A SECONDARY SCHOOL
OF AGRICULTURE,
MECHANICS, AND
DOMESTIC SCIENCE

CIRCULAR OF THE

CALIFORNIA
POLYTECHNIC
SCHOOL

SAN LUIS OBISPO, JUNE, 1905

SACRAMENTO

W. W. SHANNON, Superintendent State Printing

1905
CALENDAR, 1905-1906.

Entrance Examinations, - - - Tuesday, September 12, 1905
Registration, - - - - Wednesday, September 13, 1905
Instruction begins, - - - - Thursday, September 14, 1905
Quarterly Meeting of Board of Trustees, Wednesday, November 8, 1905
Thanksgiving Recess, Thursday and Friday, November 23 and 24, 1905
First Term ends, - - - - Thursday, December 21, 1905

CHRISTMAS VACATION.

Second Term begins, - - - - Wednesday, January 3, 1906
Quarterly Meeting of Board of Trustees, Wednesday, February 14, 1906
Washington's Birthday, - - - - Thursday, February 22, 1906
Second Term ends, - - - - Friday, March 23, 1906

SPRING VACATION.

Third Term begins, - - - - Tuesday, April 3, 1906
Annual Meeting of Board of Trustees, - - Wednesday, May 9, 1906
Memorial Day, - - - - Wednesday, May 30, 1906
Commencement and Exhibition Day, - - Friday, June 15, 1906
Quarterly Meeting of Board of Trustees, Wednesday, August 8, 1906
BOARD OF TRUSTEES.

Ex-Officio.

His Excellency, GEORGE C. PARDEE, Sacramento
Governor of California.

Hon. THOMAS J. KIRK, Sacramento
Superintendent of Public Instruction.

Appointed Trustees.

Hon. WARREN M. JOHN, San Luis Obispo
Term expires, 1908.

F. A. HIHN, Esq., Santa Cruz
Term expires, 1909.

Professor E. J. WICKSON, Berkeley
Term expires, 1906.

R. M. SHACKELFORD, Paso Robles
Term expires, 1906.

Hon. S. C. SMITH, Bakersfield
Term expires, 1907.

OFFICERS OF THE BOARD OF TRUSTEES.

S. C. SMITH, President
R. M. SHACKELFORD, Vice-President
LEROY ANDERSON, Secretary
FACULTY.

LEROY ANDERSON, B.S., Ph.D., DIRECTOR,
    Animal Industry and Dairy Industry

SYDNEY S. TWOMBLY, B.S., D.V.S.,
    Agriculture, Chemistry, and Veterinary Science

JAMES EDWYN ROADHOUSE, B.S.,  Plant Industry and Irrigation

HARRIET HOWELL,   Domestic Art

OSCAR LESLIE HEALD,    Drawing, Sloyd, and Iron Work

EDWIN WALTER YOUNT,  Carpentry and Architectural Drawing

*MAY SECREST, B.S.,  Domestic Science, Matron of Dormitory

*LEROY BURNS SMITH, A.B.,  English, History, and Economics

*HERMAN B. WATERS, M.E.,  Physics and Electricity

ISAAC P. ROBERTS, M. AGR.,  Special Lecturer

NAOMI MABEL LAKE,  Clerk and Librarian

*Appointment begins with school year 1905-06.
LOCATION AND PURPOSE.

The California Polytechnic School is a State institution established at San Luis Obispo under an act of the Legislature of 1901. 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.

The age of entrance to the school is placed at fifteen years, because it is believed that as a rule children younger than this can not do the serious kind of work which the school demands, and because students coming to the school must have had a previous training equivalent to that covered by the usual grammar school course. Moreover, the majority of children leave school when they have completed the grammar grades. The chief reason for so doing is that they either wish to, or must, do something to earn a living. This is particularly true in country communities where there are no schools that teach the things pertaining directly to farm life. It is the children of the country, therefore, who most need an institution of the kind here planned; and to accommodate them at the most opportune period they are admitted at the average age of finishing the grammar school.
EQUIPMENT OF THE SCHOOL.

BUILDINGS.

Two buildings were completed in October, 1903, and have since been occupied by the school. Both are planned after a modified mission style of architecture, and are two stories in height, with a well-lighted basement. The buildings are heated by steam and lighted by electricity.

