# University of Hawaii Bulletin 

## General Catalogue 1940-41

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# UNIVERSITY OF HAWAII General Catalogue for 1940-41 

Admission and Degree Requirements - Announcement of Graduate and Undergraduate Courses of Instruction for the Academic Year 1940-41 Record of Degrees Conferred in 1939

## CONTENTS

Calendar ..... 7
Regents of the University ..... 9
Administrative Officers ..... 10
The University of Hawail-General Statement ..... 11
History ..... 12
The University of Today ..... 12
Status of Students in the University ..... 14
Admission ..... 15
Registration, Withdrawal, and Other Changes ..... 17
Credits, Grades, Grade Points, Honors ..... 18
Requirements for Advancement Toward Graduation ..... 19
Independent Study ..... 20
Military Training ..... 20
Health, Physical Education, and Sports ..... 21
Baccalaureate Degrees ..... 21
Requirements of Medical Schools ..... 22
Summer Session ..... 23
Adult Education Division ..... 23
Tuition and Fees ..... 24
Living Accommodations and Expenses ..... 25
Student Life ..... 25
Student Personnel Office ..... 25
Loan Funds ..... 26
Scholarships ..... 26
Prizes ..... 28
College of Arts and Sciences ..... 29
Admission-Maximum Student Load ..... 29
Requirements for Graduation ..... 29
The Language Requirement ..... 29
Other College Requirements ..... 29
Selection of a Group ..... 30
Requirements of the Groups ..... 30
Group I-Social Sciences ..... 30
Group II-Languages, Literature, and Art ..... 31
Group III-Biological and Physical Sciences. ..... 31
Group IV-Economics and Business ..... 31
Social Work Training ..... 32
College of Applied Science ..... 33
Admission ..... 33
Requirements for Graduation ..... 33
Agriculture ..... 33
Civil Engineering ..... 35
Sugar Technology ..... 36
Home Economics ..... 37
General Science ..... 39
Public Health Nursing ..... 41
Teachers College ..... 42
Admission ..... 42
Requirements for Graduation ..... 42
Mașter of Education Degree ..... 45
Vocational Education ..... 46
Nursery-Kindergarten Education ..... 46
Physical and Health Education ..... 46
Graduate Division ..... 47
Requirements for Advanced Degrees ..... 47
The Master's Degree ..... 48
The Civil Engineer Degree ..... 48
The Sugar Technologist Degree ..... 49
The Doctor of Philosophy Degree. ..... 49
Graduate Fellowships and Scholarships ..... 49
Courses of Instruction for the Academic Year 1940-41 ..... 50
Agriculture ..... 50
Anthropology and Sociology ..... 53
Anthropology ..... 53
Art ..... 55
Botany ..... 56
Business ..... 59
Chemistry and Sugar Technology ..... 60
Chemistry ..... 60
Chinese (see Oriental Studies)
Economics ..... 63
Education (see Teacher Education)
Engineering ..... 64
Civil Engineering ..... 64
Mechanical Drawing ..... 66
Mechanical Engineering ..... 66
Experimental Engineering ..... 67
English ..... 67.
Special Speech Courses ..... 67
Composition ..... 68
Journalism ..... 68
Literature ..... 69
Professional Courses ..... 70
Speech ..... 71
French ..... 72
Geography ..... 73
Geology ..... 74
German ..... 75
Hawaiian ..... 75
History ..... 76
Home Economics ..... 78
General Courses ..... 78
Household Art ..... 79
Household Science ..... 79
Japanese (see Oriental Studies)
Mathematics ..... 80
Military Science and Tactics ..... 81
Music ..... 82
Oriental Studies ..... 82
Chinese Language, Literature, and History ..... 82
Japanese Language, Literature, and History. ..... 84
Philosophy ..... 84
Physical and Health Education ..... 85
Service Courses ..... 86
Professional Courses ..... 86
Physics ..... 88
Political Science ..... 89
Portuguese ..... 90
Psychology ..... 90
Public Health Nursing ..... 91
Religion ..... 92
Social Work Training ..... 93
Sociology ..... 93
Spanish ..... 95
Sugar Technology ..... 95
Survey Courses ..... 96
Teacher Education ..... 96
Professional Education Courses ..... 97
Basic Courses ..... 97
Advanced Courses ..... 97
Graduate Courses ..... 99
Related Courses ..... 100
Agriculture for Teachers ..... 100
Arithmetic for Teachers ..... 100
Art for Teachers ..... 100
Biology for Teachers ..... 100
English for Teachers. ..... 100
Geography for Teachers ..... 101
Library Science for Teachers. ..... 101
Music for Teachers ..... 101
Scout Training for Teachers. ..... 102
Social Science for Teachers ..... 103
Zoology ..... 103
Degrees, Diplomas, and Certificates Conferred in 1939 ..... 106
Summary of Enrollment, 1939-40 ..... 111
Index ..... 113

1940
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\begin{array}{ll}\text { June 18, Tuesday } & \text { Twenty-ninth annual Commencement. } \\
\text { June 24, Monday } & \text { Registration for six-weeks summer session. } \\
\text { June 25, Tuesday } & \text { Instruction begins. } \\
\text { July 4, Thursday } & \text { Independence day (holiday). } \\
\text { Aug. 2, Friday } & \text { Six-weeks summer session closes. } \\
\text { Aug. 3, Saturday } & \text { Registration for post session. } \\
\text { Aug. 5, Monday } & \text { Instruction begins. } \\
\text { Aug. 23, Friday } & \text { Post session closes. } \\
\text { Aug. 31, Saturday } & \text { Last day for receiving applications for admission. } \\
\begin{array}{l}\text { Sept. 16, Monday } \\
\text { Sept. 17, Tuesday }\end{array} & \begin{array}{l}\text { "Freshman Week." }\end{array} \\
\begin{array}{l}\text { Sept. 18, Wednesday } \\
\text { through }\end{array} & \begin{array}{l}\text { Registration of graduate students for thirty-third annual } \\
\text { session, Wednesday and Thursday } 8 \text { a.m. to } 4 \text { p.m.; }\end{array}
$$ <br>

Sept. 21, Saturday\end{array}\right\}\)| Friday 8 a.m. to 5 p.m.; Saturday 8 a.m. to 2 p.m. |
| :--- |

Sept. 18, Wednesday Registration of sophomores, juniors, and seniors, 8 a.m. to 4 p.m.

Sept. 19, Thursday Registration of freshmen, 8 a.m. to 4 p.m.
Sept. 20, Friday $\}$ Registration of all other students, Friday 8 a.m. to '5 p.m.;
Sept. 21, Saturday Saturday 8 a.m. to 2 p.m.

Sept. 23, Monday
Instruction begins.
Nov. 5, Tuesday Election day (holiday).
Nov. 11, Monday Victory day (holiday).
Nov. 21, Thursday through Thanksgiving recess.
Nov. 23, Saturday
Last day of classes before Christmas recess.

## 1941

Jan. 6, Monday
Jan. 28, Tuesday
Classes resume.

Jan. 31, Friday through
Feb. 8, Saturday
Feb. 13, Thursday Registration of regular students for second semester.
Feb. 14, Friday
Feb. 15, Saturday
Feb. 14, Friday
Feb. 15, Saturday

Feb. 22, Saturday
Apr. 11, Friday
Apr. 12, Saturday
May 1, Thursday

May 22, Thursday
May 30, Friday
June 4, Wednesday
\} Registration of all other students for second semester.
Instruction begins.
Last day to apply for graduate degrees to be received in June.

Washington's birthday (holiday).
\} Easter recess.
Last day to arrange date of final examination for graduate degrees.

June 5, Thursday
June 14, Saturday
June 11, Wednesday Kamehameha day (holiday).
June 14, Saturday Last day for depositing graduate dissertations in University Library.

June 17, Tuesday Thirtieth annual Commencement.
June 30, Monday Registration for summer session.
July 1, Tuesday Instruction begins.
July 4, Friday Independence day (holiday).
Aug. 8, Friday Summer session closes.
Aug. 30, Saturday Last day for receiving applications for admission.
Sept. 15, Monday
Sept. 16, Tuesday $\quad$ "Freshman.Week."
Sept. 17, Wednesday through
20, Saturday Sept. 20, Saturday

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## THE REGENTS OF THE UNIVERSITY

(The figure in parentheses after each name is the year in which that member was appointed.)

Charles R. Hemenway (1910), Chairman<br>Hawaiian Trust Company, Ltd.<br>Honolulu

Mary Dillingham Frear (1920)<br>1434 Punahou Street<br>Honolulu

David L. Crawford (1927), Secretary<br>University of Hawaii<br>Honolulu

Carl A. Farden (1933)<br>P.P.C.A. Experiment Station<br>Honolulu

Oren E. Long (1935)<br>Department of Public Instruction Honolulu

Herbert E. Gregory (1937)
3066 Wailani Road
Honolulu

Herbert K. Keppeler (1938)<br>Bishop Estate<br>Honolulu

## ADMINISTRATIVE OFFICERS

## General



## Divisional

Dean of the College of Arts and Sciences...........................Thayne M. Livesay, Ph.D.
Dean of the College of Applied Science................................Arthur R. Keller, M.S.
Dean of the Teachers College...............................................Benjamin O. Wist, Ph.D.
Director of the Graduate Division.........................................Paul S. Bachman, Ph.D.
Director of the Summer Session..............................................Paul S. Bachman, Ph.D.
Director of the Oriental Institute...........................................Gregg M. Sinclair, M.A.
Director of the Adult Education Division......................................R. Ray Scotr, Ph.D.
Director of the Psychological Clinic....................................Stanley D. Porteus, D.Sc.
Director of the Agricultural Extension Service........................Howry H. Warner, B.S.
Director of the Hawaii Agricultural Experiment Station....John H. Beaumont, Ph.D.

## THE UNIVERSITY OF HAWAII

## General Statement

The University of Hawaii is situated in Honolulu, on the island of Oahu. Its campus lies at the mouth of Manoa Valley, three miles from the business center of Honolulu and overlooking Waikiki Beach, which is about two miles away. Ten other tracts of land on the islands of Oahu, Maui, and Hawaii bring the University's land holdings to 400 acres.

Established by act of the legislature of the Territory of Hawaii in 1907, the University bears the same relation to the territory as do the state universities to their states. Support of the University comes from appropriations of the territorial legislature, the United States government, and miscellaneous funds that include gifts and student fees.

Although the University of Hawaii never received a grant of land such as that provided for the similar colleges of the states by the original Morrill Act of 1862, it is a federal land-grant college and has benefits from the Second Morrill Act of 1890, the Nelson Amendment of 1907, and subsequent legislation.

Open to All
Instruction is available to all persons who are qualified, regardless of their sex, color, or nationality.

## Fully Accredited

The University is fully accredited by the Association of American Universities. Its students may transfer to other American and to European universities on the same basis as may students of other American universities. Its students may also transfer to the leading Oriental universities.

## Control of the University

Government of the University resides in a board of regents consisting of seven members. Two are ex-officio members: the president of the University and the territorial superintendent of public instruction or some other member of the board of commissioners of public instruction designated by the governor of Hawaii (the incumbent is the superintendent). The other five members are appointed by the governor for terms of five years. The charter and by-laws of the board of regents are published in a pamphlet available upon request.

## Divisions of Academic Year

The University divides its academic year into two semesters of 18 weeks each and a summer session of six weeks. The semester beginning in the autumn is known as the first semester, and that beginning in the winter is known as the second semester.

## College Colors

The college colors are green and white.

## Communications to the University

Letters of general inquiry from prospective students should be addressed to the registrar.

The registered cable address of the University is COLWAI.

## History of the University

Before receiving its present name, the institution had been the College of Agriculture and Mechanic Arts from 1907 to 1911 and the College of Hawaii from 1911 to 1920. Instruction began in 1908 with two instructors and five students in a temporary location on the grounds now occupied by the Lincoln School in Honolulu. After a few years the institution was moved to its present site. When the College of Arts and Sciences was added in 1920 , the name was changed to University of Hawaii.

Eleven years later, in 1931, the territorial legislature united the Territorial Normal and Training School with the University School of Education to form the Teachers College of the University. The Normal School, founded in 1896, had been situated during most of its existence at the intersection of Emerson, Lunalilo, and Quarry streets. In 1930 the School was moved to two new buildings adjoining the University campus. When the merger took place, the property of the School was placed under the control of the board of regents of the University.

## The University of Today

Today the University's instructional organization consists of the College of Applied Science, the College of Arts and Sciences, the Teachers College, and the Graduate Division. The University Adult Education Division conducts both credit and noncredit courses in communities of the territory other than Honolulu and noncredit courses on the University campus. The Oriental Institute assists the University in planning and maintaining its course offerings in the field of Oriental studies, as well as conducting its own program of research and other work in that field.

## Related Scrvices

In addition to its instructional program, the University has several other forms of public service.

The Psychological and Psychopathic Clinic is a territorial institution under the management of the University. It examines persons at the request of the courts, industrial schools, the hoard of health, the department of public instruction, and other public institutions and organizations. Under proper regulation, it also examines individuals at the request of private organizations, parents, or guardians. In addition, the clinic conducts investigations in the field of psychology.

The Cooperative Extcnsion Scrvice in Agriculture and Home Economics conducted jointly by the University and the United States Department of Agriculture, receives federal aid on the same basis as do the extension services of the states. It is devoted to the advancement of agriculture in Hawaii and the improvement of rural home life.

The Hawaii Agricultural Experiment Station is an amalgamation of the former Federal Experiment Station with the University station, and is under the direction of the University. This station coordinates its research with that of the Hawaiian Sugar Planters' Association and that of the Pineapple Producers Cooperative Association.

The Aquarium, at Waikiki Beach, is operated by the University as a place of education and entertainment for the benefit of the resident public and of visitors.

The Pineapple Producers Cooperative Association has affiliated its experiment station with the University. The expense of the station is borne by the Association. The field work is carried on largely at Wahiawa, in the heart of the pineapple country, while the laboratory and technical investigations are conducted at the University in buildings erected by the Association.

Seismological Observatory. The United States Coast and Geodetic Survey operates a seismological observatory in Gartley Hall under agreement with the University whereby the results and observations are made of service to the territory.

The Volcano Laboratory on the island of Hawaii, conducted in cooperation with the National Park Service and the Hawaiian Volcano Research Association, offers research possibilities both to graduate students and investigators who wish to pursue their own studies in subjects pertaining to volcanology.

## Cooperating Institutions

To add to the research facilities which it offers students and to expand its services to the territory, the University has made cooperative agreements with several other institutions.

Bernice P. Bishop Museum. The University and the Bishop Museum reciprocate in the use of libraries, laboratories, collections, and other facilities of research. Graduate students registered in the University are allowed to carry on investigations under the guidance of members of the Museum staff for credit toward advanced degrees from the University. Advanced students may use the Museum facilities when working under proper direction, subject to such regulations as may be deemed expedient by the director of the Museum.

Institute of Pacific Relations. The research library accumulated by the Institute of Pacific Relations, affording excellent facilities for the study of international affairs, constitutes a part of the University library.

Honolulu Academy of Arts. This institution, built and endowed by Mrs. C. M. Cooke, has made its fine collections of art objects available to the students and instructors of the University for their educational advancement.

The Hawwaiian Sugar Planters' Association maintains an experiment station whose facilities are available to the University for instructional purposes. Students in sugar technology spend a semester at this station as a part of their program of study. Several members of the station staff take part in the instructional work of the University.

Fruit Fly Laboratory. The United States Bureau of Entomology maintains on the University campus a research laboratory and a corps of investigators for the study of fruit fly pests in Hawaii.

Queen's Hospital. The Queen's Hospital in Honolulu and the University cooperate in conducting a training course for nurses. Some of the courses of instruction are offered at the University and some at the Hospital.

## Campus and Buildings

The principal buildings on the campus are Hawaii Hall, Gartley Hall, Dean Hall, the Library, the Social Science building, Teachers College and its training school, Farrington Hall, the Engineering Quadrangle, the Agriculture and the Home Economics buildings, the University Union, and the Gymnasium. All of these except the Gymnasium and the training school are built of reinforced concrete.

Hawaii Hall is the administration building. The biological science departments are housed in Dean Hall, and the chemistry and physics departments are in Gartley Hall. Farrington Hall, which is an auditorium with a backstage extension, is well equipped for dramatics work. The engineering laboratories and classrooms are in the five concrete buildings composing the Engineering Quadrangle. An outdoor theater, whose backdrop is a tropical garden and the Koolau mountain range, is the setting for Commencement and other University programs.

The Library, which contains 125,000 bound volumes and about 325,000 pamphlets, is a depository for government publications. Extensive collections of Chinese and

Japanese works and a growing collection of valuable books and periodicals about Hawaii are among its features. Its collections of local and mainland newspapers, and literary, technical, and scientific periodicals are available throughout the day and evening. All persons complying with the regulations may draw books.

Residence accommodations on or near the campus include the Charles H. Atherton House for men and two dormitories for women students. Meals are served at the University Union.

A swimming pool, tennis courts, locker buildings, and a cinder track are grouped near Wise Field, which is used for football and baseball practice and military drill. Cooke Field affords facilities for track sports.

Other buildings connected with the University include the R.O.T.C. building Hawaii Hall Annex, which houses the Psychological Clinic and the offices of the English department, the Nutrition Laboratory, the Entomology building, the Marine Biological Laboratory at Waikiki Beach, and the Astronomical Observatory in Kaimuki. A part of the campus is occupied by an experimental farm, which is devoted to solving problems of Hawaii's dairymen, poultrymen, and livestock raisers and which provides excellent instructional facilities for students of agriculture.

The herbaria of the University and of the Bishop Museum, which are combined under the custodianship of the Museum, contain the most nearly complete collection of Hawaiian plants in existence, including some species now extinct. The most valuable parts are the cotypes of Dr. W. Hillebrand's species and the types of many new species collected by later botanists.

## Status of Students in the University

Students in the University are broadly classified in the following groups: undergraduates, graduates, and noncredit students.

The undergraduate students, comprising about three fourths of the student body, are of two kinds: rcgular students and unclassified students.

Regular students are those who are pursuing programs of study that comply with the established regulations and lead, usually after four years of study, to the bachelor's degree. Regular students usually carry full-time programs ( 10 semester hours or more). Freshmen and sophomores are lower division students, juniors and seniors upper division students.

Unclassified students are those who, although registered for credit, are not enrolled as candidates for degrees. They usually carry only part-time programs (fewer than 10 semester hours).

Graduate students (graduates of this university or of other institutions of approved standing) fall into three groups: candidates for advanced degrees, candidates for five-year diplomas, and noncandidates.

Degree candidates are those who pass qualifying examinations and pursue programs of study leading to advanced degrees.

Five-year diploma candidates are persons taking postgraduate work in Teachers College.

Most of the other graduate students, candidates neither for degrees nor diplomas, are teachers seeking professional improvement by taking graduate courses.

Noncredit students include:
Special students, who are persons qualified to participate in class work but who, though registered in credit courses, receive no credit.

Auditors, who are permitted to attend certain credit courses as listeners, but who take no part in the class work and receive no credit.

## Admission to the University

Candidates for admission must present satisfactory evidence of ability to do university work.

Persons who want to become regular, unclassified, or special students and who have not previously earned credits in an institution of higher learning must apply to the director of admissions. Their applications should be filed at least two months before the opening of the semester in which enrollment is desired; the University does not obligate itself to consider applications filed less than 30 days before the proposed date of registration. Requests for application forms and questions about admission should be addressed to the director of admissions.

The application procedure for persons who have credits from some other institution of higher learning is described hereafter under Admission to Advanced Standing.

## Admission of Regular Students Entering a University for the First Time

Every applicant for admission as a regular student who has not previously earned credits in an institution of higher learning must take college aptitude, English placement, and oral English examinations and submit evidence that he has satisfactorily completed at least 15 units of work in a four-year high school or at least 12 units of work in a three-year senior high school. Acceptable distributions of these units among courses of study are detailed hereafter.

Applicants whose preparatory school grades average $B$ or better usually are admitted unless they fail seriously in the college aptitude examination, in which case they may be rejected. Applicants whose preparatory school grades average C but who score above average in the college aptitude test may be admitted. Special consideration is given to the quality of work done in the junior and senior years of the preparatory school.

The word unit as employed here signifies the satisfactory completion of a course of study pursued for a full school year, with five recitations a week of not less than 45 minutes each, or the equivalent laboratory or shop exercises.

The college aptitude, English placement, and oral English tests are given by the University in many high schools of the territory each spring. Students seeking admission in the autumn and who have not had such examinations take them during "Freshman Week" (see University Calendar). Other examinations given during "Freshman Week" include the modern language placement test for students intending to enter advanced courses in Hawaiian, Chinese, Japanese, French, German, or Spanish; the home economics placement test for freshmen planning to major in home economics; and the mathematics placement test for students intending to register for courses in mathematics.

Admission from a Four-Year High School. Three of the 15 units presented from a four-year high school must be in English and one unit must be in algebra. Ten of the $\mathbf{1 5}$ should be from the following fields: English; physical, biological, and social sciences; mathematics; and foreign languages (but entrance credit in foreign languages is not granted unless at least 2 units in some one language are offered). The remaining 5 units may be in any subjects credited by the preparatory school toward its diploma, so long as no less than $1 / 2$ unit nor more than 2 units are in any one of these subjects and provided that these subjects have been pursued in accordance with regular classroom procedure involving a reasonable amount of preparation in addition to the time spent in class.

Admission from a Three-Year Senior High School. Three of the 12 units presented from a three-year senior high school must be in English. One unit must be
in algebra unless the student had ninth grade general mathematics in intermediate (junior high) school. Eight of the 12 units should be in the following fields: English; physical, biological, and social sciences; mathematics; and foreign languages (but entrance credit in foreign languages is not granted unless at least 2 units in some one language are offered). The remaining 4 units may be in any subjects credited by the preparatory school toward its diploma, so long as no less than $1 / 2$ unit nor more than 2 units are in any one of these subjects and provided that these subjects have been pursued in accordance with regular classroom procedure involving a reasonable amount of preparation in addition to the time spent in class.

Admission by Examination. Candidates who cannot or do not care to satisfy the foregoing admission requirements may take examinations offered by the College Entrance Examination Board ( 431 West 117th street, New York City) and submit statements from the Board covering certain subjects, or take the comprehensive examinations offered by the Board and submit a certificate covering these examinations along with a complete record of work done in preparatory school. Applicants whom the director of admissions regards as of more than average ability may take entrance examinations offered by the University covering preparatory school subjects.

## Special Requirements for Certain Programs

In addition to satisfying the requirements of the University as a whole, candidates for admission must meet special requirements for admission to some programs of university work. Each applicant should study the requirements of the college he intends to enter and the program that he intends to pursue in that college. Special attention is directed to the following requirements:

Students desiring to study mathematics in the University or to take subjects for which college mathematics is a prerequisite should have high school algebra through quadratics and plane geometry. This applies particularly to prospective students of agriculture, sugar technology, and premedical work, all of whom must take college mathematics in preparation for physics.

Prospective engineering students must offer high school algebra through quadratics, plane gcometry, and trigonometry if they want to complete the university course in four years. It is strongly recommended that they also offer solid geometry, mechanical drawing, and physics.

Prospective students of medicine should, in addition to high school algebra through quadratics and plane geometry, have two years of a foreign language, two years of history, and three years of science.

Every student entering as a freshman is expected to be on the campus during "Freshman Week," the dates of which are stated in the University Calendar. Entrance examinations, consultations with officers and instructors, and introductory lectures occupy the "week."

## Admission to Advanced Standing

Students who transfer with sufficient credits from another accredited university or college may be granted advanced standing. Such students must present to the registrar an official statement of the studies offered for admission at that institution, of the studies pursued in college and the grade received in each, and of honorable dismissal. Credit toward graduation is given only in subjects in which a grade of $C$ or better is recorded. Candidates transferring with advanced standing are required to do a minimum of one year's work ( 30 semester hours) at the University of Hawaii if they wish to receive a bachelor's degree here.

## Admission of Unclassified Students

Mature persons, ordinarily only such as are at least 21 years of age, who present satisfactory evidence of their ability to do college work, may register as unclassified students and take a limited program. Persons less than 21 years of age may be admitted as unclassified students if they are able to meet fully the entrance requirements for regular freshman standing but desire to carry only a few courses.

Persons of some maturity who have had experience that manifestly prepares them for college work may be given entrance credit for such work. What forms of work may be given credit and how many credits may be granted cannot be stated in advance; each case is considered individually.

Admission as an unclassified student is in no case permitted as a means of avoiding compliance with the requirements laid down for regular students.

## Admission of Special Students

Qualified persons interested in certain special courses without concern as to credit may be admitted as special students. They attend classes and take part in the courses for which they are registered, but they receive no credit. Applicants refused admission as regular or unclassified students are not permitted to enter under this classification.

## Admission of Auditors

Persons desiring the privilege of attending classes as auditors obtain the consent in writing of the director of admissions and present it to the registrar at the time of registration.

## Admission of Graduate Students

Graduates of accredited colleges and universities who wish to pursue graduate study in the University of Hawaii should apply to the director of the Graduate Division. Their applications should be accompanied by an official transcript of undergraduate record and of any graduate work completed at another institution. Admission to the Graduate Division is provisional until such records are on file. These transeripts became a permanent part of the University files.

## Registration, Withdrawal, and Other Changes

Dates upon which students register for courses in the University are stated in the University Calendar. Students entering in the autumn receive a circular telling them how to proceed in registering. Courses offered in the University are described in this catalogue under Courses of Instruction, and a schedule stating time and place of meeting of each course is issued by the registrar in mid-September for the first semester and in mid-January for the second semester.

## Registration of Undergraduate Students

Undergraduates are required to have made, by the time they register, a choice from among the three colleges of the University, and to have made a selection from among the programs offered in the college chosen. Each undergraduate is assigned at registration time to a faculty member who acts as his adviser in selecting courses.

## Registration of Graduate Students

Graduate students other than those eligible to work for the Teachers College five-year diploma register with the director of the Graduate Division.

## Credit Must be Arranged in Advance

The number of credits obtainable in most courses is announced in the catalogue and in the time schedule. However, certain courses in which students carry on
individual work are marked credit by arrangement, or the number of their credits is listed as var (variable). Such statements do not signify that the credits are to be determined at the end of the semester. The student registers for a definite number of credits and may earn no more nor less than that number.

## Late Registration

The University permits registration after the announced registration days in any semester only in exceptional cases and for valid reasons. The following rules govern such registration:

All students completing their initial registration for any semester after the announced registration days must pay a special fee (see Tuition and Fees).

Registration in the University (other than registration of auditors) is permitted later than six calendar days following the first day of class work in any semester only if the student obtains the consent of the dean of the college in which he desires to register and of the dean of student personnel. Such consent is given only for good and sufficient reasons.

A student already registered who wants to enter courses in which he did not originally register may do so within the period ending on the sixth calendar day following the first day of class work in any semester by obtaining a form for such change from the dean of the college in which he is registered, by having that form properly filled out and signed, by taking it to the cashier for recording and adjustment of fees, and by depositing it in the registrar's office as authorization for the desired change.

## Withdrawal from Courses or from the University

Withdrawal is the voluntary severance by a student of his connection with a course or with the University. In order to be officially recognized, the withdrawal of an undergraduate from a course must have the written consent of the dean in whose college the student has registered. This consent must be on a form procured by the student from the dean and returned to the registrar bearing the dean's signature. Withdrawals from the University must be applied for on a form to be obtained from the registrar's office; signatures as indicated on the form must be obtained, and the completed application must be returned to the registrar's office.

During the first six weeks of a semester a formal withdrawal is marked $W$ by the registrar. A withdrawal at a later time but prior to the last two weeks of a semester is marked II' if the work of the student while he was registered in the course was passable; otherwise it is marked $\boldsymbol{F}$ (for failure). Withdrawal from a course during the last two weeks of a semester is not permitted. A student who drops a course without the formality of withdrawing receives an $F$ in the course.

## Other Changes of Students' Programs of Study

A student may not formally transfer from one of the University's colleges to another during the academic year. Such changes are to be applied for on a form obtainable at the registrar's office and must have the approval of the deans of the two colleges concerned.

## Credits, Grades, Grade Points, Honors

The University recognizes work accomplished by students in terms of credits, grades, grade points, and honors.

A credit (also called a semester hour and a credit hour) is given to the student for work satisfactorily accomplished during three hours a week spent in the preparation and recitation of assignments in a course, or in the field or laboratory. The normal division of this time in nonlaboratory courses is one hour in the
classroom and two hours in preparatory work, but the division of this time usually is left to the instructor in charge.

Grades given in undergraduate courses are $A, B, C, D, E, F$, and $I$. The lowest passing grade is $D$. A grade of $E$ is a conditional failure and a grade of $I$ is an incomplete. Such grades can be removed from the record; to bring about their removal students are expected to take the initiative by conferring with instructors. An $E$ may be removed by passing a special examination or performing special work prescribed by the instructor, provided this is done in the semester following that for which the condition was given. However, no grade points (defined herein) are given on a course in which a condition was recorded. An $I$ is given to a student who has failed to complete an important part of a semester's work before the semester grades are determined if the instructor believes that failure was caused by conditions beyond the student's control and not by carelessness or procrastination. To receive credit for a course for which an $I$ has been reported, the student must make up the incomplete work before the Thanksgiving or Easter of the semester following that for which the grade was given. If the work is not thus completed, the $I$ will stand and the student will not receive either credits or grade points in that course. If the work is completed, the instructor will report a semester grade, taking the completed work into consideration. Credits and grade points will then be computed as if a grade of $I$ had not previously been recorded. Credit in a course for which an $F$ is given may be obtained only by repeating the course and passing it.

Grades given in graduate courses are $H$ (for honors), $S$ (satisfactory), and $U$ (unsatisfactory). The honors grade is awarded for exceptionally good work. Graduate students in undergraduate courses are graded on the undergraduate scale, $A$ to $F$.

Grade points are computed for all courses in which grades are reported, including military science and physical education. They are computed as follows: for each credit received in a course 4 grade points are granted if the grade is $A, 3$ if the grade is $B, 2$ if the grade is $C$, and 1 if the grade is $D$.

Students entering as undergraduates with advanced standing are not given grade points upon work done elsewhere; but on work done in the University of Hawaii such as students must gain grade points in the same proportion to credit hours required for graduation as that demanded of other students.

Honors may be granted at graduation to undergraduates who have a grade-point average of 3.4 for their undergraduate work.

## Transfers to Other Institutions

Students should bear in mind that accredited American institutions of higher learning, including the University of Hawaii, give transfer students credit toward graduation only in subjects in which the grade received was $C$ or better. (See Tuition and Fees for further note on transfers.)

## Requirements for Advancement Toward Graduation

Scholastic accomplishment in the University of Hawaii is judged by comparing the number of grade points and credits earned with the registered credits; that is, with the number of credit hours for which a student is registered six weeks after the beginning of a semester.

Further registration is denied to the following students:
(1) those who have failed to pass in any semester (or who, when withdrawing from the University during a semester, are not passing in) 50 per cent of their registered credits;
(2) those who have failed to earn, after two semesters' attendance, 1.5 times as many grade points as the total of their registered credits;
(3) those who have failed to earn, after four semesters' attendance, 1.8 times as many grade points as the total of their registered credits.

At the discretion of the faculty committee on scholastic standing, students who fail to pass in any semester 75 per cent of their registered credits or to maintain a record showing twice as many grade points as total registered credits may be warned, placed on the grade-point rule, or denied further registration. The gradepoint rule is a requirement that a student earn over a stated period of time twice as many grade points as credits for which he is registered. Failure to comply with the grade-point rule may result in refusal to permit further registration.

Failure in the first semester of a year course bars the student from registering for the second semester of that course.

Warnings of low scholarship are given by instructors and deans, usually at the end of the first and second six-weeks periods of each semester, but the student should not assume that his work is of passing grade merely because he has not been warned. The University assumes no responsibility if a warning that has been mailed to a student fails to reach him.

Unless satisfactory arrangements have been made with the instructor in advance of the time of a final examination, absence from an examination subjects the student to a grade of zero in the examination, and this grade is taken into consideration in computing the semester grade of the student. When a term paper takes the place of a final examination, it must be submitted at the time stipulated by the instructor; otherwise this grade is regarded as zero and so considered in computing the semester grade.

No student with entrance conditions may be registered as a sophomore, none with conditions in required freshman subjects as a junior, and none with conditions in required sophomore subjects as a senior.

Permission to enter the junior year as a candidate for a bachelor's degree is dependent not only upon academic standing but also upon proficiency in oral and written English.

Regular attendance at class and lahoratory sessions is expected. Unavoidable absence should be explained to the instructors concerned.

## Independent Study

Superior students may study independently under faculty supervision. The type of each student's study is, in general, left to the department to arrange with the instructor or instructors and with the student. Further information may be obtained from deans of the colleges.

## Military Training

In accordance with the requirements placed by the United States Congress on all land-grant colleges, this University offers instruction in military science and tactics. The basic courses in military science must be taken by every physically fit male student who is at least 14 years old, whose 26th birthday has not passed at the time of enrollment in the University, who (1) is (or was at the time of entering the University) a freshman or a sophomore, or (2) is an unclassified student carrying more than 9 credit hours of work and having fewer than 64 college credits. Military training in the junior and senior years is optional for students who have completed the basic courses.

## Health, Physical Education, and Sports

To assist the student in the improvement and protection of health, the University does three things:

1. Requires a complete medical and physical examination of every new student, and subsequent examinations as conditions seem to require; for this there is no cost to the student if the University facilities are used.
2. Offers first-aid service at the dispensary in the Gymnasium, available to all students suffering from minor ills and injuries; no charge is made for this service and no responsibility is assumed by the University; students who desire or require medical attention beyond that which the University nurse can reasonably give should make their own arrangements with a physician.
3. Offers instruction in health and hygiene and conducts a program of recreation and sports designed to conserve and build up the health of the student. Freshman and sophomore men and women under 25 years of age who are registered for 10 or more semester hours of academic work must take, in addition, at least one credit of physical education service courses each semester (see Physical and Health Education in Courses of Instruction). Although reasonable precautions against injury are exercised, no responsibility is assumed by the University for injuries received in sports or games on the campus.

Because of the interest of the student and alumni bodies in extramural sports and athletics, a board of athletic control exists. It forms policies, drafts budgets, and makes contracts and other arrangements for contests between University of Hawaii athletes and those of other colleges and athletic groups. Of the board's seven members, three are selected by the Associated Students of the University of Hawaii, two by the Alumni Association, and two by the faculty. The head of the department of physical education acts as chairman.

