling butter.

Applied Design. Woodwork, metal work, house planning, interior finishing, decorating and furnishing.

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Botany. General course in elementary botany; recitations and lectures on the structure, development, and form of plants; practical work in the laboratory and field. Type studies of groups of plants and collection of herbarium specimens.

Sewing. Practical dressmaking, including making of graduation gown.

Approved Elective. Five to ten periods first and second terms, depending on subject elected. English III, Mathematics III, Applied Design, Art, or other work, as may be advisable. This work must be approved by the faculty, and is required for graduation.



In the Creamery.

ADMISSION AND CLASSIFICATION OF STUDENTS.

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

Applicants must be at least fifteen years of age, and must give satisfactory evidence of good moral character and of good behavior.

Thus qualified, applicants will be admitted without examination upon presenting a Diploma of Graduation from any grammar school (eighth grade) of the State.

Applicants 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 an examination in English, arithmetic, United States history and geography. The examination in English will consist of a test of the applicant's ability to write and spell; in arithmetic, it will include fractions, decimals and percentage; in history and geography, the leading facts as covered in the usual grammar school course. The examination for 1911 will be held in the school buildings on Tuesday, September 12, at 9 A. M.

Applicants should enclose their grammar school certificate when sending their application for admission to the school. If not possible to send the certificate at the same time, it should be sent before September 5, 1911. The certificate will be returned to the applicant after the opening of school.

Prospective students applying to be admitted upon examination must send their recommendations at the same time with their application for admission. 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 Director of the school not later than September 5, 1911.

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, 1911, will be required to make written application for readmission during the school year

1911-12. Such application should reach the Director not later than September 5, 1911.

Registration and Schedule. Registration days are September 12, 1911, January 2, 1912, and April 1, 1912. Effective January 1, 1912, a special fee of two dollars will be charged for late registration. Each student is assigned to a faculty member, who will act as his adviser in all matters pertaining to schedule of work and in the regulations governing absences from scheduled duties. Full directions as to methods of making out daily schedules are given to students on registration days. The schedule of each student must be approved by the proper faculty members. The school assumes that the act of registering signifies acceptance of the regulations of the institution and intention to abide by the same.

Regular Students. A regular student is one who is admitted to full standing upon 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.

High School Credits. Since this institution is of like grade to the high schools, it follows that our academic work is of a somewhat similar nature to that of the high school. Graduates of high schools will, therefore, be given credit for work done elsewhere, such as English and mathematics. Students who have not been graduated from a high school, but who have been in attendance therein for one year or more, may be given credit for academic work for which proper credentials are presented. Entrants who have completed two full years of high school work should complete in two years the Polytechnic requirements for graduation. Applicants for advanced standing should present credentials with application for admission.

Special Students in Agriculture. Those who do not feel that they can take the full course in Agriculture, but who desire a training in the more technical subjects of the course, may elect subjects for which they are qualified. They must be at least eighteen years of age and possess the same educational qualifications as those who enter for the full course. A list of studies is given below, from which they may choose, subject to the approval of the faculty. One or two full years' work may be very profitably selected from this list.

Soils and Fertilizers (Agronomy),Plant Propagation,Animal Husbandry,General Chemistry,Horticulture,Agricultural Chemistry,Gardening,Botany,English,Dairying,Forge Work,Drawing,Agriculture I,Carpentry.

DORMITORY RESIDENCE.

Comfortable modern buildings on the school premises provide a home for a limited number of boys and girls and part of the faculty. So far as the capacity of the buildings will permit, girls not residents of the immediate locality will be expected to reside at the dormitory. Boys are not allowed to reside on required the school premises. Assignments to dormitory accommodations, however, are made for the school year, or for such part of the year as the student may continue a member of the school. The price for room and board will be \$197.00 for the period September 12, 1911, to June 7, 1912, not including the Thanksgiving recess, the Christmas recess, and the spring recess, for which periods a moderate extra charge will be made. Payments for room and board may be made in monthly installments. No rebate can be made for meals missed unless the student is necessarily absent for five days or more. The usual rebate will then be fifty cents per day.

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.

All occupants of the dormitories are required to furnish a pair of blankets, a light comfort, four sheets, three pillow cases, two dresser scarfs, hand towels, bath towels, and a napkin ring. All linen and towels should be distinctly marked.

