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## BULLETIN <br> COLLEGE OF THE PACIFIC

STOCKTON, CALIFORNIA<br>(FOUNDED 1851)



CATALOG ISSUE FOR THE BIENNIUM 1954-1956

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14. Storage
15. Student Union
16. West Memorial Infirmary
17. Radio Station KCVN
18. Art Center Studios
19. Food Processors Laboratories
20. Civil Engineering II
21. Civil Engineering I
22. Maintenance
23. West Hall (Women)
24. South Hall (Women)
25. Old Library
26. Stotage Units

1. Pacific Memorial Stadium
2. Stadium Dressing Rooms
3. Knoles Field-Baseball
4. Baxter Stadium-Track and Field
5. Athletic Club House
6. Tennis Courts
7. Swimming Pool
8. Gymnasium-Basketball
9. Owen Hall-Education
10. Bannister Hall--Social Sciences
1.1. Music Annex I
11. Music Annex II
12. Sports Pavilion-Gymnastics
13. Anderson Dining Hall
14. Anderson Social Hall
15. Anderson Y Center
16. Quonset Dormitory (Men)
17. Quonset Dormitory (Men)
18. North Hall (Men)
19. Rho Lambda Phi Fraternity
20. Omega Phi Alpha Fraternity
21. Alpha Kappa Phi Fraternity
22. Irving Martin Library
23. Administation Building
24. Weber Memorial Hall-Science
25. Observatory
26. Epsilon Lambda Sigma Sorority
27. Alpha Theta Tau Sorority
28. Tau Kappa Kappa Sorority
29. Auditorium-Conservatory, Theatre
30. Outdoor Theatre
31. Morris Chapel
32. Sears Hall-Religious Education
33. President's Residence
34. Memorial Gate
35. Manor Hall (Married Students)
36. Zeta Phi Sorority
37. Mu Zeta Rho Sorority

1954

| SEPTEMBER | OCTOBER |  |  |
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1955


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## DIRECTIONS FOR CORRESPONDENCE

The post office address is College of the Pacific, Stockton 4, California.
Address the following college officers on subjects of:
General college policy and appointment to the faculty, This President.
College bills, purchases and general business, Thb Businbss Managrr:
Curriculum and academic administration, The Dean of the College.
Admissions, bulletins, evaluation of transcripts, The Director of Admissions.
Graduate work, The Dian of Graduate Studies.
Campus life and personal problems of men students, student assemblies and the student government, The Dean of Men.
Campus life and personal problems of women students, housing and the campus
Teaching credentials, The Dean of the School of Education.
Publicity, general information, and public events schedules, The Director of Pubilc Relattons.
Academic records, grades, transcripts, and credits, The Regrstrar.
Living accommodations for students on campus and off campus, The Dean or Women.
The summer sessions, The Dean of thb Summer Session.
placement of students and graduates in business and teaching positions, The Placement Skcretary.
The educational program for veterans, The Coordinator of Vetrrans Affarrs. Special information about music curriculum and degrees, The Dean of thb Conservatory.
Alumni membership and activities, The executive Manager, Pacific Alumni Associatton.
Books and periodicals, The Librarian.
College-sponsored travel, The Director of Tours.
Asian studies, The American Academy of Asian Studies, 2030 Broadway, San
Francisco 15, California.

## TELEPHONE

The general College number, connected with the various campus offices by private branch exchange, is HOward 4-7781. The exchange is open daily from 8:30 a.m. to 5:00 p.m., and on Saturdays from 9:00 a.m. to 12:00 noon, except on holidays. Other direct connections are listed in the Stockton Telephone Directory.

## VISITORS

The College welcomes visitors to the campus throughout the year. The dministrative offices are open from 8:30 a.m. to $5: 00 \mathrm{p} . \mathrm{m}$., Monday through Friday, and from 9:00 a.m. to 12:00 noon on Saturday. Appointments for interviews with administrative officers on weekdays should be made in advance if possible. On Saturday afternoons and Sundays interviews may, if necessary, be artanged by appointment.

## COLLEGE CALENDAR

## SUMMER SESSIONS

1954-55

$$
1955-56
$$

First Summer Session.
June 22 - July 23
Second Summer Session..
.July 26 - Aug. 27
-.....June 21 - July 22

FALL SEMESTER

| eshman Orientation..............Sept. 9 (1:30 p.m.) - 12 | 11 |
| :---: | :---: |
| gistration..........................Sept. 10 (1:00 p.m.) - 11 | Sept. 9-10 |
| Classes begin...................................................-. Sept. 13 | Sept. 12 |
| Fall Convocation...........-............Sept. 23 (11:00 a.m.) | Sept. 22 |
| Last day to add courses to study list*.................Sept. 27. | Sept. 26 |
| Last day to enroll for a full study list................-Sept. 27 | Sept. 26 |
| Last day for filing with Registrar application for any Bachelor's degree for current academic year. $\qquad$ Sept. 27 | Sept. 26 |
| Last day for filing with Dean of Graduate Studies application for any graduate degree for current academic year. $\qquad$ Sept. 27 | ...Sept. 26 |
| Last day for filing with Dean of School of Education application for any teaching credential to be granted during current academic year $\qquad$ Sept. 27 | ....Sept. 26 |
| Last day for filing with Dean of Graduate Studies the thesis subject (general field only) for any Master's degree for the current academic year.. $\qquad$ Oct. 11 | Oct. 10 |
| Last day for any tuition refund on courses dropped. Oct. 25 | Oct. 24 |
| Examination in Advanced Grammar....................Nov. 4 | Nov. 3 |
| Armistice Day, holiday..................................Nov. 11 | Nov. 11 |
| Last day for filing with Committee Chairman the title, outline, and bibliography for any Master's thesis to be completed during current academic year. $\qquad$ Nov. 15 | Nov. 14 |
| State History and Constitution examination........Nov. 18 | Nov. 17 |
| Thanksgiving vacation..........-....................Nov. 25-28 | Nov. 24-27 |
| Christmas vacation.-................Dec. 18 (noon) - Jan 2 | Dec. 17-Jan. 1 |
| Final examinations.........................................Jan. 24 - 28. | --....Jan. 23-27 |
| End of semester...-...........................................Jan. 28 | .....Jan. 27 |

* Petitions to add courses after this date require a $\$ 4.00$ late petition fee.


## SPRING SEMESTER



* Petitions to add courses after this date require a $\$ 4.00$ late petition fee.


## AN INTRODUCTION TO THE COLLEGE OF THE PACIFIC

The first question that comes to mind upon hearing the name of a college for the first time is "What sort of a college is it?" This section is an attempt to give a brief answer to that question.

The College of the Pacific is a coeducational liberal arts college, related to the Methodist Church. It is not a large college, neither is it particularly small It is go, but usually has enrolled at any one time about 1300 students. the rich San Joaquin Valley, the California, a city of about 80,000 in the midst of of nearly 125,000 .

The Col ing to several de gives lower division, upper division, and graduate work lead degree in education and bachelor's degrees, two master's degrees, and the doctor's fields based rather unusual majors fore of liberal arts subjects, and in addition offers several a Conservatory of Music and a School list, see pages 65 and 66). It includes

## Objectivas

The College of the Pacific is interested in providing for youth a compre hensive program of liberal education-a core of subjects leading to the discovery of the fundamental nature of man and the universe and a general acquaintance with and appreciation of man's history and creative achievements, presented in such a way as to develop alert critical thinking, self-expression, and skill in discovering
truth.

It also seeks to provide a program, particularly in its upper division and graduate curriculum, which will prepare its students either to enter a vocation

The faith under .
The faith underlying the teaching here is that both man and the universe are created by and are responsive to God, and there is, therefore, a basic orderliness and unity in all of nature. We believe that the moral and spiritual, as well as the intellectual and the physical, are essential in the development of the complete personality. No sectarian limitations are imposed, however, on either students or faculty. The College accepts students of any race or creed who seem to be prepared for college work and who appear to have high qualities
of character and personality of character and personality.

The College seeks to develop a friendly mutuality between students and faculty. The faculty advisers are chosen because of their interest in the student's entire personality and all his varied problems. The College seeks to maintain a citizenship, and wholesome social

Recognizing that
Recognizing that the values of college life extend beyond the experiences of the classroom, the College utilizes a program of student activities experiences portunities for worthwhile and creative service which will contribute to greater social perspective, better self-discipline, and mote complete self-realization.

## Trustees

The College of the Pacific is governed by a board of thirty-six trustees thirty selected by the California-Nevada Conference of the Methodist Church and six by the Southern California-Arizona Conference. The election is so arranged
that there are three classes.

## Accreditation

The College of the Pacific was placed on the approved list of the Association of American Universities in 1927 and on that of the American Association of University Women in 1929. In 1951 it was placed on the list of approved colleges published by the Western College Association. It is approved by the State Depart ment of Education for teaching training and by the Veteran's Administration. The Conservatory of the College is a charter member of the National Association of Schools of Music. The College is approved by the University Senate of the Methodist Church and holds membership in the National Conference of Church-Related Colleges.

## History

The College of the Pacific was chartered on July 10,1851 , the product of a militant and zealous Methodism. In 1848 the General Conference of the Metho dist Church, meeting at Pittsburgh, Pennsylvania, authorized Bishop Beverly Waugh to select two young men of high qualifications for missionary service in California Those selected were William Taylor and Isaac Owen. Both were among the chief founders of the institution now know as the College of the Pacific. A third founder was Edward Bannister, who arrived in San Francisco in October, 1850.

The first important conference in reference to the College was held in San Jose, January 6-7, 1851, "to consult and advise as to the founding of a Seminaty of learning in this state under the patronage and control of the Methodist Episcopal Church." The conference recommended the "founding of an institution of the grade of university." A second conference, meeting in San Francisco, May 14, 1851, took further steps toward the actual founding by appointing a board of commissioners "to select, secure, and plot suitable grounds for the University town . . ." The third conference, meeting the following June 26, adopted a resolution fixing the site of the proposed institution at Santa Clara.

Because there was no statutory provision at that time for chartering a university, the charter of the institution was granted by the Supreme Court of California This document, issued on July 10, 1851, made the school the first institution of collegiate grade to be chartered in the state. The original name of the school California Wesleyan College, proved unpopular and was soon changed to the University of the Pacific, this alteration being sanctioned by the State legislature. The institution continued under this name unil 1911, when, in accordance wih its actual status and plans and purposes, the name was officially changed to the College of the Pacific

The actual opening of the Preparatory Department of the University took place at Santa Clara, May 3, 1852, under direction of Edward Bannister. The Male Department and the Female Collegiate Institute were operated for years as virtually separate schools, both, however, being under the same president and board of trustees.