## Baccalaureate Degrees

## Credit and Grade-point Requirements

Minimum credit requirements for the baccalaureate (bachelor's) degree vary in the colleges. The minimum requirement in the College of Arts and Sciences is 128 credits, in Teachers College 130 credits. In the College of Applied Science the minimum requirement varies from 136 to 148 credits.

A minimum of 264 grade points is required for graduation from any of the three colleges. To receive a degree after failure to graduate because of lack of grade points, a student must earn a minimum of 30 grade points in some one semester, or a minimum of 14 grade points in a summer session in courses approved by the dean of the college in which the student is registered.

## Kinds of Baccalaureate Degrees

Upon satisfactory completion of a regular program in the College of Applied Science, a candidate is granted the degree of bachelor of science (B.S.), the diploma designating the program that has been pursued. The degree of bachelor of arts (B.A.) is granted upon the satisfactory completion of a regular program in the College of Arts and Sciences. Satisfactory completion of a regular program in Teachers College leads to the award of the degree of bachelor of education (Ed.B.). Holders of bachelor degrees who, by taking a year of additional work in Teachers College, complete the Teachers College five-year program are awarded five-year diplomas.

## Residence Requirements

The University grants baccalaureate degrees only to those students who earn a minimum of 30 semester hours in residence (that is, in class or laboratory work on the University of Hawaii campus) and who in addition do one of the following:
(1) take a minimum of 14 credit hours a semester in the University during the two semesters just preceding the granting of the degree;
(2) earn a minimum total of 24 residence credits during any four of five consecutive summer sessions just preceding the granting of the degree; or
(3) earn a minimum total of 24 residence credits by carrying not less than 2 credit hours per semester and 6 credit hours per summer in any three of four consecutive years just preceding the granting of the degree.

Not more than 25 per cent of the total credits earned at the University of Hawaii for a degree may be obtained in extension courses (courses offered off the campus), and if the residence requirement conflicts with the extension allowance the residence requirement takes precedence.

## Time Within Which W'ork Must Be Completed

All graduation requirements must be completed within ten years of the beginning of work in the University of Hawaii, except that students who were registered in the University prior to 1932 or who were previously registered in the Territorial Normal School were given the following privileges:
"(a) Any such student who by June 1932 had completed three full years ( 96 credits) or more will be allowed five years from September 1932.
"(b) All others will be allowed ten years from the same date."
A recent amendment allows one additional year (that is, to September 1943) to the students referred to in (b).

## Requirements of Medical Schools

The student in the University of Hawaii who expects to study later in a medical school may follow one of two procedures: (1) He may study here four years and prucure a bachelor's degree before entering medical school; (2) he may take a two- or three-year program here, comprising only those courses required for admission to certain medical sehools.

The first of these alternatives is most strongly advised. Students who elect the second alternative should make sure that the work taken will satisfy the entrance requirements of the medical schools to which they expect to go.

Those students who choose to remain in the University of Hawaii four years before going to medical school register in the General Science program of the College of Applied Science if they wish to obtain a B.S. degree, or in Group III (Biological and Physical Sciences) in the College of Arts and Sciences to study for a B.A. degree.

Entrance requirements of the medical schools vary considerably, some of them demanding subjects not elsewhere required. Consequently, each prospective student of medicine should inform himself of the requirements of the institution to which he expects to go. Medical schools generally have adopted the entrance requirements of the American Medical Association, which are as follows:

Preparatory school-A minimum of 15 units, of which at least 3 must be in English, 2 in some one foreign language, 2 in mathematics (including algebra through quadratics), and one in history.

College or university-A minimum of 60 credit hours. These 60 credits must include the following, totaling 54:

| Chemistry . . . . . . . . . . . 20 | University of Hawaii Equivalent <br> Chemistry 101 or 102, 150, 151 or 230, 152, 153 |
| :---: | :---: |
| Physics | Physics 102 |
| Biology | Botany 101, Zoology 150 and 151 |
| English composition | English 100 or 102 |
| Other nonscience subjects: |  |
| History, language, economics . . . . 12 |  |
| The additional credits to complete an aggregate the following strongly urged subjects: | of 60 or more may be chosen from |
| A modern foreign language | Semester Hours <br> - 6 to 12 |
| Advanced botany or advanced zoology | 3 to 6 |
| Psychology | 3 to 6 |
| Advanced mathematics, including trigonometry or may be in the following suggested electives: | . . . . . . . . . 3 to 6 <br> English (in addition to other credits |
| in English), economics, history, sociology, po drawing, Latin, Greek. | litical science, logic, mathematics, |

## Summer Session

A six-weeks summer session conducted by the University offers teachers and others opportunities for professional improvement. A three-weeks post session, established in 1938 to assist graduates of the former Territorial Normal School to obtain baccalaureate degrees within the time limit fixed by University rules, has served its purpose and will be discontinued after the summer of 1940. Courses of instruction in the summer session are on a par with those of the winter and spring semesters, and credits toward university degrees may be earned by students who qualify for entrance. The tuition fee is $\$ 5$ per credit hour.

Because of its location, the University of Hawaii emphasizes Oriental cultures and philosophy and offers numerous courses in those fields during the summer.

For persons interested in volcanology and its related fields, the Volcano Laboratory on the island of Hawaii (Kilauea Volcano) offers unusual opportunities for summer study.

A summer session announcement, issued each January, may be obtained by addressing the director of the summer session.

## The Adult Education Division

The Adult Education Division makes some of the University of Hawaii's educational facilities available beyond the campus, offers noncredit courses on the campus in the late afternoon and evening, and schedules visiting lecturers and resident faculty members for public appearances on the campus. It offers credit and noncredit extension courses at times and places convenient for the persons thus served, offers a limited number of correspondence courses, and occasionally broadcasts courses by radio. It arranges for faculty members to address organizations in Honolulu and also in all of the outlying communities. It rents educational films from a library of more than 300 reels and lends without charge plays and operettas from a collection of more than 950 .

Admission to extension courses offering credit is governed by the rules that apply to admission to resident courses. Noncredit courses are open to all adults who wish to enroll.

Credits gained in University of Hawaii extension courses may be applied toward the bachelor's degree, but not more than 25 per cent of the total credits required
to be earned in the University for the degree may be extension credits, and such credits are not counted as fulfilling the residence requirement.

Announcements of extension courses and other forms of service are issued from time to time.

## Tuition and Fees

Students registered for 10 or more credit hours in any semester pay $\$ 50$ for tuition and $\$ 10$ for registration per semester. Students registered for fewer than 10 credit hours in any semester and all students in summer sessions pay $\$ 5$ per credit hour.

Persons who register after the announced days of registration pay a late registration fee of $\$ 1$.

All fees must be paid in full at the time of registration, and no registration card will be finally accepted until it is endorsed showing payment.

Laboratory and special course fees are stated in the descriptions of courses. If the instructor feels it is justified, students may be charged for excessive breakage of equipment.

Students who take the college aptitude test pay a $\$ 1$ fee at the time of examination.

Tuition and laboratory fees may be refunded to students who withdraw from courses, the percentage to be refunded to be in accordance with the following schedule:

Withdrawal during-


In no case is the registration fee or any part of it refunded.
A fee for diplomas and certificates must be paid to the business office before any such diploma or certificate can be received by a student. For the five-year diploma and the public health nursing certificate the fee is $\$ 2.50$. For all other degrees and diplomas the fee is $\$ 5$.

A graduate student receiving an advanced degree must pay, before the degree is awarded, a fee of $\$ 4$ to cover the cost of binding two copies of his thesis.

Caps, gowns, and hoods for use in graduation ceremonies may be rented from the student personnel office or purchased through the bookstore.

A student who requests the registrar to send to another institution a record of his work here is not required to pay for the first copy, but he is changed $\$ 1$ for each subsequuent copy.

Locker assignments are made in the business office during the first week of instruction.

At the request of the Associated Students of the University of Hawaii (A.S.U.H.) and with the consent of the board of regents, the University business office collects certain student fees at the time tuition and registration fees are collected. These student fees are class dues of $\$ 1$ a year and the A.S.U.H. annual membership fee of $\$ 13$ for undergraduates taking 10 or more semester hours. For other students the A.S.U.H. fee is optional. Privileges that these fees purchase are described in the ASUH Handbook, which is available to all students affected.

## Living Accommodations and Expenses

Comfortable lodgings for men students are provided at Atherton House, a dormitory adjoining the campus. The rates for rooms range from $\$ 40$ to $\$ 100$ a semester.

Women students are accommodated in two dormitories. In one of them rentals are $\$ 55$ for the first semester and $\$ 50$ for the second semester, payable in September and February, and its residents supply their own sheets, blankets, pillow cases, towels, and curtains. The other is a cooperative house, whose accommodations are available at lower rates to women students who desire to assist in the work of cooking and housekeeping. Information about the cooperative house may be obtained at the student personnel office.

The student personnel office assists students in finding moderately priced living accommodations in private homes near the University.

Meals are available at the University Union building, cafeteria style, at very reasonable rates.

The total minimum expense to the average student is estimated at from $\$ 500$ to $\$ 600$ a year, including board, room, tuition, registration, course fees, class and student body fees, and books, but not including clothing, laundry, and other personal expenses.

For the convenience of students and instructional departments, the University operates a bookstore in the Union building.

## Student Life

The Associated Students of the University of Hawaii is a self-governing organization whose stated object is to promote and to direct undergraduate extracurricular student activities and to cooperate with the University administration in student affairs. Its members include all regular students who pay A.S.U.H. fees. An elected council directs its activities.

Among the activities in which the A.S.U.H. engages are athletics (football, basketball, track, baseball, swimming, and minor sports), debating, dramatics, a semiweekly newspaper (Ka Leo o Hawaii), and a yearbook (Ka Palapala).

University of Hawaii athletic and debating teams hold intercollegiate contests with representatives of universities of the mainland United States and of the Orient.

The University of Hawaii Theatre Guild endeavors to present each year one production peculiarly appropriate to the cultures of Hawaii, mainland America (and western Europe), Japan, and China, with casts racially representative of each respective culture.

The ASUH Handbook, distributed annually by the A.S.U.H., describes the organization and its functions in detail.

Student societies include about forty scholastic, honorary, professional, religious, and social organizations.

Student extracurricular life centers in the University Union building, paid for partly by student, alumni, and faculty contributions, and opened in March 1939.

Student mail is distributed in the Union building.

## Student Personnel Office

The student personnel office seeks to develop and maintain high standards of conduct among students. The deans of studeut personnel assist students in working out personal problems, such as those of residence, health, part-time employment, scholastic standing, social life, vocational guidance, and finances. In cooperation with the University treasurer, they arrange for loans to needy students in good standing.

## Loan Funds

Through the generosity of various organizations and individuals, certain funds have been provided from which worthy students may borrow-either in small amounts to meet emergencies or in larger sums in order to defer part of their tuition costs until after graduation. Students wishing to make use of these funds should consult one of the deans of student personnel early, as applications for loans to be used to defray registration costs must be filed with the student personnel office at least one week before the first official registration day of any semester. The loan funds and the donors' preferences, if any, as to who the beneficiaries shall be are as follows:

Alumni Student Aid Fund.
American Bankers Association-Seniors in economics.
American Legion Fund-Preferably descendants of U.S. war veterans.
Business and Professional Women's Club.
Chinese Students' Alliance Loan Fund-Members of C.S.A.
Commerce Club-Preferably members of the Club.
Daughters of the American Revolution Student Fund of Hazvaii-Preferably children of D.A.R. members.
Emerycncy Loan Fund (contributed by the.Associated Women Students and others for short-term loans).
Future Farmers of America, Univai Chapter-Vocational agriculture students.
Gior!!c II. Lamy Loan Fund-Engineering students.
Hazeaiian Japancse Civic Association-Students of Japanese ancestry.
Hareaiian Unizursity Association-Students of Hawaiian ancestry, preferably juniors and seniors.
Hiten Strong Carter Fund-Students needing dental treatment.
Incz Whecler Westgate Fund.
Jafancse Stulents' Association-Students of Japanese ancestry, preferably members of the Association.
Maui H'oman's Clul) Fund-Students whose parents are Maui residents.
McKinley Scholarship Fund-Students who have attended McKinley High School.
Moir-Ross Health Fund.
N.G.B. Fund.
P.E.O. Sisterhood-Caucasian upperclasswomen.

Representatives Club Fund-Students selected on the basis of need, scholastic standing, and interest in athletics.
Rotary Club Fund-Needy students of junior and senior standing.
Scnior Fund-Seniors of any college.
Student Fund of Teachers College-Students enrolled in Teachers College.
Te Chih Sheh Fund-Members of Te Chih Sheh.

## Scholarships

A number of persons, organizations, and the territorial legislature have made donations or grants that enable the University to offer financial assistance to students in the form of scholarships. All scholarship awards are made in the president's office, after careful study of applications that are submitted on forms
obtainable from the president's secretary. Unless otherwise specified, all scholarships are awarded annually and may be withdrawn from an individual if a good standard of scholastic work is not maintained. Applications for scholarships should be addressed to the president of the University, unless otherwise specified, and should be submitted before May 15 if they are to receive adequate attention.

The names and the characteristics of the scholarship funds follow:
Alonzo Gartley-Two scholarships of $\$ 150$ each, given in memory of Alonzo Gartley, who was for many years a regent of the University, awarded to men students in sugar technology or agriculture.
Associated Women Students-Two scholarships of $\$ 50$ each awarded to regular women students above freshman standing.
Chinese Community-A fund of about $\$ 3000$ given to the University of Hawaii to endow scholarships for juniors and seniors of Chinese ancestry.
Chinese Students' Alliance-A general scholarship fund maintained by the Chinese Students' Alliance.
Chinese. University Men-A scholarship of $\$ 50$ awarded to a deserving and needy Chinese man student above freshman standing.
Chinese University Women-A scholarship of $\$ 50$ awarded to a deserving and needy Chinese woman student above freshman standing.
Chinese Women's Club-A scholarship of $\$ 50$ awarded to a deserving and needy Chinese woman student above freshman standing.
Edison B. K. Tan Memorial-A scholarship of $\$ 50$ a semester given by the friends of Edison Tan, '38, to a worthy upperclassman, preferably an economics or business major.
Filipino Women's Club, International Institute, Y.W.C.A.-Two scholarships of \$25 each given to students of Filipino ancestry and of good scholastic standing, one to an entering freshman and one to an upperclassman.
Hakuba Kai-Two scholarships of $\$ 25$ each awarded for the second semester to Japanese men students above freshman standing.
Hawaiian Civic Club of Hilo-A scholarship loan of $\$ 150$ a year, awarded to male Hawaiian students of Hawaii county who desire to attend or are attending the University.
Hawaiian Girls' Club, Y.W.C.A.-A scholarship of $\$ 50$ a year awarded to a woman student of Hawaiian ancestry, preferably an upperclassman.
Hyung Jay Club-A scholarship of $\$ 60$ awarded to a woman student of Korean ancestry and of junior or senior standing; preference given to women interested in the work of the Hyung Jay Club of the Y.W.C.A.
Ke Anuenue-The sum of $\$ 50$ awarded to a Hawaiian woman above freshman standing.
Korean National Association of Hawaii-A scholarship of \$100 awarded annually to one or two students of Korean ancestry above freshman standing.
Korean Students' Christian Movement-The sum of $\$ 200$ awarded annually to two needy students of Korean ancestry, above freshman standing, who are interested in the Korean Students' Christian Movement,
Leora Parmelee Dean-The sum of $\$ 100$ awarded by the Women's Campus Club of the University to a deserving and needy young woman; application for this scholarship should be addressed to the chairman of the scholarship committee of the Campus Club.
Mary Dillingham Frear-A scholarship of $\$ 150$ awarded to a meritorious student.

Prince Fushimi Memorial Educational Fund-The sum of $\$ 300$ available annually for the assistance of American citizens of Japanese ancestry of high scholastic and good moral standing who are unable to pay fully their educational expenses.
Ruth D. Scudder-A scholarship awarded to a deserving woman student from a memorial fund maintained by the Women's League of Central Union Church.
Stephen Spaulding-The income of an endowment of $\$ 2500$, given by Florence Tucker Spaulding in memory of her son, Stephen Spaulding, ex-1927, awarded as a scholarship to a man student.
Territorial-Six scholarships of $\$ 120$ each awarded each year to entering freshmen, one from each representative district in the Territory of Hawaii; these scholarships are held four years if the beneficiaries maintain a satisfactory standard of scholarship and conduct.
Women's League of Central Union Church-A general scholarship fund maintained by the Women's League of Central Union Church for the assistance of several women students, preferably seniors.
Yang Chun!, IIui-The sum of $\$ 50$ awarded to a Chinese woman above freshman standing.
Graduate fellowships and scholarships are described in The Graduate Division.

## Prizes

Dean Prize for Unteraraduate Research—In 1927, the faculty of the University, in honor of Dr. Arthur Lyman Dean, resigning president, established a fund to be known as the Dean Prize Fund, the proceeds to be used in stimulating interest in undergraduate research. Any senior in the University may compete for this prize of not less than $\$ 25$ nor more than $\$ 50$ each year by presenting 10 the Dean Prize Committee a thesis in which he reports fully upon his researches in any field of intellectual endeavor. The committee, appointed hy the president, selects the thesis which in its judgment is the best example of originality, independence, logic, and form of presentation. The winner receives his award at Commencement.
Banks Memorial Prizr-The Charles Eugene Banks Memorial Prize, the income from a $\$ 500$ endowment, is awarded each year to the student whose manuscript is judged to be the best received in a creative writing contest.
Hawaiian Section of the American Chemical Society Prize-A one-year student membership in the American Chemical Society is awarded each year to the most outstanding senior majoring in chemistry.
Phi Beta Kappa Recognition Fund-This is a fund maintained by the Phi Beta Kappa Association of Hawaii for the recognition of high scholastic standing among students.

## COLLEGE OF ARTS AND SCIENCES

The College of Arts and Sciences has a twofold purpose. Its first aim is to make possible a comprehensive and thorough acquaintance with those fields of thought and achievement, both in the humanities and the sciences, upon which our present civilization has been reared. Its second aim is to prepare for those activities which are professional rather than technical in their nature, such as law, medicine, journalism, commerce, and public and social service. In the main, the subjects offered in this College are those generally recognized as forming the basis of a liberal education.

Because of its geographical position, midway between continental America and the Orient, Hawaii must understand the Orient as well as the Occident. More than usual attention is therefore given to the languages, literature, philosophy, and history of the lands bordering upon the Pacific.

## Admission-Maximum Student Load

Requirements for admission to this College are the same as those for admission to the University as a whole.

Students in the College of Arts and Sciences may register for a maximum of 19 credit hours in any semester, including basic military science and physical education courses, provided that they have earned at least 45 grade points in the preceding semester. Those who fail to earn 45 grade points in any semester are limited to 16 hours in the succeeding semester. Freshmen in the College whose preparatory school average is below $B$ also are limited to 16 hours.

No credit is granted for any course not regularly entered upon the registration card with the signature of the student's faculty adviser in the case of a treshman, a sophomore, or a junior, and the signatures of the adviser and the dean in the case of a senior.

## Requirements for Graduation

To be entitled to the degree of bachelor of arts, a candidate must have at least 128 semester hours of credit and 264 grade points (see Credits, Grades, Grade Points, Honors) must meet the language requirement, and must pass the other courses required of all students in the College and the courses prescribed for students in one of the groups within the College. In planning his program, with the assistance of his faculty adviser, the student should be sure that he meets all the requirements of the College and of the group he selects. After September 1941, a major and a minor subject will be required of all students in the College. The choice may be made during the sophomore year, but must be made by the beginning of the junior year.

The Language Requirement. Every student in the College must complete one of the following or an equivalent: French 101, Spanish 101, German 101, German 102, Portuguese 101, Oriental Studies 200, Oriental Studies 200B, Oriental Studies 202, Hawaiian 200. If advanced credit in any of these courses is presented from any source other than an accredited college or university, the student must, in order to fulfill the language requirement, complete in the University of Hawaii a year's work in the language.

Other College Requirements. Specific courses required of all students in the College, other than those needed to meet the language requirement, are listed herewith according to the year in which they can ordinarily be taken to the best advantage:

| First Year |  |
| :---: | :---: |
|  | Credits each |
| English 100 or 102 |  |
| Military science (men) | 1 |
| Physical education | 1 |
| Science- |  |
| For Groups I and II Chemistry 101 or 102; Botany 101; Psychology 150-151; Zoology 150, 151; or Survey 100 |  |
| For Group III Chemistry 101 or 102; Botany 101; or Zoology 150, 151 | 3 or 4 |
| For Group IV Geography 150-151 |  |
| Political Science 150-151 (may be taken in second year by students in Groups I, II, and III) | 3. |
| Second Year |  |
| English 150, 154, 156, or 158 | 3 |
| Military science (men) | 2 |
| Physical education | 1 |
| Selection of a Group <br> Students preparing for the study of law or journalism or for public or social service select Group I, the Social Sciences. <br> Those who desire to specialize in languages, in literature, or in art should select |  |
|  |  |
| Group II. |  |
| Group III is designed for students preparing for med to study for the degree of bachelor of arts. (For Colleg in preparation for the study of medicine, see Requireme <br> Students desiring training in economics and business | ho wish courses ols.) IV. |

## Requirements of the Groups

## Group I - Social Sciences

Each student in this group must earn 42 hours of credit in social science courses. In meeting this requirement he must take History 100, Economics 150-151, and Anthropology-Sociology 150-151. To satisfy the remaining hour requirements the student may, with the aid of his adviser, select courses from those that follow:

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First and Second Yearg-
    Anthropology 170, 171, 175, }18
    Geography 150, }15
    Philosophy 150, }15
    Political Science 180, 190, 195
    Psychology 150-151
    Religion }15
    Sociology 170
Third and Fourth Years-
    Anthropology-Sociology 273
    Anthropology 250, 252, 254, 255, 257, 258, 259, 261, 263, 265, 267, 263, 269, 270,
        271, 272, 274, 275, 277, 280-281, 290
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Economics 223, 250, 251, 252, 253, 254, 256, 257, 261, 265, 270, 273, 276, 281, 285, 288, 291, 296
Geography 202, 205, 252, 255, 258, 262, 263, 271, 290
History 204, 205, 207, 209-210, 211, 212, 218, 219, 225, 226, 229, 235, 236-237, 241-242, 243, 244-245, 249, 250, 251, 252, 266, 276, 277, 285, 286, 295
Oriental Studies 241, 256-257, 268, 269, 281, 282, 283, 291, 293
Philosophy 200, 201, 253, 261, 262, 270-271, 275-276, 278, 280, 282, 285, 290
Political Science 260, 270
Psychology 200, 250, 252, 275, 280, 290
Religion 260, 261
Sociology 252, 253, 254, 255, 256, 258, 266, 267, 268, 269, 270, 271, 272, 274, 276, 290

- Group II - Languages, Literature, and Art

To satisfy the requirements of this group, the student must earn at least 40 semester hours chosen primarily from courses in English, French, German, Spanish, Hawaiian, Oriental languages and literature, music, and art. An aggregate of 18 of the 40 semester hours may, if the student prefers, be chosen from the following courses: History 100, 209-210; Anthropology-Sociology 150-151; Oriental Studies 253 ; Philosophy 150-151; and Religion 215, 270, 271.

## Group III - Biological and Physical Sciences

Requirements of Group III are met by taking at least 48 semester hours in some group of related sciences. (For a statement of the minimum requirements of medical schools and of subjects strongly urged, see Requirements of Medical Schools.) The 48 hours may be selected from the following:

First and Second Years-
Chemistry 101, 102, 150, 152, 153, 271
Botany 101, 102, 103, 151, 155, 156, 158, 160, 161, 173, 180, 181
Zoology 150, 151, 160, 161, 170, 173, 174, 180, 181
Mathematics 104, 106, 149, 150, 151, 152, 153
Physics 102, 150, 151, 153, 155, 157
Third and Fourth Years-
Agriculture 254
Anthropology 261, 280-281
Chemistry 211, 212, 230, 260, 262, 263
Botany 200, 253, 254, 258, 260, 263, 269, 273, 274, 275, 276
Zoology 253, 254, 255, 257, 259, 260, 261, 285, 291
Mathematics 252, 253, 254, 255, 272, 273, 275, 280, 281
Physics 152, 202, 253, 255, 256, 257, 261, 270, 275, 280
Geology 200, 252, 253, 254, 255, 260, 261, 262

## Group IV - Economics and Business

The only Group IV requirement of the first year (supplementing the requirements, including language, of the College) is History 100.

Second-year group requirements (supplementing those of the College) are:
Economics 150-151
Business 160-161

Business 150-151 or 152-153 (students planning to elect either the International Economics and Trade or the General Economic Problems programs, described herein, are exempt from this requirement).
Specialization in economics and business begins in the third year. The student then selects, with the assistance of group advisers, one of six fields or programs of study into which the courses offered are divided. These programs are: (1) Finance, (2) Merchandising, (3) International Economics and Trade, (4) Accounting, (5) General Economic Problems, and (6) Program for Business Women. Each of these programs comprises, in addition to a liberal allowance of elective credit hours, a group of required courses so selected as to present a considerable degree of specialization in the field concerned.

English 210 and 237 are required in all of the programs during the third or fourth year. Other third- and fourth-year courses in each of the programs follow:

Finance
Business 255, 264, 265, 266, 267, 282, 288
Economics 256, 257, 261, 265, 288

## Merchandising

Art 274
Business 259, 264, 270-271, 273, 276, 280, 286, 287
Economics 256, 257, 270, 288, 291

## International Economics and Trade

Business 267, 270-271, 275, 285
Economics 250, 251, 252, 253, 25t, 256, 257, 265, 273, 285
Geography 252, 255
Accounting
Business 250-251 or 252-253, 25t, 255, 256, 259, 265, 270-271, 282, 285, 288
Economics 256, 257, 296

## General. Economic Prodlems

Business 267, 282, 288
Economics 223, 256, 257, 261, 265, 270, 273, 276, 281, 285, 291, 296
Political science and history ( 6 credit hours)
Anthropology-Sociology 150-151
Program for Business Women
Art $27+$
Business 256, 259, 265, 270-271, 273, 276, 280, 282, 287
Economics 256, 257, 288
Political science and history ( 6 credit hours)
Anthropology-Sociology 150-151

## Social Work Training

To meet a need for trained social workers, the University offers instruction in social work training. The courses are designed to afford persons already engaged in such work opportunity for further training, and to provide a year of professional training for graduates of this and other universities who in their undergraduate work have fulfilled certain basic requirements. (See Social Work Training in Courses of Instruction.)

## COLLEGE OF APPLIED SCIENCE

The College of Applied Science combines the instructional programs usually offered by colleges of agriculture and colleges of engineering. Its principal programs are in the following fields:

Agriculture
Civil Engineering
Sugar Technology
Home Economics
General Science
A limited program in Public Health Nursing also is offered under its auspices.

## Admission

Although requirements for admission to this College are, in general, the same as those for admission to the University as a whole, candidates for admission to some of the programs should have special preparation.

Students who wish to complete the Engineering program in four years must present credentials showing that they earned preparatory school credits in algebra through quadratics, plane geometry, and trigonometry. Solid geometry, mechanical drawing, and physics are strongly advised, though not required. In addition, Engineering students are expected to be well prepared in the physical sciences.

Prospective students of agriculture, sugar technology, and premedical work, all of whom must take college mathematics in preparation for physics, and other students desiring to study mathematics in the University or to take subjects for which college mathematics is a prerequisite should have high school algebra through quadratics and plane geometry.

All students in General Science, including premedical students, should also have two years of a foreign language, two years of history, and three years of science.

Students who wish to major in nursing in the General Science program must be graduates of the four-year program of the Queen's Hospital School for Nurses.

## Requirements for Graduation

The degree of bachelor of science is granted upon satisfactory completion of any of the four-year programs of study offered in this College, provided the student has been registered in that program for at least two semesters before graduation.

The Agriculture, Home Economics, and General Science programs require 136 credits for graduation, the Engineering program 148, and the Sugar Technology program 142 (the Sugar Technology total including 6 credits from a required course taken during the summer). All five of the programs require 264 grade points for graduation.

In planning his work in the University, with the assistance of his faculty adviser, the student should be sure that he meets all the requirements of the College and of the program he selects. Additional credits needed to meet University requirements for graduation, if any, may be earned in any courses he chooses.

Description of the programs follows:

## Agriculture

The courses in the Agriculture department are designed to give the student intimate knowledge of fundamental principles underlying agriculture as a science
and a profession, and thus equip him for effective service either in practical farming, the teaching of agriculture, or research work. Agricultural science comprehends a wide range of subjects, including something from nearly every department of human learning. The natural sciences of geology, chemistry, physics, botany, zoology, bacteriology, and physiology are directly and intimately related to it. Not in the sciences alone should the agricultural student be broadly educated, but also in mathematics, languages, history, and economics.

The objective in planning the Agriculture department courses is to teach the general laws governing the relationship of growing crops and living animals to soil, climate, and environment. The methods are laboratory investigations, field experiments, and lectures.

The required courses are the same in the first year for all students in Agriculture. Opportunity for divergent specialization is provided in later years, when the student chooses one of the following as a major:

General Agriculture<br>Plant Science<br>Animal Science<br>Vocational Agricultural Education

Specialization in Vocational Agricultural Education must start at the beginning of the sophomore year. A student who chooses one of the other majors submits a statement of his choice to his adviser and the dean at the end of the sophomore year.

The Agriculture department requires all degree candidates to take the courses listed herewith, plus 111 other units in Agriculture, plus enough electives or additional required courses to hring the aggregate to 136 . The selection of the additional 10 units in Agriculture varies with the major selected.

First Year
Agriculture 100, 151, 152
Botany 101
Chemistry 101 or 102
English 100 or 102
Mathematics 149 or 150-151
Military science (men only)
Physical education
Third Year
Agriculture 250, 254, 256

Second Year
Agriculture 162 or 164
Botany 151, 173
English 110, 150, 154, 156, or 158
Military science (men only)
Physical education
Physics 102

Students preparing for General Agriculture or for Vocational Agricultural Education are offered wide choice of electives beginning in the junior year. Students preparing for work in the specialized fields of Plant Science or Animal Science follow courses that are largely prescribed. Details of these programs follow.

## General Agriculture

The selection of General Agriculture as a major subject provides the widest freedom in choice of electives. Any student who satisfies University requirements and passes the courses required by the Agriculture department as a whole may be graduated in General Agriculture.

## Plant Science

The curriculum for Plant Science is designed to prepare the student for active participation in either the production of field crops or in experimental work concerned with them. Candidates for graduation in the Plant Science program must satisfy the requirements of the department as a whole and in addition take the following courses:

THIRD YEAR
Agriculture 162 or 164, whichever
was not taken in second year
Agriculture 291
Chemistry 150, 151
Botany 158, 263; or 273, 275

FOURTH YEAR
Agriculture 252, 260, 267, 268
Botany 158, 263; or 273, 275
Chemistry 152

## Animal Science

Candidates for graduation in the Animal Science program must take the following courses in addition to those required for graduation from the department:

THIRD YEAR
Agriculture 253 or 261; 255
Chemistry 150, 151, 152, 153

FOURTH YEAR
Chemistry 260, 262
Agriculture 253 or 261; 257, 264
Zoology 253, 291
Zoology 150 (if not previously elected)

## Vocational Agricultural Education

Students specializing in Vocational Agricultural Education to fit themselves for service under the Smith-Hughes Act of Congress follow the list of general courses required for graduation and take in addition certain courses specified by the advisers and the dean. Specialization in this field must begin in the sophomore year. Students who wish the five-year diploma must register in Teachers College for the fifth(postgraduate) year of work.

## Civil Engineering

The program in Civil Engineering is designed to train students thoroughly in the fundamental principles upon which professional engineering practice is based and to illustrate the application of these principles by the solution of numerous practical problems.

The general plan provides a broad foundation in English, mathematics, chemistry, physics, and drawing during the first two years. The work of the last two years is more technical and professional, embracing the study of the principles involved in power development by means of the various prime movers, including steam engines, water wheels, gas and gasoline engines, and steam turbines, study of the design of such machines and of the materials entering into their construction, and practical tests to determine their working efficiency and economy of operation. The last two years' work is aimed to fit students to assume gradually, as practical experience is acquired, those administrative responsibilities that are more and more devolving upon men of technical training, and ultimately to become skillful practical engineers. As far as possible, the importance of each subject is illustrated by application of it to some work that is met in actual practice. It is also intended that the course shall be valuable from an educational viewpoint; therefore, while the student is learning each subject both theoretically and practically, the training of his mind is kept in view as well as the needs of the profession.

REQUIRED COURSES

FIRST YEAR
Chemistry 101 or 102
Civil Engineering 101
English 100 or 102
Mathematics 104
Mechanical Drawing 101
Military science
Physical education

SECOND YEAR
Civil Engineering 151, 153
Economics 150, 151
English 110, 150, 154, 156 or 158
Mathematics 106
Mechanical Drawing 152
Mechanical Engineering 150
Military science
Physical education
Physics 150, 151

FOURTH YEAR
Civil Engineering 276, 277, 279
Geology 256
Mechanical Engineering 282, 283, 285
Physics 202

## Sugar Technology

Students who complete the Sugar Technology program get enough technical training so that they can be of immediate value in a subordinate position in the sugar industry and they receive enough instruction in theory to prepare themselves for subsequent advancement.
'The Ilawaiian Sugar Planters' Association offers many valuable opportunities for making more practical the instructional work of the University. Advanced students serve as apprentices in mills and plantations, and take part in H.S.P.A. experiment station projects.

The cane sugar industry, as carried on in the tropics, has two distinct branches: (1) the growing of canc, and (2) its manufacture into sugar. Inasmuch as it would be exiremely difficult to acquire thorough knowledge of both these branches in four years, the program in Sugar Technology is offered in two divisions, the Agricultural division and the Sugar Chemistry division.

## Agricultural Division

In addition to certain strictly agricultural subjects, it is advisable for students in the Agricultural division to elect certain courses in chemistry. Analysis of sugarhouse products is also required, since familiarity with this work is often valuable for an agricultural chemist. Lecture courses on heat in the sugar factory and on cane sugar manufacture are required, for it is desirable that the agriculturist have some knowledge of processes in the sugar factory.

## Sugar Chemistry Division

The work of the first two years follows closely that of the Agricultural division, but in the third and fourth years the course differs in offering more work in chemistry, with the purpose of giving such training in chemistry as shall prepare a student not only to become an efficient sugar chemist, but also to conduct investigations leading to better control in the manufacture of sugar.