Bed linen and towels are laundered without extra charge. Limited laundry facilities are available for the use of students.

A circular giving more detailed information concerning the dormitories and the regulations governing the same will be mailed upon request.

GENERAL INFORMATION.

Expenses. No tuition fees are charged, except as stated below. The student is expected to pay for the materials used in the shops and laboratories. To cover these expenses all students, except first-year girls, are charged \$15 per year, regardless of the course of study pursued, except that an extra charge will be made if the student takes a greater amount of laboratory work than belongs to one year of a course. The regular fee is payable in three installments of \$5 each on registration days of the three terms. Regularly enrolled first-year girls are charged \$10 per year. The fee is payable in three installments, \$4 on registration day of the first term, and \$3 the second and third terms. Beginning with the winter term of 1912, a late registration fee of \$2 will be charged. No portion of the laboratory fee will be returned to any student leaving the institution, voluntarily or involuntarily, after the fourth week of any term. Students who are not citizens of the United States are charged a tuition fee of \$20 per term.

The materials supplied in return for the laboratory fee are chemicals, wood, gas, iron, drawing paper, and the like. At the time of registration a deposit of \$5 is required from each student to pay for individual breakage of tools and apparatus, or extra materials required. Such portion of the deposit as is not needed to cover breakage or extra materials will be returned June 7, 1912. Students are required to furnish their own books, drawing instruments, and special clothing, such as overalls, etc., needed in the shops and laboratories.

The total cost of books, supplies, and drawing instruments, together with laboratory fee, will amount to about \$40 for the first year. Of this amount \$10 to \$25, 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 expense of a nine month's year, not including railroad fare, will vary from \$240.00 to \$350.00.

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 \$22.50 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 with 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. Provision may be made, however, for students who need to do much work in order to pay their way, whereby they may take less than the full school curriculum and thus be a longer time completing the course.

Reception of New Students. A reception committee composed of old students regularly organized by the Y. M. C. A. will meet all trains at the opening of the school year. 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. A series of debates between the Polytechnic School and local high schools serves 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 Literary Society and the Amapola Club (for girls) likewise provide opportunity for practical training in 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 activ-

ities 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. While no student is required to join the association, membership is strongly advised.



The Hurdlers.

Playgrounds. The playgrounds are ample and include base-



1911 Baseball Team.

ball diamond, excellent running track, basket ball and tennis courts. The Polytechnic is a member of the San Luis Bay Athletic Association, and participates with the other schools in Rugby football, baseball, basket ball, tennis, and track events.

Government. The purpose of the institution is to build sound charater 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 credits 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 credit, if the work has been satisfactorily done. Reports of the scholarship of all students are mailed to parents at the end of each term, or oftener. Hazing

in any form, subject to severe punishment 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 a lady

Correspondence concerning school should be addressed to the Director of the California Polytechnic School, San Luis Obispo, Cal.



Agricultural Chemistry.



A Section of the Carpenter Shop.

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STUDENTS 1910-1911.

ABBREVIATIONS .- A, Agriculture; H, Household Arts; M, Mechanics; S, special student. The year in the course is indicated by the numerals. Ackley, Vera Jean......Palo Alto Allen, Helen......San Luis Obispo Anderson, Charles.....Los Angeles Andrews, John Pinkney...... 2 A...... San Luis Obispo Andrews, Sherman Ames...... 1 A...... Stone Canyon Andrews, Winfield...... 1 A...... San Luis Obispo Arnold, Percy N..... Palms Baumgardner, Charles W..... 3 A..... Gardena Baumgardner, Harrison A..... Gardena Bennett, Loring F..... Caliente Bissinger, George Lyon..... 1 A..... 1 A.... Brew, Nathaniel Andrews...... 1 M...... San Luis Obispo Brumley, May......San Luis Obispo Bush, Charles Downs...... 1 M..... Parsons, Kansas Campbell, Margaret Rose...... 2 H...... San Luis Obispo Coffman, Homer Joseph...... 1 A..... Laton Condit, Ione C.....Pataskala, Ohio Cook, Arthur G......Redwood City Coulter, Maurice E..... 0akland Cox, Donald Edmond...... 3 M..... Watsonville Crosson, Harry Jay..... 1 A..... Arroyo Grande Daily, Wendell T..... Carpinteria Davis, Ralph Royce......Santa Maria Des Granges, Paul Roy..... 2 A..... Fullerton Dyer, Gerald Twitchell...... 1 M...... Orcutt Eastman, Phillips...... 1 M...... San Luis Obispo Eastman, Thomas......San Luis Obispo Edmonds, Dorothy......San Luis Obispo Edmonds, Marc M......San Luis Obispo Eells, Ralph Horace......Santa Ana Erburu, Michael..... Ventura Fiscalini, Baptiste John 2 A..... 2 A..... Fitzgerald, John Duff......San Luis Obispo