The first college graduating class, consisting of five young men and five young women, received baccalaureate degress in 1858. In 1871 the University moved from Santa Clara to College Park, San Jose, where it remained until the move to its present site. Napa College, also Methodist-controlled, was consolidated with the University of the Pacific in 1896, and its graduates were enrolled among the alumni of Pacific.

After long consideration, the College was relocated on its present campus in Stockton in 1924, where it took on new life. With the organization of publicly supported Stockton Junior College on the same campus in 1936, the College of the Pacific restricted its offerings to the junior, senior, and one graduate year, thus becoming the first three-year liberal arts college in the United States. But with the fall class of 1951, the College reinstituted its lower division and at the same time began expanding its graduate work to include a program for the degree Doctor of Education. In 1954 the American Academy of Asian Studies in San Francisco became affiliated with the College, and with this merger it became possible to offer the Doctor of Philosophy degree in Asian Studies.

## HONORARY MEMBER

E. L. Wilhoit

## CUSTODIAN OF ENDOWMENT

Stockton Savings and Loan bank

## COMMITTEES OF THE BOARD OF TRUSTEES 1953 - 1954

Exbcutive: Baun, Chairman; Berry, Crummey, Eberhardt, Hatvey, Hornage,
Jacoby, James, Jesperson, Morris, Orvis, Mrs. Richardson, Wallace.
Finance: Eberhardt, Chairman; Baun, Berry, Morris, Orvis, Wallace.
budget: Orvis, Chairman; Eberhardt, Wilson.
additing: Wallace, Chairman; Morris.
insurance: Pruner, Chairman; Hornage, Jespersen.
Endowment: Tiss, Chairman; Chatters, Eberhardt, Hotle, Kesterson, Laird, Lange.
Educational: Tippett, Chairman.
faculty: Kennedy, Vice Chairman; Hamilton, Kenney, Lowther.
degrees: Baker, Vice Chairman; Clay, Prewitt, Sylvester.
student relattons: Men: Morris, Vice Chairman; Berger, Harvey, Yates. Women: Mrs. Davies, Vice Chairman; Mrs. Morris, Mrs. Richardson, Mrs. Weaver.

TERM EXPIRING 1955


TERM EXPIRING 1956


George Wilson. Claresburg
President


MEMBERS OF THE BOARD TERM EXPIRING 1954


Francis N. Laird Sebastopo La Habra Berkeley
Farmington Bakersfield
William S. Orvis pe Russeli prewitt Bakersield

## LIBRARY STAFF



## HEALTH STAFF

C. A. Broaddus, M.D. -

Eye, Ear, Nose and Throat
W. H. Langley Collis, MD. - - - - - - - Surgeon

MINERVA GOODMAN, M.D. - - - - - - - - - $\quad$ Inysician
Raymond Hench, M.D. - - - . - - - - - - Orthopedist
Grorge H. Sanderson, M.D. - - - - - - - - Head Nurse
Doris Richards Registered Nurse
Ethel Andres Registered Nurse
Lrona Irey Registered Nurse
Registered Nurse
Jenniebrlle Dessaussois

## STAFF OF LIVING GROUPS



## FORMER PRESIDENTS



## EMERITUS FACULTY

C. Marian Barr-Smitten, 1910. Dean of Women, Emeritus, 1937. A.B., University of California, 1904; A.M., 1906.

Charles E. Corbin, 1914. Professor of Matbematics, Emeritus, 1945. A.B., Doane College, 1904; A.M., Northwestern University, 1907.
J. William Harris, 1910. Professor of Education and Psychology and Dean of the School of Education, Emeritus, 1949.
A.B., Union College, 1901; Ph.D., Clark University, 1908.
O. H. Ritter, 1926. Vice-President and Professor of Business Administration, Eneritus, 1953.
A.B., Stanford University, 1904; Cashier and Accountant, Pacific Mail S. S. Co., Shanghai, 1907-1912; Chief Clerk and Acting Agent, Hong Kong, 1912 13; Agent, Shanghai, 1913-14; Agent, China Mail S. S. Co., Ltd., Hong Kong, 1915-20; General Manager, China Pacific S. S. Co., Ltd., Hong Kong, 1917. 20; Assistant Cashier, Stockton Savings and Loan Bank, 1921-30.

Robinson Spencer, 1945. Cataloguer and General Library Assistant, Emeritus, 1953.
A.B., Wesleyan University, 1903; B.L.S., University of Illinois, 1918.

Amos Alonzo Stagg, 1933. Professor of Physical Education and Football Coach, Emeritus, 1947.
A.B., Yale University, 1888; graduate of International Y.M.C.A. College, 1891 M.P.E., International Y.M.C.A. College, 1912; A.M., Oberlin College, 1932 L.I.D., College of Wooster, 1933.
G. A. Werner, 1923. Professor of History and Political Science and Director of Pacific Tours, Emeritus, 1949.
A.B., University of Southern California, 1911; A.M., 1920; Ph.D., University of California, 1923.

## FACULT'Y

## Academic Year 1953-54

Robert Edward Burns, 1931, President upon the Edward Bannister Foundation A.B., College of the Pacific, 1931; A.M., 1946; LL.D., Williamette University, 1947.

Tully Celon Knoles, 1919, Cbancellor
A.B., University of Southern California, 1903; A.M., 1908; D.D., 1919; LL.D., College of the Pacific, 1927; D.D., Pacific School of Religion, 1940; LL.D., Boston University, 1946.
Ada Alexander, 1944, Assistant Professor of Home Economics (on leave of absence)
( Sollege, 1916. Graduate study, Lucien Labandt School of Costume B.S., Simmons College, 1916. Graduate sur the Pacific, summer 1932; University Design, summers 1930, 1931; Colege of College, summers 1945, 1946.

Wililam K. Anttila, 1947, Assistant Professor of Pbysical Education B.S., Springfield College, 1942 ; A.M., Columbia University, 1947. Graduate study, New York University, summer 1949.

John R. Arnold, 1949, Associate Professor of Zoology A.B., Fresno State College 1932 ; A.M., University of California, 1934; Ph.D., Cornell University, 1938.
Cuifford Ashby, 1953, Assistant Professor of Speech A.B., State University of Iowa, 1950; A.M., University of Hawaii, 1953.

Grorge Atherton, 1953, Lecturer in Business Administration A.B., Stanford University, 1942 ; C.P.A. (Resigned, Februạry 17, 1954)

Allan Bacon, 1922, Professor of Organ and Piano Student of Victor Ehling and Charles Galloway, 1900-10; Rudolph Ganz, 1921. Mus.B., College of the Pacific, 1930; Mus.M., 1934.

Alonzo L. Baker, 1940, Professor of Political Science A.B., Pacific Union College, 1916; Ph.D., University of Southern California, 1948.

Granvilile Bayse, 1949, Assistant Professor of Speech A.B., Whittier College, 1948; A.M., 1949. Further study, College of the Pacific, 1949, 1950, 1951.
Arthur T. Bawden, 1931, Professor of Chemistry BS Denison Universtiy 1920; M.S., The Ohio State University, 1921; Ph.D, B.S., Denison Universtiy, 1920; M.S., Une 1924. Further study, Northford University, summer 1939.

Arthur R. Beckwith, 1953, Professor of Business Administration C.P.A., 1922, J. L. Cabrera College, Cordoba (Argentina). Economics, National University of Cordoba (Argentina) 1940.

Dorothea Berry, 1951, Reference Librarian
B.S., University of Illinois, 1937; B.L.S., 1942. (Resigned, Dec. 31, 1953).

Lloyd M. Bertholf, 1947, Dean of the College; Professor of Zoology
A.B., Southwestern College, 1921; A.M., Johns Hopkins University, 1925; Ph.D., 1928; National Research Fellow, Germany 1930-31.

Edward S. Betz, 1938, Dean of Men; Professor of Speech
A.B., Hastings College, 1930; A.M., Denver University, 1937. Further study, University of Southern California, summer 1940; Stanford University, fall 1941.
J. Russell Bodley, 1923, Professor of Music Theory

Mus.B., College of the Pacific, 1923; A.B., 1924; Mus.M., University of Rochester, 1932. Study under Mlle. Nadia Boulanger, France, 1927-28; Arne Oldberg, summer 1930. Eastman School of Music, 1931-32; University of Southern California (Arnold Schoenberg), summer 1935.

Mary e. Bowling, 1944, Associate Professor of Piano
A.B., University. of Wichita, 1928; Mus.M., 1929; Mus.M., University of Washington, 1939. Juilliard Graduate School, 1929-31. Study with Leon Trick, 1932; James Friskin, summer 1934 and winter 1937; Leo Sowerby, winters 1942 and 1943.

Alix Einert Brown, 1934, Assistant Professor of 'Cello
Diploma, Institute of Musical Art, New York, 1921; graduate study 1922. Student in 'cello of William Willeke, New York, 1918-1922, Michel Peuha, Student in cello of
Philadelphia, 1922-1925. Previous study in London and Paris.

DeMarcus Browns, 1924, Director, Pacific Theatre; Professor of Art and Speech A.B., College of the Pacific, 1923; A.M., 1934. Graduate study, American Academy of Dramatic Art, New York, summer 1923; student of Maurice Brown, Ellen Van Volkenburg and Hedwiga Reicher, San Francisco Theatre School, 1923-25; student of Rudolph Schaeffer, summer 1932. Carnegie Art Center Scholarship, University of Oregon, summer 1933.

Horace I. Brown, 1933, Director of Orchestra and Professor of Violin
A.B., Carnegie Institute of Technology, 1919; A.M., College of the Pacific, 1949. Student of Violin (Dethier), Theory (Goetschius), Institute of Musical Art, New York, 1920-21; Student of Violin, Thaddeus Rich, 1921-22; Sam Franko, 1922-23; Franz Kneisel, 1923-24; with Philadelphia Symphony, 192126; graduate study, Columbia University, 1931.

David K. Brungr, 1947, Associate Professor of Sociology
A.B., Northwestern University, 1923; A.M., 1924; two-year diploma, New York School of Social Work, 1926; Ph.D., University of Pennsylvania, 1935.

Hardas Chaudhurr, 1954, Profesor in American Academy of Asian Studies M.A., University of Calcutta, 1936; Ph.D., 1948.

Emerson Cobb, 1948, Professor of Chemistry
A.B., Union College, 1928; M.S., University of Kentucky, 1931; Ph.D. University of North Carolina, 1941.