In the summer between the third and fourth years students in both the Agricultural and Sugar Chemistry divisions must do a minimum of four weeks' work in one of the plantation factories, or in connection with the work of the H.S.P.A. experiment station. Students must submit, in duplicate, written reports of the work performed.

The second semester of the fourth year is devoted almost entirely to practical work. Students in the Agricultural division serve as student assistants in the H.S.P.A. experiment station, keep careful notes, and submit reports in duplicate at the end of the semester. Students in the Sugar Chemistry division may do the same work as those in the Agricultural division or may work as special apprentices in one of the plantation sugar factories, both in the mill and in the boiling house. Reports, in duplicate, must be submitted at the end of the semester.

## REQUIRED COURSES

AGRICULTURAL DIVISION CHEMISTRY DIVISION
First Year

Botany 101
Chemistry 101 or 102
English 100 or 102
Mathematics 149 or
Mathematics 150 and 151*
Mechanical Drawing 101
Military science (men only)
Physical education

Chemistry 150, 151
Civil Engineering 101
English 110, 150, 154, 156, or 158
Military science (men only)
Physical education
Physics 102

Agriculture 250, 254, 256
Sugar Technology 201, 253, 256

Agriculture 252
Economics 150
Sugar Technology 250, 252, 255

Botany 101
Chemistry 101 or 102
English 100 or 102
Mathematics 149 or
Mathematics 150 and 151*
Mechanical Drawing 101 or Art 154, 155, or Art 150, 151
Military science (men only)
Physical education
Second Year
Chemistry 150, 271
English 110, 150, 154, 156, or 158
Military science (men only)
Physical education
Physics 102
Third Year
Agriculture 250
Chemistry 230
Sugar Technology 201, 253, 256
Fourth Year
Agriculture 252
Economics 150
Sugar Technology 250, 252, 255 or 257

Sugar Technology 253, a required course in the third year of the Chemistry division, is a summer course for which students register in the second semester of the junior year. The work is done in a factory during the summer period following the junior year. Suggested electives for the Chemistry division third year are Agriculture 254 and 256.

Students taking Sugar Technology 255 or 257 do their work in the field or in a mill during the second semester of the fourth year and receive 16 credits for it.

## Home Economics

The program in Home Economics allows students to major in Household Science, Household Art, Institutional Management, or Vocational Home Economics Educa-

[^1]tion. A student who wants to teach home economics chooses Vocational Home Economics Education as her major; if she seeks to teach in secondary schools, she must complete the four-year program in Vocational Home Economics Education and then register for fifth-year work in Teachers College to study for the five-year diploma.

Students entering the University as freshmen planning to major in home economics take the English tests given to all beginning students and also take a home economics placement test (see Admission to the University). Registration for the first year's work follows the completion of these tests.

## First Year's Program, All Home Economics Majors

During the first year all Home Economics majors who are admitted without deficiencies in English take the following:

English 100 or 102
Chemistry 101 or 102
Household Art 110, 111
Home Economics 100, 101
Art 150, 151
Physical education
Household Science 150, except students whose achievement in the home economics placement test excuses them from this course.

Students excused from any freshman requirements may take in their first year either or hoth of two courses ordinarily required in the second year: Household Art 150-151 and Botany 156.

## Sccond Ycar's Program for Home Economics Majors

Required courses for the second year in all four major fields are: English 110, 150, 154, 156, or 158, Houschold Science 102, Household Art 114, Economics 150, 151, physical education, and-unless they were taken in the first year-Household Art $150-151$ and Botany 156. Additional requirements for the second year, varying with the major field selected, follow:

Chemistry 152 (for Household Science majors)
Art 154, 155 (for Household Art majors)
Business 150, 151, Chemistry 152 (for majors in Institutional Management)
Education 135, 180, 181 (for majors in Vocational Home Economics Education).

## Third and Fourth Years

Programs for the third and fourth years in each major field follow:
Household Science. Requirements: Home Economics 250, 252, 253, 291; Household Science 200, and 249 or 251; Chemistry 260, 262, 263 ; Anthropology-Sociology 150-151; Zoology 291. Suggested elective: Art 172.

IIousehold Art. Requirements: Home Economics 250, 252, 253, 291; Art 170 and 270, or Art 171 and 173; Art 172, 175 ; Household Art 253; Household Science 272; Anthropology-Sociology 150, 151. Suggested electives: Art 250, 251, 276, 277.

Institutional Management. Requirements: Home Economics 250, 291; Household Science 200, 251, 260, 261, 263, 273; Chemistry 260, 262; Zoology 291; Economics 281; Anthropology-Sociology 150-151; Psychology 280. Suggested elective: Household Science 249.

Vocational Home Economics Education. Requirements: Home Economics 201, 250, 251, 252, 253, 291 ; Household Science 272, 273, and 251 or 249 ; AnthropologySociology 150-151; Art 172; Education 250, 251, 253. Home projects may also be required, their number and nature to be determined by the home economics staff on
the basis of each student's need. Suggested electives: Household Art 253; Psychology 280; Zoology 291; Sociology 267.

Those students who intend to become teachers and who desire the five-year diploma register in Teachers College in their fifth year. Required courses in this program are Education 340, 350, 351, 354, 390, 395, and Home Economics 360. Electives are selected from Sociology 267, Psychology 280, and Home Economics 201.

## General Science

Students in General Science may major in the following fields: botany (bacteriology, plant physics and mathematics physiology, taxonomy) zoology (entomology, general chemistry zoology, premedical zoology) nursing
The major should be selected during the freshman year.
Requirements of the General Science program (other than those for nursing majors, whose program is described hereafter) are:
(1) Chemistry 101 or 102 in the freshman year
(2) English 100 or 102 in the freshman year; English 110, 150, 154, 156, or 158 in the sophomore year
(3) Two years of physical education, freshman and sophomore years
(4) For men, two years of military science, freshman and sophomore years
(5) Six or more credits each in five of the following groups:

Mathematics 104, 149, Geology 252-253 150-151, 152-153
Physics 102 or 150-151, 152
Botany 101
Zoology 150, 151
(6) 66 credits in either the Group A (Physical Sciences) electives or the Group B (Biological Sciences) electives listed on the following pages
(7) Either (a) For students whose major is one of the following, 30 hours credit in that major:

| botany | chemistry |
| :--- | :--- |
| zoology | physics and mathematics |

or (b) For students whose major is premedical work, 20 hours of chemistry and 12 hours of zoology.
Certain single courses are counted as meeting more than one of the foregoing requirements.

Students majoring in chemistry are required to take the following courses in chemistry: 101 or $102 ; 150,152,153,230,271,211,212$, and may elect any other chemistry courses. One year of college physics and one of mathematics are strongly advised.

The choice between the Physical Sciences and Biological Sciences groups referred to in (6) and the selection of a major should be made during the first year. Since a working knowledge of French and German is essential for advanced work in chemistry, zoology, and botany, students who plan to major in those subjects should take French or German in the freshman year.

During his last four semesters the student must devote most of his time to his major and to closely related courses in the other fields named in (7).

Students who plan to meet the entrance requirements of medical schools by two or three years of resident collegiate work and those students who plan to get a B.S. degree before going to medical school should enter this program. The subjects they choose must, to a large extent, be governed by the admission requirements prescribed
by the American Medical Association (see Requirements of Medical Schools) and by the school the student expects to enter. Such students who do not enter with algebra through quadratics, plane geometry, and trigonometry must take either Mathematics 149 or 150-151 in the freshman year.

Courses from which the Physical Sciences and Biological Sciences electives must be selected follow:

First Year
Drawing
Geography 150, 151
Language
Political Science
150, 151
Mathematics 104, 149, 150, 151, 152, 153
History 100

First Year
Botany 101
Drawing
Geography 150, 151
Language
Political Science 150, $151{ }^{-}$
Zoology 150, 151
History 100

## GROUP ELECTIVE WORK

Group A-Physical Sciences
Second Year Third and Fourth Years
Chemistry 150, 151, 152, 153, 271
Civil Engineering 101
Geology 252, 253, 256
Language
Mathematics 106
Mechanical Drawing 152
Physics 102, 150, 151
First-year electives may be taken by sophomores.

Chemistry 211, 212, 230, 260, 262, 263, 310, 313, 315, 316, 317, 318, 319, 320, 350
Civil Engineering 231, 252, 253, 255
Geology 254, 255, 260, 261, 262
Mathematics 252, 253, 254, 255, 272, 273, 275, 280, 281
Mechanical Engineering 202, 203, 282
Physics 152, 202, 253, 255, 257, 261, 275, 280, 361
Sugar Technology 201, 250, 252
Second-year electives may be taken by juniors and seniors.
Group B-Biological Sciences
Second Year Third and Fourth Years
Botany 102, 155, 156, 173 Agriculture 250, 254, 256,
Chemistry 150, 151, 152, 261, 262
153, 271
Geology 252, 253, 256
Anthropology 261, 280, 281
Household Science 102 Botany 151, 158, 200, 253;
Language $\quad 254,258,260,263,269$,
Psychology 150 273, 274, 275, 276, 300,
Physics 102 365, 367, 370
Zoology 160, 161, 170, 173, Chemistry 230, 260, 262, 174, 180, 181 263, 316, 317
First-year electives may
Economics 150, 151
Geology 255, 260, 261, 262
Household Science 200, 249, 251, 272, 350, 351
Physics 255, 257, 275, 280
Zoology 253, 254, 255, 260, 261, 310, 351, 352, 353, 355, 356, 362
Second-year electives may be taken by juniors and seniors.

## Nursing Majors

Students in, or intending to enter, the Queen's Hospital School for Nurses also register in the General Science program. The School admits to its four-year program only students who are, or have been, regular students in the College of Applied Science.

The University courses required for completion of the School's program are:

| Psychology 150 | Anthropology-Sociology 150 <br> English 100 |
| :--- | :--- |
| Chetany 151, 156 |  |
| Coology 150, 151 | Household Science 150, 155 |

This work may be completed in two semesters and one summer session by a student who devotes her full time to it. Such a student then enters the Queen's Hospital School for Nurses and spends the remaining three years of her program at the Hospital and School.

Alternatively, the University work may be spread over four semesters' time by a student who lives at the Harkness Home for Nurses and combines work in the Hospital with her University work. Such a student devotes full time to the School and Hospital during the third and fourth years of her program.

After completing the four-year program of the School, a student may, if she wishes, return to the University and enroll as a candidate for the B.S. degree. The work completed at the Hospital is accepted by the University as meeting the requirement of a major in Nursing, and 30 credits are granted for it. The subsequent work in the University is planned to meet the individual needs and desires of each student, but must be planned in consultation with the dean and the student's adviser, and must, in general, follow the requirements of the Biological Sciences group. A total of 136 credits is required for graduation. The student must complete a second year of college English (English 150, 154, 156, or 158). In addition, the student must acquire at least 6 credits each in at least five of the following:

| botany | chemistry |
| :--- | :--- |
| zoology | nutrition |
| mathematics | geology |
| physics | economics or anthropology-sociology |

## Public Health Nursing

In cooperation with Palama Settlement, the Territorial Board of Health, and the Family Consultation Service, the University offers a one-year program in Public Health Nursing. Enrollment is strictly limited to registered nurses. Upon successful completion of this program, the student receives a certificate in public health nursing.

Credits earned in this program may be applied, by those who are eligible, toward the degree of bachelor of science.

Detailed information about the program is contained in a pamphlet available on request. (See Public Mealth Nursing in Courses of Instruction.)

## TEACHERS COLLEGE

Teachers College prepares teachers for the public schools of Hawaii, attempting in every possible way to provide an education that will enable them to give the most practical and cultural service possible to the people of the territory.

The program leading to the bachelor of education degree is four years long. A fifth, postgraduate, year of work is provided for students preparing for either elementary or secondary school teaching. The five-year diploma is granted upon the completion of 30 credit hours of postgraduate work, including interne teaching and other required courses.

A program of professional preparation for teachers must include, along with courses for prospective teachers, courses for teachers in service. In late afternoon, evening, and Saturday morning classes and summer session classes, Teachers College offers courses designed especially to meet in-service needs.

## Admission

Students entering Teachers College must meet certain standards of health, personality, and oral English, in addition to the general University requirements for admission. The number allowed to enter the freshman year is limited in order that those who graduate may be reasonably certain of obtaining positions in the schools of the territory.

## Requirements for Graduation

Candidates are recommended for the degree of bachelor of education upon satisfactory completion of the refuirements set forth in the section of this catalogue entitled Baccalaurcate Degreces in addition to the following:
(1) A minimum of $\mathbf{1 3 0}$ semester hours of course work,
(2) A minimum of 264 grade points (see Credits, Grades, Grade Points, Honors) and
(3) Prescribed work in studies in Elementary or Secondary Education as follows:

## Elementary Education

Participation and practice teaching. ..... 12
Other education courses. ..... 26
English ..... 19
Social science. ..... 13
Natural science ..... 12
Physical and health education ..... 8
Military science. (men) ..... 6
Art and music. ..... 8
Secondary Education
Participation and practice teaching ..... 12
Other education courses. ..... 26
English ..... 18
Social science ..... 12
Natural science ..... 10
Physical and health education. ..... 8
Military science (men) ..... 6

Prospective secondary teachers must also complete two teaching majors, with a minimum of 24 semester hours in each, by the end of the fourth year, and a teaching minor of not less than 12 semester hours by the end of the fifth year. Typical teaching majors are: English, social studies, science, mathematics, physical education. Teaching minors are: art, commercial subjects, dramatics and speech, journalism, library science, music, physical education, prevocational subjects, and club activities.

## Basic Courses*

During the first two (freshman and sophomore) years all Teachers College students carry the same work, with the exception of a few electives. These courses are as follows:

## FIRST YEAR

## Courses

Education Sem.I Sem. II
Education 100.............................................................................................................. 3
English 100...................................................................................................................... 3


Physical education................................................................................................................ 1
Physical Education 180 (women) .............................................................. (1) (1)

Electives ..............................................................................................................................
Total ............................................................................ 17.

## SECOND YEAR

## Courses



## Advanced Courses

At the end of the second year students elect to specialize in either Elementary or Secondary Education.

[^2]
## THIRD YEAR

## Elementary Curriculum

## (Primary Years)

## Courses

Sem. $\begin{aligned} & \text { Credits } \\ & \text { Sem. } \\ & \text { II }\end{aligned}$
Art 261 ..... 2
Biology 236 .....
Education 235 ..... 1
Education 285-286. ..... 3
English 290-291. ..... 3
English 294. ..... -
Geography 261 ..... 3
Physical and Health Education 220 ..... 2
Music 250-
Agriculture 271 .....
Social Science 271 ..... 1
Electives ..... 2
Total ..... 17
Elementary Curriculum
(Upprr Years)
Courses
Art 262
Sem. Iredits $\underset{\text { Sem. II }}{ }$
Biology 236. ..... 2
Education 235 ..... 1
Education 285-286. ..... 3
English 290-291 ..... 3
English 295. ..... 1
Geography 261 .....
Physical and Health Education 220 ..... 2
Music 251 ..... 2
Agriculture 271 ..... 1
Social Science 271 ..... 1
Electives ..... 2 ..... 2
Total ..... 17 ..... 17
Secondary Curriculum
Courses
Education 235 Sem. 1 Credits Sem. 11
Education 250-251 ..... 3
English 292-293 ..... 3
Electives ..... 10
Total ..... 17

## FOURTH YEAR

The program required of all fourth-year students in Teachers College consists of two parts: (1) one semester of elective and recommended courses, and (2) one semester of professional education courses. One half of part 2 is devoted exclusively to practice teaching; the other half exclusively to required education courses. While one half of the fourth-year students carry the elective program, the other half carry the professional education program, one group doing practice teaching while the second carries the required courses.

Courses

|  |  |  |
| :---: | :---: | :---: |
|  | 2 | .. |
| Education 254. | 9 | - |
|  | 2 | .- |
| Education 268. | 2 | - |
| Education 295.. | 2 | .- |
| English 240. | -- | 1 |
| Electives ................................................................................................... | .. | 15 |
|  | - | - |
| Total .-. | 16 | 16 |

## FIFTH YEAR

The work required of all fifth-year students in Teachers College consists of two parts: (1) one semester of interne teaching in a public school, under supervision, and (2) one semester of required and elective course work. The class is divided into two groups, one of which carries the academic program while the other carries the interne teaching.

Courses


## Master of Education Degree

Candidates for the master of education degree must have met the essential requirements of the bachelor of education degree, including practice teaching. The candidate must complete a graduate program of 30 semester hours and present an acceptable thesis. For matriculation the candidate must pass a comprehensive examination in the fields of philosophy of education, educational psychology, history of education, and educational administration. The matriculation examination may not be taken until the candidate can present graduate course credit in the four fields covered. Interne teaching or successful teaching experience is also prerequisite to matriculation. Graduate education course requirements for the five-year diploma, with the exception of Education 354 and 395, are acceptable in partial fulfillment of requirements for the master of education degree. The graduate program is explained
further in another section of this catalogue, and an announcement of courses is issued separately.

## Vocational Education

Prospective vocational agriculture and home economics teachers receive their undergraduate preparation as registrants in the College of Applied Science, receiving the bachelor of science degree (see College of Applied Science). Basic professional education courses and practice teaching are required. English usage and other selective criteria used in Teachers College apply to prospective vocational teachers. The students in these divisions register in Teachers College for the fifth (graduate) year, during which one semester is devoted to interne teaching and one to the education course requirements set up for all others.

## Nursery-Kindergarten Education

As the result of a gift from the Henry and Dorothy Castle Memorial Foundation to the University, plans are being developed for a new department in Teachers College. This department will offer training to prospective teachers of the preschool years and will maintain a nursery-kindergarten laboratory school.

## Physical and Health Education

Beginning with the academic year 1940-41, the University physical and health education program will be administered as a department in Teachers College. It will continue as heretofore to serve all colleges of the University in terms of degree and other requirements.

## THE GRADUATE DIVISION

Students registered in the Graduate Division are principally of two types: (1) candidates for advanced degrees and (2) teachers, social workers, and others seeking professional improvement by taking graduate courses.

| Graduate work is offered in the following fields: |  |  |
| :---: | :--- | :--- |
| anthropology genetics | physical geology and <br> botany | geography |
| business | history | geophysics |
| chemistry | international relations | physics |
| education | nutrition | sociology |
| English | Oriental studies | soil work training |
| entomology | philosophy | speence |
|  |  | zoology |

Unusual opportunities for graduate study and research are offered in several of these fields. In Oriental studies there are not only the regular course offerings in Japanese and Chinese language, history, and philosophy, but additional courses made possible by the Oriental Institute. These, together with good library resources and the advantages of the natural environment, which is a blending of Orient and Occident, afford unusually good opportunities for graduate students.

For graduate work in the physical and biological sciences relating to tropical agriculture, the University's instructional personnel and laboratory equipment are supplemented by the staffs and facilities of research organizations cooperating with the University in the Graduate School of Tropical Agriculture. These cooperating institutions are : the experiment station of the Hawaiian Sugar Planters’ Association, the experiment station of the Pineapple Producers Cooperative Association, the Hawaii Agricultural Experiment Station, under the direction of the University, and the Bernice P. Bishop Museum. Research in geophysics and related fields may be pursued at Kilauea Volcano Laboratory, situated at Kilauea Crater on the island of Hawaii.

## Requirements for Advanced Degrees

Graduate work completed at other institutions may be accepted as fulfilling part of the requirements for an advanced degree. For the master's degree, the maximum amount ordinarily accepted is 8 semester hours.

Seniors in the University of Hawaii may carry a limited amount of graduate work during their last semester as undergraduates, provided that the total number of credit hours for which they are registered during that semester does not exceed 16.

No extension course may be counted toward an advanced degree.
Students in the Graduate Division may not register for more than 16 credit hours in any semester, more than 6 credit hours in a six-weeks summer session, nor more than 3 credit hours in any post summer session. The number of credit hours that may be carried by students engaged as faculty assistants is limited by the nature of their duties.

No credit is granted in thesis research courses (number 400 in each field) until the thesis has been accepted. Failure to make satisfactory progress on a thesis is not a basis for a valid claim to a refund of tuition fees.

Grades in courses numbered 200 to 299 (upper division undergraduate courses) must be $A$ or $B$ if they are to be credited toward an advanced degree.

Candidates for advanced degrees who fail to complete successfully 75 per cent of the course credits they carry are automatically dropped from candidacy.

Admission to Candidacy. Admission to the Graduate Division does not imply admission to candidacy for an advanced degree. Such admission is granted only after a committee representing the department in which the candidate proposes to work for an advanced degree is satisfied as to the adequacy of his preparation and his probable ability to pursue graduate work successfully.

Candidates failing to obtain the degree within five years after admission to candidacy must again qualify for candidacy.

Graduate students not interested in earning advanced degrees need not meet the requirements for admission to candidacy.

## The Master's Degree

The University awards three master's degrees, namely master of arts, master of science, and master of education.

The minimum period of residence is one academic year or four six-weeks summer sessions.

Thirty semester hours of graduate study are required for the master's degree. All work connected with the thesis must be registered for as thesis research (course number 400 in each major field). A maximum of 6 semester hours may be earned in the thesis research course, except that in the natural and physical sciences a maximum of 12 is allowed. At least 8 credits toward the master's degree must be earned in courses primarily for graduate students (300-399). All of the course work taken by the candidate should lie in his major field of interest or in related courses in one or two closely allied fields. A reading knowledge of a foreign language is required in certain fields and, at the discretion of the qualifying committee, may be reguired of candidates in other fields.

A thesis is required of all candidates for the master's degree. The thesis should deal with a topic within the field of the major. It must be written in acceptable English and show evidence of ability to pursue research intelligently and to arrive at logical conclusions. The topic must be approved by the committee which admits the student to candidacy. Only afier this approval has been granted and the candidate has registered for the thesis research course is a committee appointed to supervise the preparation of the thesis. A candidate expecting to receive the master's degree in June must notify the director not later than February 20 and must submit copies of the completed thesis to the members of his committee for final checking by May 15. Instructions on the form of the thesis may be obtained from the director.

Arrangements for the final examination should be made at least six weeks prior to the end of the semester or summer session in which the candidate expects to receive the degree. The examination is conducted by the members of the candidate's advisory committee and any other persons especially designated. It is open to all faculty members. The examination is on the thesis, but may cover any fundamental knowledge required for the research work or necessary to the conclusions reached. If the results of the examination are satisfactory, a typewritten copy of the thesis and a carbon copy, both signed by the members of the examining committee, must be deposited in the Library to become the permanent property of the University. A fee for the binding of both copies must be paid to the University business office.

## The Civil Engineer Degree

The degree of civil engineer (C.E.) is granted to bachelors of science in civil engineering from this institution who, after graduation, complete two years of
practical experience in the profession, present a satisfactory paper upon some topic of interest connected with their work, complete certain assigned problems, and pass required examinations. Regulations governing fees, registration, and completion dates are essentially the same as those stated for master's degree candidates.

## The Sugar Technologist Degree

The degree of sugar technologist (S.T.) is granted to bachelors of science in sugar teehnology from this institution and to other bachelors of science whose undergraduate work has included the proper basic studies. To become a candidate for this degree a student must have two years of practical experience after graduation and must pass a qualifying examination based on assigned reading in the general field of sugar technology. Later a thesis, or final report, covering some topic distinctly important and closely allied to the practical work of the candidate, must be presented for the approval of the candidate's committee. Regulations governing candidates for this degree are essentially the same as those governing candidates for the master's degree.

## The Doctor of Philosophy Degree

Candidates for the doctor of philosophy (Ph.D.) degree are accepted only in those sciences basic to tropical agriculture.

The minimum period required for securing this degree is three years of graduate study, at least one year of which must be in residence at this institution and one year in residence at some other university. A qualifying general examination, which includes a test of reading knowledge of both French and German, must be passed at least one academic year (nine months) prior to the awarding of the degree; a student will not be considered a candidate for the doctor's degree until he has passed this examination. The candidate must write a doctor's dissertation and, in the final examination, present and defend it:

## Graduate Fellowships and Scholarships

The University offers a number of fellowships to graduates of accredited institutions of higher learning who desire to pursue graduate study in the fields in which the University offers advanced degrees. Graduate fellows receive stipends ranging from $\$ 225$ to $\$ 630$, pay no registration, tuition, or laboratory fees, carry a limited program of graduate study toward the master's degree, and act as readers and research or laboratory assistants.

Graduate scholarships are available to a limited number of qualified students in Oriental studies. A more detailed description of these scholarships may be obtained from the director of the Oriental Institute.

The Graduate Division Announcement states further details of work in the Division.

# ANNOUNCEMENT OF COURSES OF INSTRUCTION FOR THE YEAR 1940-41 

College of Arts and Sciences Dean: Thayne M. Livesay, Ph.D.<br>\title{ College of Applied Science }<br>Dean : Arthur R. Keller, M.S.<br>Teachers College<br>Dean: Benjamin O. Wist, Ph.D.<br>Graduate Division<br>Director: Paul S. Bachman, Ph.D.

Courses numbered 100 to 199 are lower division courses, intended primarily for freshmen and sophomores. Those numbered 200 to 299 are upper division courses, primarily for juniors and seniors but open to graduate students. Courses numbered 300 and higher are primarily for graduate students, but, unless otherwise stated, are open to seniors who obtain instructors' consent.

All courses in Teachers College, except those in physical and health education for teachers, are listed under Teacher Education.

Courses not offered in the academic year 1940-41 but given at other times may be found under Other Courses at the end of each group.

A schedule stating time and place of meeting of all courses is issued by the registrar in mid-September for the first semester and in mid-January for the second semester.

Persons wishing to audit courses should see statement on Admission of Auditors.

## Agriculture

Professors Harold A. Wadsworth, B.S., John H. Beaumont, Ph.D., Louis A. Henke, M.S.; Associate Professors Samuel H. Work, Ph.D., Lyman A. Dean, Ph.D.; Assistant Professors Charles M. Bice, B.S., Milton A. Miller, Ph.D.; Lecturers Julius L. Collins, Ph.D., J. C. Ripperton, M.S., Elver M. Hodges, M.S.

Professor Wadsworth, chairman

## 100 Orientation Course

Mr. Wadsworth
First semester only; no credit.
Lectures to acquoint the student with the fields of agriculture in Hawaii and to help him select a major field of study.

## 164 Truck Crop Production

First semester only; 3 credits. (Alternates with Agriculture 162.)
Origin, description, cultural requirements, and distribution of more important vegetable crops in Hawaii. Two lectures and one laboratory period a week. Prerequisites: Chemistry 101 or 102 , Botany 101. Laboratory fee $\$ 1$.

## 250 Soils

Mr. Wadsworth
First semester only; 4 credits.
Origin and physical properties of local soils. Texture, structure, and moisture relations. Three lectures or recitations and one laboratory period a week. Prerequisites: Chemistry 101 or 102, Physics 102. Laboratory fee $\$ 2$.

## 252 Sugar Cane Production

First semester only; 4 credits.
Varieties of cane, their planting, irrigation, fertilization, and harvesting. Visits to experimental fields and plantations. Students keep Fridays free as possible for field trips. Lectures, assigned readings, and laboratory periods. Prerequisites: Agriculture 250, 254. Laboratory fee $\$ 2$.

253 Dairying
Second semester; 3 credits. (Alternates with Agriculture 261.)
A study of dairy cows; production and marketing of milk and milk products; milk testing, separating, etc. Two lectures or recitations and one laboratory period a week. Laboratory fee $\$ 1$.

## 254 Principles of Genetics

Mr. Miller
First semester only; 3 credits.
Fundamentals of genetics, including principles of Mendelian and Neo-Mendelian inheritance, physical basis of heredity, variation, and an introduction to biometric methods. Two lectures and one laboratory period a week. Prerequisite: Botany 101 or a year of zoology.

255 Poultry Husbandry
Second semester only; 3 credits.
Problems of management on a commercial poultry farm. Assigned readings, discussions, and an hour report on one phase of the poultry industry. Two lectures and one recitation a week. Prerequisites: Agri culture 152 and sophomore standing. Laboratory fee $\$ 1$.

256 Principles of Agronomy
Mr. Hodges
Second semester only; 3 credits.
Field crops, their distribution, character, culture, utilization, and improvement. Two lectures and one laboratory period a week. Prerequisites: Botany 101, Chemistry 101 or 102. Laboratory fee $\$ 1$.

257 Feeds and Feeding
First semester only; 3 credits.
Principles of feeding and their application to farm and plantation animals.

## 259 Poultry Husbandry

Mr. Bice
Second semester only; credit by arrangement.
Special problems in poultry husbandry research. Individual work.
260 Pineapple Production
First semester only; 3 credits.
A general study of pineapple production. Prerequisites: Botany 101, Chemistry 101 or 102, Agriculture 250. Laboratory fee $\$ 1$.

## 262 Advanced Genetics

Mr. Collins
Second semester only; 3 credits.
Organization of germinal materials. Methods and results of modification of germinal materials. Two lectures a week, problems, assigned reading, field trips, and demonstrations. Primarily for those who expect to make genetics a major study or to engage in academic or experiment station work. Prerequisite: Agriculture 254.

264 Seminar in Animal Nutrition
Mr. Henke
Second semester only; 1 credit.
Recent investigations in animal nutrition. Oral reports by students on special topics after a review of literature. Prerequisites: Agriculture 257, sufficient training in chemistry, and consent of instructor.

## 267 Agricultural Chemistry

Mr. Dean
Second semester only; 3 credits.
Lectures, reading, and problems concerning the chemistry of soil composition, soil fertility, fertilizers, and feeds. May be supplemented by laboratory exercises in Agriculture 268. Prerequisite: Agriculture 250.

## 268 Agricultural Chemistry Laboratory

Mr. Dean
Second semester only; 2 credits.
Analysis of soils, fertilizers, and feeds. Prerequisites: Chemistry 151 or 230, Agriculture 250, and credit or concurrent registration in Agriculture 267. Laboratory fee $\$ 2$.

275 Pasture Management
Mr. Ripperton
First semester only; 3 credits.
Plant species on local pastures, exotic species adapted to Hawaii ; principles of pasture management. Two lectures and one laboratory period a week. Prerequisite: Agriculture 256.

281 Agricultural Machinery
H.S.P.A. Expt. Sta. Staff

Second semester only; 1 credit.
Kinds and types of machinery used in plantation work. Lectures by various individuals each covering a type of machine used in a particular division of a plantation. Field trips to plantations to see machines demonstrated. Given through cooperation with the H.S.P.A. engineering committee.

291 Irrigation Practice
Second semester only; 4 credits.
Irrigation in its relation to crop production. Development, distribution, and measurement of water; soilmoisture and its effect on plam mrowth. Three recitatms, one laboratory period a week. Prerequisite: junior standing. Laboratory fee $\$ 1$.

## 299 Comparative Agriculture

Second semester only; 2 credits.
Mr. Wadsworth
The crops, cultural practices, and agricultural institutions of the principal agricultural countries of the world.

300 Reading and Researcil in Atriculture
Staff
First semester, credit by arrangement; repeated second semester.
1'rerequisite: graduate standing and consemt of instructor concerned.
301 Seminar in Genetics
Mr. Collins
Year course; 2 credits each semester.
The seminar makes a critical review of current, fundamental researches in the field of experimental


## 302 Research in Genetics

Mr. Collins
Credit by arrangement.
Precentisite: erraduate standing and consent of instructor.
305 Research in Solf. Chemistry or Sohl Physics Credit by arrangement.
Prerequisite: graduate standing and consent of instructor concerned.
306 Research in Tropical Horticulture
Mr. Beaumont, Mr. Jones
First semester, credit by arrangement; repeated second semester.
Prerequisite: graduate standing and consent of instructors.

## 307 Soll Science Seminar

Mr. Dean, Mr. Wadsworth
Year course; 1 credit each semester.
Presentation of seminar reports, research reports, or reviews of soil science literature. May be taken repeatedly. Prerequisite: graduate standing or consent of instructors.

## 400 Thesis Research Staff <br> Credit by arrangement. <br> Open only to graduate students engaged in the preparation of theses in genetics, soil science, or horticulture.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

162 Tropical Pomology-First semester only; 3 credits.
261 Beef and Swine Production-Second semester only; 3 credits.

# Antbropology and Sociology 

Professor Felix M. Keesing, D. Litt.; Associate Professor Andrew W. Lind, Ph.D.; Assistant Professors Gordon T. Bowles, Ph.D., John F. Embree, Ph.D.; Instructor Bernhard L. Hörmann, M.A.; Lecturers Peter H. Buck, D.S.O., M.D., Kenneth P. Emory, M.A.

Professor Keesing, chairman
150-151 Introduction to the Study of Man Mr. Embree, Mr. Bowles, Mr. Hörmann
Year course; 3 credits each semester.
The development of man; race and race relations; the growth of culture; the nature of society; the individual and the group; communication. Prerequisite: sophomore standing.

## 273 Modern America

Mr. Embree
Second semester only; 3 credits.
Society in a new, machine-age, immigrant-settled country in contrast to that of old indigenous folk communities in Europe and Asia.
(Other courses in anthropology and sociology are listed separately under those titles.)

## Antbropology

150-151 Introduction to the Study of Man Mr. Embree, Mr. Bowles, Mr. Hörmann
(For description, see Anthropology and Sociology)
175 Race
Mr. Bowles
Second semester only; 2 credits.
Origin, evolution, and differentiation of the human species. Varieties of fossil and living man. Primarily for late afternoon students. Credit not obtainable in this course if Anthropology 261 is taken for credit.

254 Peoples of Asta
Mr. Bowles
First semester only; 3 credits.
Ethnology and races of Asia. Hunters and food gatherers, nomads and agriculturists. The great civilizations.

## 257 Peoples of the World

Mr. Embree
First semester only; 3 credits.
An ethnographic course dealing with the peoples and cultures of the world, their distribution, and their social and religious systems.

258 General Ethnology
Mr. Embree
Second semester only; 3 credits.
Development of human cultures; problems of diffusion, independent invention, and the relationship of environment to culture. Prerequisite: Anthropology and Sociology 150-151 or Anthropology 257.

261 Race and Race Mixture
Mr. Bowles
First semester only; 3 credits.
Historic development of concepts of race. Physical differences in man, especially as they affect human differentiation into "races." Genetic factors in race crossings.

263 Prehistory of Europe and Africa
Mr. Bowles
Second semester only; 3 credits.
Preclassical archaeology. Cultures and races of the early and late stone ages. Domestication of plants and animals, the use of metals, and commencement of civilization.