The Recitation and Administration Building is 47 by 100 feet, and has a concrete foundation with Los Berros stone from the grade line to the first floor. The remainder of the structure is of wood, covered with a metal lath and cement. The roofing is of metal tile. The basement contains storage rooms and a general lavatory for boys. The first floor contains the Director's offices, library, lecture room and laboratory for chemistry and physics, lecture room and laboratory for botany and entomology, photographic dark room, and girls' cloak room and lavatory. The second floor contains an assembly room, with dressing room, two drawing rooms, and two class rooms.

The chemical laboratory is a well lighted and ventilated room, 20 by 47 feet. It contains gas and water, and is well supplied with tables, hoods, storerooms, and other facilities of a modern laboratory.

The Dormitory is constructed in the same manner as the recitation building, except that the basement and foundation walls are entirely of concrete. Its dimensions are 40 by 100 feet. Its purpose is to provide a home on the school grounds for a few of the teaching staff and for as many students as can be accommodated. It contains thirty single rooms (each with a closet), a parlor, dining-room, kitchen, laundry, and four bathrooms. Provision is made for one student in a room. Each room is furnished with a single iron bedstead, woven-wire springs, sanitary mattress, pillow, white spread, study table, two chairs, dresser, and a rug covering most of the floor.
The Farm consists of 280 acres of land, the most of which is rolling and typical of a large section of the coast counties. The soil is varied in character, comprising rich, black bottoms, adobe, loams and the rocky soil of the steep hillside. The larger portion of the farm has been cultivated for many years in the production of hay and grain. A small bearing orchard consists of the leading varieties of the different fruits.

Gardens. Two or three acres of the best land have been set aside for gardens. Here, the first-year students in agriculture take their lessons in gardening. Each student has a plat which he plants, cultivates and irrigates as his own, under the guidance of the instructor.

Poultry. A prize-winning pen of White Wyandottes and of Buff Orpingtons were purchased in the fall of 1904. Chicks are being hatched of these two varieties and of White Leghorns. The school has two incubators, three brooders and a small brooder-house. One thousand dollars will be spent on further equipment of the plant this year.

Farm Stock. This equipment consists of good individuals of Jersey and Ayrshire cattle, Percheron horses and Poland-China swine. More good animals will be purchased during the present year.

Creamery. The past year instruction in butter-making has been given in the basement of the recitation building. During the present summer a new creamery, costing $2,000, is to be built in connection with the power-house. This will be fitted with as good machinery as our means will permit.

Dairy Barn. A new and modern dairy barn is nearing completion. It has concrete floors, a milkroom, bathroom, feed-room and dairyman’s sleeping-room. A silo 17 by 29 feet is being constructed near the dairy barn.
MECHANICS.

Power-House. The present equipment consists of a 50 H. P. return tubular boiler oil-burner, an 18 indicated H. P. Bailey upright engine, and a 6½ kilowatt generator. Heat and light are furnished to the buildings from the power-house.

Forging. The forge shop is a one-story building, 40 by 56 feet. It is equipped with eight down-draft forges, blacksmith's drill, combination blast and exhaust fan, and a 5 H. P. portable gas engine.

Carpentry. Instruction in this subject has been given during the past two years in the basement of the recitation building. A new shop, 40 by 100 feet, is in course of construction and will be finished and equipped in time for the opening of the next school year in September. It contains drafting and finishing rooms and a lavatory, but the major portion is in one large room for class work. The building and equipment will cost nearly $4,000.

Electricity. The past Legislature appropriated $2,000 for an equipment in electrical working. This will be installed in the recitation building in conjunction with the equipment in physics. The work will be in charge of a competent and experienced instructor, and it is hoped and expected that this department may grow rapidly.

DOMESTIC SCIENCE.

The appropriation of $24,000 made by the Legislature of 1905 for erecting and furnishing a domestic science and art building assures to the school the best equipped department of domestic science on the Pacific Coast. The appropriation is not available until January 1, 1906, thus the building will not be ready for occupancy until September, 1906. In the meantime, instruction in domestic science and art is given in the recitation building.
THE COURSES OF STUDY.