George H. Colliver, 1920, Professor of Bible and Religious Education
B College of the Pacific, 1915; S.T.B., Boston University School of Theology, A.B., College of the Pacific, 1915, University, 1918; University of California 1918. Further study, Harvard S. Sity of Southern California, 1945.

Iva Colliver, 1944, Assistant Circulation Librarian A.B., College of the Pacific, 1915.

Arthur Corra, 1952, Director of the Band
A.B., Mus.B., College of the Pacific, 1951

John C. Crabbe, 1937, Associate Professor of Speech; Director of Radio Station
KCVN A.B., College of the Pacific, 1937; An', 19ty of Iowa, summer 1938; New York Univity, 1951-52.
afred S. Dale, 1953, Business Manager and Associate Professor of Business Administration
A.B., Jamestown College, 1919; American College of Law, admitted to practice of law, 1924; M.E., University of North Dakota, 1952. Further study, Princeton University; University of Minnesota, 1940; University of Oregon, 1943-44; University; 1952-53.
Wililam J. Darden, 1948, Associate Professor of Education
B.S., Alabama Polytechnic Institute, 1935; M.S., 1941; A.M., Columbia University Teachers College, 1948; Ed.D., 1953.

Catherine P. Davis, 1953, Dean of Women
A.B., Hattwick College, 1939; A M., Syracuse University, 1950.

Don C. DeVault, 1949, Associate Professor of Chemistry and Pbysics B.S., California Institute of Technology, 1937; Ph.D., University of California, B. 1940.

Edwin Drng, 1948, Professor of Economics A.B., Fukien Christian University, 1922; A.M., University of Southern California, 1926; A.M., Harvard University, 1927; Ph.D., University of Southern California, 1937.

Malcolm Rogers Eiselen, 1927, Professor of History A.B., Northwestern University, 1924; A.M., 1925; Ph.D., University of Pennsylvania, 1931.
John Gilchrist Elliott, 1927, Dean of the Conservatory of Music; Professor of Piano
Grad Mus., Northwestern University, 1922; Mus.M., 1923. Student of CarI Grad. Mus., Northwestern University, 122 , 1911-23; Edward Collins, Chicago Milton Beecher, Northwical College, 1923-24; Ernest Hutcheson, New York City; Arne Oldberg, Nusical College University.

Edward S. Esser, 1950, Instructor in Education
A.B., College of the Pacific, 1940. Graduate study, University of California, summers of 1948 and 1949; College of the Pacific, 1950-51.

Fred L. Farley, 1918, Professor of Ancient Languages, Art, and English A.B., Albion College; 1907; A.M., 1911; Ph.D.; Stanford University, 1923.

Loida M. Farrow, 1951, Assistant Professor of Speech (under the Rosenberg Fund)
B.S., Southeast Missouri State College, 1948; A.M., State University of Iowa 1951.

Maxine Garrigan, 1938-42, 1950, 1952, Associate Professor of Home Economics A.B., University of California, 1934; A.M., College of the Pacific, 1949.

Edna P. Grhlken, 1945, Professor of Home Economics
(on leave of absence, spring 1954)
B.S., Central Missouri State Teachers College, 1925; M.S., Oregon State College, 1937. Futther study, Columbia University, summer 1939; University of Califfornia, summers 1942, 1946, 1948.

Fay Goleman, 1937, Lecturer in Sociology, and Consultant in Pbyschiatric Social Work
Ph.B., University of Chicago, 1932; M.S.S., Smith College, 1934.
Irving Goleman, 1937, Professor of English and Religious Education (on leave of absence)
A.B., University of California, 1923; A.M., 1925. Further study, London University, 1925-26; Yale University, 1926-27, 1931-35.

Walter R. Gore, 1947, Professor of Education and Director of Educational Administration, Curriculum Library, and Placement
A.B., University of Denver, 1939; A.M., 1940; Ed.D., University of Colorado, 1947.
W. Edgar Gregory, 1948, Associate Professor of Psychology
A.B., Colorado College, 1933; B.D., Chicago Theological Seminary, 1936, Further study, University of Chicago 1933-36; Andover-Newton Theological School and Massachusetts General Hospital, 1939; University of California, 1949-50, and summers 1945-53.

Edith Grider, 1948, Reserve Librarian and Thesis Librarian
A.B., College of the Pacific, 1946; A.M., Washington State College, 1948. Further study, College of the Pacific, 1948-49; summer 1949.

Charles. W. Gulick, 1930, Professor of Engineering
C.E., Cornell University, 1922 ; Registered Structural Engineer, State of California, 1932.

Wilhelminia K. Harbert, 1937, Professor of Public School Music and Musical Therapy
Mus.B., College of the Pacific, 1933; A.M., 1939; A.M., 1947. Student of James Mursell and Peter Dykema of Columbia University; voice with Marie Reuter Gallison and Ivan Morawski of Boston; piano and harmony with Benjamin Whelpley, Harris Stackpole Shaw, and Mon. Longy, Boston; student, Benjamin Welpley, Harris Stackpole Shaw,
A. Flager Fultz ,Boston, 1944, 1946, 1947.

Lawton D. Harris, 1938, Associate Professor of Religious Education and Pbysical Education
A.B., College of the Pacific, 1922; A.M., 1948. Further study, University of California, 1923-25.
Gordon L. Harrison, 1948, Associate Professor of Engineering
B.Sc. in C.E.; Oregon State College, 1935; M.Sc. in C.E., Iowa State College, 1940; P.E., State of California, 1946.
Oola Hazelwood, 1947, Assistant Professor of Religious Education (on leave of absence)
(on leave of absence) Chicago, 1922; A.M., 1947. Further study, University Ph.B., University of Chicago, 1922; A.M., of Washington, summer 1929,
Sofiba Mohamed Hitt, 1950, Instructor in Food Processing, and Director of Food Processing Laboratory
A.B., College of the Pacific, 1949.

Hblen Dooley Hodgins, professor Art
A B San Jose State College, 1928; A.M., Claremont College, 1939. Further A.B., San Jose State College, 1 , fornia School of Fine Arts, University of California, and Columbia University.
arthur J. Holton, 1947, Assistant Professor of Music Theory
Student of Mickey Gillette, San Francisco, San Francisco Symphony, 1937-38; Rudd, San Francisco Symphony, 1940. Mus.B., College of the Pacific, 1947.
lizabeth M. Humbargar, 1948, Assistant Professor of English A.B., University of Kansas, 1923; A.M., 1930. Further study, University of California, summers 1925 and 1927; Columbia University, 1929-30; University of Colorado, summer 1941; College of the Pacific, 1942-43, summer 1944, 1944-45, 1945-46; University of Denver, summer 1949.
Rockivel D. Hunt, 1895-1902; 1947, Visiting Professor of Early California Rockvell D. Hunt,
History; Director of California History Foundation

History; Director of California History Foundation 1892 ; Ph.D., Johns Hopkins University Ph.B., Napa College, 1890; A.M., 1892; Ph.D., College of the Pacific, 1932; Litt:D., University of Southern
1895; LL.D., $1895 ;$ LL.D., Co
California, 1936.
Grorge S. Ingebo, 1952, Assistant Professor of Education and psychology B.S., Rocky Mountain College, 1941 ; A.M., Colorado State College of Educaion, 1948; Ph.D., University of Washington, 1953. Further study, Projective Technique Institute, 1953.
Earl R. Jackson, 1938, Professor of Physical Education
AB. Jand 1908 ; A.M., Stanford University, 1937. Further study, College of the Pacific, 1939, 1942, 1948.
Harold Stanley Jacoby, 1933, Professor of Sociology A.B., College of the Pacific, 1928;A.M., Northwestern University, 1932 ; Ph.D., University of Pennsylvania, 1937.
J. Marc Jantzen, 1940, Dean of the Scbool of Education; Dean of the Summer Session; Professor of Education
A.B., Bethel College, 1934; A.M., University of Kansas, 1936; Ph.D.; 1940.

John Herbert Jonte, 1920, Professor of Cbemistry
B.S., University of Kansas, 1912; M.S., State University of Iowa, 1928. Further study, University of Colorado, summer 1938; College of the Pacific, 1935-36, summer 1936, 1939-40, 1941-42, 1944; Yale University, summer 1945; University of New Mexico, summer 1949.
G. Jerald Kirsten, 1950, Graduate Manager of Atbletics; Instructor in Pbysical Education
A.B., College of the Pacific, 1947. (Resigned, Dec. 31, 1953)

## Avery L. Krzer, 1951, Lecturer in Journalism

Modesto Junior College 1933, 1934; Stanford University special seminars, 1949, 1950. Newspaper experience as reporter, rewrite man, copy editor in various fields, and as chief editorial writer.

Chrrs J. Kjeldsen, 1935, Associate Professor of Pbysical Education A.B., College of the Pacific, 1935; A.M., 1943.

Lorraine Knoles, 1922, Professor of History
A.B., College of the Pacific, 1921; A.M., University of Southern California, 1932. Further study, Stanford University, summer 1925; University of Chicago, summer 1936; University of Washington; summer 1939; University of California at Los Angeles, summer 1947

Walter S. Knox, 1946, Administrative Director and Professor of Health and Pbysical Education
A.B., State University of Iowa, 1927; A.M., Texas Christian University, 1934; Ph.D., State University of Iowa, 1938.

Charles DeWolf LaMond, 1949, Assistant Professor of Piano
A.B., Yale College, 1938; Mus.B., Yale School of Music, 1939; Mus.M., 1940. Further study under Charles H. Ditson Fellowship with Egon Petri, Cornell Graduate School, 1940-41

Rom Landay, 1954, Professor in American Academy of Asian Studies Member, Arab Committee of Foreign Office Political Intelligence Department, 1941-44. Fellow, Royal Geographical Society, 1952

Allan R. Laursen, 1946, Librarian
A.B., State College of Washington, 1933; A.B.L.S., University of Michigan, 1934; A.M.L.S., 1937.

David T. Lawson, 1946, Director of Pacific Music Camp
B.M., Baker University, 1922; B.S. in Music, 1934; M.M.E., University of Kansas, 1944; further study, 1945. Student of voice with Wm. B. Downing, 1922; Joseph Wilkins, 1942, 1943, 1944. Conducting, Valdimir Bakaleinkoff; voice, Milan Petrovich; band techniques, James J. Gillett, National Music Camp, Interlochen, Michigan, 1933.

Roy E. Learned, 1953, Associate Professor of Education; Director of Elementary Education.
A.B., College of the Pacific, 1915; A.M., Stanford University 1925; University of California, summers 1937, 1942, 1945.