## 267 Primitive Religion

First semester only; 2 credits.
Mr. Embree
Religious beliefs and practices in preliterate society. Function of religion in social organization. Reading of monographs on religions of various tribes. Prerequisite: Anthropology and Sociology 150-151 or consent of instructor.

## 268 Primitive Art and Craft

Mr. Embree
Second semester only; 2 credits.
Survey of art forms and techniques of preliterate peoples of the world; types of design, relation of art form to culture.

## 270 Folk Society in Japan and China <br> Mr. Embree <br> Second semester only; 3 credits.

Peasant life in Japan and China. Village organization, festival and seasonal calendar. Family systems. Parallels and relationships of folk society in the two countries.

274 India
Mr. Bowles
Second semester only; 3 credits.
Archaenlogical and ethnological survey of India. Prehistoric and historic cultures and civilizations; development of caste, zeligion, and other institutions.

280-281 Physical Anthropology
Mr. Bowles
Year course; 3 credits each semester.
First semester: man's position amens the primates; age, race, sex variations of man; measurement and statistical treatment of skeletal anatomy. Second semester: cumparative external morphology of the living. Two lectures and one lahoratury periud a week. Prerequisite: Anthropology and Sociology 150-151 or Zoology 150.

290 Independent Study

Staff

Credit by arrangement.

Prerequisite: consent of department chairman.

300 Advanced Reading and Research
Staff
Credit hy arrangement.
Prerequisite: consent of dep.artment chairman.


400 Thess Research
Only madnate shy arrangement.
Ontaned in the preparation of theses may register in this course.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

170 Development of Man-First semester only; 2 credits.
171 Man and Culture-Second semester only; 2 credits.
180 Asia-Second semester only; 2 credits.
250 The Polynesians-Second semester only; 3 credits.
252 Peoples of the Pacific-First semester only; 3 credits.
255 The American Indian-First semester only; 2 credits.
259 Languages of the World-Second semester only; 2 credits.
269 Folklore-Second semester only; 2 credits.
271 Applied Anthropology—First semester only; 2 credits.
272 Modern Changes among Pacific Peoples-Second semester only ; 2 credits.
275 Prehistory of Asia-Second semester only; 3 credits.
277 Southeast Asia-Second semester only; 2 credits.

## Art

Associate Professor Huc-Mazelet Luquiens, B.F.A.; Instructors Jessie Shaw Fisher, Ed.B., Ben Norris, B.A., Robert Lee Eskridge; Lecturer Edgar Craig Schenck, M.F.A.

## Associate Professor Luquiens, chairman

Certain of these courses may be repeated for credit if the consent of the instructor is obtained. TThe University reserves the right to retain any student work which may be needed for exhibition or for the art department files.

## 150-151 Art Structure

Mr. Norris, Mrs. Fisher

Year course; 2 credits each semester.
Elements of design and composition; line, mass, color, etc. Exercises in various design styles to stimulate appreciation and to provide background for advanced work. This course, or the equivalent in experience, is prerequisite to all advanced study.

## 154-155 Freehand Drawing and Beginning Painting Mr. Luquiens, Mrs. Fisher

 Year course; 2 credits each semester.First semester: freehand perspective. Second semester: three-dimensional form in charcoal and water color.

## 156 Beginning Commercial Art

Mr. Eskridge
First semester only; 2 credits.
Design applied to commercial layout. Lettering as the foundation of all commercial work. Study of advertising, posters, etc., in pencil, pen, and color. Prerequisites: Art 150-151, 154-155.

## 160-161 Oil Painting

Year course; 2 credits each semester.
Study of form and color in oils, stressing composition, plane structure, and character of subject. First semester: still life. Second semester: portrait head and costume. Prerequisite: Art 154-155 or consent of instructor. Studio fee $\$ 3$ second semester, to cover expense for models.

170 Imaginative Design
Mr. Norris
First semester only; 2 credits.
Development of design and color as flexible means of expression. Imaginative handling of motifs, and fundamentals of design structure. Prerequisite: Art 150-151.

171 Industrial Design
Mr. Norris
First semester only; 2 credits.
Primarily an appreciation course to further the understanding of design in everyday objects, including "machine art": furniture, kitchen utensils, automobiles, radios, etc. Lectures, lantern slides, and some drawing. Prerequisite: Art 150-151.

## 172 Interior Decoration

Mrs. Fisher
First semester only; 2 credits.
Design, arrangement, and color of furniture, hangings, etc., in relation to wall and floor space. Shop and museum excursions. Prerequisite: Art 150-151.

175 Textile Decoration
Second semester only; 2 credits.
Advanced problems in tie dye, batik, appliqué, etc. Prerequisite: Art 150-151.
Mrs. Fisher

Mr. Norris
250-251 History of Art
Year course; 2 credits each semester.
Origins and development of architecture, sculpture, and painting from prehistoric times to the present. Lectures with lantern slides. Visits to Honolulu Academy of Arts. Prerequisite: junior standing or consent of instructor.

253 Modern Painting
First semester only; 2 credits.
European painting from the 17 th century to the present, both as related to its cultural setting and as contributing to the formation of modern taste. Lectures and reading assignments. Prerequisite: Art 250 251 or consent of instructor. The course is given only when there is a registration of at least 15 students.

## 262 Creative Art for the Upper Elementary Years (For description, see Teacher Education, Art for Teachers.)

Mṛs. Fisher

263 Creative Art for the Secondary School Years
Mrs. Fisher
(For description, see Teacher Education, Art for Teachers.)

## 268 Landscape Painting

Mr. Luquiens

First semester only; 2 credits.
Landscape in oils. Two periods a week, out of doors and in the studio. Prerequisite: Art 160-161.

## 269 Life Class

Mr. Luquiens
Second semester only; 2 credits.
Drawing from the model, with a view to establishing a foundation for the imaginative use of the human figure. Prerequisite: Art 154-155. Studio fee 84, to cover model expense.

## 270 Advanced Composition

Mr. Norris
Second semester only; 2 credits.
Continuation of Art 170, allowing maximum freedom for individual expression in fields chosen by the student. Prerequisite: Art 170.

## 274 Commercial Art for Economics and Business Students

Mr. Norris
Second semester only; 2 credits.
Art principles applied to merchandising. Newspaper and magazine advertising, window and showcase display, cholhing. furniture, choice of textiles, color psychology, Lectures and lantern slides. Primarily for students of cconomics and business. Drerequisite: junior standing or consent of insirnctor.

## 275 Advanced Commercial. Art

Mr. Eskridge
Second semester only; 2 credits.
Art in linsiness from a designers point of view. Advertising psychology and business requirements; practical work in varions fiedds. Prerepuisite: Art 156.

286-287 Modern Painting and Design Staff
Credit by arrangement.
Criticism and vilidance in work of the alvanced student's own choosine, subject to the instructor's advice. Plerequisite: consent of department dhaiman.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

173 Advanced Interior Decoration-Second semester only; 2 credits.
252 Renaissance Painting-First semester only; 2 credits.
266-267 Etching-Year course; 2 credits each semester.
272 Illustration-First semester only; 2 credits.
273 Advanced Illustration-Second semester only; 2 credits.
276-277 Stage Design-Year course; 2 credits each semester.

## Botany

Professors Harold St. John, Ph.D., Harry F. Clements, Ph.D., Harold E. Clark, Ph.D., Oscar Nelson Allen, Ph.D.; Associate Professor G. K. Parris, Ph.D.; Assistant Professors Charles J. Engard, Ph.D., George F. Papenfuss, Ph.D.; Lecturer Richard H. P. Sia, M.D.

Professor St. John, chairman

## 101 General Botany

Year course; 3 credits each semester.
Introduction to botany; structure of seed plants; relation of form to function; adjustment to external conditions; plant survey from algae to seed plants; evolution in relation to habitat. One lecture or recitation and two laboratory periods a week. Laboratory fee $\$ 4$ a semester.

## 102 Systematic Botany of Flowering Plants <br> Year course; 3 credits each semester.

Native and exotic Hawaiian flowering plants, their classification, history, distribution, use. Trips to mountains. Preparation of a herbarium. One lecture and two laboratory periods a week. Prerequisite: Botany 101. Laboratory fee $\$ 2$ a semester.

## 151 General Bacteriology

Mr. Allen
First semester, 4 credits; repeated second semester.
Introduction to physiological reactions and culture of microorganisms and laboratory technique; first semester emphasizes industrial and agricultural applications; second semester emphasizes medical phases. Two lectures and two laboratory periods a week. Prerequisite: Botany 101 or Zoology 151. Laboratory fee $\$ 5$.

## 155 Nutrition of Plants

Mr. Clements
First semester only; 2 credits.
Nature of seeds; nutrition of the embryo during germination; intake of raw materials; manufacture of food by the adult plant. Not open for credit to students who have taken Botany 173.

156 Bacteria in Relation to the Individual and the Public Mr. Allen
Major contributions of bacteriological research to agriculture, dairying, mechanisms of sewage disposal, and study of communicable diseases. Not open for credit to students who have taken Botany 151.

## 161 Plant Geography

Mr. St. John
First semester only; 2 credits.
Plant distribution throughout the world; vegetation of forests, grasslands, deserts, tundra, mountains, and oceans; special attention to origin, development, ecology, and economic importance. Laboratory fee $\$ \mathbf{2}$.

## 173 Elementary Plant Physiology

Mr. Engard
Second semester only; 4 credits.
Introduction to plant physiology; osmosis, absorption of water and its ascent in plants, transpiration, mineral utilization, photosynthesis, storage, digestion, respiration, growth, photoperiodism. Three lectures and one laboratory period a week. Prerequisites: Botany 101, Chemistry 101. Laboratory fee $\$ 2$.

Algology
Mr. Papenfuss
First semester only; 3 credits.
Structure and life histories of the more common species of algae; their importance and relationships. One lecture and two laboratory periods a week. Prerequisite: Botany 101. Laboratory fee $\$ 3$.

## 181 Plant Life of the Sea

Second semester only; 3 credits.
Marine plants, their distribution, life histories, environments and importance in the cycle of life in the sea. Two lectures and one laboratory period (at the Marine Biological Laboratory, Waikiki), a week. Laboratory fee $\$ 3$.

Botanical Problems
First semester, credit by arrangement; repeated second semester.
Pursuit of any advanced botanical problem. Reading and laboratory work. May be taken repeatedly. Prerequisite: consent of instructor concerned. Laboratory fee $\$ 1$.

## 254 Advanced Taxonomy

First semester only; 2 or more credits.

Mr. St. John

Synopsis of lower Dicotyledons from Piperaceae to Rosaceae, with laboratory study of important families; plant distribution and independent identification of collections. Qualified students may do part of their work in the Bishop Museum herbarium. One lecture and one or more laboratory periods a week. Prerequisite: Botany 102. Laboratory fee $\$ 1$.

## 258 <br> Agricultural Microbiology

First semester only; 4 credits. (Alternate years.)
Role of microorganisms in transformations of inorganic and organic materials in soil; relation of these processes to agriculture; survey of the pathogenic soil microorganisms. Two lectures and two laboratory periods a week, Recommended for students of agriculture. Prerequisite: Botany 151. Laboratory fee $\$ 5$.

## 269 Plant Anatomy

Second semester only; 3 credits. (Alternate years.)
Structure of vascular plants; origin and differentiation of tissues; relation of structure to function. One recitation and two laboratory periods a week. Prerequisite: Botany 101. Desirable preparation: Botany 268 or Zoology 362. Laboratory fee \$6.

## 273 Plant Biophysics

First semester only; 3 credits. (Alternate years.)
Intensive work on physical aspects of plant physiology, including water relations, drought resistance, permeability, the nature of protoplasm, mineral nutrition. Prerequisites: Botany 173, organic chemistry, one year of college physics.

## 274 Laboratory Technioue in Plant Biophysics

First semester only; 2 credits. (Alternate years.)
Parallels Botany 273 and should be taken with it, although this is not required. Two laboratory periods a week. Laboratory fee $\$ 5$.

## 275 Plant Biochemics

Mr. Clements
Second semester only; 3 credits. (Alternate years.)
Intensive study of chemical aspects of plant physiology, including photosynthesis, nitrogen assimilation, fat metabolism, translocation and storage, enzymes, respiration, growth hormones. Prerequisites: Botany 173, organic chemistry, one year of college plysics.

## 276 Laboratory Technioue in Plant Biochemics

Mr. Clark
Second semester only; 2 credits. (Alternate years.)
Parallels Botany 275 and should be taken with it, although this is not required. Two laboratory periods a week. Laburatury fee $\$ 5$.
300 Botanical. Research

Prercquisite: eraduate standing and consent of instructor concerned. Laboratory fee $\$ 1$.

310 Botanicai, Seminar Staff
Year course; 1 credit each semester.
Presentation of seminar reports, reports on research, or reviews of current botanical literature. May be taken repeatedly.

351 Piant Physhology Seminar
Second semester only; 1 credit.
Discussion of topien of particular interest to the group. May be repeated several times.

## 352 Microbial Decomposition of Piant Material

First semester only; 1 credit. (Alternate years.)
A review of current literatire ein the decomposition of nitrogenous and carbohydrate organic materials in sinil by bacteria and funsi.

## 360 Immunology

Mr. Allen, Mr. Sia
Second semester only; 3 credits. (Alternate years.)
Lectures and discussions dealine, with natural, active, and passive types of immunity to specific diseases. Common diagnostic serological reactions. Two lectures and one laboratory period a week. Prerequisite: Botany 260. Laboratory fec $\$ 3$.

## 365 Taxonomy of the Dicotyledons

Second semester only; 1 credit. (Alternate years.)
A synoptical treatment of the Dicotyledons, from the Leguminosae to the Ericaceae, with reference to their gross morphology, economic value, and distribution. Prerequisite: Botany 102.

## 370 Physiology of Bacteria <br> Second semester only; 3 credits. (Alternate years.)

Mr. Allen
Analysis of the major physiological processes carried on by bacteria and yeasts, such as growth processes, energy relationships, and enzymatic reactions; current literature reviewed. Two two-hour periods a week. Prerequisite: Botany 258 or 260.

## 372 Determinative Bacteriology <br> Second semester only; 3 credits. (Alternate years.)

Survey of major systems of bacterial classification; review of methods useful in identification of unknown organisms. Two two-hour lecture periods a week, Prerequisite: Botany 258 or 260.

Credit by arrangement.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

103 Evolution-Second semester only; 2 credits.
158 Mycology-First semester only; 3 credits.
160 Flower and Tree Identification-First semester only; 2 credits.
253 Plant Ecology-Second semester only; 4 credits.
263 Plant Pathology-Second semester only; 3 credits.
303 Plant Pathology Seminar-First semester only; 1 credit.
353 The Nitrogen Cycle Seminar-First semester only; 1 credit.
367 Taxonomy of the Higher Dicotyledons-Second semester only; 1 credit.

## Business

Professors Merton K. Cameron, Ph.D., Matthew M. Graham, C.P.A.; Instructors Kan Jung Luke, M.B.A., Frederick W. Wagner. Ph.D.; Lecturer J. J. Delpech, C.P.A. Absent on leave 1940-41: Associate Professor William H. Taylor, Ph.D. (first semester only) ; Assistant Professor Ralph C. Hoeber, J.D.

Professor Merton K. Cameron, chairman

## 150-151 Elementary Accounting

Mr. Graham
Year course; 3 or 4 credits each semester.
Fundamental principles, including the accounting problems of single proprietorships, partnerships, and corporations. A 3 -credit course; 1 credit laboratory in addition required of all economics and business majors who have not passed creditably two full years of high school bookkeeping. Prerequisite: sophomore standing in the department or permission of instructor.

## 152-153 Elementary Accounting

Year course; 3 credits each semester.
Duplicates the subject matter of Business $150-151$; primarily for unclassified evening students; scheduled only in the evening. Credit not obtainable in both this course and Business 150-151. Prerequisite: unclassified student status or permission of instructor.

## 161 Elementary Business Law (Formerly 160-161)

First semester, 3 credits; repeated second semester.
Nature and sources of law; judicial procedure; brief survey of business law, emphasizing historical, social, and preventive aspects of principles discussed. Prerequisite: sophomore standing.

## 250-251 Intermediate Accounting

Mr. Graham

## Year course; 3 credits each semester.

The balance sheet; form, content, and such related problems as depreciation, valuation of assets, etc.; mergers, construction of consolidated statements. Prerequisites: Economics 150-151, and a grade of $\dot{C}$ or better in Business 150-151 or 152-153.

## 259 Office Management and Secretarial Science

## Second semester only; 3 credits.

Classification of office activities; distribution of authority and responsibility; employment; compensation; measuring efficiency; procedure and layout; indexing and filing; qualifications and functions of a secretary. Prerequisites: Economics 150-151, Business 150-151.

## 264 Principles of Business

Mr. Cameron
First semester only; 3 credits.
Choosing goods to handle, time to enter, location, size and legal form of organization; selecting, handling, and promoting executives; choosing selling policies; promoting good public relations. Prerequisite: Economics 150-151.

266 Investments and Investment Banking
Mr. Wagner
First semester only; 3 credits.
Economic theory and tests of investment; personnel of investors; investment credit analysis; mathematics of investment; tools of investment; types of investment institutions and their functioning. Prerequisites: Economics 150-151; credit or concurrent registration in Business 150-151 or 152-153.

## 267 Business Cycles and Business Forecasting

First semester only; 3 credits.
Analysis of the business cycle and proposed remedies; assumptions, methods involved, and statistical data used in business forecasting; forecasting services; applicability of business forecasts to specific cases. Prerequisite: Economics 150-151.

## 273 Economics of Advertising

Mr. Luke
First semester only; 3 credits.
History and present importance; methods and media; agencies and campaigns; costs and their measurement; evaluation from social and economic points of view. Prerequisites: Economics 150-151; credit or concurrent registration in Business 270-271.

## 276 Economics of Retail Merchandising

Mr. Luke
Second semester only; 3 credits.
Analysis of consumers and their buying habits; history of retailing; store organization and management; sales promotion. Prerequisites: Economics 150-151; credit or concurrent registration in Business 270-271.

## 282 Statistics

Second semester only; 3 credits.
The science; uses; characteristics; sources; gathering material; statistical units; collecting and tabulating data: diagrams, frequency tables, and graphs; averages; index numbers; comparison of variables. Prerequisite: junior standing.

305-306 Seminar in Business
Staff
Year course; maximum of 3 credits each semester.
Open only tu usalified graduate students.

## Other Courses

The following courses, ordinarily given in the alternate years, will not be offered in 1941)-41:

252-253 Intermediate Accounting-Year course; 3 credits each semester.
254 Cost Accounting-First semester only; 2 credits.
255 Analysis of Financial Statements-Second semester only; 2 credits.
256 Income Tax Problems and Procedure-Second semester only; 2 credits.
262 Principles of Insurance-First semester only; 2 credits.
265 Corporation Finance-Second semester only; 3 credits.
270-271 Principles of Marketing-Year course; 3 credits each semester.
275 Practice of Foreign Trade-Second semester only; 3 credits.
280 Salesmanship and Sales Management-First semester only; 3 credits.
285 Law of Contracts-Year course; 2 credits each semester.
286 Law of Sales-First semester only; 2 credits.
287 Law of Bills, Notes, and Interest-Second semester only; 2 credits.
288 Law of Partnerships and Corporations-Second semester only; 3 credits.
290 Law of Agency-First semester only; 1 credit.
291 Law of Personal Property-First semester only; 2 credits.
292 Law of Real Property-Second semester only; 2 credits.

## Chemistry and Sugar Technology

Professors Frank T. Dillingham, M.A., Leonora Neuffer Bilger, Ph.D.; Associate Professor Earl M. Bilger, Ph.D.; Assistant Professors John H. Payne, Ph.D., Wilfred J. Holmes, M.S.; Instructor Giichi Fujimoto, M.S.; Lecturer Raymond Elliott.

Professor Dillingham, chairman

## Chemistry

(Faculty listed under Chemistry and Sugar Technology.)
Students specializing in chemistry are required to take the following courses: 101 or $102 ; 150,152,153,230,271,211$, and 212, and may elect any other chemistry courses. One year of college physics and one of mathematics are strongly advised.

## 101 General Chemistry

Mr. Payne, Mr. Fujimoto
Year course; 4 credits each semester.
Introductory general chemistry for students without previous training in the subject. Three lectures and one laboratory period a week. Laboratory fee $\$ 7$ a semester.

## 102 General Chemistry

Mrs. Bilger
Year course; 4 credits each semester.
A comprehensive survey designed for students who have had one year of chemistry in preparatory school. Three lectures or discussion periods and one laboratory period a week. Laboratory fee $\$ 7$ a semester.

## 150 Qualitative Analysis

Mr. Bilger
First semester only; 4 credits.
Systematic qualitative analysis covering characteristic reactions, separation, and detection of common basic and acidic ions, principles of analysis, and theory of solutions. Two lectures and two laboratory periods a week. Prerequisite: Chemistry 101 or 102 . Laboratory fee $\$ 8$.

## 151 Quantitative Analysis, Short Course <br> Mr. Fujimoto <br> Second semester only; 4 credits. <br> Principles of gravimetric and volumetric analysis. Two lectures and two laboratory periods a week. Prerequisite: Chemistry 101 or 102; 150. Laboratory fee $\$ 8$.

## 152 Elementary Organic Chemistry

Mr. Payne
First semester only; 4 credits.
Introduction to chemistry of carbon compounds, dealing chiefly with fundamental principles and detailed study of the aliphatic series. Three lectures and one laboratory period a week. Prerequisite: Chemistry 101 or 102. Laboratory fee $\$ 9$.

## 153 Intermediate Organic Chemistry <br> Mr. Payne <br> Second semester only; 4 credits. <br> Continuation of Chemistry 152, covering principally the aromatic and heterocyclic compounds. Three lectures and one laboratory period a week. Prerequisite: Chemistry 152. Laboratory fee $\$ 9$.

## 211 Physical Chemistry

Mr. Bilger
Year course; 3 credits each semester.
Fundamental theories and principles of chemistry. Three lectures a week. Prerequisites: Chemistry 150, 230; concurrent registration in Chemistry 212.

## 212 Physical Chemistry Laboratory

Year course; 1 credit each semester.
Laboratory exercises in physical chemistry methods. One laboratory period a week. Prerequisite: credit or concurrent registration in Chemistry 211. Laboratory fee $\$ 6$ a semester.

## 230 Quantitative Analysis

Mr. Fujimoto
Year course; 3 credits each semester.
Principles of gravimetric and volumetric analysis, colorimetric and electrometric methods of $p \mathrm{H}$ determinations. One lecture and two laboratory periods a week. Prerequisites: Chemistry 101 or 102; 150. Laboratory fee $\$ 8$ a semester.

## 240 Honors Course in Chemistry

Year course; 2 or 3 credits each semester.
Reading and independent work on a problem in an advanced branch of chemistry, such as advanced agricultural, biological, organic, physical, or quantitative analysis. Prerequisites: Chemistry 101 or 102; 150, 152, 153, 230, 271; Mathematics 152, 153; Physics 102; credit or concurrent registration in Chemistry 211, 212. Laboratory fee $\$ 6$ a semester.

## 260 Biological Chemistry

Mr. Dillingham
First semester only; 3 credits.
Lectures, recitations, and supplementary reading on chemistry of food constituents, plant and animal life, and nutrition. Prerequisites: Chemistry 101 or 102 ; 151, 152.

262 Biological Chemistry Laboratory
First semester only; 1 credit.
Experimental studies of proteins, fats, carbohydrates, enzymes, milk, urine. One laboratory period a week. Prerequisites: Chemistry 101 or 102 ; 151, 152. Laboratory fee $\$ 5$.

## 271 Colloidal Chemistry

Second semester only; 3 credits.
Chemistry of colloids. Assigned readings and written reports. Two lectures and one laboratory period a week. Laboratory fee $\$ 5$.

## 281 History of Chemistry

Second semester only; 2 credits.
The historical foundations of the facts and theories of chemistry, from the earliest times through alchemy to the present; emphasis upon achievements that led to new basic ideas and the personalities of great chemists. Prerequisite: credit or concurrent registration in Chemistry 230.

## 310 Seminar in Chemistry

Mry. Bilger
Year course; 1 credit each semester.
Recent advances in chemistry. Prerequisites: graduate standing and credit or concurrent registration in Chemistry 211, 212.

## 313 Selected Topics in Advanced Physical Chemistry

 First semester only; 2 credits.Phase rule, molecular structure, photochemistry, electrochemistry, and recent advances in physical chemistry. One lecture and one laboratory period a week. Prerequisites: Chenistry 211, 212. May be repeated if consent of instructor is obtained. Laboratory fee $\$ 6$.

## 315 Chemicar. Literature

Staff
Year course; 1 to 2 credits each semester.
Articles in current chemical periodicals are studied, and topics are assigned for reports. Prerequisites: Chemistry 101 or 102; 150, 152, 153, 230. May be taken in conjunction with Chemistry 211,212, 316 , and 317.

## 316 Advanced Quantitative Analisis Year course; 3 credity each semester. <br> Mr. Dillingham, Mr. Fujimoto

Primarily a laboratory ceurse covering analysis of such materials as foodstuffs, fertilizers, soils, sugarhouse products, water, urine, ett. Prerequisites: Chemistry 101 or 102; 150, 152, 153, 230. Laboratory fee $\$ 6$ a scmester.

317 Advanced Organic Chemistry
Mr. Payne
First semester only; 3 credits.
Designed to develop maturity in the literatitre of the earhon compounds and manipulative technique in the latioratory. Two laburatory perinds and wie discussion hour a week. D'rerequisite: Chemistry 153. laberatory fee $\$ 0$.

## 318 Chemistry Research <br> Staff

Year course; credit by arrangement.
Research in pure or applied chemistry. Prerequisites: Chemistry 101 or 102; 150, 152, 153, 230,271, or their equivalemts; eredit or concurrent registration in Chemistry 211, 212, and in 316, 317, or 350; and consent of instructor concerned. Laboratury lee silu a semester.

## 319 Quantitative Microanai.ysis

Mr. Fujimoto
Second semester only; 2 credits.
Typical methods of both organic and inorganic quantitative microanalysis. Prerequisite: Chemistry 230. Laboratory fee $\$ 8$.

## 320 Theoretical Organic Chemistry <br> Year course; 2 credits each semester.

Modern theories of valence and the chemical link. Ingold and Pauling systems, resonance, new physical methods of investigation, molecular reatiangements, dıpole moments. Prerequisite: senior or graduate standing and permission of instructor. Open only to chemistry majors.

## 350 Organic Analysis

Mr. Payne
Second semester only; 3 credits.
Introduction to technique of organic analysis, both qualitative and quantitative. Three laboratory periods a week. Prerequisites: Chemistry 153, 230. Laboratory fee $\$ 9$.

400 Thesis Research
Staff
Credit by arrangement.
Only graduate students engaged in the preperation of theses may register in this course. Prerequisites: Chemistry 101 or 102; 150, 152, 153,230, 271, or their equivalents; credit or concurrent registration in Chemistry 211, 212, and in 316, 317 or 350 . Laboratory fee $\$ 10$ each semester.

## Cbinese

(See Oriental Studies)

## Economics

## Professor Merton K. Cameron, chairman <br> (Faculty listed under Business)

150-151 Principles of Economics
Mr. Cameron
Year course; 3 credits each semester.
Principles underlying consumption, production, and distribution of wealth; analysis of important current economic problems. Prerequisite: sophomore standing.

## 223 History of Economic Institutions <br> Year course; 3 credits each semester.

Population and agricultural changes, labor and manufacturing systems, and transportation, trade, money, banking, and credit developments from earliest times, emphasizing causes and effects of changes. Prerequisite: sophomore standing.

## 252 Economic History and Problems of Japan Second semester only; 3 credits.

A detailed exposition of the feudal economic organization and its disintegration, and the rise of capitalistic enterprise and its relation to the state. Prerequisite: junior standing.

## 253 Economic History and Problems of China

Mr. Taylor
Second semester only; 3 credits.
A historical survey of Chinese economic institutions; discussion of recent agricultural, industrial, financial, and trade problems. Prerequisite: Economics 150-151 or consent of instructor.

## 254 Economic Problems of Europe

First semester only; 3 credits.
Postwar domestic and international economic problems and policies of the more important European countries, especially those of the United Kingdom, France, Germany, and Russia. Prerequisite: Economics $150 \cdot 151$ or consent of instructor.

## 256 Money, Credit, and Prices

Mr. Wagner
First semester only; 3 credits.
Nature, history, and kinds of money; characteristics of credit; monetary system of the United States; monetary standards; value of money; relation of money and credit to prices. Prerequisite: Economics 150-151.

## 257 Banking

Mr. Wagner
Second semester only; 3 credits.
Nature and history of banking; the banking system of the United States, including commercial banks, trust companies, sayings banks, and related banking institutions. Prerequisites: Economics 150-151, 256.

## 261 Public Finance

Mr. Wagner
Second semester only; 3 credits.
Public expenditures: extent, purposes, determinants, effects; public revenues: public domains and industries, fees, assessments, charges, taxation, pubiic credit; fiscal administration. Prerequisite: Economics 150-151.

## 262-263 Practice Banking

Mr. Cameron
Year course; 2 credits each semester.
Actual work in Honolulu banks two afternoons a week from 1 p.m. until the books are balanced; supplementary reading on bank organization and management. Prerequisites: Economics 256, 257, permission of instructor and of the bank concerned.

## 265 International Finance

Second semester only; 3 credits.
International loans and investments; the instruments, technique, and organization of foreign exchange; varying monetary standards and foreign exchange; manipulation of exchange by national governments. Prerequisites: credit or concurrent registration in Economics 256 and 257.

## 273 Ocean Transportation

Mr. Cameron
Second semester only; 3 credits.
Economic characteristics, history, and vehicles of ocean transportation; services, organization, and ratemaking theories and practices of ocean carriers; subsidies and government control. Prerequisite: Economics 150-151.

## 281 Labor Problems

First semester only; 3 credits.
Sources of wage earners; wages, hours, environment, and unemployment; labor organizations and their weapons and accomplishments; labor legislation; cooperation and socialism as remedies for the labor problem. Prerequisite: Economics 150-151.

## 288 Risk, Risk-Bearing and Speculation

Mr. Wagner
First semester only; 3 credits.
Study of risks arising from economic processes and hazards such as fire, accident, and death, and of institutions, such as insurance and speculation, devised to meet them. Prerequisite: Economics 150-151.

## 296 Recent Economic Thought

Second semester only; 3 credits.
General survey of economic thought from John Stuart Mill to the present time with special emphasis on value and distribution. Prerequisites: junior standing and $B$ in Economics 150-151 or permission of the instructor.

305-306 Seminar in Economics
Staff
Year course; maximum of 3 credits each semester. Open only to qualified graduate students.

311 Seminar in the Economic History and Problems of the Far East

Mr. Taylor
Second semester only; 3 credits.
Open only to qualified graduate studente.
400 Thesis Research Staff
Credit by arrangement.
Open only to graduate otudents engaged in the preparation of theses.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

270 Public Utilities-First semester only; 3 credits.
276 Trusts and Industrial Combinations-First semester only; 3 credits.
285 Theory and Control of Foreign Trade-First semester only; 3 credits.
291 Economics of Agriculture-Second semester only; 3 credits.

## Education

(See Teacher Education)

## Engineering

Professors Arthur R. Keller, M.S., Carl B. Andrews, M.S.; Visiting Professors Leonard C. Urquhart, C.E., Charles E. O'Rourke, C.E.; Assistant Professors Wilfred J. Holmes, M.S., Russell C. Brinker, C.E.; Instructors Kenichi Watanabe, Ph.D., William M. Cade, M.S. ; Assistant Shigeo Okubo, M.S.; Lecturer E. C. Holtzworth, Lt. (CC), U.S.N. Absent on leave 1940-41: Assistant Professor Elvin A. Hoy, B.S.

Professor Andrews, chairman
CIVIL ENGINEERING (C.E.)
C.E. 101 Plane Surveying

Mr. Andrews, Mr. Cade
Year course; 3 credits each semester.
Use of chain, tape, level, and transit. Map platting and computations. Lectures on Hawaiian land descriptions. One lecture and two field or draíting periods weekly. Prerequisites: credit or concurrent registration in Mechanical Drawing 101, Mathematics 104. Laboratory fee $\$ 2$ each semester.

## C.E. 151 Graphical Statics

C.E. 153 Roads and Pavements

Mr. Keller
Second semester only; 2 credits.
Construction and maintenance of various types of city streets and rural highways. Prerequisites: Civil Engineering 101, Mechanical Drawint 101.
C.E. 227 Route Surveying

Mr. Brinker
Year course; 3 credits each semester.
Reconnaissance; preliminary survey; paper location; curve computations; field location. Platting profiles; determining grade lines. Earthwork computations for location of railroad or highway. One 7 -hour continuous period a week. Prerequisites: Civil Engineering 101, 153; Mathematics 106.
C.E. 229 Municipal Engineering

Mr. Keller
Year course; 3 credits each semester.
City water supply, waterworks, fire protection, methods of treating water used for a public supply, sewage and garbage disposal, sewage treatment, and disposal of storm water.

## C.E. 231 Soil Mechanics

## Mr. Andrews

Year course; 2 credits each semester.
Physical factors in earth pressure phenomena; soil phenomena in earthwork operations and foundation work.
C.E. 252 Analytical and Applied Mechanics

Mr. Andrews
First semester only; 4 credits.
Effect of forces on bodies, both at rest and in motion. Prerequisite: Mathematics 106.

## C.E. 253 Structural Mechanics <br> Mr. Andrews

Second semester only; 4 credits.
Action and effect of internal stresses in bedies and members of structures. Prerequisite: Civil Engineering 252.

## C.E. 255 Hydraulics

Second semester only; 3 credits.
Water pressure, strength of pipe, stability of gravity dams. Water flow through orifices, nozzles, and weirs. Manometers, Pitot tubes and Venturi meters. Steady flow in pipes and open channels. Prerequisites: credit or concurrent registration in Civil Engineering 252, 253.
C.E. 257 Railway Track, Turnouts, and Accessories

Mr. Andrews
Second semester only; 2 credits.
Railway track, turnouts, crossings, crossovers, and accessories, and maintenance of railway tracks and structures. Prerequisite: credit or concurrent registration in Civil Engineering 227.

## C.E. 259 Higher Surveying

Mr. Brinker
Second semester only; 3 credits.
Topographic surveying; triangulation; base line measurement; precise leveling; least squares computations. Theory and use of the plane table, sextant, solar attachment, precise level, and theodolite. Two lectures and one laboratory period a week. Prerequisites: Civil Engineering 101, Mathematics 106.