Three main lines of work are undertaken by the school, viz., Agriculture, Mechanics and Domestic Science. The courses in Agriculture and Domestic Science comprise all the leading subjects usually grouped under these heads and as detailed below. The course in Mechanics includes,—in addition to drawing, academic and science branches,—practical work in carpentry, forging and electricity. In all courses the work is about equally divided between class-room and laboratory or shop work. A student entering upon a certain course of study at the beginning of the year will be expected to continue the same course throughout the year. Upon completion of the three years’ course the student will be given a certificate indicating the work done and the student's proficiency therein.

The courses of study are approximately as follows:

<table>
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<tr>
<th>AGRICULTURE.</th>
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<tr>
<td><strong>First Year.</strong></td>
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<tr>
<td>Agriculture, class and field work.</td>
<td>English.</td>
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<tr>
<td>Arithmetic and Algebra.</td>
<td>Drawing.</td>
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<tr>
<td>Carpentry.</td>
<td>Gardening.</td>
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<td><strong>Second Year.</strong></td>
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<tr>
<td>Horticulture.</td>
<td>English.</td>
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<tr>
<td>Breeds of Live Stock.</td>
<td>Chemistry.</td>
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<td>Geometry and Trigonometry.</td>
<td>Bookkeeping.</td>
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<tr>
<td>Drawing.</td>
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<tr>
<td><strong>Third Year.</strong></td>
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<tr>
<td>Irrigation and Surveying.</td>
<td>History.</td>
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<tr>
<td>Feeding and Care of Animals.</td>
<td>Physics.</td>
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<tr>
<td>Agricultural Chemistry.</td>
<td>Physiology.</td>
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<tr>
<td>Plans and Specifications for Buildings.</td>
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MECHANICS.

FIRST YEAR.
Arithmetic and Algebra.
Physical Science.
Carpentry.

SECOND YEAR.
Geometry and Trigonometry.
Science, Electricity.
Forging.
Carpentry and Electrical Working.

THIRD YEAR.
Higher Mathematics.
Electrical Working.
Engines and Boilers.
Architectural Drawing and Designing.

DOMESTIC SCIENCE.

FIRST YEAR.
Arithmetic and Algebra.
Physical Science.
Sewing, Dressmaking, Millinery.

SECOND YEAR.
Cooking and Sewing.
Physiology.
House Construction and Furnishing.
Bookkeeping.

THIRD YEAR.
Cooking, Catering and Serving.
Home Nursing.
Elective Work in Gardening, Horticulture, Dairying and Poultry-keeping.
Chemical Laboratory
Sewing Class
Forging
Mechanical Drawing

CLASS-ROOMS
ADMISSION AND CLASSIFICATION OF STUDENTS.

The school is open to any boy or girl upon the following conditions:

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

Applicants thus qualified 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 and United States history. The examination in English will consist of a test of the applicant's ability to read, write and spell; in arithmetic, it will include all subjects as far as fractions, decimals and percentage; in history, the leading facts as covered in the usual grammar school course. The examination for 1905 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 1, 1905. The certificate will be returned to the applicant after the opening of the school.

Applicants who expect to be admitted upon examination must send their recommendations at the same time with their application for admission.

Copies of the application form will be sent to any who request. All applications for admission to the school must be made on this form.

All applications should be sent to the Director of the school not later than September 10, 1905.
Regular Students. These are students who are admitted to full standing upon a Diploma of Graduation from a grammar school or upon passing an equivalent entrance examination and who take 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 value 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. These are students who do not take a regular course of study as outlined, but select such studies of each as may seem to best equip them for the work they plan to do after leaving school. They will not be required to present a Diploma of Graduation from a grammar school, but should they not present such diploma they will be required to take the same entrance examination as is required for those who desire to become regular students. Their standing in this examination will decide the subjects they will be allowed to pursue if admitted. Special students may enter for the work of a year or more. Applicants sufficiently well qualified may be admitted for a term or more of special work. The choice of subjects by special students is subject to the approval of the faculty. In all other respects special students are subject to the same rules and regulations as regular students, except that they must be seventeen years of age at the time of admission.

High School Graduates. 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 two years or more, may be given credit for academic work for which the proper credentials are presented. Any high school student who receives credit upon entrance for the academic work should complete our course in two years.
DISCIPLINE.