Frank A. Lindhorst, 1945, Director of Christian Community Administration; Professor of Religious Education
A.B., DePauw University, 1914; S.T.B., Boston University, 1925; D.D., College f Idaho, 1952. Further study, Harvard University, 1920; University of Chicago, 1929-30, 1930-31; University of Southern California, summer 1950.

Robert L. Livezey, 1954, Lecturer in Zoology
B.S., Oregon State College, 1943 ; M.S., 1944; Ph.D., Cornell University, 1946.

Elizabeth Matson, 1945, Professor of Pbysical Education
B.S., Kellogg School of Physical Education, Battle Creek College, 1934; M.S., B.S., Kellogg Schoor of 1938. Further study, University of Michigan, 1938; College of the Pacific, 1949.

Charles M. Melick, 1953, Assistant Football Coach and Tennis Coach Attended Pace Institute, 1938; B.S., University of California at Los Angeles, 1950. Graduate study University of California at Los Angeles. 1950; San Jose State, 1950; Stanford University, 1952-53; College of the Pacific, 1954 A.M., Stanford University, 1954

Wilfred M. Mitchell, 1946, Professor of Clinical Psychology A.B., Pomona College, 1935; Ph.D., Yale University, 1940. Post-doctoral fellowships, Elgin State Hospital, summer 1944, Boston City Hospital, summer 1945.

James R. Morrison, 1947, Assistant Professor of Journalisn A.B., Grinnell College, 1932. Graduate study, College of the Pacific, 1947.

Malcolm Herbert Moule, 1946, Associate Professor of Political Science (on leave of absence)
A.B., Wheaton College, 1935; A.M., Stanford University, 1940; Ph.D., 1947.

Jack Myers, 1951, Assistant Professor of Pbysical Education; Head Football Coach
A B., University of California at Lus Angeles, 1947; Graduate study, University of California at Los Angeles, 1949, 1950, 1951.

William D. Nietmann, 1946, Professor of Pbilosophy A.B., West Virginia Wesleyan College, 1936; S.T.B., Boston University, 1941 ; Ph.D., 1943.

John Nikcevich, 1953, Assistant Fowrball Coach
B.S., University of California at Los Angeles, 1950. Graduate study, University of California at Los Angeles, 1950.

William Niven, 1948, Assistant Professor of Business Administration BBA Armstrong College, 1936; B.S., University of California, 1944; M.B.A. B.B.A., Armstrong College, 1936; B.S., Unifornia, summers 1946, 1947, 1948. Certified Public Accountant, 1954.

Alden E. Noble, 1929, Professor of Zoology
A.B., Ohio Wesleyan University, 1923; M.S., Ohio State University, 1925; Ph.D., University of California, 1931.

Charles Norman, 1938, Professor of Economics
A.B., DePauw, University 1922; Fellow, Bookings Institute, 1930-31; Ph.D. Stanford University, 1933. Further study, University of California, summer 1938.

Eleanor S. Norton, 1953, Associate Professor of Music Education
A.B., University of North Dakota, 1919; Mus.B., College of the Pacific, 1923. Graduate study, San Jose State College, summers, 1930, 1939; Matthay School, London, 1935-36; Music Academy, Munich, 1936; Mozarteum, Salzburg, 1936; Stanford University, 1939.

Sherwood Norton, 1952, Lecturer in Business Administration
A.B., College of the Pacific, 1941; LL.B., University of California, Hastings College of the Law, 1948.

Willam W. Norton, 1951, Director of Cburch and Community Music
A.B., University of Minnesota 1909; A.M., 1910; Mus.D., Sioux Falls College, 1936. Further study, Columbia Teachers College, 1928-29.

Leonard L. O'bryon, 1943, Professor of Modern Languages
A.B., University of Kansas, 1928; University of Berlin, 1929-30; Alliance Francaise, Paris, 1931; University of Marburg, 1931-34; Ph.D., 1934. Further study, Columbia University, summer 1939; Mexico City, summer 1940; Department of State, Washington, D.C., 1945.

Earl P. Oliver, 1942, Assistant Professor of Voice
Student of New England Conservatory, 1917; C. A. White, 1918-20; Munich, 1923-24; five years opera, concert, radio experience in Europe; New York University, 1939. Exponent of Vilona School of Singing.

Clair C. Olson, 1939, Professor of English
A.B., Oberlin College, 1923; A.M., University of Chicago, 1926; Ph.D., 1938.

Latfrence J. Osborne, 1951, Assistant Professor of English
A.B., North Central College, 1930; Mus.B., Chicago Conservatory of Music, 1932; B.D., Evangelical Theological Seminary, 1933; S.T.M., Union Theological Seminary, 1937; A.M., University of Nevada, 1943; Ph.D., Stanford University, 1952. Further study, Garrett Biblical Institute, summers 1931, 1932; General Theological Seminary, 1939-40.

William G. Paden, 1954, Professor of History*
A.B., University of California, 1908; M.A., University of California, 1912; J.D., University of California, 1912. Graduate study, University of California, 1912, 1920; Stanford, 1920, 1921; University of California at Los Angeles, summer 1925; University of California, 1925, 1940.

Alfred W. Painter, 1951, Associate Professor of Pbilosopby and Director of Religious Activities
A.B.,Linfeld College, 1938; Ph.D., University of Chicago, 1945.

* Deceased, April 6, 1954.

Margaret Paintrr, 1952, Lecturer in Speech
B., Par Collther study, University of California, University of Southern California, Columbia University.
Marion Ochsner Pease, 1929, Director of Elementary Student Teaching and Associate Professor of Education College, 1927; A.M., State University B.Educ., Northern Illinois Teachers College, 190, Further study, University of California, summer 1934; Univer sity of Chicago, summer 1938, spring 1946.
Ruth Phelps, 1952, Cataloguer and Classifier
A.B., University of Michigan, 1928; B.S. in L.S., University of Minnesota, 1937.

Martha Foster Pierce, 1928, Associate Professor of English
A.B., Oberlin College, 1924; A.M., Columbia University, 1928. Bread Loaf School of English, 1938.

Bernard Piersa, 1952, Lecturer in Business Administration A.B., College of the Pacific, 1948. Certified Public Accountant.

Willis N. Potter, 1947 Dean of Graduate Studies; Director of Secondary Education; Professor of Education and Psychology A.B., Hobart College 1923; A.M., University of Rochester, 1929; Ed.D., Pennsylvania State College, 1947. Other study, Columbia University, 1931-32; Cornell Univeristy, 1939. Visiting professor of psychology, Syrian University, Damascus, 1951-52.

Monreo Potts, 1918, Associate Librarian
Mus.B., College of the Pacific, 1913; A.B., 1923. School of Library Service Columbia University, summer, 1939.

Parl B. Quyle, 1952, Special Instructor in Art (Ceramics)
B College of the Pacific, 1948. Graduate study, College of the Pacific, A.B., College of the Pacific, 1948 . Gradu
1949; Bernard Leach Conference, Mills College, 1950; Mills College, summer, 1950 .

Alfrbd Rageth, 1951, Teacher of Clarinet
Mus.B., College of the Pacific, 1934.
William H. Ramsey, 1947, Assistant Professor of Speech; Assistant Director of Radio Station KCVN
A.B. College of the Pacific, 1941; graduate study, 1942, summers 1948, 1951, A.B., College of the Paciinc, 194, griversity of Washington, summer 1949; Ohio State University, 1952-53.

Richard H. Reynolds, 1939, Professor of Art
A.B., University of California, 1936; A.M., College of the Pacific, 1942. Further study, University of California, 1938-39; University of California at Los Angeles, summer 1939; Mills College, (Moholy-Nagy, Marli Ehrmann, Gyorgy Kepes, James Prestini), summer 1940; College .or

John H. Rohde, 1953, Assistant Football Coach; Rugby Coach
A.B., College of the Pacific, 1950. Graduate study, College of the Pacific 1950.

## Howard I. Runion, 1948, Professor of Speech

A.B., University of Michigan, 1931; A.M., 1932; Ph.D., 1936.

Ned M. Russeli, 1949, Professor of Psychology and Director of Clinical Services A.B., University of Kansas, 1932; A.M., and Ph.D., 1936. Further study, University of Chicago, 1946.

William Sajowitz, 1951, Lecturer in Bible
A.B., University of Cincinnati, 1942; M.H.L., Hebrew Union College, 1944. Further study, University of California, 1950.

Edward G. Shadbolt, 1945, Professor of Piano
Mus.B., Grinnell College, 1931; A.M., 1935. Fellowship student of Bela Bartok and Zoltan Kodaly, Royal Hungarian Academy of Music, Budapest, 1931-33.

Harribt L. Sheldon, 1947, Assistant Professor of Health and Pbysical Education A.B., San Jose State College, 1942; A.M., College of the Pacific, 1950.

Virginia L. Short, 1929, Professor of Music History
Mus.B., College of the Pacific, 1922. Graduate study, San Jose State College, summers 1927 and 1944; violin with Gertrude Field, summer 1928; conducting with Vandenburg, summer 1938; Mills College, summers 1933, 1937 and 1939; Salzburg Mozarteum, summer 1936; College of the Pacific, summer 1944 . Claremont College, summer 1948. Sabatical study in Europe, 1952-1953.

Vivienne Sisk, 1952, Instructor in Psychology
A.B., San Jose State College, 1934. Graduate study, College of the Pacific, 1947-1950.
M. Ruth Smith, 1927, Professor of Modern Languages
A.B., University of Wisconsin, 1919; A.M., 1924. Further study, University of Grenoble, summers 1920 and 1922; Middlebury College, French School, summer 1924; Univeristy of Paris, summer 1930; University of Wisconsin, summer 1933; University of Paris, 1936-37; University of California at Los Angeles, summer 1941; Mills College, French School, summer, 1944; College of the Pacific, summers 1946, 1948, 1950. Palmes d' Académie-Officier d' Académie, 1950.

Robert M. Snyder, 1951, Lecturer in Civil Engineering
B.S. in Engr., Iowa State College, 1941. Registered Mechanical Engineer, State of California.

Elizabeth Spelts, 1948, Assistant Professor of Voice
(on leave of absence, 1953-54)
A.B., Colorado Women's College, 1936; Mus.B., Northwestern University, 1939; Mus.M., 1940. Further study with Paul Althouse and Alice Nichols; Royal Academy of Music, London, summer 1950; with Elena Gerhardt, London, summer 1952.

Sherman H. Spencer, 1950, Circulation Librarian
A.B., Montana State University, 1949; M.S., Columbia University, 1950.