Flint, John Walter 3	ASan Diego
Forbes, Leona1	HSan Miguel
Freeman, Chester Lucas 3	MSanta Maria
Fridley, Eva Alice 1	H Dinuba
George, Auble Orval I	M Imperial
Giacomazzi, John1	A Guadalupe
Gottfriedsen, Arthur	M Chualar
Grimes, Jesse James1	M Bicknell
Hamaker, Charles Munroe,	M Nipomo
Harms, August Fred 1	ASanta Paula
Harris, Evan	A. Chula Vista
Hart Damon Divine	A Los Angeles
Hartranft Richard Allan	A Tog Angeles
Heartt Eva A	Tos Angeles
Holm Homer H	M Balarafald
Itemi, fromer frankliger	M Dakersheid
Herrera, Manuel	M Morro
Herrera, Kosalie	HSan Luis Obispo
Herring, Edward Lewis	M San Luis Obispo
Herring, George W 3	M San Luis Obispo
Hilliard, Effie Elizabeth 3	H Visalia
Hillard, Humphreys 1	MSan Luis Obispo
Holman, Elwood Harold 1	MSan Luis Obispo
Hoskins, Maye1	H Turlock
Huchting, Sophia2	H Encinitas
Iles, Thomas Jefferson 2	M Palms
Johnson, Tekla1	H Templeton
Kennedy, Donald Samuel 1	ASan Luis Obispo
Keyes, Robert Loring2	M Claremont
Kiger, Lucy Van1	H Creston
King, Ernest C 1	ASan Luis Obispo
King, John Earl 2	A Ventura
King, Nellie Grace 2	HSan Luis Obispo
King, Thomas Wheeler	M Moorland
Knight, Florence	HSan Luis Obispo
Latta, Olin Ralph 1	M Sacramento
Lawrence, Roy Manuel 1	MSan Luis Obispo
Leonard, John Francis	M
Lewis Elizabeth Thurman	M Pacific Grove
Lind Tean	H San Luis Obispo
Lopez Lino	M San Luis Obispo
Loring Buth Mary 1	H San Diego
Luchessa Lincoln	M San Luis Obispo
MaArthur John Archibald	
McCrumell Hemen James	ASall Jose
McCormack, nomer James	ASanta Ana
McGuire, Arthur	M Saratoga
McMillin, Vera Carol	H Glendora
McMillin, 101	A Glendora
Mailoy, Walter 1	ASan Luis Oibsipo
Markloff, Fred 3	ASan Jacinto
Mendenhall, Annie Edith 2	HValley Center
Mendenhall, George Frederick2	MValley Center
Mitchell, Donald Harlow 2	MSan Luis Obispo
Mizuo, T 2	A Japan
Murray, Bernard2	MStone Canyon
Murray, Francis 1	MStone Canyon
Muzio, Marguerite1	HSan Luis Obispo
Nock, William 2	M Cambria
Noren, Albin Carl 2	A Reedley
Paul, Nedom A 2	M Morro