## C.E. 260 Highway Economics

Mr. Keller
First semester only; 2 credits.
Continuation of Civil Engineering 153. Economics of road building, methods of paving for road construction, detailed design of highways and city streets. Prerequisite: Civil Engineering 153.

## C.E. 276 Structural Design

First semester only; 3 credits.
Stress computation and design of plate girders and steel building trusses and other structural members. Complete detail drawings and specifications, carefully supervised and checked. Prerequisite: Civil Engineering 253.

## C.E. 277 Bridge Design

Second semester only; 3 credits.
Design of a single track through bridge for a given conventional loading, including all computations, drawings, and specifications. Prerequisite: Civil Engineering 276.

## C.E. 279 Concrete and Masonry Structures

Mr. Urquhart, Mr. O'Rourke

## Year course; 3 credits each semester.

Elementary theory of reinforced concrete, beams, columns, footings, retaining walls. In the second semester, design of floor systems for buildings, bins, reservoirs, combined footings, highway bridges, miscellaneous structures. Prerequisites: Civil Engineering 252, 253.

## C.E. 280 Water Analysis

Mr. Keller
Year course; 1 credit each semester.
Standard methods of making physical, chemical, an? bacteriolosical examinations of water and sewage. Laboratory. Prerequisite: credit or concurrent registration in Civil Engineering 229.
C.E. 281 Advanced Structural Analysis

Mr. Urquhart
First semester only; 2 credits.
Deflections, analysis of rigid frames, the two-hinged arch, and other redundant structures. Prerequisite: senior. standing or consent of instructor.

## C.E. 282 Foundations

Second semester only; 2 credits.
Design and construction of various types of foundations for bridges and buildings, underpinning, theory of bearing capacity. Prerequisite: senior standing or consent of instructor.

## C.E. 284 Hydraulics Laboratory

Mr. Holmes
First semester only; 1 credit.
Calibration of weirs, orifices, meters, nozzles, and short tubes. Loss of head in pipes. Tests and field trips. Prefequisice: Civil Engineering 255.
C.E. 289 Soli, Mechanics Laboratory

Mr. Andrews
Second semester only; 1 credit.
Determination of Aterherg Limits, grain size distribution, permeability, expansion and compression indices. slakins time, apecific pravity, water content; other routine laboratory determinations. Prerequisite: credit or coneurrent registration in Civil Engineering 231.

## MECHANICAL DRAWING (M.D.)

M.D. 101 Mechanicai. Drawing

Mr. Brinker, Mr. Cade
Year course; 2 credits each semester.
Elements of drafling, sketching, lettering, isometric, oblique, and cabinet drawing, working drawings, conventions, stambards, tracing, and blueprinting. Two 3 -hour, or three 2 -hour laboratory periods a week. Cost of instrumests and materials about $\$ 30$.
M.D. 152 Describtive Geometry

Mr. Watanabe
First semester only; 3 credits.
Germetry of cusiutering drawing, analysis and design of structures, intersections and development of surlaces. I'rerefuisites: Mechanical Drawing 101, Mathematics 104.

## MECHANICAL ENGINEERING (M.E.)

M.E. 150 Office and Shop Methods

Mr. Andrews
First semester only; 2 credits.
Machines and tools nsed in pattern, forge, machine, and boiler shops; office methods, cost keeping, estimating, and economic comparisons of struetures.
M.E. 202 Materials of Engineering

Mr. Urquhart
First sementer only; 2 credits.
Properties of cements, limes, and plasters, plain and reinforced concrete. Methods of manufacture and standard tests for quality. Prerequisites: Mathematics 106, Mechanical Drawing 152.

## M.E. 203 Materials of Engineering

Mr. O'Rourke
Second semester only; 2 credits.
A continuation of Mechanical Eng!necring 202. Properties and requirements of wood, iron, steel, and other metals. Prerequisite: Mechanical Engineering 202.

## M.E. 282 Steam Machinery

Mr. Holmes
First semester only; 3 credits.
Fundamental laws governing transformation of heat into work; properties of gases, laws of expansion, heat measurement, mechanical equivalent of heat, properties of steam, steam tables. Prerequisites: Mathematics 106, Physics 102 or $150,151$.
M.E. 283 Diesel Engines

Mr. Holmes
Second semester only; 2 credits.
Elementary thermodynamics of the Diesel engine; comparison of various types. Mechanical and thermodynamic characteristics of commercial Diesels from the literature of the manufacturers. Prerequisite: Mechanical Engineering 282 or consent of instructor.
M.E. 285 Contracts and Specifications

Mr. Keller
Second semester only; 2 credits.
Essential points of value to engineers; such principles of law as should be understood by the engineer who is entrusted with the drawing of contracts. Prerequisite: Mechanical Engiueering 282 or Civil Engineering 229.
M.E. 287 Basic Theoretical Naval Architecture

Mr. Holtzworth Second semester only; 3 credits.
Basic ship calculations of displacement, centers of gravity, centers of flotation, metacenters, stability; fundamentals of resistance and power; launching calculations; longitudinal strength calculations. Prerequisite: junior standing or consent of instructor.

## EXPERIMENTAL ENGINEERING (X.E.)

## X.E. 202 Materials Laboratory

Mr. Holmes, Mr. Okubo
First semester only; 1 credit.
Testing cements, concrete, reinforced concrete, and aggregates used in making concrete. Operation and calibration of testing machines. Prerequisite: Mechanical Engineering 202. Laboratory fee $\$ 2.50$.

## X.E. 203 Materials Laboratory

Mr. Holmes, Mr. Okubo Second semester only; 1 credit.
Continuation of Experimental Engineering 202 in testing laboratory practice. Various tests of timber and metals. Prerequisite: Experimental Engineering 202. Laboratory fee $\$ 2.50$.
X.E. 254 Materials Laboratory
First semester only; 1 credit. Mr. Holmes, Mr. Okubo

A continuation of Experimental Engineering 202 and 203 for students who wish to make tests not ordinarily included in routine testing work. Prerequisite: Experimental Engineering 203. Laboratory fee $\$ 2.50$.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:
C.E. 262 Applied Fluid Mechanics-First semester only; 3 credits.
C.E. 288 Arches-First semester only; 2 credits.

## English

Professors N. B. Beck, Ph.D., Gregg M. Sinclair, M.A.; Associate Professors Charles H. Neil, M.A., Laura V. Schwartz, Ph.D., Arthur E. Wyman, B.S., Willis B. Coale, Ph.D.; Assistant Professors Florence M. Henderson, Ph.D., Carl G. Stroven, Ph.D., Willard Wilson, Ph.D., Gaylord C. LeRoy, Ph.D., Stewart C. Wilcox, Ph.D.; Instructors Muriel J. Bergstrom, M.A., Stanley Orne, M.A., Lucinda N. Bukeley, Robert C. Elliott, M.A., Howard L. Miller, M.A., Esther M. Lound, M.A., Charles S. Bouslog, B.A., Marshall W. Stearns, B.A., Orvin P. Larson, Ph.D., James W. Abel, M.A.; Assistants Ruth Bricker, B.A., Norman J. Wright, B.A., J. Roy Petersen, B.A. Absent on leave 1940-41: Assistant Professor Thomas Blake Clark, Ph.D.; Instructors Fred G. Holahan, M.A., Cynthia Larry, M.A., William A. McCartney, M.A.

Professor Beck, chairman

Courses in English are listed in six groups: Special Speech Courses, Composition, Journalism, Literature, Professional Courses, and Speech.

Students deficient in oral English are required to complete successfully one or more of the Special Speech Courses, according to the nature of their deficiencies. Students deficient in composition are required to take without credit two hours a week of composition laboratory in addition to the regular freshman composition course.

## SPECIAL SPEECH COURSES

## A Oral English for Foreign Students <br> Staff <br> Year course; no credit. <br> Required of all students not citizens of the United States whose speech falls below a certain standard. Fee $\$ 10$ a semester.

[^3]
## 35 Practical Speaking <br> Year course; no credit. <br> Required of those whose speech is slightly below standard. Fee $\$ 1$ a semester.

## COMPOSITION

English 100 or 102 is a prerequisite to all other English courses except English $30,35,130$, and 134.

## 100 Composition

Staff
Year course; 3 credits each semester.
Principles and practice of composition. Conferences for personal criticism. Required during the freshman year of all students in the University. Students deficient in composition are required to attend English 100 Laboratory for 2 hours a week without additional credit.

## 102 Composition

Mr. Neil
Year course; 3 credits each semester.
Parallels English 100, but stresses writing and reading rather than the mechanics of composition. Restricted to students making high scores in the entrance examination.

## 110 English Applied in Technical Writing

Mr. Wilcox
Year course; 2 credits each semester.
Principles of technical esposition. Composition and analysis of reports, papers, and selected types of business letters.

## 210 Business English

Mr. Stroven, Mr. Wilson, Mr. Beck
Principles and practice, psychology and composition of business letters, advertisements, and other forms of publicity. Designed for economics and business students. Prerequisite: junior standing.

216 The One-Act Play
Mr. Wilson
First semester only; 2 credits.
Technique of the one-act play, analysis of selected examples, and writing of original plays.

## 217 The Short Story

Mr. Wilson
Second semester only; 2 credits.
Analysis of model stories and writing of original short stories. Prerequisite: English 150 or equivalent.

## Other Courses

The following course, ordinarily given in alternate years, will not be offered in 1940-41:

116 Advanced Composition-First semester only; 3 credits.

## JOURNALISM

## 120 News Writing

Mr. Orne
First semester only; 3 credits.
An introduction to journalism with emphasis on reporting and with practice in news writing. News recognition, structure, and style; journalistic vocations. Some work on Ka Leo. Two lecture-recitation periods and one 2-hour laboratory period a week. Prerequisite: B or better in English 100 or 102; or consent of instructor.

## 121 Advanced News Writing

Second semester only; 3 credits.
Continuation of English 120 into more complex forms. Some work on Ka Leo. Two lecture-recitation periods and one 2-hour laboratory period a week. Prerequisite: English 120 or consent of instructor.

## 222 Mechanics of Publishing

Mr. Orne
First semester only; 1 credit.
Printing processes; type faces; typographical display; type calculations; newspaper illustration processes. Reading and reports. Prerequisite: English 121 or consent of instructor.

[^4]
## 224 The School Newspaper

Mr. Orne
First semester only; 1 credit.
Objectives of secondary school journalistic activities; the adviser's functions; staff organization; preparation of copy; makeup. Saturday morning course designed for advisers and students in teacher education.

## 229 Proseminar in Journalism

Mr. Orne
First semester, 1 credit; repeated second semester.
Conferences, reading and reports, individual studies. Laboratory work on Ka Leo. May be taken several times. Prerequisite: consent of instructor.

## Other Courses

The following course, ordinarily given in alternate years, will not be offered in 1940-41:

211 Principles of Publicity-Second semester only; 2 credits.

## LITERATURE

One of the following courses is prerequisite to all English courses numbered 200 or more: English 150, 154, 156, or 158.

150 Introduction to English Literature
Staff
Year course; 3 credits each semester.
A survey of English literature from Beowulf to Wells. Prerequisite: English 100 or 102.

## 154 Introduction to Dramatic Literature

Mr. Wilson
Year course; 3 credits each semester.
A historical and critical study of modern drama and the stage from 1600 to the present day. Prerequisite: English 100 or 102.

## 156 Introduction to General Literature Staff <br> Year course; 3 credits each semester. <br> The chief types of literature, including the novel, essay, biography, satire, and poetry. Emphasis on the appreciation of literary excellence. Prerequisite: English 100 or 102.

## 158 Introduction to Contemporary Literature <br> Staff <br> Year course; 3 credits each semester. <br> Representative contemporary novelists, poets, biographers, and short story writers. Prerequisite: English 100 or 102 .

160 Literature of the Pacific Islands
Mr. Stroven
Year course; 1 credit each semester.
A survey of literature of the South Seas, including narratives by Melville, Stevenson, London, Maugham, and Nordhoff and Hall.

252 World Literature
Year course; 3 credits each semester.
English translation of major writers of Japan, China, and India, first semester; the classics of Persia, Arabia, Greece, and Italy, second semester.

260 American Literature
Mr. Stroven
Year course; 3 credits each semester.
A critical survey of American literature from colonial times to the present. Special attention to the main currents of American thought and culture.

270 The English Novel from Its Beginnings to the Present Mr. Neil
Year course; 3 credits each semester.
A chronological and critical survey of the development of the English novel. Reports on the works of the leading novelists.

## 272 English Drama from Its Beginnings to the Present <br> Mr. Wilson <br> Year course; 3 credits each semester.

A chronological and critical survey of English drama, including a consideration of the development of dramatic forms and the work of major playwrights.

## 274 The Age of Chaucer

First semester only; 3 credits.
An introduction to medieval thought as exemplified in European and English literature.

## 275 The Age of Elizabeth <br> Miss Schwartz <br> Second semester only; 3 credits. <br> The English Renaissance as portrayed by the poets, dramatists, and great prose writers of the period.

## 280 The Age of Milton

Second semester only; 3 credits.
A critical study of the principal works of Milton and his contemporaries.

## 286 The Victorian Age

Mr. Neil
Year course; 3 credits each semester.
The prominent poets and prose writers of the period between 1830 and 1890.

## 288 Twentieth Century

Year course; 3 credits each semester.
Representative works of the leading English and American novelists, playwrights, poets, and essayists since 1890.

## 289 Litrrary Criticism

Mr. Beck
First semester only; 3 credits.
The development of medern standards of criticism from their classical sources through the major periods of English literary history.

## 350 Seminar in English Literature <br> Staff

Year course; 2 credits each semester.
An introduction to methods of independent study and research applied to some special aspect of English literature. May be repeated until an aggregate of $\mathbf{6}$ credits has been earned.

## 355 Individual Studies

Staff
Year course; 2 credits each semester.
Supervised investigation in fields of special interest or value to the student. May be repeated until an aggregate of 6 credits has been earned.

## 360 Seminar in American Literature

Mr. Stroven
Year course; 2 credits each semester.
A seminar in American literature similar in methed and scope to English 350. May be repeated until an aggregate of 6 credits has been earned.

## 400 Thesis Research <br> Credit by arrangement.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

170 Introduction to Poetry-First semester only; 3 credits.
250 European Masters-Year course; 3 credits each semester.
254 Modern Continental Drama-Year course; 3 credits each semester.
276 Shakespeare-Year course; 3 credits each semester.
282 The Age of Pope and Johnson-Second semester only; 3 credits each semester.

284 The Age of Wordsworth-Year course; 3 credits each semester.
296 Development of Modern English-First semester only; 2 credits.
PROFESSIONAL COURSES
The following courses in English given in Teachers College are open only to students in that college. (For descriptions see Teacher Education, English for Teachers.)

## SPEECH

130 Fundamentals of Public Speaking
Mr. Larson, Mr. Abel
First semester, 3 credits; repeated second semester.
The fundamentals of action, projection, self-control before audiences; outlining and speech organization. Platform speaking throughout the course.

## 132 Argumentation and Debate

Mr. Larson
Second semester only; 3 credits.
The technique of constructing effective arguments; emphasis on analysis, reasoning, brief drawing, evidence, and persuasion. Practice in argumentative speaking. Prerequisite: English 130.

## 134 Voice and Diction

Staff
Year course; 2 credits each semester.
Intensive training in speech fluency, speech-tune, rhythm, articulation, and enunciation, and the oral interpretation of poetry and prose.

## 140 Play Production

Mr. Wyman
Year course; 3 credits each semester.
Lectures and laboratory work in scene design, painting, construction, lighting, properties, costumes, and stage management.

146 Dramatics Laboratory<br>Mr. Wyman<br>Year course; 1 credit each semester.<br>A laboratory course in dramatic interpretation and stage management, using University Theatre Guild productions as material.

230 Oral Interpretation
First semester only; 3 credits.
Oral interpretation of various forms of literature; emphasis on development of the speaking voice, articulation, and pronunciation. Prerequisites: English 134 and consent of instructor.

## 237 Business and Professional Speaking <br> Second semester only; 2 credits.

A study of model speeches and practice in the preparation of sales talks, group discussions, business conferences, formal addresses, after-dinner speeches, and other speeches of courtesy. Designed for economics and business students. Prerequisite: junior standing.

240 Speech Improvement Laboratory
Mr. Beck
First semester, 1 credit; repeated second semester.
Observation of English 30 classes and training in classroom techniques. Open only to students in Teachers College.

## 246 Elementary Acting

Year course; 3 credits each semester.
Discussions and practical work demonstrating the fundamental principles of acting. Prerequisite: consent of instructor.

## 249 Proseminar in Oratory and Forensics <br> Year course; 2 credits each semester.

Directed research in oratory, debating, and materials of proof and persuasion. Prerequisites: English 130, 132; consent of instructor.

## 297 The Sounds of English

Year course; 2 credits each semester.
Elementary phonetics. Emphasis on ear training and the production of English speech sounds. :

## 298 Correction of Speech Defects, Elemrntary Course

 First semester only; 2 credits.The speech apparatus as it functions in the production of speech sounds, and the correction of functionally defective speech.

## 299B Techniques of Speech Improvement in the Secondary School

Second semester only; 2 credits.
The general speech problems of schools in Hawaii, the materials adapted to secondary grades, and the technique for their application. Prerequisite: English 297 or its equivalent.

## 302 The Speech Clinic

Year course; 2 credits each semester.
Supervised practice in the correction of defective speech. Prerequisites: English 297, 298, or their equivalent. May be repeated until an aggregate of 6 credits has been earned.

## 355 Individual Studies

Year course; 2 credits each semester.
Investigation in fields of special interest or value to the student. May be repeated until an aggregate of 6 credits has been earned.

## 400 Thesis Research Staff <br> Credit by arrangement.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

137 The Forms of Address-Second semester only; 3 credits.
236 The Foundations of Speech Discussion-First semester only; 3 credits.
299A Techniques of Speech Improvement in the Elementary School-Second semester only; 2 credits.

300 Correction of Speech Defects, Advanced Course-Second semester only; 2 credits.

## French

Professor Irving O. Pecker, B.A.; Instructor Eva Métraux, Licence-es-Lettres. Professor Pecker, chairman of Romance Languages department

## 100 Elementary French

Mrs. Métraux
Year course; 3 credits each semester.
Grammar, phonetics, diction, reading of casy prose and poetry.

## 101 Intermediate French

Mrs. Métraux
Year course; 3 credits each semester.
Review of grammar, composition, reading from selected modern authors. Prerequisite: one year of French in college or two years in preparatory school.

## 200 Modern French Literature

Mr. Pecker
Year course; 3 credits each semester.
Postwar literature, lectures, essays, composition. Prerequisite: two years of college French or equivalent.

## 202 Conversation and Composition <br> Year course; 2 credits each semester.

Mr. Pecker
Discussion of various aspects of contemporary French life with a view to building practical vocabulary. Essays on assigned topics. May be taken twice for credit. Prerequisite: French 200 or equivalent.

## 250 Classic Drama

First semester only; 2 credits.
Masterpieces of Corneille, Racine, and Molì̀re. Lectures in French upon the literary history of the period. Additional outside reading and research.

## 251 Romantic School

Mr. Pecker
Second semester only; 2 credits.
Readings from Lamartine, de Musser, Huyo, etc. Lectures in French upon the significance and influence of the Romantic Movement. Individual research and reports on assigned topics.

## 260-261 Individual Research

Mr. Pecker
Year course; credit by arrangement.
Research on any phase or period of French literature in which atudent may be interested. Prerequisite: consent of instructor.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

201 Phonetics-Year course; 1 credit each semester.
252 Modern French Drama-First semester only; 2 credits.
253 Advanced French Seminar-Second semester only; 2 credits.
255 Survey of French Literature-Year course; 2 credits each semester.

## Geography

Associate Professor John Wesley Coulter, Ph.D.; Assistant Professor Stephen B. Jones, Ph.D.

150 Elements of Geography<br>First semester only; 3 credits.<br>Relationship of people to their natural environment.

## 151 Economic Geography

Second semester only; 3 credits.
Relationship of production and distribution of industrial raw materials to natural environment.

## 180 Elementary Meteorology

Mr. Jones
First semester only; 3 credits.
Elements of weather; preparation of a weather map; principles of forecasting. Two lectures and one laboratory period a week.

200 Field Geogŕaphy
Year course; credit by arrangement.
Field and library work in human and economic geography; collection, evaluation, and presentation of field data. Prerequisite: consent of instructors.

## 202 Cartography and Map Reading

Mr. Jones
First semester only; 3 credits.
Map projections; reading of topographic maps; preparation of economic and social maps. Two lectures and one laboratory period a week.

## 205 Climatology

Mr. Jones
Second semester only; 3 credits.
Climatic principles; climates of the continents and oceans. Two lectures and one laboratory period a week.

## 252 Geography of North America

Mr. Coulter
First semester only; 3 credits.
Major geographic regions of North America; relationship between principal economic activities and natural environment. Prerequisite: junior standing or any one of the following-Geography 150, 151, 261, Geology 252.

## 255 Geography of Asia

Mr. Coulter
Second semester only; 3 credits.
Geographic regions of Asia. Prerequisite: junior standing or any one of the following-Geography 150, 151, 261, Geology 252.

258 Geography of Europe
Mr. Jones
Second semester only; 3 credits.
Geographic regions of Europe; areas of political and historical significance.
261 Occupational Geography
Mr. Jones
(For description, see Teacher Education, Geography for Teachers.)
262 Gegraphy of Hawail
Mr. Coulter
First semester only; 2 credits.
Nattiral environment; economic activities of the people. Prerequisite: one course in geography or junibir standing.

301 Seminar in Political Grography
Mr. Jones
Year course; 2 credits each semester.
Special studies in political geography. Prerequisite: consent of instructor.

## Thesis Research

Credit by arrangement.
Only graduate students engaged in the preparation of theses may register in this course.

## Other Courses

The following course, ordinarily given in alternate years, will not be offered in 1940-41:

271 Political Geography-Second semester only; 2 credits.

## Geology

## Professor Harold S. Palmer, Ph.D.

## 252 Physical Grology

Mr. Palmer
First semester only; 3 credits.
Materials composing the earth. Operation and effects of geologic agents. Two recitations and one
laboratory period a week. Prerequisite: any of the following, Botany 101, Chemistry 101 or 102,
Geography 150 and 151, Physics 102 or 150 and 151, or Zoology 150 and 151. Laboratory fee $\$ 1$.

## 253 Historical Grology

Mr. Palmer
Second semester only; 3 credits.
History of the earth, of its continents and occan basins, and of its inhabitants. Two recitations and one laboratory period a week. Prerequisite: Geology 252 or 256 . Laboratory fee $\$ 1$.

## 256 Geology for Engineers

Mr. Palmer
First semester only; 3 credits.
Materials composing the earth. Operation and effects of geologic agents. Meteorology surveyed. Prerequisite: junior standing in civil engineering or consent of instructor.

## 260 Physlographic Regions of the United States

Mr. Palmer
First semester only; 3 credits.
Prerequisite: Geology 253. Two recitations and one laboratory period a week.
Crystallography
Second semester only; 1 credit.
Geometrical laws of crystals, crystallographic systems, and chief crystal forms. One combined lecture and laboratory period a week. Prerequisite: consent of instructor.

## 262 Volcanology

Second semester only; 2 credits.
Classification, eruptive types, products, structures, distribution, and periodicity of volcanoes. requisites: Geology 252 or 256 and credit or concurrent registration for a year of college physics.

200-300 Geology Seminar
First semester; repeated second semester. Credit by arrangement. Special work by arrangement. Prerequisite: consent of instructor.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

254 Economic Geology-First semester only; 3 credits.
255 Geology of Ground Water-Second semester only; 2 credits.

## German

Assistant Professors Maria Hörmann, B.A., Bertha Mueller, Ph.D.

100 Elementary German
Mrs. Hörmann, Miss Mueller
Year course; 3 credits each semester.
For beginners. Grammar developed from easy reading material. Exercises in reading and translating.
101 Intermediate German Miss Mueller
Year course; 3 credits each semester.
Continuation of grammar. Vocabulary building through discussion of pictures. Reading and practice of sight reading.

102 Scientific German
Mrs. Hörmann
Year course; 3 credits each semester.
Sentence construction and analysis. Translation from difficult German scientific readings.
200 Classical Literature Mrs. Hörmann
Year course; 3 credits each semester.
Reading supplemented by exercises in composition.
202 Advanced Scientific German
Mrs. Hörmann
Year course; 1 or 2 credits each semester.
Reading and translation of scientific material and practice in sight translation. Prerequisites: 2 years of college German and consent of instructor. May be repeated once.

250 Readings in German Literature
Year course; 1 or 2 credits each semester.
Prerequisite: consent of instructor concerned.

## Other Courses

The following course, ordinarily offered in alternate years, will not be offered in 1940-41:

201 Contemporary Literature-Year course; 3 credits each semester.

## Hawaiian

Professor Henry P. Judd, B.A.
100 Elementary Hawaian ..... Mr. JuddYear course; 3 credits each semester.Eiements of the language.
101 Intermediate Hawailan ..... Mr. Judd
Year course; 3 credits each semester.
Reviowing Hawaiian grammar.
200 Advanced Hawaitan ..... Mr. JuddComposition. Reading of Hawaiian antiquities.
250-251 Great Leaders of HawaitMr. JuddYear course; 1 credit each semester.A biographical approach to the study of Hawaiian history.
280-281 Seminar in Hawailan
Year course; 1 credit each semester.

## History

Professors Paul S. Bachman, Ph.D., Shao Chang Lee, M.A., Shou-Yi Ch'en, Ph.D.; Associate Professors Ralph S. Kuykendall, M.A., Charles H. Hunter, Ph.D.; Assistant Professors Klaus Mehnert, Ph.D., Shunzo Sakamaki, Ph.D́.

Professor Bachman, chairman
100 History of Western Civilization
Mr. Mehnert
Year course; 3 credits each semester.
Development of modern culture and institutions, including the classical heritage, medieval contributions, expansion overseas, and present-day tendencies in Europe and America.
205 Cultural History of Europe
Year course; 2 credits each semester.
Europe's main contributions to culture and civilization from ancient Greece to modern times.
207 Nationalism in the Modern World
Mr. Sakamaki
First semester only; 2 credits.
Development and significance of modern nationalism; comparison of trends in Europe and the Far East.

## 211 Constitutional History of England

Mr. Hunter
First semester only; 2 credits.
Anglo-Saxon institutions, Norman innovations; development under the Angevins; the limitation of the royal power; ris, of the cabinet system.

## 225 History of China

Mr. Lee
Year course; 3 credits each semester.
General survey of Chinese history; development of institutions; impact of western culture upon Chinese civilization.

## 226 History of Japan <br> Year course; 3 credits each semester.

Mr. Sakamaki
Gencral survey of Japanese history; development of institutions; impact of western culture upon Japanese civilization.

## 229 History of the Cultural Relations Between <br> China and the Occident <br> Year course; 2 credits each semester.

Mr. Ch'en
Religious, intellectual, and commercial relations between China and the occidental countries from the earlicst times to the present.

236-237 History of Modern China
Mr. Ch'en
Year course; 2 credits each semester.
Survey of the multiple changes and readjustments since the arrival of the Europeans overseas. First semester: 1600-1842; second semester: 1842 to the present.

## 244-245 Diplomatic History of the United States

Mr. Hunter
Year course; 3 credits each semester.
The relations of the United States with Europe. Latin America, and the Far East from 1775 to the present.

250 The History of Early Civilization in the Far East<br>Mr. Sakamaki<br>First semester only; 3 credits.<br>A general survey of the development of civilization in eastern Asia.

251 History of Thought in Japan
Mr. Sakamaki
Second semester only; 3 credits.
The major schools of thought and important thinkers, social reformers, economists, statesmen, and educators of the Far East.

252 Constitutional History of the United States Mr. Hunter
First semester only; 3 credits.
The genesis, drafting, ratification, and development of the federal constitution.
266 Diplomatic History of Japan
Mr. Sakamaki
Year course; 2 credits each semester.
Early relations; causes of seclusion; reopening; emergence as a great power; formulation of present foreign policies.

## 285 Russia in Asia

Mr. Mehnert
First semester only; 3 credits.
The history of Russia's conguest and colonization of Siberia and central Asia; early relations with China; rivalry with Great Britain.

## 286 Russia in the Pacific <br> Second semester only; 3 credits. <br> Russia's occupation of the Siberian Pacific Coast; her activities in Alaska, California, and Hawaii; and her modern relations with China and Japan.

$310 \begin{aligned} & \text { Seminar in Historical Method } \\ & \text { First semester only; } 2 \text { credits. }\end{aligned} \quad$ Mr. Hunter
311 Seminar in American Diplomatic History Mr. Hunter
Second semester only; 2 credits.
315 Seminar in Japanese History
Mr. Sakamaki
Year course; 2 credits each semester.
316 Seminar in Chinese Cultural History
Mr. Ch'en
Year course; 2 credits each semester.
319 Seminar: Europe in the Pacific
Mr. Mehnert
Year course; 2 credits each semester.
327 Seminar in Hawailan History
Mr. Kuykendall
First semester only; 2 credits.
400 Thesis Research
Staff
Credit by arrangement.
Only graduate students engaged in the preparation of theses may register in this course.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

204 Diplomatic and Colonial History of Modern Europe-Year course; 2 credits each semester.

209-210 Political and Social History of England-Year course; 3 credits each semester.

212 History of Central Europe-First semester only; 3 credits.
216 History of Russian Culture and Thought-Year course; 2 credits each semester.

218 Europe in the Pacific-Year course; 3 credits each semester.
219 Europe in Asia-First semester only; 3 credits.
235 History of Ancient China-Second semester only; 3 credits.
241-242 History of the United States-Year course; 3 credits each semester.
243 The United States, 1890-1936-Second semester only; 3 credits.
249 Representative Americans-Second semester only; 2 credits.
253-254 Hispanic America-Year course; 2 credits each semester.
277 The Pacific Region in Modern Times-First semester only; 2 credits.
295 Social History of China-Year course; 2 credits each semester.
313 Seminar in Historiography-Second semester only; 2 credits.
318 Seminar: Russia in the Far East-Year course; 2 credits each semester.

## Home Economics

Professor Carey D. Miller, M.S.; Associate Professor Martha Potgieter, Ph.D.; Assistant Professors Katherine Bazore, M.A., Ruth Douglass, M.S.; Instructors Jana Glenn, M.S., Helen Lind, B.S., Martha Swoyer, M.S., Dagmar C. Gustafson, M.S., Nora Mark, B.S.; Assistants Marguerite Cork, B.S., Carol Yocum, B.S.; Lecturer Frank Gaudin, M.D.

## Professor Miller, chairman

See College of Applied Science for programs in home economics. After the first year the student may choose a major in household science, household art, institutional management, or home economics (vocational education).

## GENERAL COURSES (H.E.)

H.E. 100 Orientation in Home Economics<br>Miss Bazore<br>First semester only; 1 credit.<br>Application of social ethics to daily life; position of women in the family and community. Choice of a vocation; vocational opportunitics in home economics.

## H.E. 101 Hygiene and Home Nursing

Second semester only; 3 credits.
Principles of healthful living applied to the individual and the community. Home care of the sick. Two lectures and one laboratory period a week.

## h.E. 201 Consumer Buying <br> Miss Glenn <br> Second semester only; 2 credits.

Problems of consumers in purchasing forls, clothing, cosmetics, drugs, furniture, and equipment. Brief survey of market structure, alvertising agencies, testing bureaus, and consumer-buying habits. Prerequisite: junior standing.

## H. E. 250 Household Management

Miss Bazore
First semester, 3 credits; second semester, 2 credits.
Contribminin of hamemaker and family members to better home living. Management of time and money; arrallement, selection, cost, and tare of cquipment. Prerequisite: junior standing. First semester: two lecanes, one liamiratory perion a week. Second semester: one lecture, one laboratory period a week. Laboratory lee \$2. seeond semester.

1I.E. 251 Home Economics Education
Miss Douglass
Second semester only; 3 credits.
Curriculnm enntent, teaching procedures. and current educational philosophies and practices as they apply to lume coonumics clucation. Drerequisic: junior standing.

## H.E. 252 Child Training

Second semester only; 2 credits-with laboratory, 3 credits.
Importance of the preschool years in the development of the individual. A constructive program of training the normal child in the home. Home economics majors required to take one laboratory period. Planned especially for home economics students. Prerequisite: Psychology 150 or Education 180.181.

## H.E. 253 Child Care

Mr. Gaudin
First semester only; 2 credits.
Reproduction, prenatal care, childbirth, infant and preschool care, growth, minor ailments, and common diseases of children.
H.E. 291 Practice Course in Home Management

Miss Douglass
First semester, 4 credits; repeated second semester.
Groups of four to six students live in a supervised practice house for nine weeks. Practical application of courses in home economics. Meal preparation, time and money management, and human relationships. Conferences and laboratory period. Students share subsistence costs.

## H.E. 295 Field Practice in Home Economics

Work under the direction of a county home demonstration agent of the University Agricultural Extension Service. Students selected at the end of the junior year by the department chairman and the assistant director of the Extension Service. Prerequisite: senior standing.

## HOUSEHOLD ART (H.A.)

H.A. 110 Elements of Clothing Construction Miss Gustafson, Mrs. Mark First semester only; 2 credits.
Fundamentals of cutting, fitting, and constructing simple garments. Two laboratory periods a week. Laboratory fee $\$ 3$.

## H.A. 111 Clothing and Textiles

Miss Gustafson
Second semester only; 3 credits.
Use of commercial patterns and selection of textiles for clothing construction. Three laboratory periods a week. Laboratory fee $\$ 4$.

## H.A. 114 Clothing Design and Construction

Miss Gustafson
Year course; 2 credits each semester.
Design and construction of costumes suitable to the individual student. Two laboratory periods a week. Prerequisites: H.A. 110, 111; credit or concurrent registration in Art 150-151. Laboratory fee $\$ 3$.
H.A. 150-151 Clothing Selection
Year course; 1 credit each semester.
Color, design, suitability, quality, and cost of clothing and accessories. Laboratory fee $\$ 1$.

## H.A. 253 Advanced Clothing Construction

Miss Gustafson
First semester only; 3 credits.
Tailoring and advanced instruction in choice of materials; practice in the art of design and dressmaking. Prerequisite: H.A. 114. Laboratory fee $\$ 3$.