Frederic Spiegelberg, 1954, Visiting Professor in the American Academy of Asian Studies
Ph.D., University of Tüpingen, 1922; S.T.M., University of Hamburg, 1925. Fellow, Rockefeller Foundation, for study in India, 1949. (Visiting from Stanford University.)

Doris Standerfer, 1948, Assistant Professor of Art
(on leave of absence, 1953-54)
A.B., San Jose State College, 1934. Graduate study, San Jose State College, summers, 1934, 1935, 1936, 1939, 1940; Columbia University, summer, 1937 University of California, summer 1938; Fresno State College, 1938, 1939; University of California at Los Angeles, summer, 1941; College of the Pacitic, 1946-1952.

Ernest Elwood Stanford, 1926, Professor of Botany (on leave of absence, spring, 1954)
B.S., University of Masachusetts, 1915; M.S., North Carolina State College, B.S., University of Masachivetsity, 1924; D.Sc., University of Massachusetts, 1950.

Frederick E. Steinhaudser, 1936, Professor of Modern Languages
A.B., University of Chicago, 1918; A.M., 1923; graduate study, summers A.B., University of Chicago, 1930, 1931-32. University of Madrid, summer 1921, Univetsity of Mexico, summer 1922; University of California at Los Angeles summer 1939; University of Havana, 1951.

John H. Sticht, 1946, Associate Professor of Geology
B.Sc., University of New Zealand, 1938; M.Sc., 1940; A.M., Harvard University, 1941; Ph.D., 1952.

Kenneth M. Stocking, 1950, Associate Professor of Botany
A.B., College of the Pacific, 1933; A.M., 1941 ; Ph.D., University of Southern California, 1950.
VAN Sweet, 1953, Basketball and Baseball Coach; Executive Manager, Alumni Association
A.B., Baylor University, 1943 ; A.M., College of the Pacific, 1950.

Richard H. Toms, 1953, Lecturer in Business Administration
A.B., College of the Pacific, 1941.

Academy of Music, Munich, (Hausegger, Waltershausen); University of Munich (Sandberger, Muncker, Kutscher); University of Erlangen (Becking Saran), Ph.D., Erlangen, 1927; Conservatory of Music, Augsburg; Conservatory of Music, Hannover.

Carl Voltmer, 1948, Professor of Physical Education
B.S., State University of Iowa, 1927; A.M., 1930; P.D., Columbia University, 1935.

Fblix A. Wailace, 1947, Professor of Engineering
B.C.E., Polytechnic Institute of Brooklyn, 1939; M.C.E., 1942; P.E., State of New York, 1946; State of California 1949. Ph.D.'. (Engr.), Carnegie Institute of Technology, 1952.

Earl J. Washburn, 1946, Assistant Professor of Art
A.B., California College of Arts and Crafts, 1942; A.B., College of the Pacific, 1946. Further study, University of California, summer 1944; College of the Pacific, spring 1948, summer and fall 1949.

Evg A. Wasilchen; 1954, Lecturer in Home Economics
B.S., University of Minnesota, 1938. Further study, University of California, 1951, College of the Pacific, 1952.

Alan W. Watts, 1954, Dean of the American Academy of Asian Studies S.T.M., Seabury-Western Theological Seminaty, 1948. Research fellow in oriental philosophy, Bollingen Foundation, 1951-53.
J. Henry Welton, 1926, Professor of Voice

Voice student of Marvin Hinshaw, Chicago, 1916-17; Theodore Harrison, Chicago, 1912-20; Mus.B., Northwestern University School of Music, (Walter Allen Stults), 1933; voice student of Edmund J. Myer, Los Angeles, 1929; College of the Pacific, summers 1930, 1931, and 1937; Northwestern University, summers 1932 and 1939.

Gborge Warren Whitb, 1922, Professor of Mathematics
A.B., College of the Pacific, 1918; A.M., University of California, 1926. Further study, University of Utah, summer 1949.

Richard Coke Wood, 1953, Assistant Professor of History
A.B., College of the Pacific, 1932; A.M., 1934; Ph.D., University of Southern California, 1950.

Allan E. Woodall, 1947, Associate Professor of English
A.B., Syracuse University, 1926; A.M., Columbia University, 1927; Ph.D., University of Pittsburgh, 1932.

Richard D. Yip, 1951, Special Instructor in Art (Painting)
A.B., College of the Pacific, 1951; A.M., Uiversity of California, 1952. Studied California College of Arts and Crafts; special citation in watetcolor painting American Watercolor Society, New York, 1952; first award, watercolor, San Francisco Fifth Annual Art Festival, 1952.

## FACULY COMMITTEES FOR 1953-1954 <br> (The first named is chairman)

Academic Policy: Burns, T. Knoles, Bertholf, Dale, Deeting (secretary), Elliott, Jantzen, Olson, Potter.
Administrative: Bertholf, Betz, Davis, Deering (secretary), Taylor.
Athletic Scholarships: Knox, Betz, Jackson, Christopulos.
Campus Organizations: Betz, Bertholf, Dale, Davis, Matson.
Catalogue: Bertholf, Bruner Farey, Jonte, Olson, Taylor
Civil Defense: Voltmer, Betz, Wallace.
Commencement: Bertholf, DeM. Brown, Elliott, Farey, Laursen, Jacoby, Norman, Reynolds.
Convocations and Forum Arts: Betz, Davis, Eiselen, L. Knoles, LaMond, Lindhotst, Runion,Sheldon, and student members appointed by P.S.A. President.
Council on Teachrr Education: Jantzen, Burns, Bertholf, Betz, Davis, Deering, Eiselen, Elliott, Gore, Knox, Olson, Pease, Potter, Runion, Russell, Taylor.
Counsbilng: Betz, Bayse, Bertholf, Davis, Ding, Ingebo, Sheldon.
Faculty Adviser to Naranjado: Washburn.
faculty Adviser to Pacific Weekly: Osborne. professors.
eaculty Appointbes to Board of Athletic Control: Burns, T. Knoles, Betz, Cobb, Colliver, Jantzen, Knox.
faculty Appointers to Council of Religous Activities: Beckwith, Colliver, Wallace.
Foreign Students Adviser: Pierce. Berholf, Cobb, Eiselen, Elliott, Farley, Jantzen, Knox, Lindhorst, Olson, Potter, Runion.
Honorary Degree: Bertholf, Elliott, Jantzen, Potter.
Library: Eiselen, Gore, Jacoby, L. Knoles, Laursen, Noble, Olson, Potter, Short. Parents Day: Deering, Betz, Davis, Norman, Rudkin, Sweet, Taylor.
Publications: Olson, Ashby, Betz, Davis, Osborne, Pierce, Washburn, Editor Pacific Weekley, Editor Naranjado, Publications Committee of P.S.A.
Research Council: Cobb, Bettholf, DeVault, Noble, Stanford, Stocking, Sticht, Wallace.
Sabbatical Leaves: Bodley, Darden, Ding, Pierce, Wallace.
Schedule: White, L. Knoles.
Scholarships and Grants-in-Aid: Burns, T. Knoles, Bertholf, Betz, Dale, Davis, Lindhorst, Potter, Saecker, Taylor.
Social and Recreational Life: Davis Betz, Bowling, OBryon, P.S.A., Social Chairman, A.W.S. Pres., C.R.A. Vice Pres., Pan-Hellenic Pres., and other students and faculty members at the discretion of the group.
Student Health: Knox, Betz, Dale, Davis, Richards, Sanderson, one man and one woman selected from the Senior Class.
Student Housing: Davis, Betz.

## PHYSICAL FACILITIES

## CAMPUS AND BUULDINGS

The original campus of fifty actes, forty acres of which were a gift of the C Smith Company, is known as the Harriet M. Smith Memorial Campus, and J. C. Smith Compand, by twenty-one acres made possible by a gift from Mr. and Mrs. Amos Alonzo Stagg. There are now located on this campus twenty-six Mrs. Amos Aollows: Administration, Weber Memorial, Conservatory, Old Library, buildings as follows. Adaing, Art. Building, Home Economics Buliding, Campus Radio Engineering Building, Arven Hall, Bannister Hall, Music Annexes I and II, Wes Station, Sport Hall, North Hall, Manor Hall, Quonsets I and II, Anderson Dining Hall, South Hall, including Anderson ' Y ' Center, the Student Union, West Mem and Social Hall, the President's Home, Morris Chapel with its Christian Education orial 1 her Hall, and a well-equipped, modern gymnasium with baskeball Unit and court of regulation size, also Baxer pool provided by the Associated Students, gymnasium, an erder the the stadent body; an observatory building available for the enjous ore finch portable telescope with altitude and equipped with an equatorianit and zenith telescope, sextants, and other necessary azimuth mounting, a transt and equipment, gifts of the Jack recent of all, the Irving Martin Library.
36,00 spectạts, and alls tentioned
In addition to the residence halls mentioned above, there are eight houses maintained by fraternities and sororities.

Located in the Morris Chapel is the Aeolian Organ, a to the College by the S. H. Kress Company of New York.

The sixteenth-century masterpiece, "The Assumption of the Virgin," by Calisto Piazza da Lodi, a gift from the personal collection of Mr. S. H New York City, is hung in the South Transept of the Morris Chapel

The Carnegie College Music Set, donated by the Carnegie Corporation, consisting of a thousand records, more than one hundred volumes of books on ousic and one hundred and fifty musical scores, together with a fine reproducing instrument is available to all students.

## LIBRARY

The college library contains at present 60,000 volumes, including material解 It receives annually 489 general and technical journals.

A small but growing collection of Californiana has been established in connection with the California History Foundation.

## FACILITIES FOR MUSIC AND DRAMA

The Conservatory building, largest on the campus, provides an auditorium seating 1256 and a studio theatre seating 125 . Both are equipped with ample stage facilities for the presentation of dramatic and musical productions. In addition there are numerous offices, studios, and practice rooms.
$\cdots$ Two new buidings, Music Annex I and Music Annex II, have more than
the space avalable to music. Here are located a large rehearsal room, a band and orchestra room, several classrooms and offices, and 25 practice rooms.

## BROADCAST' FACILITIES

Radio: The college owns and operates two radio stations, one a frequency modulation station transmitting on 91.3 megacycles at 3400 watts, the other a carrier-current station, limited to the campus area.

Both stations, operating with the call KCVN, are housed in a. modern building, which includes spacious broadcasting studios, several offices, and professional engineering equipment. The whole is considered one of the finest college installations in the country.