It is expected that all persons who attend this school have an earnest purpose to make the best use of their time while in attendance. It is expected, therefore, that their behavior will always be exemplary in school and in the town. Failure to do the work laid out by the school or neglect to conduct one’s self as a lady or gentleman will result in the suspension or expulsion of the guilty student. The parent or guardian will be notified of any disobedience or misconduct on the part of the student.

EXPENSES.

There is no charge for tuition. The student is expected to pay for the materials used in the shops and laboratories. To cover these expenses, the student is charged $10 per year, regardless of his or her course of study. Of this fee, $4 is due at the beginning of the first term and $3 at the beginning of the second and third terms. The materials supplied under such payment are chemicals, wood, gas, iron, drawing paper and the like. At the beginning of the first term a deposit of $5 is required from each student to pay for individual breakage of tools and apparatus. Such portion of the deposit as is not needed to cover breakage is returned at the end of the year. 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 expense for books, drawing instruments and other supplies needed by each student at the beginning of the school year will be about $10. The drawing instruments will last during the entire course. The expenses for additional books at the beginning of the second and third terms will not exceed $5. The total cost of books, supplies and fee for first year will, therefore, be about $35.

Arrangements are made whereby the books and other supplies may be purchased at reasonable prices in San Luis Obispo.
Board and room (including heat and light) are provided in the dormitory at actual cost for food and service. The charge thus far has been $20 per month for each person. This sum has also included the laundering of bed linen and towels. Payment for accommodations in the dormitory are monthly in advance. The occupant of a room is required to furnish bed linen, blankets, towels and soap for his personal use. He will need at least two pillowcases, three sheets and two pairs of blankets. It is desired that blankets be used rather than quilts.

Room and board may be secured in private families in San Luis Obispo at from $18 to $25 per month. There is opportunity to rent furnished rooms for light housekeeping.

OPPORTUNITY FOR SELF-SUPPORT.

A limited amount of employment can be given to students who find it necessary to earn a portion of their expenses while attending the school. The farm, dairy, dormitory and grounds afford opportunity to employ a few students more or less regularly during the year. No remuneration will be made for manual work of any kind which carries instruction with it.

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.

ATHLETICS.

Encouragement is given in athletics, and a lively association is doing good work. Any student of good standing or officer of the school is eligible to membership. A good tennis court has been built and a large plat of ground is being put into shape for athletic work as opportunity affords. A strong baseball team has been organized and the prospects are bright for a football eleven next year.
THE SCHOOL YEAR.

The year 1905–06 is divided into three terms of about twelve weeks each. As is seen by the calendar on page 2, the first term begins September 13 and ends December 21; the second term begins January 3 and ends March 23; the third term begins April 3 and ends June 15. All students will register at the office of the school on Wednesday, September 13, between 9 and 12 A. M. and 1 and 4 P. M. They will meet their instructors the following day.

School is held five days a week—from Monday to Friday inclusive. If found necessary, Saturday may be used for excursions or field work. The daily hours for recitation and laboratory exercises are from 9 to 12 and 1 to 4. Each student is occupied at some school work the whole of this time.

Correspondence concerning the school should be addressed to the Director of the California Polytechnic School, San Luis Obispo, California. Write for an application form.
STUDENTS, 1904-1905.