## HOUSEHOLD SCIENCE (H.S.)

## H.S. 102 Food Economics

Miss Bazore
Year course; 3 credits each semester.
Economic conditions related to food purchasing. Selection, preparation, and comparison of foods as to composition, cost, and season; meal planning and serving; food demonstrations. One lecture, two laboratory periods a week. Prerequisites: Chemistry 101 or 102, H.S. 150 or equivalent. Laboratory fee $\$ 5$.

## H.S. 150 Elementary Food Preparation

Mrs. Lind, Miss Yocum
First semester, 3 credits; repeated second semester.
Fundamental processes of food preparation; meal planning and serving. Production, manufacture, and composition of common foods. One lecture and two laboratory periods a week. Required of students whose placement tests show insufficient preparation for H.S. 102. Laboratory fee $\$ 5$.
H.S. 155 Elementary Nutrition for Nursing Students

Second semester only; 3 credits.
Principles of nutrition in relation to health and disease. Emphasis on nutritive value and use of foods grown or used in Hawaii. One lecture, two laboratory periods a week. Laboratory fee $\$ 5$.

## H.S. 200 Nutrition

## Miss Potgieter

$$
\text { Year course; } 3 \text { credits each semester. }
$$

Nutritive requirements of man; function of food in the body; nutritive value of foods and their place in the diet. Two lectures and one laboratory period a week. Prerequisites: Chemistry 101 or 102 ; Chemistry 152; credit or concurrent registration in Chemistry 260,262 . Laboratory fee $\$ 5$.

## H.S. 249-349 Research

 Credit by arrangement.Problems according to preparation of each student. Nutritional investigations; animal and human feeding experiments. Prerequisites: H.S. 200 and consent of instructor. Laboratory fee $\$ 5$.

## H.S. 250 Diet and Disease

## Miss Glenn

First semester, 3 credits; repeated second semester.
Diet therapy in abnormal conditions. Reading, conferences, and laboratory. Prerequisites: H.S. 102, 200. Laboratory fee $\$ 2$.

## H.S. 251 Food Investigation

Second semester only; 2 or 3 credits.
Special problems relating to cost, preparation, and utilization of food, either of a general nature or with reference to Hawaiian conditions. Reading, laboratory, and conferences. Prerequisite: H.S. 102. Laboratory fee $\$ 5$.
H.S. 260 Quantity Cookery (Formerly 261.)

First semester only; 3 credits.
Food problems of institutions, including preparation and serving of food in large quantities, menu planning, and food costs. One lecture and two 3 -hour laboratory periods a week. Prerequisite: H.S. 102. Laboratory fee $\$ 5$.
H.S. 261 Institutional Management (Formerly 260.) Miss Swoyer Second semester only; 2 credits.
Organization and administration problems of food departments of institutions such as college caleterias, school cafeterias, college residence halls, and hospitals. Prerequisite: H.S. 260.

## h.S. 263 Institutional Buying <br> Miss Swoyer <br> Second semester only; 2 credits. <br> Selection and purchase of foods and equipment for an institution. Prerequisite: H.S. 261.

## H.S. 264 Problems in Institutional Management

Miss Swoyer
First semester, 4 credits; repeated second semester.
Field practice for senior and kraduate student dietitians in the Queen's Hospital of Honolulu. Prerequisites: H.S. 200, 260, 201, 203.

## H.S. 272 Elementary Nutrition

Miss Glenn
First semester only; 4 credits.
Nutrition in relation to health of the individual and the family. Planning adequate diets utilizing foods available in llawaii. Two lectures and two laboratory periods a week. Prerequisite: H.S. 102 or consent of insiructor. Laboratory fee $\$ 5$.
H.S. 273 Racial Food Habits in Hawain

Miss Bazore, Mrs. Lind Second semester only; 4 credits.
The plannine amb preparation of meals for various racial groups at different income levels; emphasis on adequate diets at minimum cost. Two lectures and two laboratory periods a week. Prerequisite: H.S. 272. Laboratory fee $\$ 5$.
II.S. 350-351 Seminar in Nutrition

Miss Miller, Miss Potgieter
First and/or second semester; 1 credit each semester.
Review of current literature. l'reparation of repurts and reviews of articles on assigned topics. One $11 / 2^{-}$ humr meetime a week. Preseppisite: consent of instructor.
h.S. 373 Racial. Fom Habits in Hawail

Miss Miller, Mrs. Lind Second semester only; 4 credits.
Foods and fowil halits of racial groups in Ilawaii and in countries bordering on the Pacific. Two lectures and two laburanny perinds a week. Students may not receive credit for both this course and for H.S. 273. Prerequisites: II.S. 102: $11.5 .200,272$, or equivalent; and consent of instructor. Laboratory fee $\$ 5$.

## H.S. 400 'Tuests Research

Staff Credit by arrangement.
Only mrahnate students ensased in the preparation of theses may register in this course.

## Japanese

(See Oriental Studies)

## Mathematics

Professors Ernest C. Webster, C.E., Arthur R. Keller, M.S.; Assistant Professors Wilfred J. Holmes, M.S., Russell C. Brinker, C.E.; Instructors Kenichi Watanabe, Ph.D., William M. Cade, M.S.; Assistant Shigeo Okubo, M.S. Absent on leave 1940-41: Assistant Professor Elvin A. Hoy, B.S.<br>\section*{Professor Webster, chairman}

Plane and solid analytic geometry, spherical trigonometry, and a short course in advanced algebra and differentiation. Prerequisites: two years of high school algebra, one year of plane geometry, one semester of plane trigonometry. Desirable preparation: solid geometry.

Year course; 3 credits each semester.
Differential and integral calculus. Prerequisite: Mathematics 104 or 152-153.

## 149 Algebra

Mr. Cade, Mr. Okubo
First semester only; 3 credits.
Second-year algebra. Prerequisites: One year of high school algebra, one year of plane geometry. Six hours a week.

## 150 Plane Trigonometry

Mr. Keller, Mr. Brinker, Mr. Cade
First semester, 3 credits; repeated second semester.
Prerequisites: two years of high school algebra, one year of plane geometry.

## 151 College Algebra

Second semester only; 3 credits.
Prerequisites: two years of high school algebra, one year of plane geometry, one semester of plane trigonometry.

## 152-153 Analysis

Mr. Watanabe
Year course; 3 credits each semester.
Analytic geometry, differentiation, integration, and applications intended to meet the needs of students of natural science. Prerequisites: two years of high school algebra, one year of plane geometry, one semester of plane trigonometry.

252-253 Advanced Calculus and Differential Equations
Year course; 3 credits each semester. (Alternate years.)
Theory and application of ordinary, total, and partial differential equations. Fourier and other series, hyperbolic functions. Prerequisite: Mathematics 106.

## 272-273 History of Mathematics

Mr. Watanabe
Year course; 3 credits each semester. (Alternate years.)
A general survey of the growth of elementary mathematics by chronological periods. Special attention to racial achievements. Prerequisites: algebra, plane geometry, trigonometry.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

254-255 Applications of Higher Mathematics in Engineering and Physical Science-Year course; 3 credits each semester.

260 Teaching of Elementary Mathematics-First semester only; 2 credits.
275 Theory of Equations-Second semester only; 3 credits.
280 Elementary Statistics-First semester only; 3 credits.
281 Advanced Statistics-Second semester only; 3 credits.

## Military Science and Tactics

Major Maurice S. Kerr, U.S.A.; Capt. Harold J. Keeley, U.S.A., Ret.; Sergeants Edward J. Barnes, Patrick J. Hogan, Harry S. Junker, U.S.A.

## Major Kerr in charge

M.S. 101 and 102 must be taken by every physically fit male student who is at least 14 years old, whose 26 th birthday has not passed at the time of enrollment in the University, who (1) is (or was at the time of entering the University) a freshman or a sophomore, or (2) is an unclassified student carrying more than 9 credit hours of work and having fewer than 64 college credits. Military training in the junior and senior years is optional for students who have completed the basic courses.

Students in M.S. 101 and 102 who possess the necessary qualifications may, if they procure permission of the officer in charge, obtain the usual R.O.T.C. credit for participation in the band that serves the R.O.T.C.
M.S. 101 R.O.T.C. Basic

Major Kerr and Staff
Year course; 1 credit each semester.
Military fundamentals; leadership; rifle marksmanship; map reading; outline of military history; citizenship; hygiene and first aid; infantry drill. Three hours a week, theoretical and practical. Uniform rehabilitation fee 75 cents (not refundable).

## M.S. 102 R.O.T.C. Basic

Year course; 2 credits each semester.
Leadership; automatic rifle; characteristics of infantry weapons; extended order drill; combat principles; infantry drill. Three hours a week, theoretical and practical work. Prerequisite: M.S. 101. Uniform rehabilitation fee 75 cents (not refundable).

## M.S. 203 R.O.T.C. Advanced Major Kerr and Staff

Year course; 3 credits each semester.
Leadership; technique of infantry weapons; aerial photographs; operation of motor vehicles; estimate of situation; administration; combat principles. Five hours a week, theoretical and practical. Open only to students selected by University. Prerequisite: M.S. 102 or credit for equivalent R.O.T.C. work.
M.S. 204 R.O.T.C. Advanced

Year course; 3 credits each semester.
Leadership; military history and policy; defense against tanks and air craft; military law; signal communication; combat training; allied subjects. Five hours a week, theoretical and practical. Prerequisite: M.S. 250.

## M.S. 250 Summer Camp

Summer following completion of M. S. 203; 2 credits.
Field leadership; firing infantry weapons; camp sanitation; marches; physical training; demonstrations; field problens. Six wecks' duration. Prerequisite: M.S. 203.

## Music

Professor Fritz Hart, F.R.C.M.; Lecturer Verne Waldo Thompson, B.Mus.

110 Ilistory of Music Mr. Hart
Year course; 2 credits each semester.
History of music from 1250 to the present: each school considered in order of historical importance; attention to outstantim: compusers of each era.
120 Sliht Re،ding and Choral. Singing
Mr. Hart
Year course; 2 credits each semester.
Training: in sifht reating and the elements of music; choral sinsing.
135 Ilarmony and Counterpoint Mr. Hart
Year course; 2 credits each semester.
201 Music Appreciation
Mr. Thompson
Year course; 2 credits each semester.
A distovety romse desirned to cullivate listening skill. Records and class demonstrations. Special athention to urdhestral instruments. Disenssion of newer records.

201 Abvanced Mustc Apprecintion
Mr. Thompson
Year course; 2 credils each semester.
The symphony as an art form: critical amalysis of representative works; Second semester devoted to Wivener und the munxic drama. Special alicution to "The Ring." Wagner's theories in relation to those of his period.

## 210 Musical, Form

Mr. Hart
Year course; 2 credits each semester.
Attention given to the special structure of music. Works of composers analyzed to exemplify evolution of the art from folk sonss to symphonics and operas.

220 Advanced Harmony and Counterpoint<br>Mr. Hart<br>Year course; 2 credits each semester.

## Oriental Studies

Professors Shao Chang Lee, M.A., Wing-tsit Chan, Ph.D., Shou-Yi Ch'en, Ph.D.; Assistant Professors Shunzo Sakamaki, Ph.D., Cheuk-Woon Taam, Ph.D.; Instructors Yukuo Uyehara, M.A., Tsuen-Kung Chang, M.A. Absent on leave 1940-41: Instructor Kenneth K. S. Ch'en, M.A.

CHINESE LANGUAGE, LITERATURE, AND HISTORY
Year course; 3 credits each semester.
Study of 250 foundation characters each semester. Reading and construction of simple sentences, simple conversation, and translation.

100B First-Year Chinese for Occidental Students
Mr. Chang, Mr. Taam
Year course; 3 credits each semester.
Same as O.S. 100, but adapted to Occidental students.
101 Second-Year Chinese
Year course; 3 credits each semester.
Study of 250 additional foundation characters and idioms each semester. Reading, composition, conversa-
Mr. Chang tion, and translation.
101B Second-Year Chinese for Occidental Students Mr. Chang, Mr. Taam
Year course; 3 credits each semester.
Same as O.S. 101, but adapted to Occidental students.

## 200 Third-Year Chinese <br> Year course; 3 credits each semester.

Reading of short stories, novels, and modern plays. Letter writing, composition, and translation.
221 Chinese Literature in Chinese
Mr. Lee
Year course; 3 credits each semester.
Critical study of classical and modern masterpieces of prose and poetry. Prerequisite: Q.S. 200 or equivalent.

## 241 Oriental Religions

Mr. Lee
Year course; 2 credits each semester.
Historical development of the religions of India, China, and Japan. Lectures, asfgned readings, and temple tours.

## 250-251 Chinese Literature in English

Year course; 2 credits each semester.
Critical study of Chinese prose and poetry in English translation. I sctures on development of Chinese literature. Assigned readings.

## 253 Oriental Art

Year course; 2 credits each semester.
The arts of different periods in India, China, Korea, dikd Japan. Illustrated lectures, assigned readings, and visits to Honolulu Academy of Arts.

## 263-264 Chinese Aesthetics

Mr. Chan
Year course; 2 credits each semester.
Oriental philosophy expressed in art; theories of color and form, music and poetry, humor and taste, inspiration, Zen, harmony of man and nature, relation of art and ethics.

## 293 Methods and Bibliography in Chinese Studies <br> First semester only; 3 credits.

Mr. Taam
Designed to familiarize the student with the main fields of Chinese research in China and abroad, the special methods evolved, and the principal sources of bibliographical information. Prerequisite: junior standing.

300 Advanced Reading and Research
Staff Credit by arrangement.

302 Seminar in Chinese Historical Literature in Chinese
Mr. Lee Year course; 2 credits each semester.
Prerequisite: consent of instructor.

400 | Thesis Research |
| :--- | :--- |
| Credit by arrangement. |

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

200B Third-Year Chinese for Occidental Students-Year course; 3 credits each semester.

254-255 Chinese Philosophy and Art-Year course; 2 credits each semester.
268 Great Oriental Philosophers-First semester only; 2 credits.
269 Spirit of Oriental Philosophy-Second semester only; 2 credits.
281 Confucian Philosophy-Second semester only; 2 credits.

282 Taoist Philosophy-Second semester only; 2 credits.
283 Buddhist Philosophy-First semester only; 2 credits.
291 Chinese Civilization-Year course; 2 credits each semester.
303 Seminar in Chinese Philosophy-Year course; 2 credits each semester.

## JAPANESE LANGUAGE, LITERATURE AND HISTORY

## 102 First-Year Japanese

Mr. Uyehara
Year course; 3 credits each semester.
Reading and translation of Japanese language readers Katakana, Hiragana and simple Chinese characters. Dictation, composition, and oral exercises.

103 Second-Year Japanese
Mr. Uyehara

- Year course; 3 credits each semester.

Reading and translation of Japanese language readers, and the learning of more Chinese characters. Dictation, composition, and leter writing.

## 202 Third-Year Japanese

Year course; 3 credits each semester.
Reading and translation of advanced Japanese language readers and modern literature. Exercises in Japanese-E.:glish and English-Japanese translations and essay writing.

## 240 Japantse Literature in English

Year comse; 2 credits each semester.
L.ectures and selecieng from English translations of Japanese classics supplement the reading of Aston's ilistory of Japanese Eiccraturc.

256-257 History on Japanese Culture and Institutions Mr. Sakamaki Year course; 2 aredits each semester.
Cultural listory of lipan trom ancient times to Meiji period; development of institutions, impact of Chinese civilization, introluction a' Buddlism, influence of Western civilization.

400 Tuess Reqearch Staff
Credit by arrangement.


## Pbilosophy

Professors Wing-tsit Chan, Ph.D., J. Leslie Dunstan, Ph.D., E. Vern Sayers, Ph.D.; Associate Professor Charles A. Moore, Ph.D.

Associate Professor Moore, chairman

150-151 History of Philosophy (Introductory Course) Mr. Moore
Year course; 3 credits each semester.
Western philosophy from era of great Greek thinkers to modern times. First semester: Greek and medieval periods: second semester: modern philosophy. Basic course in philosophy. Prerequisite: sophomore standing.

## 200 Philosophies of Life

Mr. Moore
First semester only; 3 credits.
The several great Western plifosophies and typical theories of the nature of the good life. Some comparative consideration of Eastern philosophics. Advised as preparation for Philosophy 201.

## 201 Problems of Conduct

Second semester only; 3 credits.
Important practical problems of individual and social life. Social and economic justice; crime and punishment; happiness; sex life, the family, etc. Desirable preparation: Philosophy 200.

253 Problems of Philosophy
Second semester only; 3 credits. (Alternate years.)
The great and persistent problems and types of philosophy, with special reference to contemporary discussion of those problems. Designed as a second course in philosophy. Prerequisite: one course in philosophy or consent of instructor.

## 262 Philosophy of Experimentalism (Pragmatism)

Mr. Sayers
First semester only; 2 credits.
Experimentalism as a development of the pragmatism of Charles Peirce and William James; emphasis upon views of Dewey and George H. Mead. Prerequisite: senior standing or consent of department chairman.

## 270-271 Eastern Philosophies

Mr. Chan
Year course; 2 credits each semester.
Fundamental philosophical movements of India, Persia, Arabia, China, and Japan-all treated as living philosophies. Basic course in Oriental philosophy.

275-276 Philosophy of Religion
Mr. Dunstan
Year course; 3 credits each semester.
Analysis of religious experience to show its basic element; emphasis upon the significance of this for a constructive philosophical position.

278 Political Philosophy
First semester only; 3 credits.
Analysis and evaluation of great political philosophies, including those of Plato, Aristotle, Aquinas, Machiavelli, Hobbes, Locke, Rousseau, Hegel, Mill; also such types as Democracy, Pluralism, Fascism, Socialism, Communism.

280 Logic and Scientific Method
Mr. Moore
First semester only; 3 credits.
Valid forms of reasoning; common fallacies; methods, difficulties, and validity of scientific reasoning. Introductory course.

## 285 Education Integration Toward a Phllosophy of Life <br> Mr. Moore

Second semester only; 3 credits.
An attempt to coordinate various and even conflicting approaches to life and reality encountered by students in college, working toward more integrated viewpoint as basis of philosophy of life. Prerequisite: senior standing.

290 Independent Study Staff
Credit by arrangement.
Prerequisite: consent of department chairman.
300 Directed Reading in Philosophy
Staff
Year course; 2 credits each semester.
Opportunity for advanced students to do special reading in the study of particular thinkers, periods, types, or problems.

## 321 Seminar in Comparative Philosophy (East and West)

Mr. Moore, Mr. Chan
Year course; 2 credits each semester.
Comparison of Eastern and Western philosophy generally, and of specific great systems of East and West. Prerequisites: Philosophy $150-151$ and $270 \cdot 271$ or their equivalents.

400 Thesis Research
Staff
Credit by arrangement.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

261 Idealism as a Philosophy-Second semester only; 3 credits.
282 Taoist Philosophy-Second semester only; 2 credits.
Credit in philosophy is allowed for the following courses in other departments: Oriental Studies 263-264, Education 340, 345.

Related courses in other departments: Oriental Studies 241; Religion 261; History 251.

## Physical and Health Education

Professors Walter S. Knox, Ph.D., Otto Klum, B.A.; Assistant Professors May K. Gay, M.A., Eugene Gill, B.S.; Instructors LaVerne M. Bennett, M.A., Thetis Bucklin, M.S., Theodore Searle, B.S., Thomas Kaulukukui, F.d.B., Sidney Llambias, B.A.; Assistant Ralph Yempuku, B.A.; Lecturer Theodore R. Rhea, C.P.H.

## Professor Knox, chairman

Freshman and sophomore men and women under 25 years of age who are registered for 10 or more semester hours of academic work must take, in addition,
at least 1 credit hour of physical education service courses each semester. Students whose physical examinations indicate that class work would be inappropriate for them may be given special corrective work. Normal requirements for graduation include the following (or equivalent in credits transferred from another college):

|  | For men | For women |
| :--- | :--- | :--- |
| 1 semester of | P.E. 101 or 102 or 103 | P.E. 132 or 133 |
| aggregate of 3 | P.E. 100, 104, 105, 106, | P.E. 130, 131, 135, 137, |
| semesters in | $107,108,109,110,111$, | $140,141,150,151,152$, |
|  | $112,113,114,115,116$, | 153 |
|  | $117,121,12,123,124$, |  |
|  | $125,126,127,136,150$, |  |
|  | $151,152,153$ |  |

For juniors and seniors, physical education is optional.
Each service course yields one credit per semester. No course may be repeated for credit.

Grades are based on achievement in: (1) knowledge of rules and strategy; (2) physical skills; and (3) social values such as sportsmanship, leadership, and cooperation.

A one-dollar fee is charged for archery.

## SERVICE COURSES

|  | Courses for men only |
| :--- | :--- |
| 100 | Tumbling |
| 101 | Football, Speedball |
| 102 | Basketball |
| 103 | Baseball, Volleyball |
| 104 | Weight Lifting |
| 105 | Light Work |
| 106 | Tennis |
| 107 | Swimming |
| 108 | Advanced Tumbling |
| 109 | Advanced Swimming |
| 110 | Advanced Tennis |
| 111 | Varsity Football |
| 112 | Varsity Basketball |
| 113 | Varsity Baseball |
| 114 | Varsity Track |
| 115 | Varsity Wrestling |
| 116 | Varsity Tennis |
| 117 | Varsity Swimming |
| 121 | Advanced Varsity Football |
| 122 | Advanced Varsity Basketball |

123 Advanced Varsity Baseball
124 Advanced Varsity Track
125 Advanced Varsity Wrestling
126 Advanced Varsity Tennis
127 Advanced Varsity Swimming
136 Judo
Courses for women only
130 Swimming
131 Tennis
132 Basketball, Hockey, Volleyball
133 Soccer, Speedball, Baseball
135 Bowling
137 Rifle
140 Advanced Swimming
141 Advanced Tennis
Courses for both men and women
150 Social Dancing
151 Archery
152 Clog and Tap Dancing
153 Life Saving and Water Safety

## PROFESSIONAL COURSES

Students in Teachers College desiring to major in physical education or students in the College of Arts and Sciences who wish to major in recreation select a minimum of 24 credits, as approved by the head of the department, from the following courses:

## 175 First Aid

Miss Bucklin
First semester only; 1 credit.
Prevention and treatment; emergency care of accidental injury; special reference to school and playground; practical work in the use of bandage and splints.

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## 224 Theory of Individual Athletics (women)

Miss Gay
First semester only; 2 credits.
Teaching technique in archery, badminton, bowling, golf, swimming, diving, tennis. One lecture, 2 laboratory periods a week.

## 226 Survey of Rhythmics (women)

Miss Gay
First semester only; 2 credits.
Fundamentals of movement and rhythm basic to all types of the dance. Basic methods and materials in modern folk and tap dancing. Three lecture and laboratory periods a week.

## 232-233 Activity Teaching Techniques (men)

Mr. Llambias
Year course; 2 credits each semester.
Theory and practice in teaching calisthenics, games of low organization, tumbling, gymnastics, pyramids. Techniques of group instruction in tennis, volleyball, speedball, swimming.

## 238 Theory of Individual Gymnastics Staff

First semester only; 2 credits.
Principles and methods of corrective exercise. Organizing the program for the handicapped.
240 Theory of Major Sports, Football (men)
Mr. Klum
First semester only; 2 credits.
Theory and practice; offensive and defensive tactics, play in various positions, strategy and generalship.
241 Theory of Major Sports, Basketball (men)
Mr. Gill
First semester only; 2 credits.
Theory and practice. Fundamentals of offensive and defensive basketball, individual and team play.
242 Theory of Major Sports, Baseball (men)
Mr. Gill
Second semester only; 2 credits.
Theory and practice in playing technique of various positions; offensive and defensive team play.
243 Theory of Major Sports, Track (men)
Second semester only; 2 credits.
Theory and practice in each event in track and field; daily schedule of practice; team balance.

## 245 Theory of Group Athletics (women)

Miss Gay
Second semester only; 2 credits.
Technique of play and organization of team sports for junior and senior high schools. Onc lecture, 2 laboratory periods a week.

252 Principles of Public Health Mr. Rhea
Second semester only; 2 credits.
Problems of public health: sanitation, the program of the local and federal agencies.

## 260 Physiology of Exercise

Mrs. Bennett
First semester only; 2 credits.
Mechanics of muscular movement; fatigue; physiological value of various kinds of activity; effects of exercise on heart, lungs, etc.; training of athletes; children's need for activity.

## 270 Community Recreation

Mr. Knox
Second semester only; 3 credits.
Principles of organized play; the program, leadership in recreation, problems in organization, and supervision of community recreation.

## 280 Organization and Administration of Health and Physical Education <br> Second semester only; 3 credits.

Mr. Knox
The activity program; interscholastic and intramural athletics; the physical education plant; school health education; student leaders; management of finances; testing in physical education.

## 281 Personal Hygiene

First semester, 3 credits; repeated second semester.
Fundamentals of personal health, preservation of health in the individual and the community. Special reference to problems of the college student. Open to men and women.

## 282 History and Principles of Physical Education <br> Mr. Knox

First semester only; 2 credits.
Historical survey, aims and objectives of physical education; its relation to general education. Selection and adaptation of activities to different ages and conditions.

## 356 Principles of School Health Education

Second semester only; 2 credits.
The field of health education; principles governing health; methods and materials for teaching health; problems of administration of the health program. (Not open to students who took P.Ed. 256 in 1939-40.)

## Pbysics

Professor Willard H. Eller, Ph.D.; Assistant Professor Stanley S. Ballard, Ph.D.; Instructor Iwao Miyake, M.S.

## Professor Eller, chairman

## 102 College Physics

Mr. Ballard and Assistants
Year course; 4 credits each semester.
Three lectures and one laboratory period a week. Prerequisites: Mathematics 149, or Mathematics 150 and 151, or equivalent. Laboratory fee $\$ 4$ a semester.

## 150 General Physics

Mr. Miyake
First semester only; 4 credits.
Three lectures and one laboratory period a week. Prerequisite: credit or concurrent registration in Mathematics 106. Laboratory fee $\$ 4$.

## 151 General Physics

Mr. Miyake
Second semester only; 4 credits.
Three lectures and one laboratory period a week. Prerequisites: Physics 150; credit or concurrent registration in Mathematice 106. Laboratory fee \$4.

## 152 General Physics

Mr. Eller
First semester only; 3 credits. (Formerly Physics 250.)
Two lectures and one laboratory period a week. Prerequisite: Physics 150. Laboratory fee $\$ 4$.
153 Elementary Radio
Mr. Miyake
First semester only; 3 credits.
Fundamentals of radio: theory, design, and construction of radio receiving and amplifying equipment. Two lectures and one laboratory period a week. Prerequisite: high school physics or equivaient. Laboratory lee $\$ 4$.

## 155 Electrical Machinery and Instruments

Mr. Eller
First semester only; 2 credits.
A nonmathematical treatment of principles of construction, operation, and use of direct and alternating current machinery and instruments.

## 157 Radio

Mr. Miyake
Second semester only; 2 credits.
Continuation of Physics 153 . More advanced radio theory and practice: theory, design, and construction of modern A. C. recsiving sets and audio amplifiera. One lecture and one laboratory period a weck. Prerequisite: Physici 153 . Laboratory fee $\$ 4$.

## 202 Electrical Engineering

Mr. Eller
Year course; 3 credits each semester.
Theory, construction, and operation of direct and alternating current electrical machinery equipment. Two lectures and one laboratory period a week. Prerequisite: Physics 152. Laboratory fee $\$ 4$ each semester.

## 253 Electrical Measurements

Second semester only; 3 credits.
Mr. Eller
Electrical measuring instruments and circuits; their usp in the measurement of the fundamental electric and magnetic quantities. One lecture and two loboratory periods a week. Prerequisite: Physics 152 or equivalent. Laboratory fee $\$ 8$.

## 261 Reading or Research in Advanced Physics Staff Credit by arrangement.

Students pursuc any desired branch of physics through recommended reading, occasional consultations, and written reports, or may carry out some experiméntal problem. Prerequisites: Physics 102 or equivalent; Mathematice $\mathbf{1 5 2}$-153 or equivalent.

## 275 Electricity and Magnetism

Mr. Eller
First semester only; 3 credits.
Fundamental thery of electric and magnetic phenomena. Prerequisites: Physics 102 or equivalent; Mathematics 152-153 or equivalent.

First semester only; 3 credits. (Alternate years.)
Spectroscopic instruments; theory and practice of spectrochemical analysis. Prerequisite: consent of instructor.

## 361 Reading or Research in Graduate Physics Staff Credit by arrangement. <br> Students pursue some branch of physics through recommended reading, occasional consultations, and written reports, or carry on supervised experimental work. Prerequisites: graduate standing and consent of department chairman.

400 Thesis Research Staff
Credit by arrangement.
Only graduate students engaged in the preparation of theses may register for this course.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

255 Light-First semester only; 3 credits.
256 Optics Laboratory-First semester only; 1 credit.
257 X-Ray-Second semester only; 2 credits.
270 Heat-First semester only; 3 credits.
When sufficient demand is apparent, the following courses are offered:
263 Theoretical Mechanics; 356 Theory of Spectra; 375 Advanced Electricity and Magnetism.

## Political Science

Professor Paul S. Bachman, Ph.D.; Associate Professor Charles H. Hunter, Ph.D.; Instructor William E. Williamson, M.A.

Professor Bachman, chairman
150 American Government and Politics
Second semester only; 3 credits.
Mr. Hunter
Rapid survey of national and territorial political institutions and prublems. Emphasis on duties and privileges of citizenship.

## 151 Governments of Europe and the Far East

First semester only; 3 credits.
Survey of the governmental organization and politics of the states of Europe and of the Far East.
180 Municipal Government
First semester only; 3 credits.
The city as a political subdivision; forms of city government; consolidation of city and county; municipal politics.

190 Municipal Administration
Mr. Williamson
Second semester only; 3 credits.
The function of city government: civil service, finance, city planning, zoning, police, fire protection, traffic, health, water, sewerage, public works, utilities, recreation.

195 Police Administration: Organization
Mr. Williamson
Second semester only; 2 credits.
Historical development of police systems; present day law enforcement problems; organization and functirning of the Honolulu police.

## 212 Police Administration: Crime Prevention

First semester only; 2 credits.
Principal types of attack on the problem, community organization approach, educational attack, clinical methods, police activities, and work of recreational agencies.

213 Police Administration: Criminal Law
Mr. Williamson
First semester only; 2 credits.
Elements of criminal law of importance to police officers.

## 214 Police Administration: Evidence

Mr. Williamson
Second semester only; 2 credits.
The phases of the law of evidence of importance to police officers.
260 International Relations Mr. Bachman
First semester only; 2 credits.
Economic nationalism, imperialism, policies of the great powers.

## 270 Government of Hawair <br> Mr. Hunter

First semester only; 2 credits.
Survey of the organization and functions of the territorial, county, and city and county governments in Hawaii.

282 Public Administration Mr. Williamson
First semester only; 3 credits.
Relationship of administration to policy-forming agencies; organization of administrative staff; centralization of responsibility.

## 283 Public Service <br> Mr. Williamson

Second semester only; 3 credits.
The recruitment, training, promotion, and control of government employees.
301 Seminar in Far Eastern International Relations Mr. Bachman First semester only; 2 credits.
400 Thesis Research Staff
Credit by arrangement.
Only graduate students engaged in the preparation of theses may register in this course.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

211 Police Administration: Criminology-First semester only; 2 credits.
256 American Political Parties-First semester only; 3 credits.
258 Conduct of American Foreign Relations-First semester only; 2 credits.
261 International Law-Second semester only; 3 credits.
262 Governments and Politics of the Far East-Second semester only; 2 credits.
320 Seminar in Public Administration-Year course, 2 credits each semester.

## Portuguese

Professor Irving O. Pecker, B.A.; Instructor Norman P. Sacks, Ph.D.<br>Professor Pecker, chairman of Romance Languages department

100 Elementary Portuguese
Year course; 3 credits each semester.
Grammar, phonetics, dietion.
101 Intermediate Portuguese
Year course; 3 credits each semester.
Advanced grammar, composition, and reading from selected modern authors.

## Psychology

Professors Thayne M. Livesay, Ph.D., Stanley D. Porteus, D.Sc.; Assistant Professors Madorah E. Smith, Ph.D., Colin J. Herrick, Ph.D.; Instructor MacEldin Trawick, Ph.D.

## Professor Livesay, chairman

150-151 General Psychology
Year course; 3 credits each semester.
Introductory course surveying human behavior. Two lectures and one laboratory period a week. Prerequisite: sophomore standing. Lahoratory fee $\$ 2$ a semester.

250 Applied Psychology (Formerly 151)
Mr. Livesay
First semester only; 3 credits.
Application of psychological principles to practical life situations. Special attention to industrial, business, legal, and medical fields. Prerequisite: Psychology 150 or equivalent.

## 252 Racial Psychology <br> Second semester only; 2 credits. <br> The nature and importance of racial differences; special reference to racial research in Hawaii. Prerequisite: Psychology 150 or equivalent.

## 267 Psychology and Treatment of Exceptional Children Miss Smith

Second semester only; 2 credits.
Psychological and educational aspects of problems presented by various types of exceptional children. Methods desirable in work with such children. Prerequisite: Psychology 150 or equivalent.

## 275 Systematic Psychology

Mr. Livesay
Second semester only; 3 credits.
The various systems of psychology: existentialism, functionalism, behaviorism, purposivism, and Gestalt. Prerequisite: Psychology 150 or equivalent.

## 280 Social Psychology

Mr. Herrick
First semester only; 2 credits.
The psychology of human relations. Psychological factors that determine the behavior of an individual in his many social relationships. Prerequisite: Psychology 150 or equivalent.

## 292 Mental Hygiene

First semester only; 3 credits.
Conditions requisite to mental health and satisfactory social adjustment. Causes and means of prevention of maladjustments and neuroses. Prerequisite: Psychology 150 or equivalent.

295 Abnormal Psychology
Second semester only; 3 credits.
The nature and causes of the psychoneuroses and insanity; incipient abnormal traits manifested in everyday life. Psychotherapy. Prerequisite: Psychology 150 or equivalent.

300 Reading or Research
Staff
Credit by arrangement.
Research or intensive reading in some field of psychology. Prerequisites: graduate standing and consent of department chairman.

Courses in other departments credited toward a major in psychology: Education 259, 260, Mathematics 280, 281, Philosophy 280, and Religion 260.

Assistant Professor Theodora Floyd,* M.A., R.N.; Instructor Jana Glenn, M.S.

## 150 Public Health Nursing

First semester only; 3 credits.

## Mr. Trawick

 <br> \title{Public Health Nursing
} <br> \title{
Public Health Nursing
}

The development, methods, and technique of public health nursing. Emphasis on the social and preventive aspects of service to the family and community.