Television: Presently housed in the radio building is the necessary equip. ment to operate a television production laboratory. Studio work is recorded on sound film and certain programs are released through commercial television stations in the area.

The college has plans to develop its television facilities to include closedircuit camera equipment and larger and more flexible studios. The college is working with other agencies in the area toward the establishment of an educational television station serving the central part of the state.

## FACILITIES FOR ATHLETICS AND PHYSICAL EDUCATION

The College maintains a complete athletic plant. A new bowl, Pacific Memorial Stadium, with a capacity of 36,000 and modern dressing rooms for home and visiting teams, was completed in 1950. Baxter stadrum, with 5,000 capacity, has a regulation football field and a quarter-mile cinder track, and is equipped for both day and night petformances. The Club House provides dressing room facilities for Baxter Stadium.

Knoles Feld, consisting of twenty-one acres directly west of Baxter Stadium, The Bob Cole Memorial baseball diamond provides the following facilies, eight volleyball courts, two basketball courts, three playing fields, archery sof thall diamonds, and a golf practice links.

The Gymnasium, built in 1940; has a regulation basketball court with a eating capacity of 1250 , two practice basketball courts, three volleyball courts, ix badminton courts, and two handball courts; also offices, a dance studio, two class rooms, adequate showers, dressing rooms and equipment. Near the gymnasium are eight asphalt tennis courts.

Adjacent to the gymnasium is located a modern outdoor swimming tank, with filtering and sterilizing equipment. The tank is furnished with both underwate and overhead lighting and is beated so as to permit activities throughout the entire year.

A recent addition is the Sports Pavilion with facilities for tumbling and gymnastics, boxing, wrestling and restricted activities. It also contains a badminton court and a four-walled handball court.

Supplementing the campus facilities, the College utilizes the Stockton Municipal Golf Course and a private riding academy for class activities.

## INFIRMARY

West Memorial Infirmary, dedicated October 8, 1926, the gift of Mrs. Charles M. Jackson in morin Ellen M. West, and her brother Frank Allen West, is completely equipped to care for the health of the students.

The infirmary fee, which is charged to all regular students, entitles them to such medical and dispensary services and hospital care as are needed, under the advice and direction of the infirmary staff. Patients who do not board in the College Dining Hall, however, are charged extra for infirmary meals.

## PACIFIC MARINE STATION

The college maintains a marine station at Dillon Beach, California, devoted to instruction and research in the biological sciences. This station now consists of two well-equipped buildings embracing at total of approximately 10,000 square feet. Additional laboratory and dormitory building is envisioned for in order to provide for the growth of recognition for its research activities

## LIVING ACCOMMODATIONS

The dormitories and fraternity and sorority houses of the College accommoTout 800 students. Women's quarters include South Hall, West Hall, and five date about 800 For men there are North Hall, Quonsets I and II, and three orority houses. Manor Hall has apartments for 23 married couples.

Men who cannot be housed on the campus may obtain private rooms in the ighborhood of the College. A list of rooming places for men is to be found ghbe fice of the Dean of Men. All undergraduate women are required to live in the office of the Dean of Men. in campus residences, except all arrangements for such exceptions, includthose working for room and bo will be made with the Dean of Women.
ing those for sume hall cafeteria provides meals for all who live in the dor-
The Anderson Hall cafeteria provides meals for all wadition there is a mitories and for others who wish to board on the campus. In add

## GIFTS AND MEMORIALS

the arthur and helen alexander foundation, an endowment estab THE ARTHUR AND HELEN A. Alexander, for work in Christian Community Administration.

THE MARIB ALIEN FUND, given by her friends, the income to be used to purchase books in classical literature for the college library.
anderson hall, given by Mr. and Mrs. W. C. Anderson, a social hall and two beautiful dining halls, accommodating three hundred students. A new unit for the use of the Student Y.M.C.A.-Y.W.C.A., the gift of Mr. Anderson, was built and dedicated in 1939.

EDWARD BANNISTER FOUNDATION FOR THE PRESIDNNCY, given in memory of Edward Bannister, D.D., first president of the College, and his wife, Elizabeth, of thward daughter, Mrs. Chester A. Congdon, the income to be used toward the salary and official expenses of the president.
baninistre hall. The exterior covering of brick and teria cotta on this edifice was made possibie by a gift from the granddaughter of the first president, Miss Elizabeth Congdon. tanton.
tanton.
the briggs book collection, given by Mrs. Edna Iliff Briggs of Santa Cruz.

CALIFORNIA HISTORY FOUNDATION, a fund, being constantly increased for advancing the significant contribution of the American Period in California history.

THe albert c. Coburn fund, given by Mrs. Adelaide M. Coburn as a memorial to her son, the income to be used to purchase books for the history
department of the library. nt of the library.

THE BOB COLE MEmORIAL FUND, given by the Stockton. Kiwanis Club to help develop the campus baseball diamond on Knoles Field.

ThE AMELIA DENNIS FUND, given by Charles M. Dennis in honor of his mother, the income to be used for the purchase of books for the music departmen of the library.

THE ASA M. FAIRFIELD FUND, a bequest by Mr. Faiffield, the income to be used for the support of the history department.
the gertrude A. farley book collection, a fund given by friends of Mrs. Farley for books of writers who she especially admired.
the J. William harris fund, obtained thtough the efforts of the Alumni Association and given by friends and former students of Dr wenty-five years of outstanding service, the income to be used per books in education and psychology

The bob heck mbmorial bench, the Pacific players' bench in the Pacific Memorial Stadium, given in memory of Bob Heck by his brothers and friends of Omega Phi Alpha

THE J. M. Hinkle memorial fund, given by Mrs. J. M. Hinkle, to be expended in the teaching of Christian religion and its kindred topics.

THE ROCKWELL DENNIS HUNT Chair in CALIFORNIA HISTORY, a fund established in honor of Dr. Hunt to further the study of California history.

KNOLAS FIELD, an addition of twenty-one acres adjacent to the campus being developed for physical education and athletics, made possible by the gift of Mr. and Mrs. Amos Alonzo Stagg.
kNOLES Portrait, painted by Oscar Galgiani of Stockton and presented to the College by former student body presidents on the anniversary of President Knoles' twenty-five years of service to the College.

THE MR. AND MRS. JERE LEITER FUND FOR CHIMES, given in memory of Mr. and Mrs. Leiter for the establishment of chimes in the pipe organ of amplifying system, given by friends in memory of the late Professor Adelaide Coburn, makes these chimes available to the campus and community.

JERE LEITER FUND, established by order of the trustees from the gift of $\$ 10,000$ made by Mr, Leiter, for many years treasurer of the College, the interest to be used perpetually for administrative putposes.

THE IRVING MARTIN LIBRARY, given by the late Irving Martin, publisher of 1955 . 1955.

THE J. J. MARTIN BOOK COLIECTION, six hundred valuable books on philos ophy and history, the gift of Mr. and Mrs. Martin.

THE PERCY p. MORRIS FUND, given by Mr. Morris to be used for purchase of books in the field of administration.

THE MORRIS MEMORIAL CHAPEL, made possible by the primary gift of Percy F. and Lillie B. Morris. This beautiful building includes many outstanding memorials, including the Baumann tower, the Crummey chapel, and the Bodley choir loft. In addition there are the artistic hand-carved oak furnishings, the everlasting light over the chancel, the chaste cast-stone altar and the Kress Aeolian organ, continual invitations to devotions and consecration.

THE MUTO FUND, established by S. Muto, of Tokyo, Japan, a former student of the College of the Pacific, the interest to be used to purchase books dealing with the problems of Japanese-American relations.

THE MU ZETA RHO LIBRARY FUND, given by alumni of this sorority in honor of Miss Nella Rogers and Miss Etta Booth, the income to be used to purchase books for the College Library.
the napoleona book collection, given by J. W. Mailliard, Jr., of San Francisco.
the charles l. Neumilier fund, given by Miss Emma Neumiller in memory of her brother, to be used for the purchase of books on criminology and sociology.
the georgb c. pearson fund, given by Chaplain George C. Pearson and Mrs. Mary Pearson Schnack in honor of their father, the income to be used for books in religious education.

THE MAB SHAW ROGFRS BOOK FUND, given in her memory, the income to be used for books on physical education with special emphasis on natural dancing.

THE ROBERT C. ROOT FUND, obtained through the efforts of the Alumni Association and given by friends and former students of Professor Root, the income to be used perpetually for books on sociology.
sears hall, given by Mr. and Mrs. Osto H. Sears in memory of his parents, Mr. and Mrs. Joseph Sears of Bakersfield. This building is used primarily for the work in Christian Community Administration.
the harriet m. smith memorial campus, given by the J. C. Smith Co., of Stockton.
the smith memorial gate, given by Miss Nellie E. Smith in honor of her mother, Mrs. Harriet M. Smith.
harry solon art collection, thirty-one pastel portraits given to the College by Mr. Solon, artist, of New York City.

5in WARD EXHIBIT OF INDIAN ART, a collection of American Indian art given by Mr. and Mrs. Garfield Merner of San Francisco to the art department in honor of Miss Grace Ward, for many years a teacher in the department.

THE WATT MEMORLAL ORGAN, a four-manual Estey pipe organ given by Mr. di Mrs. Rolla V. Watt.

WEBER MEMORIAL HALL, given by the citizens of Stockton in honor of ptain Charles M. Weber, founder of the City of Stockton.

THE JAMES b. WEBSTER MEMORIAL FUND, given by friends of the late Dr Webster, professor of psychology at the College of the Pacific from 1926 to 1928 , the income to be used perpetually for books and periodicals on mental hygiene.

West memorial infirmary, given by Mrs. Charles M. Jackson in memory of her parents, George and Ellen K. West, and brother, Frank Allen West.

JOHN THORNTON WOOD MEMORIAL FUND, given by the members and friends of Omega Phi Alpha Fraternity in his memory to purchase books of fiction for the enjoyment and use of students and faculty.

THE DANIRL KINDLE ZUMWALT MEMORIAL. LIbrary fund, given by Mrs. Emma F. Zumwalt of Visalia, California, as a memorial to her husband, income to be used for library purposes.

Yelland SEmiNar room, the futnishings given by Mr. and Mrs. Robert Yelland to provide pleasant surroundings for seminar work.

## SCHOLARSHIPS AND STUDENT AID

The College offers a fairly large number of scholarships, ranging in amounts from $\$ 50$ to $\$ 500$ a year. Qualifications vary according to the purposes of the donors of scholarshp funds, but attention is ordinatily given to some or all of the following: academic record, special talents, leadership abilities, standards of character and citizenship, vocational objectives, and financial need. Entering students must file applications for scholarships, along with applications for admission, by April 15. Applicaiton blanks may be obtained from the Secretary to the President. Final awarding of scholarships will be made upon admission to the College.