Barnard, Morris Hall............ Ventura, Ventura Co.
Basten, Eivion Carlton.......... Placentia, Orange Co.
Biaggini, Ester................. Cayucos, San Luis Obispo Co.
Brown, Evan.................... Cholame, San Luis Obispo Co.
Buck, Francis D................ Goleta, Santa Barbara Co.
Collins, Clement Laurence..... Fresno, Fresno Co.
Conradt, George S.............. Lotus, El Dorado Co.
Cook, Samuel H................ San Luis Obispo, San Luis Obispo Co.
Cox, Herbert.................... Morgan Hill, Santa Clara Co.
Curtis, Ernest Walton.......... Lordsburg, Los Angeles Co.
Dodge, Clara Lenore............ Santa Maria, Santa Barbara Co.
Doty, Jesse Wilmer............ Cambria, San Luis Obispo Co.
Doty, Lorenzo Dow............. Cambria, San Luis Obispo Co.
Emmert, Allan V................ Arroyo Grande, San Luis Obispo Co.
Faulkner, Laura E.............. San Luis Obispo, San Luis Obispo Co.
Fox, Lilian Byrne.............. Pomona, Los Angeles Co.
Girard, Marie E................ Cayucos, San Luis Obispo Co.
Goodrich, Elmer John.......... San Luis Obispo, San Luis Obispo Co.
Grant, Fred.................... Annette, Kern Co.
Hanson, Alice Louisa.......... Paso Robles, San Luis Obispo Co.
Hartnett, George W............. Sacramento, Sacramento Co.
Hathaway, Ella Riley.......... San Luis Obispo, San Luis Obispo Co.
Hollister, Owen F............... Goleta, Santa Barbara Co.
Hoyt, Robert Colfax........... San Luis Obispo, San Luis Obispo Co.
Hyde, Hollis Ezra.............. San Francisco.
James, Harry L................ Santa Barbara, Santa Barbara Co.
Kendall, Walter Lon........... San Luis Obispo, San Luis Obispo Co.
Kennedy, Avery B.............. Campbell, Santa Clara Co.
Knowlton, Kent S.............. Fullerton, Orange Co.
Kondo, Eizo.................... Oakland, Alameda Co.
Lewin, Nathan S............... San Luis Obispo, San Luis Obispo Co.
Martin, Georgia M.............. San Francisco.
McLean, Maurice A............. Bakersfield, Kern Co.
Miossi, Alfred Felix........... San Luis Obispo, San Luis Obispo Co.
Pezzoni, Henry............... Guadalupe, Santa Barbara Co.
Pierce, Earl Dean.............. San Francisco.
Potter, Herbert............... San Luis Obispo, San Luis Obispo Co.
Righetti, Irene................ San Luis Obispo, San Luis Obispo Co.
Righetti, Laura............... San Luis Obispo, San Luis Obispo Co.
Schneider, Annie W............. Morro, San Luis Obispo Co.
Schulze, Claudius H.............San Luis Obispo, San Luis Obispo Co.
Smith, Walter Guy................ Orange, Orange Co.
Sprague, Ed ...................... San Luis Obispo, San Luis Obispo Co.
Stringfield, Hunter .............. Arroyo Grande, San Luis Obispo Co.
Stuart, Arthur Lewis ............. San Luis Obispo, San Luis Obispo Co.
Tanner, Ella Lydia................ Morro, San Luis Obispo Co.
Thaler, Fred Leslie ............... San Luis Obispo, San Luis Obispo Co.
Thomas, Myron Norris .......... Riverside, Riverside Co.
Tout, H. Floyd .................. Sultana, Tulare Co.
Tout, Carl S. .................... Sultana, Tulare Co.
Tout, Jeanne ........................ Sultana, Tulare Co.
Tout, Nye .......................... Sultana, Tulare Co.
Wade, Gustavus ................... Goleta, Santa Barbara Co.
Wade, Henry ........................ Goleta, Santa Barbara Co.
Wilson, George William ........... Bakersfield, Kern Co.
Worden, Guy Truman............... Shandon, San Luis Obispo Co.
Vetter, Josephine.................. Santa Maria, Santa Barbara Co.
SAN LUIS OBISPO is a city of about 4,000 people, charmingly situated in a valley of the Coast Range Mountains, and ten miles in two directions from the Pacific. The ocean is reached at Port Harford to the southwest and at Morro Bay to the northwest. The climate is a pleasing combination of sea and mountain environment, which moderates both the summer and winter temperature.

San Luis Obispo has churches representing the following denominations: Presbyterian, Congregational, Baptist, Methodist, Episcopalian, and Catholic. The last-named congregation occupies the famous Mission San Luis Obispo de Toloso, which was established in 1772.

A free public library was established in 1897. It now contains 4,500 bound volumes and many unbound pamphlets and magazines. It will this year occupy a $10,000 library building, which is the gift of Mr. Carnegie. Students in the Polytechnic School will be granted equal privileges in the library with the residents of the city.

San Luis Obispo is on the coast line of the Southern Pacific Railway, about midway between San Francisco and Los Angeles. Through trains leave each of these cities daily—one in the morning and one in the evening—and meet at San Luis Obispo in the middle of the afternoon and in the early morning. A local train service with San Francisco is obtained by one train daily. The town may also be reached by water by the Pacific Coast Steamship Company's line of boats, connecting at Port Harford with the Pacific Coast Railway for San Luis Obispo and other towns in the interior.