## 156 Child Hygiene Miss Floyd and Special Lecturers

First semester only; 3 credits.
Hygiene of normal childhood from birth through school age; functions of the public health nurse in urban and rural communities; observation in institutions doing child health work.

## 158 Nutrition

First semester only; 3 credits.
Nutrition and diet as related to needs of individuals and family groups. Emphasis on nutritive value of local foods and racial diets. Two lectures and one $2 \frac{1}{2}$-hour laboratory period a week.

160 Public Health Administration
First semester only; 2 credits.
Methods for the protection and promotion of community health; epidemiology and control of communicable diseases; modern public health organization and administration; statistical methods in health work.

[^6]
## 162 Teaching in Public Health Nursing

First semester only; 2 credits.
Basic principles underlying teaching and learning; selection and organization of materials used in health teaching; methods used with groups and individuals.

## 171 Field Program

Miss Floyd and Field Supervisors
Second semester only; 10 credits.
Practical training in home visiting for both bedside and instructive care; experience in kindergarten and school health work, prenatal and child health conferences, tuberculosis and other clinics, and social case work.

## Religion

The Hawaii School of Religion, affiliated with the University, is independently supported, and its affairs are managed by its own board of trustees.

Professor J. Leslie Dunstan, Ph.D.; Lecturers George S. Meinzinger, M.A., Stephen G. Mark, M.A.

Professor Dunstan, director

150 Introduction to the Study of Religion
First semester only; 3 credits.
The nature of recigion and itg relationship to other areas of life and thought.

## 151 Problems in Religious Thought <br> Second semester only; 3 credits.

The ways in which religious faith has been undergirded by rational thought; emphasis upon modern developments.

## 200 Old Testament Survey

First semester only; 2 credits.
The Old Testament from the literary and philosophical points of view. Emphasis on prastical values of the book for life today.

## 201 New Testament Survey <br> Second semester only; 2 credits.

The New Testament from the literary and philosophical viewpoints. Emphasis on practical values for life today.

210 Lives and Teachings of the Old Testament Prophets
Mr. Dunstan
First semester only; 2 credits.
The thought of the five great prophets studied from the angle of their own historical situation and with consideration of the permanence of their message.

## 211 The Lifb and Teachings of Jesus

Mr. Dunstan
Second semester only; 2 credits.
The known teachinge of Jesus; their philosophical and practical implications.
215 Thr Historical Development of the Bible
Mr. Dunstan
Second semester only; 2 credits.
Survey of present knowledge of the origin and development of the English Bible in the light of historical, archeological, and literary research.

## 220-221 Personalitirs of Christian History

Year course; 2 credits each semester.
The men and women whose lives have marked stages in the history of the Christian church.
230-231 Fundamental Beliefs of the Christian Faith Mr. Meinzinger
Year course; 2 credits each semester.
Analysis of the various beliefs of the Christian church; the evidence that is presented to support them.
250 A Comparative Study of Religions
First semester only; 2 credits.
Mr. Dunstan
The origin, development, and major ideas of the great religions.

## 260 The Psychology of Religion

Mr. Dunstan
First semester only; 2 credits.
Analysis of religious behavior from the psychological point of view, dealing with its appearance in its most significant forms.

## 261 Religion and Ethics

Second semester only; 2 credits.
Problems arising from the relationship between religion and ethics; modern thought on these problems.

## 270 Religion and Art

First semester only; 2 credits.
The way in which religious life and thought have found expression in art. Each student required to purchase a set of illustrative material costing $\$ 4$.

## 271 Religion and Literature

Mr. Mark
Second semester only; 2 credits.
Interpretations of religion that have appeared in the literature of the Engiish-speaking world.

## 275-276 The Philosophy of Religion <br> Year course; 3 credits each semester. <br> (For description, see Philosophy)

Mr. Dunstan

## Social Work Training

## 200 Introduction to Social Work

Year course; 3 credits each semester.
Historical development and present trends in all fields of social welfare; field trips to local institutions and agencies. Prerequisite: senior standing.

## 300 Theory of Soclal Case Work

Year course; 3 credits each semester.
An introductory course. Principles of social case. work and their application. Students combine this course with field work in a social agency. Prerequisites: graduate standing and consent of instructor.

302 Methods in Social Case Work
Year course; 3 credits each semester.
Continuation of S. W. T. 300. More advanced techniques of social case work practice. Field work practice required of all students. Prerequisites: graduate standing and consent of instructor.

## Sociology

(Faculty listed under Anthropology and Sociology)
150-151 Introduction to the Study of Man
Mr. Bowles, Mr. Embree, Mr. Hörmann (For description, see Anthropology and Sociology)

## 252 The Community

First semester only; 3 credits.
An orientation to community problems. The nature, types, growth, and institutional bases of the community.

253 Rural Sociology
Mr. Hörmann
Second semester only; 3 credits.
Organization of life in the rural environment. A comparative study of rural community types, with special reference to Hawaii. Field trips to plantation and farm communities. Prerequisite: Sociology 252.

## 266 Social Institutions

Mr. Lind
Second semester only; 3 credits.
The natural history of institutions. An examination of the origin, structure, functions, growth, and decline of certain contemporary institutions. Prerequisite: Anthropology and Sociology 150-151.

## 267 The Family

Mr. Lind
First semester only; 3 credits.
A comparative study of Occidental and Oriental family systems. Mating and marriage. Family structure and functions. Personality development in the family. Family tensions and disorganization. Prerequisite: Anthropology and Sociology 150-151.

## 268 Human Migrations

Mr. Hörmann
First semester only; 3 credits.
Migration and civilization building. Factors affecting population movements in contemporary society. Nature and social consequences of American immigration. Analysis of immigrant autobiographies. Prerequisite: Anthropology and Sociology 150-151.

## 269 Personality and Culture

Mr. Lind
Second semester only; 3 credits.
The origin and development of personality as the subjective aspect of culture. The function of communication. Human nature and lie mores. Personal life organization and disorganization. Prerequisite: Anthropology and Sociology 150.151.

## 270 Population and Society

Mr. Hörmann
First semester only; 3 credits.
Society analyzed in terms of the quanitative and qualitative aspects of population. Sociological aspects of birth and death rates, natural inerease, and mobility. Laboratory. Prerequisite: Anthropology and Sociology 150-151.

## 271 Human Ecology <br> Second semester only; 3 credits.

Mr. Hörmann
asic coneepts, principles and reliniopley of human ecology. Factors affecting distribution and movement of ropulation, utilitics, and social institutions. Prerequisite: Anthropology and Sociology 150-151.

## 272 Collective Behavior

Mr. Lind
First semester only; 3 credits.
Forms and cunditions of collective and cultered action. Social unrest. Social contagion: Mass movements, fally, civers, and panics. Relicinnts ambl nationalistic movements. Reform and revolution. Pre-


## 276 Principles of Sociolohiy

Mr. Hörmann
First semester only; 3 credits.
Maior prollems of the science, sncialization of the individual, collective behavior, and natural history of collective prowings, types of sprulpinks, culture, and social values. Preequisite: Anthropology and Sociulogy i51. 151 .

290 Inderendent Studr and Honors

Credit by arrangement.

Prerefuisile: consent of department chairman.

300 | Advanced Readinf, and Research |
| :--- |
| Credit by arrangement. |

Prerequisite: consent of instructor.

## 350-351 Seminar in Sochology

Mr. Lind
Year course; 2 credits each semester.
Open to senior and graduate studems. Prerequisite: consent of instructor.
400 Thesis Research
Mr. Lind
Credit by arrangement.
Only graduate students engaged in the preparation of theses may register in this course.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

> 170 Elementary Sociology-First semester only; 2 credits.
> 254 Urban Sociology-Second semester only; 3 credits.
> 255 Social Disorganization-Second semester only; 3 credits.
> 256 Race Relations in Hawaii-First semester only; 3 credits.
> 258 Race Relations in the Pacific-Second semester only; 3 credits.
> 274 Social Change-Second semester only; 3 credits.

## Spanish

Professor Irving O. Pecker, B.A.; Instructors John Earl Aguiar, M.A., Norman P. Sacks, Ph.D.

## Professor Pecker, chairman of Romance Languages department

## 100 Elementary Spanish <br> Mr. Aguiar

Year course; 3 credits each semester.
Conversation and dictation. Both Castilian and Latin-American pronunciation.

## 101 Modern Spanish Literature

Mr. Aguiar
Year course; 3 credits each semester.
Work of Galdos, Valera, Pereda, Ibanez, and others. Conversation and composition; review of grammar. Commercial correspondence.

## 102 Phonetics

Mr. Aguiar
Year course; 1 credit each semester.
Elementary course in general phonetics. Reading and writing exercises in Spanish pronunciation. Prerequisite: one year of college Spanish or equivalent.

## 252 Modern Spanish Novel

Mr. Aguiar
First semester only; 2 credits.
Rapid reading; advanced work in composition and conversation; review of grammar. Prerequisite: two years of college Spanish or equivalent.

## 253 Modern Spantsh Drama

Second semester only; 2 credits.
Rapid reading of modern Spanish plays; continued work in composition, diction, and conversation. Prerequisite: Spanish 252.

## Other Courses

The following courses, ordinarily given in alternate years, will not be offered in 1940-41:

250 Spanish Classics-First semester only; 2 credits.
251 Spanish Seminar-Second semester only; 2 credits.

## Sugar Technology

(Faculty listed under Chemistry and Sugar Technology.)
Sugar Technology courses in addition to those below are listed under Chemistry and Agriculture.

## 201 Sugar Analysis

Mr. Dillingham
Year course; 3 credits each semester.
Apparatus for and methods of analysis of sugarhouse products and by-products. One lecture and two laboratory periods a week. Prerequisites: previous or concurrent registration in Chemistry 101 or 102; 150, 151, or 230. Laboratory fee of $\$ 7$ a semester.

250 Sugarhouse Calculations
First semester only; 1 credit.
Instruction in sugarhouse calculations and in making out laboratory reports such as those required by plantations in Hawaii. Prerequisites: S.T. 201, 253.

252 Sugar Manufacture
First semester only; 3 credits.
Manufacture of sugar, with particular reference to Hawaiian principles and practice. Prerequisites: S.T. 201, 253.

## 253 Summer Factory Practice

Mr. Dillingham
Summer following completion of junior year; 6 credits.
A minimum of four weeks in a sugar factory under the direction of the plantation management. A comprehensive technical report must be submitted in duplicate. Prerequisite: S.T. 201. Students ordinarily register for this course in second semester of junior year.

## 255 Field Practice

Second semester only; 16 credits.
Practical work during the second semester of the senior year as a student assistant at the experiment station of the Hawaiian Sugar Planters' Association. Prerequisite: all other courses required for graduation in sugar technology. If this requirement has not been met at the end of the first semester, arrangements may be made to take this course in the first semester of the following year.

## 256 Heat in the Sugar Factory

Mr. Holmes
Second semester only; 3 credits.
Calculations and lectures on heat relations and the influence of variables on the heat balance of cane sugar factories. Prerequisite: previous or concurrent registration in S.T. 201.

## 257 Factory Practice

Mr. Dillingham
Second semester only; 16 credits.
Practical work as an apprentice in a sugar factory during the second semester of the senior year. Prerequisites: all other courses required for graduation in sugar technology.

## Survey Courses

Professors Harold S. Palmer, Ph.D., Harold St. John, Ph.D.; Instructor Spencer W. Tinker, M.S.

## 100 A Survey of the Natural Sciences

Mr. Palmer
Year course; 3 credits each semester.
Items frum variuns lie lids of niatural science, selected to illustrate what is known and how it has been learned. Primarily for freslimen in Groups i and II of the College of Arts and Sciences and freshmen in Teachers College. Aumission ter the second semester only by consent of instructor.

205 Hawailan Natural. History
Mr. Tinker
Second sementer only; 2 credits.
Review of various fieche of theal natural science. Lectures and reading.
250 History of Science
Mr. St. John
Second semester only; 2 credits.
Promers and disuoveries in, ploysinal and biolugical science from ancient to modern times. Readings and reports. Prerequisites: juniur stunding and two semesters of biological or physical science, one of which muse inclute lahorntery wirk.

## Teacher Education

Professors Benjamin O. Wist, Ph.D., E. Vern Sayers, Ph.D.; Associate Professors Fred E. Armstrong, M.S., R. Ray Scott, Ph.D., Willis B. Coale, Ph.D., Jesse A. Tanner, Ph.D., John W. Coulter, Ph.D., Bruce White, Ph.D.; Assistant Professors Ida J. Caro, M.A., Madorah E. Smith, Ph.D., Stephen B. Jones, Ph.D., William T. Bryan, Ph.D., Ruth Douglass, M.S., Gaylord C. LeRoy, Ph.D., Willard Wilson, Ph.D.; Instructors George P. Gordon, M.A., Dorothy M. Kahananui, Ed.M., Elizabeth D. W. Brown, Ph.D., Ralph J. Wentworth-Rohr, Ed.M., Jessie Shaw Fisher, Ed.B., Cynthia B. Geiser, M.A., LaVerne M. Bennett, M.A., Carlos P. Hancey, Ed.M., Spencer W. Tinker, M.S., Gladys M. Traut, M.A., Della Z. Copp, M.A., Lorraine A. Freitas, M.A., Thetis Bucklin, M.S., Faith Snider; Lecturers Leslie E. Eichelberger, M.A., Lawrence Norrie, M.A., Frederick B. Forbes, B.A., Edna P. Reese, Helen C. Twitchell, B.A.

## Professor Wist, chairman

The courses under this heading, together with some of those listed under Physical and Health Education, constitute the curriculum of Teachers College. Because of the professional nature of the Teachers College courses, registration in them is ordinarily restricted to Teachers College students. This restriction
does not apply to courses in Physical and Health Education numbered 100 to 199. Also, exception may be made for a student in another college who procures the permission of his dean and that of the dean of Teachers College.

Certain required and elective courses are not included among Teacher Education courses because they are offered in other colleges and departments. Descriptions of these courses are found elsewhere in this catalogue.

## PROFESSIONAL EDUCATION COURSES

## Basic Courses

## 100-101 Orientation to Education

Year course; 3 credits each semester.
Orientation of the student to personal and professional aspects of education. First semester attention centered on personal problems, second semester on various fields of education.

## 135 Participation Teaching

Mr. Scott, Mr. Gordon
Year course; 1 credit each semester.
Students assigned as assistants to classroom teachers in public schools. Practical experience, observation, and illustrative material for Education 180-181. One laboratory period a week.

180-181 Introduction to Educational Psychology
Mr. Scott, Mr. Wentworth-Rohr
Year course; 3 credits each semester.
Nature, control, and modification, development, and neural basis of human behavior. Individual differences. Nature, conditions, and improvement of learning. Mind and its development.

## Advanced Courses

## 219 Adult Education-The Art of Discussion

Mr. Norrie
First semester only; 2 credits.
Techniques of the conference method as an educational skill. Public forum, panel, committee, conference, informal group discussion. Individual practice in leadership. Demonstration.

## 235 Participation Teaching

Year course; 1 credit each semester.
Similar to Education 135, providing illustrative material for Education 250-251 and 285-286.

## 237 Directed Learning

Mr. Bryan
First semester, 2 credits; repeated second semester.
Exploration and examination of the literature of directing study and learning. Critical discussion of principles and techniques of guiding pupil experiences. Nine weeks, 4 hours weekly.

## 246 Adult Education-Organization and Methods <br> Mr. Scott

Second semester only; 2 credits.
The continuation school; community service centers; workers' education; the state and adult education; methods of teaching in the adult school.

## 250-251 Secondary Education

Mr. Bryan
Year course; 3 credits each semester.
Background and development; adolescence; functions and objectives; curricula; teaching techniques; organization and planning of materials; statistical techniques and evaluation. Principles of organization and administration.

253 Practice Teaching in Home Economics.
Miss Douglass
First semester, 8 credits; repeated second semester.
Supervised practice teaching in home economics. Observation, teaching, and conferences. Open only to seniors and graduates. Prerequisite: credit or concurrent registration in Home Economics 251.
259 Child Psychology
Miss Smith
First semester only; 2 credits.
Mental, social, and emotional development of the child from infancy to adolescence; interests and abilities at different age levels. Prerequisite: Psychology 150 or Education 180.
261 Educational Measurements
Miss Smith
First semester, 2 credits; repeated second semester.
Use of informal and standardized tests in school work; practice in scoring such tests and interpreting the results. Nine weeks, 4 hours weekly.

## 262 Philosophy of Experimentalism <br> Mr. Sayers <br> (For description, see Philosophy.) <br> 267 Psychology and Treatment of Exceptional Children Miss Smith (For description, see Psychology.)

## 268 Mental Hygiene

Miss Smith
First semester, 2 credits; repeated second semester.
Factors that decermine personality. Conditions reguisite to the preservation of health; applications to various fields of belavio• Nine weeks, 4 hours weekly.

## 270 Agricultural Project Work

Mr. Armstrong
Second semester only; 3 credits.
The nriject as an educational deviee in axriculture; home projects; classroom correlation; plans, records, rephris, ind accounts.

## 271 Principles of Vocational Education

Mr. Armstrong
Second semester only; 3 credits.
Develypment of voeational cducation, with special reference to agriculture; organizations adapted to this type of work : organization for Hawaii.

## 272 Teaching Agricultural Reiated Subjects <br> Mr. Armstrong

First semester only; 3 credis.
Correating general school subjecis wilh veeatimat agriculture in Hawaii.
274 Teaching Voentional, Agriculture
Mr. Armstrong
First semester only; 3 crodits.
l.rins-lime proprams; annual plan of work: methods of teaching; references, equipment, supplies, records, renisis.

## 275 Practice Teaching in Vocational Agriculture Second semester only; 3 credits.

Full time teaching under supervision for three weeks in selected centers.

## 285-2S6 Elementary Education

Mr. Sayers, Mr. Bryan
Year course; 3 credits each semester.
Problems of elementary cducation arisill: from contrasting views and practices.

## 291 Adult Education-Aims and Principles <br> Mr. Scott <br> First semester only; 2 credits.

The adult education movement and its philusophy; its relation to political and social organization; local application; psychology of adult learnime.

## 292 Leadership of Groul Work for Boys and Girls First semester only; 2 credits. <br> Principal national programs of group work for youth. Democratic procedure in program building based on individual and group needs. Each student advises some group in school, church, or community.

## 293 Comparative Education

Mr. Gordon
First semester only; 2 credits.
Analysis of modern educational practices in countries of Europe and the Pacific area, emphasizing comparisons with the United States.

294 Educational Sociology
Second semester only; 2 credits.
Factors and situations within the contemporary school and community that influence man's behavior, studied in order to discover the conditions within which a better education may develop.

[^7]296 History of Education in Hawail
First semester only; 2 credits.
Review' of the socioeconomic influences that brought about an American public school system in Hawaii previous to annexation.

## 297 Hawailan Educational History in Modern Times <br> Second semester only; 2 credits.

Events of the present century that have influenced education in Hawaii. Industry and immigration; Organic Act and legislation; secondary education; teacher preparation; higher education.

## Graduate Courses

## 300 Reading or Research

Staff
First semester, 1 to 3 credits; repeated second semester.
Individual reading or research. Prerequisites: graduate standing and consent of dean of Teachers College and instructor concerned.

## 340 Philosophy of Education

Mr. Sayers
First semester, 4 credits; repeated second semester.
Philosophy, and science in education; the American democratic social tradition; basic views of human behavior; improvement of life; reconstruction in education.

## 345 Seminar in Philosophy of Education <br> Second semester only; 2 credits.

Social and psychological theory involved in controversial educational issues. Prerequisites: Education 340 or equivalent and consent of instructor. May be repeated for credit if permission of instructor is obtained.

350 History of Education
Mr. Tanner
First semester, 4 credits; repeated second semester.
Development of educational thought and practice to present time, studied to determine origins of influence responsible for modern school systems.

## 351 Advanced Educational Psychology

Mr. White
First semester, 2 credits; repeated second semester.
Application of experimental evidence in psychology to major educational problems. The bearing of recent psychological theories upon education.

354 Interne Teaching Mr. Sayers, Mr. Bryan, Mr. Armstrong, Miss Douglass First semester, 14 credits; repeated second semester.
Full-time teaching under special supervision in selected public schools. Restricted to fifth-year students.
363 Seminar in Educational Administration
First semester only; 2 credits.
Organization for public education; taxation; equalization; internal problems of school administration; personnel; pupil classification; records and reports. Restricted to administrators and prospective administrators. Prerequisite: consent of instructor.

## 365 The Supervision of Instruction

Mr. Wist
Second semester only; 2 credits.
A seminar of the supervisory aspect of the work of the principal. The place of supervision; organization for supervisory service; techniques. Restricted to administrators and prospective administrators. Prerequisite: consent of instructor.

## 371 Experimental Child Study

Miss Smith
Second semester only; 2 credits.
Experimentation in child psychology. Prerequisite: consent of instructor.
376 Seminar in Vocational Education
First semester only; 2 credits.
Individual study of special problems in vocational education.
380 Research and Thesis Writing
First semester, 2 credits; repeated second semester.
Designed to assist students in thesis preparation. Research techniques and thesis development. Prerequisite: consent of instructor.

## 395 Seminar for Interne Teachers

First semester, 2 credits; repeated second semester.

## Problems arising from immediate experiences as classroom teachers. Separate sections for elementary, secondary, and vocational education groups. Restricted to fifth-year students.

400 Thesis Research
Staff

Credit by arrangement.

Only graduate students engaged in the preparation of theses may register in this course.

## RELATED COURSES

## Agriculture for Teachers

270 Farm Practice
First semester, 2 credits; repeated second semester.
Acquisition of skills, under supervision, in animal husbandry, dairy husbandry, poultry, vegetables, fruits, and field crops.

## 271 School and Home Gardening

Mr. Armstrong
First semester, 1 credit; repeated second semester.
For prospective elementary school teachers. Designed to develop ability to conduct home and school gardens. Study of fertilizers, insect control, and plant propagation.

## Arithmetic for Teachers

## 150 Arithmetic for Teachers <br> Miss Smith <br> Second semester only; 1 credit. <br> Required for admission to junior standing of all students below standard in arithmetical skill, as determined by a placement examination. Two recitation periods a week.

## Art for Teachers

261 Creative Art for the Primary Years Mrs. Fisher Second semester only; 2 credits.
Provides a working knowledge of tools, materials, and processes in the work of the primary years. Limited to 30 students. Laboratory fee $\$ \mathrm{t}$.

## 262 Creative Art for the Upper Elementary Years

First semester only; 2 credits.
Similar to Art 261 but with emphasis upon the work of the upper elementary gears. Limited to 30 students. Laboratory fee $\$ 1$.

## 263 Creative Art for the Secondary School Years <br> Mrs. Fisher

First semester, 2 credits; repeated second semester.
Similar to Art 261 but with emphasis upon the work of the secondary school years. Limited to 30 students. Laboratory fee \$1.

## Biology for Teachers

135 Biology
Year course; 2 credits each semester.
Mrs. Brown
Underly ing biologieat-prineipless of-plants-and-animats. Morphologicat, physiological, and ecologicat study of types from lower and higher forms. One lecture and one laboratory period a week. Laboratory fee $\$ 1$ a semester.

236 Science for the Elementary School.
First semester, 2 credits; repeated second semester.
Suitable and available science materials and literature for use in the elementary grades. One lecture and one laboratory or field trip a week. Prerequisite: Biology 135. Laboratory fee $\$ 1$.

## English for Teachers

152 Introduction to Litrrature
Year course; 3 credits each semester.
Development of critical standards in literature. Knowledge of reading resources. Literature as an interpretation of life.

## 201-202 Appreciation of Children’s Literature

Mrs. Twitchell
Year course; 2 credits each semester.
Methods of increasing the pleasure derived by children from books. Outstanding books for children considered.

## 290-291 English in the Elementary School Mr. Coale <br> Year course; 3 credits each semester.

Reading and the creative phases of expression. Problems of usage and speech, especially as found in Hawaii.

## 292-293 English in the Secondary School

Mr. Coale
Year course; 3 credits each semester.
Teaching of English in the secondary school years. Reading and literature emphasized during first semester, language and composition during second semester.

## 294-295 Literature for the Elementary School

Mrs. Geiser
First semester, 1 credit; repeated second semester.
Literature suitable for children in grades one to six. First semester emphasis upon materials for primary years, second semester for upper elementary years.

## Geography for Teachers

## 261 Occupational Geography

Mr. Jones
First semester, 3 credits; repeated second semester.
Problems based upon occupational life of peoples of the world, from standpoint of adaptation to environment. Consideration of available sources of materials for elementary grades.

262 | Geography of Hawail |
| :--- |
| (For description, see Geography.) Mr. Coulter |

263 Geography of Pacific Islands
Mr. Coulter
(For description, see Geography.)
Library Science for Teachers
200 Seminar in Library Methods
Mrs. Geiser
First semester, 2 credits; repeated second semester.
Evaluation of library techniques as applied to school libraries; emphasis upon local problems. Prerequisite: consent of instructor.

## 260 Library Observation and Participation <br> Mrs. Geiser

First semester, 2 credits; repeated second semester.
An orientation to library routine to help the student determine his aptitude for library work.

## 262 Organization and Administration of School Libraries Mrs. Geiser

Year course; 2 credits each semester.
First semester emphasis upon essentials of school library organization, sécond semester upon relation of the library to the school program.

## 264 School Library Practice <br> First semester, 2 credits; repeated second semester.

Mrs. Geiser
Students are assigned as assistants to librarians in selected public schools.
268 Cataloguing and Classification
Mrs. Geiser
First semester only; 2 credits.
Principles of dictionary cataloguing; Dewey, decimal classification; simple subject heading work; practice in cataloguing and classifying children's books.

280 Book Selection
Mrs. Geiser
Second semester only; 2 credits.
Evaluation and choice of books for school libraries. Standard book selection aids examined. Reading of books from school lists.

## Music for Teachers

152-153 Fundamentals of Music
Mrs. Kahananui
Year course; 1 credit each semester.
Music reading in unison and parts. Elementary theory and conducting. Melodic dictation.

250 Music for the Primary Years<br>Mrs. Kahananui First semester only; 2 credits.<br>Music materials and procedures for the primary years. Prerequisite: Music 152-153.

251 Music for the Upper Elementary Years<br>Mrs. Kahananui<br>Second semester only; 2 credits.<br>Music materials and procedures for the upper elementary years. Prerequisite: Music 152-153.

252 Music in the Secondary School.
Mrs. Kahananui
Second semester only; 2 credits.
The adolescent and music. Special groups in the secondary school. Music units and materials for the secondary school. Prerequisite: Music 152-153.

## 261 Music History to the Classical Period

Second semester only; 2 credits.
Pre-Christian music. The Christian church and musical evolution. The rise of secular music in the
West and its influence on musical evolution. Early classical music.
262 Music History-Classicism, Romanticism Mrs. Kahananui First semester only; 2 credits.
The Viennese period. Ninetecnth century romanticism as influenced by social evolution.

## 263 Music History-Twentieth Century <br> Second semester only; 2 credits.

Mrs. Kahananui
Nineteenth century nationalism and wentieth century modernism.

## 264 Chorat. Conducting

First semester only; 1 credit.
Organizatiun and seating of choral groups. Use of the baton and hands in conducting. Selection of materials for amateur choral sroups.

## 265 Conducting Instrumental, Groups <br> Mr. Hancey

Second semester only; 1 credit.
Supervised pratitec int meehords of teaching and conducting elementary instrumental groups. Opportunity to observe. assiss, and condnct instrumental classes in Teachers College Intermediate School.

## 266 Band

Mr. Hancey
First semester, 2 credits; repeated second semester.
Stuly of standard wertures. lipht eoncert, and military band music. Class gives concerts and provides musie for military, aliletic, and other campus functions.

268 Band and Orchestra Methods
Mr. Hancey
First semester only; 2 credits.
Instruments of the band and orihestra and methods of teaching. Each student taught to play simple forms of music on two insurumente.
$269 \begin{aligned} & \text { Problems of the Instrumental Music Teacher Mr. Hancey } \\ & \text { Second semester only; } 2 \text { credits. }\end{aligned}$ music. Emphasis on local conditions.

## Physical and-Heattil Education for-Teachers

(See page 85.)

## Scout Training for Teachers



## Social Science for Teachers

251 Social Science in the Secondary School
Mr. Gordon
Second semester only; 2 credits.
To develop an acquaintance with objective types, sources, organization, and use of materials in the secondary school curriculum.

271 Social Science Materials for Children
Mr. Gordon
First semester, 1 credit; repeated second semester.
Organizing, social studies in the integrated program. Procedures adapted to nature of material and special subject-matter trends of individual interest.

274 Visual Materials in the Social Studies
First semester only; 2 credits.
Such aids as text illustrations, maps, news photographs, cartoons, museum collections, motion pictures, etc., evaluated in terms of their contribution to effective teaching.

## Zoology

Professors Charles H. Edmondson, Ph.D., Walter Carter, Ph.D., Christopher J. Hamre, Ph.D.; Associate Professors Frederick G. Holdaway, Ph.D., Joseph E. Alicata, Ph.D.; Assistant Professor Milton A. Miller, Ph.D.; Instructors Jens M. Ostergaard, Elwood C. Zimmerman, B.S.; Lecturers David T. Fullaway, M.A., C. B. Keck, M.S.

Professor Edmondson, chairman

Students expecting to continue in graduate work in zoology should include in their undergraduate work Zoology 150, 151, 253, 260, and 261, Agriculture 254, and fundamental courses in chemistry, physics, and botany.

Students who plan to pursue graduate work in entomology should take Zoology 150, 170, 173, 260, Agriculture 254, 12 credits in chemistry, 3 credits in physics, 12 credits in general botany. In addition, Zoology 362 is recommended.

A biological laboratory at Waikiki provides excellent opportunity for marine biological studies. Special investigators are offered every possible facility for research.

150 General Zoology
Staff
First semester only; 4 credits.
An introductory course. Biological principles; studies of structure, development, relationship, and distribution of animals. Two lectures and two laboratory periods a week. Laboratory fee $\$ 5$.

## 151 Comparative Anatomy of the Vertebrates

Staff
Second semester only; 4 credits.
A continuation of Zoology 150. Comparative study of the organ systems of typical vertebrates and the structural and evolutionary relationships of vertebrate groups. Two lectures and two laboratory periods a week. Prerequisite: Zoology 150. Laboratory fee $\$ 5$.

## 160-161 Mammalian Anatomy

Mr. Ostergaard
Year course; 2 credits each semester.
A laboratory course primarily for premedical students. Careful dissection of a typical mammal. Prerequisites: Zoology 150, 151. Two laboratory periods a week. Laboratory fee $\$ 6$ a semester.

## 174 Medical and Veterinary Entomology

Mr. Alicata
First semester only; 2 credits.
Arthropod-borne diseases of man and domesticated animals; emphasis on the habits, distribution, prevention, and control of arthropods involved. Prerequisite: Zoology 170 or consent of instructur.

## 180-181 Animal Ecology

Mr. Edmundson
Year course; 3 credits each semester.
The relation of organisms to their environment. Lectures on the campus; laboratory work at the Marine Biological Laboratory. Waikiki; library work. Prerequisites: (1) Zoology 150, 151, or (2) Biology 135, or (3) Botany 101. Ladoratory lee $\$ 2$.

## 253 Parasitology

## Second semester only; 3 credits.

Parasites affecting man and domesticated animals. Emphasis on classification, morphology, life history, and control. Une lecture and two laboratory periode a week. Prerequisites: junior standing; Zoology 150, 151. Laloratory fee $\$ 4$.

254 Insect Moripholociy
First semester only; 2 credits.
Comparative morphology of insects, special attention to structures of importance in economic and systematic entomolory, Homologics of structures. Insect anatomy. Two laboratory periods a week. Prerequisite: Youlogy 170 . Laboratory fee $\$ 2$.

## 255 Sistematic Entomology

Mr. Zimmerman
Second semester only; 2 credits.
Classification of insects. Practice in insect taxonomy. History of nomenclature. The international code. Each student selects a particular grturp for special study, collection, and report. Two laboratory periods a week, ineluding a slurt course of lectures. I'rerequisite: Zoology 254. Laboratory fee $\$ 2$.

## 257 Píant Quarantine and Inspection

Second semetter only; 3 credits.
Quarantine laws and regulations; ship and cargo inspection. Practical experience in plant inspection. In conperation with entomolotists of the Territorial Board of Apriculture and Forestry and under the supervisinn of die Plamt lispection Service. (Mne lecture and two laburatory periods a week. Prerequisites: Zoolo:y 254, 255. Desirable preparation: Zuology 173.

## 259 Apicuiture

Second semester only; 3 credits.
Strueture, life history, general hehavior, activities and prolnets of the honey bee; practice in bee kecpins: her diseases: relation of hees to insiculture and hrrtienhore. Two lectures and one laboratory perinil a week. I'rereguisite: Zoulogy 170 of permission of instructor. Laboratory fee $\$ 2$.

## 260 Histology

Mr. Hamre
First semester only; 3 credits.
Sundy of lissues, principles of listolory, anil mieroscopic anatomy of organ systems of a limited number of veridirate animals. Lectures and lithoratory. Prerequisites: Zoology 150, 151. Laboratory fee $\$ 5$.

## 261 Vertedrate fmbryodocy

Second semestir only; 3 credits.
Principles of embryology illostrated hy a detailed study of the development of the chick and frog. Lectures and latoratory. l'rereguisites: Zoology 150, 151. Laboratory fee $\$ 5$.

Principifs of Genetics
Mr. Miller
(For description, see Agriculture 254.)
285 Evolution and Eugenics
Mr. Miller
Second semester only; 2 credits.
The doctrine of organic evolution, its historical development, supporting evidence, theories. and applieations. Human genetics and evolution and their social import. Prerequisite: one year of zoology or botany. Desirable preparation: a course in genetics.

## 291 Physiology

Mr. Edmondson
Second semester only; 3 credits.
The functions characteristic of the various systems of organs of the human body. Prerequisite: junior standing.
$300 \begin{aligned} & \text { Research } \\ & \text { Credit by arrangement. }\end{aligned}$ Staff
Prerequisites: graduate standing and consent of department chairman.
310 Zoology Seminar
Staff
Year course; 1 credit each semester.
Presentation of seminar reports, reports upon research, or reviews of current zoological literature. Open to upper division undergeaduates who obtain consent of instructor. May be taken repeatediy

## 351 Cellular Biology

Mr. Hamre
Second semester only; 2 credits.
A seminar course for the study of the cell and its inclusions as a protoplasmic unit. Special reference to the development of the germ cell and the recent methods of experimentation. Open to upper division undergraduates who obtain consent of instructor. Prerequisites: Zoology 150, 151, 260.