THE ALPHA GAMMA SIGMA SCHOLARSHIP, offered by the College of the Pacific to a gtaduate of a junior college in California who is recommended by Alpha Gamma Sigma.

THE AMERCAN ASSOCIATION OF UNIVERSITY WOMEN SCHOLARSHIP, given by the Stockton Branch of the A.A.U.W. to a woman student who is a graduate of a high school in San Joaquin County. Apply to the Dean of Women by May 15.

THE ARNOLD SCHOLARSHIP, given by A. R. Arnold of Tracy to an outstanding graduate of Tracy Union High School.

THE ATKinson scholarships, given by the Myrtle L. Atkinson Foundation for students preparing for careers in the field of religious education.

The baun bngineering scholarships, given by Mr. and Mrs. Ted F. Baun to be awarded annually to four students in civil engineering.

THE ARTHUR BONNER SCHOLARSHIP, given in his memory by friends and relatives to aid a student preparing for full-time Christian service.

THE BOYNTON SCHOLARSHIP, given by Mr. and Mrs. J. E. Boynton, of San Jose, to aid some student in preparation for Christian work.

The burland scholarship, given by Mr. and Mrs. Edward G. Burland in memory of their daughter, Roberta Burland, for the student of music deemed most worthy by the faculty of the Conservatory of Music.
the Case scholarship, given by Dr. Ellen C. Case.
CHICO METHODIST CHURCH SCHOLARSHIPS, given each year by the Chico Methodist Church to two students preparing for full-time Christian service.

THE J. P. CORSON SChOLARSHIP, given by Mr. Corson, of Modesto, to further Christian character and scholarship.

THE TEACHER EDUCATION SCHOLARSHIPS OF THE CALIFORNLA CONGRESS OF PARENTS AND TEACHERS, for a junior, senior, or graduate student training to teach in the public elementary schools of California.

THE CALIFORNIA SCHOLARSHIP FEDERATION SEAL-bRARER SCHOLARSHIP, offered by the College of the Pacific to an entering freshman who is a seal-bearer in the California Scholarship Federation.

TTHE CUNNINGHAM SCHOLARSHIP, given by the late E. M. Cunningham to assist some worthy student in preparation for Christian service.

THE yOHN DELPHIA SCHOLARSHIPs, awarded annually to one student from Patterson High School and one student from Orestimba High School in Newman who are majoring in civil engineering.
the epsilon lambda sigma scholarship, given by Delta Chapter of the Epsilon Lambda Sigma Sorority in the amount of $\$ 150$ yearly to aid some worthy woman student.

THE FIBREBOARD WORKING SCHOLARSHIP IN CHEMISTRY, a plan set up by the Fibreboard Company and the College of the Pacific whereby a student may earn the cost of his schooling and gain practical experience. Information may be obtained through the Chemistry Department.

FORENSIC SCHOLARSHIPS, four scholarships awarded upon recommendation of the Director of Forensics.
tino,
the graves scholarship, given by Mr , and Mrs . S. F. Graves of Cupertino, California.

THE THOMAS GUARD SCHOLARSHIP, founded by James Gillon in memory of the Reverend Thomas Guard, long a member of the California Conference, preferably to be used for the benefit of some student who belongs to the Methodist Church.

THE HRACOCK SCHOLARSHP, in memory of the Reverend H. B. Heacock, long a trustee of the College.

THE HOWARD SCHOLARSHIP, given by Reverend and Mrs. W. C. Howard.
the harriot west jackson scholarship, given by Mrs. Winifred Cumming of Washington, D.C.; and Frank-West of Stockton, California, in memory of their aunt, Mrs. Harriot West Jackson, a long time trustee of the College.

Johns, the income to bre. T. R. JOHNS SCHOLARSHIP, given by Mr. and Mrs. Johns, the income to be used to aid some student preparing for the ministry or for missionaty service.

Th. THE EMELINE NARCISSUS JONRS SCholarship, given by Alice D. Jones in memory of her sister.

THE JUNIOR SCHOLARSHIP, given by the Board of Trustees of the College to cover tuition for the senior year to the student maintaining the highest scholarship during the junior year in the College of the Pacific.
the knights templar educational foundation schorarship, given by the Knights Templar Educational Foundation of California, Inc.
the bessie c. Lenvig scholarship, awarded annually to a worthy student.
the lowell scholarship, given by Mrs. Isabel Lowell.
THE DOCTOR JAMES N. MARTIN CLASSICAL SCHOLARSHIP, a sum of $\$ 2,000$ given by Mrs. May Stewart, class of '79, as a memorial to her father, Doctor Martin, the income to be awarded each year to the student maintaining the highest scholarship in classical courses in the College of the Pacific.

THE MARTIN JEWELRY COMPANY SCHOLARSHIP, established in 1951 to assist that student entering the senior class who shows greatest promise in the field of sports-casting and special events broadcasting.
the national methodist scholarships. A limited number of tuition scholarships are awarded by the Board of Education of the Methodist Church to qualified members of the Methodist Church upon recommendation of the local National Methodist Scholarship Committee.
the milnes scholarship, given by Reverend C. G. and Reverend H. E. Milnes.

MINISTERIAL SCHOLARSHIPS. Sons and daughters of ordained ministers of evangelical churches in active service are granted scholarships to the amount of one-half the regular tuition rate at regular sessions. Students going into full-time Christian service and holding local preacher's licenses or the equivalent are granted scholarships to the amount of one-half the regular tuition rate at regular sessions.
the mitchell scholarship, given by Mr. and Mrs. J. E. Mitchell, of San Jose, California.

MUSIC SCHOLARSWPS, awarded through the Dean of the Conservatory:
THE PANAMA COSTA RICA INSTITUTE SCHOLARSHIPS, two scholarships, one each given by Mrs. Percy F. Morris of Berkeley and the Board of Trustees of the College of the Pacific to selected students who desire to come to the College from the Panama Costa Rica Institute at Panama City, Canal Zone.

THE WILliam h. pFUND SCholarship, given in honor of William H. Pfund.
the president's scholarships, given by the Trustees of the College to be awarded by the President.
the presser foundation scholarship; given by the Presser Foundation for a music student who is expecting to teach.
the sandy price memorial scholarship, given by the Caldor Lumber Company, to be awarded annually preferably to a young man from El Dorado Union High School in Placerville.

THE SEATON SCHOLARSHIP, a fund raised through the efforts of former President John L. Seaton.
the daniel page simons scholarship, given by Mrs. Maty Simons.
THE JANE HARRISON SMITH SCHOLARSHIP, for a student majoring in religious education.

THE STOCKTON COLLEGE SChOLARSHIP, a tuition scholarship awarded annually to an outstanding graduate of Stockton College.

THEATRE SCHOLARSHIPS, four of which are awarded upon recommendation of the Director of the Pacific Theatre.

THE ELIEN GRACE TURNER SCHOLARSHIP, given by Elizabeth Turner in memory of her daughter.

THE GARRISON TURNER FUND, established for the preparation of Christian leaders, and in memory of Garrison. Turner of Modesto, by one who walked with him for fifty-seven years.

THE TUTHILL scholarship, in loving memory of David Tuthill (Professor in the University of the Pacific in 1859, and Principal of the Female Collegiate Institute from 1864 to 1896), given by his widow and son.
the whitaker scholarship, given by the Reverend and Mrs. James Whitaker.

THE WINSOH SCholarship, given by the Reverend H. J. Winsor.

## ADVANCED STANDING SCHOLARSHIPS

Beginning in the summer of 1953 the College of the Pacific instituted a plan which amounts, in effect, to a scholarship of maximum value up to the complete cost on one semester's work for each student who qualifies.

The theory of the plan is simply this, that since it has been demonstrated in many colleges that good students who have not yet graduated from high school can do successful college work, it should logically follow that good students who have graduated (or are about to graduate) from high. school can probably pass several units of freshman college work by examination.

The Plan, therefore, consists of the following program:

1. Twelfth-grade students in their final semester, whose grades qualify them for California Scholarship Federation "Seal-Bearer" status or Life Membership in the National Scholarship Federation, or the equivalent, many apply for the privilege of taking certain College of the Pacific freshman courses by examination. Applications must be accompanied by all the various forms required for Admission into the College of the Pacific.
2. If the student is approved for admission and for taking the Advanced Standing Scholarship Examinations, he will present himself at one of the places designated and at the time specified, and will take examinations in not more than 12 units selected from a list of certain Freshman courses.
3. Anyone taking such examinations may not omit English 11, but is free to select from among the other courses, provided he makes his choice known in advance, and provided the total units attempted does not exceed 12.
4. Grades will be recorded on the College of the Pacific records as plus or minus, depending on whether or not the student passes the course. The grades will not be considered at any time in computing the student's grade point average. The units will be counted toward his graduation, however, but only after the student has spent a total of three semesers (minimum of 36 additional units) in the College of the Pacific. Up until that time the credits will remain dormant on the College of the Pacific records and will not be available for transfer. At such time credit is transferable to most institutions.
5. The examinations will be given on the second Saturday in May at several cities, depending on applications.
6. Applications for these examinations or request for information should be addressed to the Director of Admissions, College of the Pacific, Stockton 4, California. Each application will be confirmed and complete directions sent.

The fee for each examination is $\$ 3.00$, payable at the time the examination is taken, but no tuition fee will be charged.

## FELLOWSHIPS

The College offers a limited number of fellowships, open to gradute students. The appointment of the fellows is for one year only, and is made by the President of the College on recommendation of the Dean of Graduate Studies. The amount of each fellowship will be determined by the President at the time the appointment
is made.

## STUDENT LOAN FUNDS

Information concerning loans may be obtained in the office of the Dean of Men or the Dean of Women. The Methodist Student Loan Fund, the Knights Templar Loan Fund, and the Edella Memorial Loan Fund are administered through the President's Office.

THE C. MARIAN BARR IOAN FUND, obtained through the efforts of the Alumni Association and given by friends and former students of Dean Barr in recognition of outstanding service. Loans from this fund will be open to women students on a basis of chatacter, need, and scholarship.

THE BEN ALI TEMPLE loan fund, providing loan assistance for juniors and seniors as funds are available.

THE beta sigma phi scholarship loan fund, given by Beta Sigma Phi Sorority for women students.