I	Pearce, Anson Kuns	M Ingomar
Ŧ	Pease Rainh W. E	MSan Bernardino
ĩ	Perking Carolyn 3	H(Oakland
τ	Certifies, Calofynt	M Oakland
1 T	Server's Taba	Mahland Oregon
1. T		MAsinand, Oregon
1	erozzi, Walter C 1	ASan Luis Obispo
F	Pixley, Osman 2	A Orange
I	Plaskett, Clarence Leroy2	M Lockwood
Ŀ	Rapp, Signe 1	H Pasadena
F	Reilly, William Harold 3	M Repressa
I	Rickard, Howard B2	A Hemet
F	Ridle, Harry John	MSan Luis Obispo
R	idle Ruth Elizabeth	H San Luis Obispo
т Т	Sowerts Lawrence Conrad	M Bradley
1	Clewents, Hawrence Connau	M. Our of the Constant of the
1		
1	Riley, Frank Edmond 2	M Meeker, Colorado
ŀ	Roberts, William Alvin2	MRound Valley
1	Robson, Alfred Tennyson 1	MSan Luis Obispo
F	Roselip, Walter Bernard 3	M Edna
1	Russell, Lynn Porter 1	MSan Luis Obispo
S	Sandercock, Helen VeClare	HSan Luis Obispo
ŝ	Schulze Cora Nellie	H
Č	Sibler Cossins B	A San Bernardino
۲. د	Silice, Cassius D	
		M. Cay Luis Olima
	Shaw, Robert Daniel 3	MSan Luis Obispo
	Shipsey, Marguerite 2	HSan Luis Obispo
\$	Shipsey, William T 2	MSan Luis Obispo
Ş	Smale, Percy Ransom1	M Spreckels
Ş	Smith, Leslie Ralph 1	M Tulare
5	Snyder, John Ellsworth1	M Orange
ş	Sommer, Fred	A Gonzales
ç	Southard Fred	M Edna
	Spradlin Farl LeBoy	M Visalia
	Spraum, Lan Lekoy	U Dece Deblee
	Stevens, Millian	M Can Taile Obies
	Strobel, Koy E	MSan Luis Obispo
	Strobridge, James Harvey	MSan Lorenzo
\$	Sutliff, Ramona Pauline 1	HSan Luis Obispo
5	Swartz, Charles2	M Nipomo
\$	Swerdfeger, Lawrence 3	A Calexico
	Fanner, Clifford Gilbert 2	A Morro
'	l'anner, J. Rudolf 1	M Morro
,	Paylor, Verne Ivan	M Chico
,	Thomson Fred Cordon	A Campbell
;	Thompson Joseph B 2	A San Tose
÷	$\frac{1}{2} = \frac{1}{2} = \frac{1}$	H Correson
	Lognazzini, Juliet E	
÷	Fomassini, Florinda	HSan Luis Obispo
	Γomassini, Luis1	A San Luis Obispo
1	Van Couvering, Martin 2	A Riverside
٦	Wade, Howard Clark1	MSan Luis Obispo
۲	Wade, Lilabel1	HSan Luis Obispo
1	Walker, Arthur Bevan1	A Alpine
٦	Ward Morris L	M Colton
1	Welch Fav.	HLos Angeles
	Welch Paul 1	A
	Weich, Lauisson Williard	A Decife Creme
	weymouth, Merton willard2	M T ' ' T
	White, Lester Eugene 3	IVI Livingston
1	Williams, George Thomas1	M Jackson
1	Willoughby, James Russell 2	A Sherman
. I	Wilmar, Ralph R 1	MSan Miguel
1	Wolfrom, Wilbur Calahan2	M Bernardo

1 HSan Luis Obispo-
2 A Fullerton
S ASan Jose
1 ASan Jose
1 HSan Luis Obispo-
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CALIFORNIA POLYTECHNIC SCHOOL SAN LUIS OBISPO

Application for Admission

	Dat	e.	• •		•	•••	• •	·	••	•		•	• •	• •	•	 •	•		•
Name in full	••••	•••	•••			•••		•	• •			•	•		•	 •	•		•
Residence		• •			•			•				•	•	• •	•	 •	•		••
Date and place of birth	••••				•	•••		•				•	•		•	 •	•		•
Course of study desired	this a	•••	•••	···	n 1	•••	•••	••	•••		•••••••••••••••••••••••••••••••••••••••	•	•	•••	•	 	•	• •	•
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(Business address.)

Certificate from School Last Attended

The above-named applicantenrolled in	the
School	
completed g	rade
with the following record: Scholarship,	••••
Deportment, Attendance,	
Dated at 19	•••

I hereby recommend as a desirable student for the California Polytechnic School.

(Teacher, Principal, or Superintendent.)

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Detach and mail to the California Polytechnic School, San Luis Obispo. S AN 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.

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.