## 352 Insect Ecology

First semester only; 3 credits. (Alternate years.)
Mr. Holdaway
Insect habitats, synecology, autecology; emphasis on recent advances. Lectures, discussions, field work, and experimental work. Prerequisite: Zoology 255 or consent of instructor.

353 Principles of Applied Entomology
Mr. Holdaway and Staff
Second semester only; 3 credits (Alternate years.)
Economic problems from the standpoint of history and recent advances. Insect vectors of plant and animal diseases. Reduction of insect damage by reduction of insect abundance and host susceptibility. In collaboration with entomologists of Hawaiian experiment stations and others. Prerequisite: Zoology
173 and 352 , or consent of instructor.
355-356 Insect-Transmitted Diseases of Plants
Year course; first semester, 3 credits; second semester, 1 credit.
Lectures, laboratories, and assignments in first semester; current literature second semester.
362 Microtechnique
Mr. Hamre
First semester only; 2 credits.
The fixing, staining, and mounting of animal tissues. Two laboratory periods a week. Prerequisite: Zoology 260. Laboratory fee $\$ 8$.

Systematic Zoology
Mr. Edmondson
Year course; 2 credits each semester.
A systematic survey of the invertebrate and vertebrate fauna of Hawaii (exclusive of insects). Open to upper division undergraduates who obtain consent of instructor. Laboratory fee $\$ 2$ a semester.

400 Thesis Research
Staff
Credit by arrangement.
Only graduate students engaged in the preparation of theses in zoology may register in this course.

## DEGREES, DIPLOMAS, AND CERTIFICATES CONFERRED IN 1939

All of these awards were made in June except those whose recipients' names are starred. The single star signifies that the award was made in February, the double star that it was made in August.

## ACADEMIC DEGREES

## Master of Science

Man Hing Au, B.S., University of Hawaii, 1936. Zoology.
Paul Herbert Baldwin, A.B., University of California, 1936. Zoology.
Arthur R. Beach, E.E., Rensselaer Polytechnic Institute, 1930. Physics. Lawrence Allen Boggs, B.S., Iniversity of Hawaii, 1938. Chemistry. Bruce J. Cooil, B.S., State College of Washington, 1936. Plant Physiology. Jefferson Clark Davis, B.S., North Carolina State College, 1928. Physics. Walter Grimmett Hoge, A.B., Brigham Young University, 1936. Bacteriology.
Leonard Machlis, B.S., State College of Washington, 1937. Plant Physiology.
Martin Emmanuel Nelson, B.S., College of Puget Sound, 1937. Physics.
Shigeo Okuho, B.S., University of Hawaii, 1937. Physics.
Kamehameha Kun Lai Wong, B.S., University of Hawaii, 1937. Zoology.
Clayton Melvin Zieman, B.A., University of Wisconsin, 1927. Physics.

## Master of Arts

*Helen Hanawalt Griges, A.B., University of California, 1923. Oriental Studies.
Rosalie Leong Lee, B.A., Univervity of Hawaii, 1932. History.
Gordon Beach Mainland, B.A., Stanford University, 1937. Zoology.
*Shizuko Morimoto, B.A., University of Hawaii, 1931. Education. Stanley Orne, B.A., University of Washington, 1923. English.
John Ressler Shively, A.B., Oiterhein College, 1933. Oriental Studies.
**Satoru Sugimura, LL.B., Iniversity of Meiji, 1938. Oriental Studies.
Master of Education
Charles B. Barrett, B.A., Hastings College, 1929.
Hlarriet Mae Black, B.E., Illinois State Normal, 1935.
Hubert Victor Everly, Ed.b., University of Hawaii, 1937.
"Earl Cyril Holmer, B.Ed., Wisconsin State Teachers College, 1930.
Helen Tilleman Jamieson, Ed.B., University of Hawaii, 1937.
Mitsuyuki Kido, B.A., University of Hawaii, 1928.
**Erwin L. S. Wong, Ed.B., University of Hawaii, 1936.

## BACHELOR OF SCIENCE

IN AGRICULTURE
Hidesuke Akamine
Francis Ching Ako
Richard Yat Sen Auyong
Lammy Yung Lum Ching
George Ju Yin Chun
Kinji Kanazawa
Kaname Kataoka
Hisanobu Matsui
Toshiaki Matsushima
Wallace Chosei Miyasato
Daniel Duk Sung Moon

Kenneth Pui Yuen Quon
Douglas Saichi Sakamoto
Philip Wallington Won
Ah Lum Wong
Ah Tong Wong
in civil engineering
Rijo Hori
Bung Yuen Quon
Keith Cameron Reid
Jack Kazuma Taniyama
Tatsuki Yoshida

IN GENERAL SCIENCE

* Hajime Akita

Quon Chee Chun
Louisa Kun Sil Chung
Alice Emerson (Honors in Chemistry)
**Conrad Tuck Onn Fong
Kam Chong Hee
Warren Sadayoshi Ikeda
Edward Chang Yul Inn
Sadamoto Iwashita (Honors in Chemistry)
Kanemi Kanazawa
Kikuo Kuramoto (Honors in Chemistry)
Ethel Ululani Lucas (Honors in Zoology)
Shichiro Moriguchi
Yukio Nakao
Robert Seiso Nekomoto
Gordon Tokiyoshi Shigeura
Ralph Gun Hoy Siu (Honors in Chemistry)
*Robert Evans Stevenson
**Denis Kiyoshi Teraoka
Hannah Burbank Van Ingen
Philip Wadsworth Weber, Jr.
Richard You

IN HOME ECONOMICS
Miriam Hahn
Etta Kon Kin Ho
Mitsue Komu
Sadako Kutsunai
**Dorothy Sui Ngan Lam.
*Rosamond Kam Lin Lau
Leinaala Myra Lee
Wai Kam Hee Luke
**Edna Taye Matsumura
Harriet Masako Nagata
Dorothy Kikue Watanabe
Aileen Oi Lin Wong
Lily Lin Oi Wong
Mabel Kam Hu Wong
Myrtle Oi Tai Wong
IN SUGAR TECHNOLOGY
David Henderson Butchart
Harry Sheh Yen Chu
Peter Bayduro Kim
Shiv Nandan Lal
Ralph Hayato Okumoto
*Russell Sampson Quaintance, Jr.
Arthur Rex Smith
Donald Look Yen Yee

## BACHELOR OF ARTS

**Ben Asakura
Norman Tai Chong Au Hoy
Florence Williams Broadhurst
James William Carey
Dei Jing Chang
Peter Hyi Chang, Jr.
Hon Chung Chee
Ch'eng Chiang
Clarence Chuang Lai Chin
Daniel Kui Fah Ching
*Terence Ying Fong Ching
Wah Chock Ching
Kayo Ryong Chung
Norman Chung
** Alona Eugenia Collins
Joseph DeSilva
Joan Hester de Vis-Norton
Minnie Mineko Fujita
Einar Bügal Gerner
Tin Seong Goo
Frederic Charles Gray
*Edward N. Hamaishi
Richard Kenjiro Harada
Warren Mills Haynes

Ben Asakura

Florence Williams Broadhurs
James William Carey
Dei Jing Chang
Peter Hyi Chang, Jr.
Hon Chung Chee
Ch'eng Chiang
Clarence Chuang Lai Chin
Daniel Kui Fah Ching
*Terence Ying Fong Ching
Wah Chock Ching
Kayo Ryong Chung
Norman Chung
Alona Eugenia Collins
Joseph DeSilva
Joan Hester de Vis-Norton
Minnie Mineko Fujita
Einar Bügal Gerner
Tin Seong Goo
Frederic Charles Gray
Edward N. Hamaishi

Warren Mills Haynes
Arline C. Henkle
Cornelia Baird Hicks
William Tsugio Hiraoka
Matthew Chongho Hong
Gregory Hiroto Ikeda
Thomas Tsutomu Imada
Bessie Miyeko Iwai
Yoshio Iwamoto
Mary Orme Johnson
*Rita Thérèse Johnson
Charles Summer Judy
Kiyoshi Kaneshiro
Margaret Stewart Kangeter
Edwin Ichiro Kawahara
Charles Harukichi Kimura
Michio Kinoshita
**Setsuko Kobayashi
Victoria Tsuchiya Kobayashi
**Anita Tsin Yun Kong
Maryly La Follette
Wallace Lai
*Edward Kwai Sing Lau
Henry Ung Yen Lee
Koon Wah Lee

Dorothy Lin Tai Leong<br>Kam Man Leong<br>William Yee Cnung Lo<br>Theodore Aiona Loo<br>*Helen Luke<br>Gladys Hong Lum<br>Aiko Maeda<br>Frank Marzano<br>Beatrice Moi Mau<br>Kathleen McCall<br>Ethel Raynor McDonald<br>Fumiye Miho<br>Katsuso Miho<br>${ }^{* *}$ Frederick Noboru Miike<br>Aiko Morimoto<br>Matsue Motoki<br>**Adeline Ruth Munro<br>Kent Yoshinobu Nakamura<br>Walter Mitsuo Nakano<br>Yukiso Nitta<br>Genevieve Kazu Obara<br>Ichiro Okada<br>Ruth Atsuko Okumura<br>Masao Onishi<br>Shigeru Oshiro<br>John Ruxton Porteus<br>**Samuel John Randall, Jr.<br>**Wesley Henry Rickard<br>Eva Anita Rodiek

*Carol Henrietta Ross
Kaname Saito
Fumi Seki
*Sung Dai Seu
*Yodo Shigemura
Genko Shimabukuro
Edwin Hiloji Shimoda
Robert Ayer Stafford
*Paul Ellis Summers
Akiko Taira
Gimei Ben Takayesu
Charles Yasuyuki Taniguchi
*Edward Sosei Tomihama
*Sadao Tsumoto
Ralph Merton Van Brocklin
Masayoshi Wakai
Winifred Elizabeth Wing
Hung Chun Wong
Thomas K. Woo
Ralph Harry Woolsey, Jr.
Bernard Katsuyoshi Yamamoto
Harold Hiromu Yamamoto
Hitoshi Howard Yamamoto
Nathan Tadashi Yamamoto
Yoji Yasui
Grace Ngit Young Yee
Edward Masami Yoshimasu
-Carol Frykholm Young
Lin-Yau Yuen

## BACHELOR OF EDUCATION

Kim Chun Au
*"Lydia Tyau Auyong

- Eleanor Awai

Ivy Awana
Rosalind Florence Barrère
Kaliko Maryadams Burgess
${ }^{*}$ Isabelle Fernandez Cabrinha
Blase Camacho
**Beatrice Fincke Carter
Bernice Sukin Chang
Irene Yuk Lin Chang
Lily Ngo Lau Chang
*Constance Ching
Mew Kun Ching
*Eleanor Au Chock
*Jane Christman
*Ernell Fungkwai Chuck
Dora Ep Chun
Myra Hee Chun
*Charlotte Ai Chang Chung
Haunani Katherine Cooper
Anne M. Cummingsmith

Haruko Daikokuya
*Berta K. van Heemskerck Duker
Elizabeth Soo Dung

* Elizabeth Ventura Fernandes

Joseph Audrey Fernandes
Marjorie Louise Foley
Martha-Jean Forrest
Kiyono Fukuda
Floy Taylor Gay
${ }^{*}$ Fanny Tam Goo Mitsugi Hamada
*Rose Kium Sai Hee
${ }^{*}$ *Harold Toshio Hieda
Yuriko Hiramoto
${ }^{*}$ Mary Elizabeth G. Hoagland
Myrtle H. Holtberg
Tomiko Honda
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*Shizue Inamine
**Gilbert Yuen Hin Ing

Alice Misao Watanabe Iwanaga
*Katherine Yuen Kyau Kam
**Myrtle Fumiko Kanda
**) Isami Kansako
Joseph Yoshio Kiyonaga
*Chizu Zella Kurokawa
** John Kwon
**Edna Hussey Lansing
Alice Pau You Lau
*Frances Fung Choy Lau
${ }^{*}$ Helen Lee Lau
*Bok Hee Lee
*Esther Yet Fung Lee
Eunice Wai Yuk Lee
Gladys Hai Young Lee
**Hilda Chinn Len Lee James Fook Len Lee
*Virginia Stone Littell
Adeline Lau Loo
**Edith Chai Lum William Chung Wai Lum Charles Robins MacClean
*Ward Ellis Madden
*Mae Akiko Maeda
*Violet Kakelaka Lua Makaaa
**Gladiola Shigeyasu Matsumoto
Hilda Rego McCormack
**Helena Emma Merrick
**Stanley G. Mitsuo
Anne Shigeko Miyashiro
Harue Morimoto
**Mae Itsuno Murakawa *Mitsuko Muraoka
Florence Mikie Nakagawa
*Helene Yasuko Nakama Jeanette Miyeko Nakama Margaret Kinuyo Nakamura
*Bert Noboru Nishimura
${ }^{* *}$ Maile Tomoguchi Nishioka
Adeline Ferreira Nobrega
Chiyoko Hoshino Oda
*Yuki Ogai
**Charles Kazuo Oyagi

Loy Kuulei Pa
**Marian Catherine Quinn
Dolores Quinto
**William Frank Rapoza
${ }^{*}$ Margaret Shizu Sakai
*John Yoshio Sasagawa
Helen Frances Seawell
*Mildred Lai Seto
Harvey Leo Shapiro
*Michiko Shimokawa
*Ralph Shimokawa
**Hideo Shiraki
Evonne Marques Silva
Aileen Smith
Iwalani Frieda Frear Smith
Vera Yen Kum Sue
Umeichi Suenaga
Kiyoko Suzuki
Waichi Takemoto
**Howard Iwao Takenaka
***ileen Chun Tam
**Irene Wong Tam
Betty Yoshie Tanaka
${ }^{*}$ Jane Shizuko Tanaka
Koto Tanaka
Melvin Mitsuo Tsuchiya
Beatrice Hin Ling Tsui
Alice Y. F. Tyau
Bessie Amana Tyau
Margaret Yook Mui Ung
Esther Waihee
May Adelheide Wedemeyer
**Edna Clarissa Wittman
*Yoshitsugu Yamada
Mineko Yanagihara
Dorothy Mew Seong Yap
Irene Sue Hing Yap
Bessie Hatsumi Mashino Yen
**Libbie Marie Aweau Yong
Harriet Tatsue Yoshida
**Yone Yoshioka
Dorothy Wong Young
Evangeline Wanda Zulawinski

FIVE-YEAR DIPLOMA
**Eythel Yatsuko Abe
Ethel Stewart Angco
Elsie Katsuko Ikeda Carter
Dorothy Yim Chang
*Kim Young Ching
Pearl Sau Pung Choy
Elsie Koon Wah Chun
Betty Wha Sook Chung

Faith Siu Chung
Nam Young Chung
Edna Lucille Fernandes
*Beatrice Jook Yee Fong
Mabel Fong
Mitsuo Fujishige
Mitsuyoshi Fukuda
Asakuma Goto

John Do Won Han<br>Blanche Aoe Hong<br>${ }^{*}$ Edith Kyung Sin Hong<br>May Kam Yau Ing<br>*Thelma Mitsuko Izutsu<br>Lei Dorothy Kamakaiwi<br>-Thomas Kaulukukui<br>Fred Haruo Kawamura<br>*Helen Hanako Kawano<br>Selma Koehler<br>Josefa Dorothea Ledesma<br>-Alice Wook Hee Lee<br>- Alyce Yuke Chin Lee<br>Miyo Hee Nancy Lee<br>${ }^{\bullet}$ Edaa Leong<br>Beatrice Yuen-Oi Liu<br>Beatrice Kam Lin Loo<br>Mabel Nee Keon Loo<br>Ruth Oie Tuck Loo<br>Lillian Lum<br>- Ngan Sum Lum<br>Juanita Yuck Gin Lum-King<br>${ }^{*}$ Hazuo Maeda<br>Puarose Mahi<br>Tsuruyo Masuda<br>George Dung Loy Mau<br>${ }^{-}$Donald McCluskey<br>- Albert Joseph McKinney<br>Phyllis Medeiros<br>Ella Wittrock Mendiola

*Eleanor Ayako Miyake
*Kim Lan Ho Mossman
Walter Wha Inn Nahm
*Haruko Nishikawa
Lily Tsuyuko Okada
Itsuko Irene Okano
Barbara Fumiko Okazaki
John Edward Osmanski
**Elsie Tonayo Ozaki
${ }^{* *}$ Rosalind Phillips
Hitoshi Sakai
Lily Doong How Shak
Futae Shimokawa
Shiho Shinoda-
William Boyd Shook
${ }^{*}$ Dorothea Yee Soon
${ }^{-}$Eleanor Tsz Oi Soong
Asako Kutsunai Suzuki
Doris Kimie Takeuchi
*Thelma Tenn
-Sumi Watanabe
Margaret Louise Whittington
${ }^{*}$ Charlotte Kui Lin Wong
${ }^{*}$ Elizabeth Wong
Minnie Ngan Hung Wong
-Sau Chun Wong
Sau Hoy Wong

- Douglas Shigeharu Yamamura

Ella Pil Soo Yang
Bernice Sai Lin Young

## PUBLIC HEALTH NURSING CERTIFICATE

Ruby Rae Barnwell
Gerda Beck
Yoshiko Burroughs
Hilda Ching
Phyllis Deacon
Helen de Harne

Katharine Flory
Maye Gunnerud
Lillian Hicks
Mary Jean MacDonald
Esther Irene McClure
Sakae Sasaki

## SUMMARY OF ENROLLMENT 1939-40



## GEOGRAPHIC DISTRIBUTION OF ENROLLMENT <br> (Summer sessions and noncredit students excluded)

| Oahu | 1964 | Kentucky | 1 | South Dakota | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hawaii | 260 | Maryland | 1 | Tennessee | 1 |
| Maui | 172 | Massachusetts | 1 | Texas | 3 |
| Kauai | 143 | Michigan | 3 | Vermont | 1 |
| Molokai | 6 | Minnesota | 1 | Virginia | 1 |
| Lanai | 3 | Missouri | 3 | Washington | 4 |
| Alabama | 1 | Montana | 2 | Wisconsin | 4 |
| Arizona | 1 | New Hampshire | 1 | Alaska | 1 |
| California | 40 | New Jersey | 1 | District of Columbia | 1 |
| Colorado | 3 | New Mexico | 1 | Samoa | 1 |
| Connecticut | 3 | New York | 11 | Bohemia | 1 |
| Florida | 1 | North Carolina | 1 | Canada | 2 |
| Idaho | 1 | North Dakota | 2 | China | 9 |
| Illinois | 9 | Ohio | 4 | Haiti | 2 |
| Indiana | 1 | Oklahoma | 1 | Ireland | 1 |
| Iowa | 2 | Oregon | 8 | Japan | 4 |
| Kansas | 1 | Pennsylvania | 12 | Thailand | 1 |
| TOTAL | - | . . . | - | . . . . | 2703 |

## INDEX OF NAMES

Abel, James W., 67
Aguiar, John Earl, 95
Alicata, Joseph E., 103
Allen, Oscar Nelson, 56
Andrews, Carl B., 64
Armstrong, Fred E., 96
Bachman, Paul S., 10, 50, 76, 89
Ballard, Stanley S., 88
Barnes, Edward J., 81
Bazore, Katherine, 78
Beaumont, John H., 10, 50
Beck, N. B., 67
Bennett, La Verne, 85, 96
Bergstrom, Muriel J., 67
Bice, Charles M., 50
Bilger, Earl M., 60
Bilger, Leonora Neuffer, 60
Bouslog, Charles S., 67
Bowles, Gordon T., 53
Bricker, Ruth, 67
Brinker, Russell C., 64, 80
Brown, Elizabeth D. W., 96
Bryan, William T., 96
Buck, Peter H., 53
Bucklin, Thetis, 85, 96
Bukeley, Lucinda N., 67
Cade, William M., 64, 80
Cameron, Merton K., 59, 63
Caro, Ida J., 96
Carter, Walter, 103
Chan, Wing-tsit, 82, 84
Chang, Tsuen-Kung, 82
Ch'en, Kenneth, K. S., 82
Ch'en, Shou-Yi, 76, 82
Clark, Harold E., 56
Clark, Thomas Blake, 67
Clements, Harry F., 56
Coale, Willis B., 67, 96
Collins, Julius L., 50
Copp, Della Z., 96
Cork, Marguerite, 78
Coulter, John W., 73, 96
Crawford, David L., 9, 10
Dean, Lyman A., 50
Delpech, J. J., 59
Dillingham, Frank T., 60
Douglass, Ruth, 78, 96
Dunstan, J. Leslie, 84, 92
Edmondson, Charles H., 103
Eichelberger, Leslie E., 96
Eller, Willard H., 88
Elliott, Raymond, 60
Elliott, Robert C., 67
Embree, John F., 53
Emory, Kenneth P., 53
Engard, Charles J., 56
Eskridge, Robert Lee, 55

Farden, Carl A., 9
Fisher, Jessie Shaw, 55, 96
Forbes, Frederick B., 96
Floyd, Theodora. 91
Frear, Mary Dillingham, 9
Freitas, Lorraine A., 96
Fujimoto, Giichi, 60
Fullaway, David T., 103
Gaudin, Frank, 78
Gay, May K., 85
Geiser, Cynthia B., 96
Gill, Eugene, 85
Glenn, Jana, 78, 91
Gordon, George P., 96
Graham, Matthew M., 59
Gregory, Herbert E., 9
Gustafson, Dagmar C., 78
Hamre, Christopher J., 103
Hancey, Carlos P., 96
Hart, Fritz, 82
Hemenway, Charles R., 9
Henderson, Florence M., 67
Henke, Louis A., 50
Herrick, Colin J., 90
Hodges, Elver M., 50
Hoeber, Ralph C., 59
Hogan, Patrick J., 81
Holahan, Fred G., 67
Holdaway, Frederick G., 103
Holmes, Wilfred J., 60, 64, 80
Holtzworth, E. C., 64
Hörmann, Bernhard L., 53
Hörmann, Maria, 75
Hornung, Cenie S., 10
Hoy, Elvin A., 64, 80
Hunter, Charles H., 76, 89
Jones, Stephen B., 73, 96
Judd, Henry P., 75
Junker, Harry S., 81
Kahananui, Dorothy M., 96
Kaulukukui, Thomas, 85
Keck, C. B., 103
Keeley, Harold J., 81
Keesing, Felix M., 53
Keller, Arthur R., $10,50,64,80$
Keppeler, Herbert K., 9
Kerr, Maurice S., 81
Kinnear, Gerald R., 10
Klum, Otto, 85
Knox, Walter S., 85
Kuykendall, Ralph S., 76
Larry, Cynthia, 67
Larson, Orvin P., 67
Lee, Shao Chang, 76, 82
LeRoy, Gaylord C., 67, 96
Lind, Andrew W., 53

Lind, Helen, 78
Livesay, Thayne M., 10, 50, 90
Llambias, Sidney, 85
Long, Oren E., 9
Loomis, Charles F., 10
Lound, Esther M., 67
Luke, Kan Jung, 59
Luquiens, Huc-Mazelet, 55

MacNeil, Helen B., 10
Mark, Nora, 78
Mark, Stephen G., 92
McCartney, William A., 67
Mehnert, Klaus, 76
Meinzinger, George S., 92
Métraux, Eva, 72
Miller, Carey D., 78
Miller, Howard L., 67
Miller, Milton A., 50, 103
Miyake, Iwao, 88
Miore, Charles A., 84
Mueller, Bertha, 75

Neil, Charles H., 67
Norrie, Lawrence, 96
Norris, Ben, 55

Okuho, Shigeo, 64, 80
Orne, Stanley, 67
O'Ruurke, Charles E., 6t
Osturgaard, Jens M., 103
l'almer, IIarold S., 74,96
Papenfuss, (ieorge F., 56
l'arris, ©. K., 56
l'ayne, John II., 60
Pecker, Irving O., 72, 90, 95
Petersen, J. Roy, 67
D'urieus, Sianley D., 10, 90
Ponsieter, Martha, 78
Pringle, Mary P., 10

Reese, Edna P., 96
Rhea, 'Theodore R., 85
Ripperton, J. C., 50

Sacks, Norman P., 90, 95
Sakamaki, Shunzo, 76, 82
Sayers, E. Vern, 84, 96
Schenck, Edgar Craig, 55
Schwartz, Laura V., 67
Scott, R. Ray, 10, 96
Searle, Theodore, 85
Sia, Richard H. P., 56
Sinclair, Gregg M., 10, 67
Smith, Madorah E., 90, 96
Snider, Faith, 96
Stearns, Marshall W., 67
St. John, Harold, 56, 96
Stroven, Carl G., 67
Swoyer, Martha, 78
Taam, Cheuk-Woon, 82
Tanner, Jesse A., 96
Taylor, William H., 59
Thompson, Verne Waldo, 82
Tinker, Spencer W., 96
Traut, Gladys M., 96
Trawick, MacEldin, 90
Twitchell, Helen C., 96
Urquhart, Leonard C., 64
Uyehara, Yukuo, 82
Wadsworth, Harold A., 50
Wagner, Frederick W., 59
Warner, Howry H., 10
Watanabe, Kenichi, 64, 80
Webster, Ernest C., 10, 80
Went worth-Rohr, Ralph J., 96
White, Bruce, 10, 96
Wilcox, Stewart C., 67
Williamson, William E., 89
Wilson, Willard, 67, 96
Wist, Benjamin O., 10, 50, 96
Work, Samuel H., 50
Wright, Norman J., 67
Wyman, Arthur E., 67
Yempuku, Ralph, 85
Yocum, Carol, 78
Zimmerman, Elwood C., 103

## INDEX OF SUBJECTS

Academic year, divisions of, 11
Academy of Arts, Honolulu, 13
Accredited, university, 11
Administrative officers, 10
Admission
general requirements, 15
of regular students entering a university for the first time, 15
from a four-year high school, 15
from a three-year high school, 15
by examination, 16
special requirements for certain programs, 16
to advanced standing, 16
of unclassified students, 17
of special students, 17
of auditors, 17
of graduate students, 17
to extension courses, 23
Adult Education Division, 12, 23
Advanced degrees, 47
Advanced degrees, candidates for, 14, 48
Advisers, faculty, 17
Agricultural Experiment Station, 12, 47
Agriculture
for teachers, 98, 100
in College of Applied Science, 33, 50
American Medical Association, 22, 40
Anthropology and sociology, 53, 93
Aquarium, 12

Arithmetic for teachers, 100
Art
for teachers, 100
in College of Arts and Sciences, 55
Associated Students, 25
Association of American Universities, 11
Astronomical observatory, 14
ASUH Handbook, 25
Atherton House, 14, 25
Auditors, 14, 17
Biology for teachers, 100
Biological and physical sciences, group in College of Arts and Sciences, 31
Bishop Museum, 13, 14, 47
Board of athletic control, 21
Bookstore, 25
Botany, 56
Bureau of Entomology, U.S., 13
Business, 59
Cable address, 11
Calendar, 7
Campus and buildings, 13
Caps, gowns, and hoods, 24
Chemistry and sugar technology, 60, 95
Chinese, 15
also see Oriental studies
Civil engineering, 33, 35, 64
College aptitude examination, 15, 24
College Entrance Examination Board, 16
College of Applied Science, 12, 21, 33
College of Arts and Sciences, 12, 21,29 Major and minor requirements in, 29
Colors, 11
Committee on scholastic standing, faculty, 20
Composition, English, 68
Conditions, 19, 20
Course numbers, meaning of, 50
Courses of instruction, 50
Credit
must be arranged in advance, 17
by arrangement, 18
variable, 18
definition, 18
extension, 23
Credit hour, definition, 18
Debate 25
Degrees, diplomas, and certificates see also five-year diplomas and public health nursing certificates
baccalaureate, 21
bachelor of arts, 21, 29
bachelor of education, 21, 42
bachelor of science, 21, 33
civil engineer, 48
conferred in 1939, 106
doctor of philosophy, 49
fees for, 24
master's, 48
master of arts, 48
master of education, 45, 48
master of science, 48
sugar technologist, 49

Dispensary, 21
Dormitories
men's, 14, 25
women's, 14, 25
Dramatics, 25
Economics and business, 31, 59, 63
Education
see Teacher Education
Employment, 25
Engineering
civil, $33,35,64$
experimental, 67
mechanical, 66
English
for teachers, 100
in College of Arts and Sciences, 67
English placement examination, 15
Enrollment, 1939-40, 111
Examinations, final, 20
Expenses of students, 24, 25
Experimental engineering, 67
Extension courses, 12, 22, 23, 47
Extension Service in Agriculture and Home Economics, 12

Family Consultation service, 41
Farm, University experimental, 14
Fees, 24
Fellowships, graduate, 49
Films, lending library of, 23
Final examinations, 20
Five year-diplomas, $14,17,21,24,35,38$, 39, 42
French, 15, 39, 49, 72
"Freshman Week," 7, 8, 15, 16
Fruit fly laboratory, 13
General science, program in College of Applied Science, 33, 39
Geography
for teachers, 101
in College of Arts and Sciences, 73
Geology, 74
German, 15, 39, 49, 75
Grade-point rule, 20
Grade points, 18
definition, 19
required for graduation, 21
Grades, 18
Graduate Division, 12, 17, 47
Graduate School of Tropical Agriculture, 47
Graduate students, 14, 17, 47
Hawaii School of Religion, 92
Hawaiian, 15, 75
Hawaiian Sugar Planters' association, 12, $13,36,47,51,52$
Hawaiian Volcano Research association, 13
Health, 21, 25
History, 76
History of the University, 12
Holidays
see Calendar
Home economics, 33, 37, 78

Home economics placement test, 15, 38
Honors, 19
Incompletes, 19
Independent study, 20
Institute of Pacific Relations, 13
Japanese, 15
also see Oriental studies
Journalism, 29, 30, 68
Ka Leo o Haqvaii, 25, 68, 69
Ka Palapala, 25
Language requirement, College of Arts and Sciences, 29
Language, literature, and art, group in College of Arts and Sciences, 31
Law, preparation for schools of, 29, 30
Library, 13
Library science for teachers, 101
Literature, English, 69
Living accommodations, 14, 25
Loans, 26
Location of University, 11
Lockers, 24
Mail, student, 25
Marine hiological laboratory, 14, 103
Mathematics, 80
Mathematies plarement test, 15
Mechanical drawing, 66
Mechanical enginerring, 66
Medicine, preparation for nehools of, 22, 29, 39
Men's durmilury, 14, 25
Military science and tacties of whom required, 20,81 courses, 81
Modern language placement test, 15
Music
hand, 81,112
for teachers, 101
in Collece of Arts and Sciences, 82
National Park service, 13
Noncredit courses, 12, 23
Nursery-kindergarten education, 46
Nursing courses, 13, 41
Nutrition laboratory, 14
Oral English examination, 15
Oriental Institute, 12, 47, 49
Oriental studies, 82
Palama settlement, 41
Philosophy, 84
Physical education of whom required, 21, 85
courses, 85
Physics, 88
Pineapple Producers Cooperative association, 12, 47, 51
Plays, lending library of, 23
Political science, 89
Portuguese, 15, 90

Post session, 23, 47

## Prizes, 28

Psychological and Psychopathic Clinic, 12, 14
Psychology, 90
Public health nursing
program, 33, 41
certificate, 24, 41
courses, 91
Public relations, director of, 10
Public service, preparation for, 29
Queen's Hospital, 13, 33, 41
Refunds, 24
Regents, 9
Registration
dates, 7, 8, 17
of undergraduate students, 17
of graduate students, 17
late, 18
Repistered credits, definition, 19
Regular students, definition, 14
Religion, 92
R.O.'T.C., 14, 20, 81

Residence accommodations, 14, 25
Residence requirements
foir baccalaureate degrees, 22
firr inaster's degrees, 48
firr doctor of philosophy degrees, 49
Rumance languages
see French, Portuguese, Spanish
Scholarships, 26, 49
Sirult Iraining for teachers, 102
Scismological observatory, 13
semester hour, definition, 18
sucial science
for teachers, 103
$-s$, group in College of Arts and Sciences, 30
Surial work training
program, 32
cullises, 93
Suciulogy, 93
Spanish, 15,95
Specch, 71
Special students, definition, 14
Sports, 14, 21, 25
Status of students, 14
Student body fees, 24
Student life, 25
Student load, maximum in College of Arts and Sciences, 29
Student Personnel Office, 25
Students, status of, 14
Sugar technology, 33, 36, 95
Summer sessions, 11, 23
Support of University, 11
Survey courses, 96
Teacher education, 96
Teachers College, 12, 13, 17, 21, 35, 38 ,42, 96
Territorial Board of Health, 41

Theatre Guild, 25
Time limit on work for degrees undergraduate, 22 graduate, 48
Time schedule of courses, 17, 50
Transfer from one University college to another, 18
Transfer of credits, 11, 15, 16, 24
Tuition, 24
Unclassified students, definition, 14
Union, University, 13, 25
Unit of credit in admission, definition, 15

Vocational education, 46
agricultural, 35
home economics, 38
Vocational guidance, 25
Volcano laboratory, 13, 23, 47
Warnings, 20
Withdrawal
from courses, 18
from the University, 18
refunds, 24
Women's dormitories, 14, 25
Zoology, 103



[^0]:    $\{$ Registration for thirty-fourth annual session.

[^1]:    * Students who offer $31 / 2$ units of mathematics for entrance are not required to take Mathematics 149 or Mathematics 150 and 151 , but are ordinarily expected to elect Mathematics 152-153.

[^2]:    * For descriptions of all courses offered in Teachers College see Teacher Education in Courses of Instruction.

[^3]:    30
    Speech Improvement
    Required of freshmen and certain other students whose speech is seriously below standard. Fee $\$ 1$ a semester.

[^4]:    223 News Editing
    Second semester only; 1 credit.
    Copyreading, headline writing, news display, illustration. Prerequisite: English 222 or consent of instructor.

[^5]:    180 Personal Hygiene (women only)
    Staff
    Year course; 1 credit each semester.
    Emphasis upon scientific health information as a basis for hygienic living. Personal health probleme.

[^6]:    * Resigned. Successor to be announced.

[^7]:    295 History of Education in the United States
    First semester, 2 credits; repeated second semester.
    The evolution of American education; an aid in making use of the historical method in intelpreting current educational movements and trends. Nine weeks, 4 hours weekly.