THE bUSINESS AND PROFESSIONAL women's zoan fund, given by the Stockton Business and Professional Women's Club, for women students from San Joaquin County.
the julia andress corbin revolving fund, established by members of the Church of the Wayfarer, Carmel, and augmented by other friends.
the delta kappa gamma loan fund, established by Alpha Zeta Chapter of Delta Kappa Gamma for juniur and senior women who are earning teaching credentials.
thr emily dodge scholarship loan fund, given by El Toyon Chapter, D.A.R., for women students who are juniors or above, with special preference given to music students.
the edella memorial loan fund, given by Miss Frances Knerr in memory of her mother and father to be used as a revolving loan fund for a student in religious education.
the lois catherine farone loan fund, offered through Beta Pi Chapter of Phi Mu Alpha Sinfonia to a male music student.
the eliza m. howell loan fund, for a student especially interested in music.
the knights templar loan fund. A few seniors may obtain loans from the Knights Templar Educational Foundation. Detailed information may be secured from the President's secretary.
thb lange fund, given by Dr. and Mrs. Harry Lange of Bakersfield, to assist needy and worthy students in preparation for full-time Christian service.
the bennington mc gee loan fund, given by Mrs. Ada M. McGee in memory of her husband, to be loaned to worthy students.
the ensign joseph sherwood mayo fund, given by Mr. and Mrs. Frank V. Mayo in memory of their son, to be loaned to students who are or have been members of the order of De Molay from chapters sponsored by the Stockton Scottish Rite Bodies.
the methodist student loan fund. A limited number of worthy students, members of the Methodist Church, may obtain Ioans from the Student Loan Fund administered by the Board of Education of that church. Christian character, satisfactory scholarship, promise of usefulness, financial responsibility and recommendation of the church to which the applicant belongs are essential to a loan Each borrower must sign an interest-bearing promissory note.

The mu phi epsilon loan fund, established by the Stockton Alumnae Chapter for senior women music majors.
grace taylor pearce revolving loan fund, given by friends of Grace Taylor Pearce to commemorate her years of service in the public schools of San Joaquin County.
thb ardene phifer memorial loan fund, a revolving fund given by friends of Ardene Phifer for a woman student in music, the student to be selected by members of the Conservatory and of the Mu Eta Chapter of Mu Phi Epsilon.
the louis claybourne phillips student loan fund, given by Mrs. Phillips in memory of her deceased husband. This fund is to be used to assist a worthy and needy student of the College at the discretion of the College and without discrimination as to sex, religion, or particular scholastic interest.
the president's and dean's revolving fund, given by Mr. and Mrs. Amos Alonzo Stagg to aid worthy students.
rotarian loan fund, given by the Lodi Rotary Club to assist some worthy young man.
rotarian loan fund, given by the Stockton Rotary Club to assist some worthy young man.
the lafayette $J$. Smallpage loan fund, a revolving loan fund to be used for the help of needy students.

THE LODI SOROPTIMIST LOAN FUND, given by the Lodi Soroptimist Club for women students, with preference given to those from the Lodi area.

THE WHITENER LOAN FUND, a tevolving fund established by Mr . and Mrs. Gilbert V. Whitener to be used for students majoring in religious education.

Several loan funds for students have been established through the efforts of the Alumni Association. Applications should be made to the Alumni Secretary.

## SELF HELP

A number of young men and women find employment in the College or in the community by which they earn a part of their expenses. The College attempts to aid worthy applicants in finding places. No student should come expecting to earn all of his expenses or without sufficient reserve funds at his disposalined care for expenses for at least the first semester. Information may be obtained at the office of the Dean of Men or Dean of Women, or Director of Admissions. at the office of the Dean of Men or Dean of (ull-time study list of $161 / 2$ units plus a It should also be pointed for social life and recreation require the entire time of the average student.

## STUDENT ORGANIZATIONS AND ACTIVITIES

Student Government. The students of the College have organized themelves into the Pacific Student Association. This organization collects the student selves into the Pacific Student Assll-rounded program of social, athletic, and other student activities under the general advice of the Dean of Men and the Dean of Wtudent

The women students have an organization of their own known as Associated Tomen Students with representation on the executive cabinet of the Pacific Student Association. The A.W.S. sponsors acivities of particular interest to women, including the Women's Recreational Association.

Religious Organizations. Most of the extracurricular organized religious activity of the College is under the sponsorship of the Council of Religious Activties, a joint committee of students, faculty and friends of both Stockon College and the College of the Pacific. Much of the activity occurs in the Anderson and the College of the Pacific. Much of the activity Student Christian Associ" $Y$ " Center building, which' is the headquaten's $Y$. Represented on the Council ation. This includes a Men's $Y$ and a Women's Y, Represed Chapel and the Vespers of Religious Activities are also the Committee for Tuesday Chas Religious Emphasis Committee, as well as special committees for such projects as Redig students of the Week. A campus chapter of the Newman Club is maintained Clic Christian FellowCatholic faith. Jewish students have a Hillel Club. The Pacific Chais also church-
ship is a chapter of the Inter-Varsity Christian Fellowship. There are alt
sponsored groups with which students may affiliate, such as the Canterbury Club, Central Wesleyan Fellowship, Presbyterian Chi Rho, Channing Club, and Christian Science. Chi Rho is a vocational organization sponsored by the Department of Religious Education to provide fellowship for those going into full-time Christian service and for those who propose to magnify Christian motivation in their chosen vocation.

Soclal Organizations. There are three local social fraternities and five sororities on the campus, each maintaining a chapter house as home for its members. They are Alpha Kappa Phi (Archania) fraternity founded April 1, 1854; Rho Lambda Phi fraternity, founded as Rhizomia Literary Society, November 8, 1858; Epsilon Lambda Sigma sorority, founded as Emendia Literary Society, November 12, 1858; Alpha Theta Tau sorority, founded as Sopholechtia Literary Society, November 12, 1881; Tau Kappa Kappa sorority, founded as Athenaea Literary Society, October 8, 1917; Omega Phi Alpha fraternity, organized December 21 1921; Zeta Phi sorority, founded in 1936 as the Zetagathean Club, and Mu Zeta Rho, founded as Philomusia Society, March 3, 1913, and reactivated in 1949.

Honorary and Departmental Organizations. The College was ap proved in 1951 for a chapter of the national honoraty scholarship fraternity Phi Kappa Phi, and the chapter was installed that spring. As a general honorary fraternity it took over the functions of the All-College Honor Society which had been in existence since 1926. Membership is restricted to those in the upper tenth of each graduating class who have distinguished themselves by character and service, and to outstanding graduate students, alumni and faculty members.

Other general organizations are Blue Key, a national honor society for senior men; Knolens, a local honor society for senior women, named in honor of Mrs. Tully C. Knoles; Sophomore Women's Honorary; and Sputs (probationary).

Athletic and physical education organizations include the Physical Education Club, the Aquatic Club, Block P, Orchesis, Ski Club, a chapter of the national athletic fraternity Sigma Psi, and the Women's Recreation Association. For men physical education majors there is Phi Epsilon Kappa, national professional physical education fraternity.

In biology there is the Omicron chapter of the national society Beta Beta Beta, established in 1931.

In chemistry there is a student affliate of the American Chemical Society. Economics has its Economics Club.
In education there is a branch of the California State Teachers Association, and in May 1951 there was installed a campus chapter of the national education fraternity Phi Delta Kappa.

Engineering majors maintain a Student Engineering Society.
For forensic students a chapter of the national fraternity Pi Kappa Delta is located on the campus.

In home economics there is a chapter of the national society Delta Mu Eta.
Journalism majors may join the Alpha Delta Chapter of the Alpha Phi Gamma fraternity.

For music students there are a general Association of Music Students and three national societies: Mu Phi Epsilon sorority (Mu Eta chapter, 1920), Pi Kappa Lambda fraternity (Delta chapter, 1921), and Phi Mu Alpha (Beta Pi chapter, 1931).

The Philosophy Club is for all students interested in this feld .
Students interested in psychology may join the Psychology Club.

Radio majors have a national honorary society known as Alpha Epsilon Rho.
The various social science departments unite in supporting a chapter of the national society Pi Gamma Mu.

In theatre, the greatest honor is to be elected to the national Theta Alpha Phi fraternity.

## ACTIVITIES

Athletics and Physical Education Activities. The fact that a physical education activity course is required of practically all students each semester for three years means that the sports program is a most active one at the College. Intercollegiate teams compete in football, basketball, baseball, tennis, swimming, rugby, track, skiing, cross country running, and gymnastics under the rules of the Pacific Coast Inter-collegiate Athletic Conference. Intramural, interclass, and allcollege tournaments are conducted for both men and women.

Physical examinations are given to all students entering the College, and none is allowed to participate in a sport for which he is physically unqualified.

Forensics. Enthusiasm for debate and other forms of competitive speaking is a tradition at the College of the Pacific. The success which students have attained in representing the College in its extensive forensic program has won it recognition as one of the leaders of the West in this field. Academic credit toward the Bachelor of Arts degree is granted for approved participation in forensic contents.

In addition to attending the torunaments and conventions of these organizations, forensic students make many public appearances in and around Stockton. It is the aim of the College to make available to as many students as possible a It is the aim of the College to make available to as many students as possible a
variety of competitive and other public speaking opportunities. These speech variety of competitive and other public speaking opportunities. These speech
experiences include debate, discussion-forum, extempore and impromptu speaking, experiences include debate, discussion-forum, extempore and impromptu speaking,
after-dinner speaking, oratory, student legislative assemblies, and adaptations of after-dinner speaking, orato
these forms for the radio.

Broadcasting. The College of the Pacific has pioneered in the areas of both public service broadcasting and career training in radio. In 1940 the College presented the first major course in broadcasting offered on a western campus. In 1947 the Federal Communications Commission licensed the building and operation of the frequency-modulation station KCVN at 3400 watts power on 91.3 megacycles. The operation of this educational station is both curricular and extracurricular activity for an increasing number of students.

Most of these facilities are utilized by the student-owned and operated station which is restricted to the campus area by wire transmission. This station provides radio students with a complete laboratory experience in broadcast procedure and management.

The College is also including training in television as rapidly as equipment can be made available. A camera is under construction and in the meantime programs can be produced on motion picture film.

Drama. The Pacific Theatre has become widely recognized among campus production groups in America through its work of the past twenty-six years, and also makes a significant contribution to the cultural and entertainment life of the Central Valley. More than 200 major plays, representing a cross section of dramatic literature "from Athens to Broadway," have been presented here since 1924.

The theatre is not a technical school, but is organized academically within the Department of Speech in the liberal arts framework of the College. The fact that many of its students have had marked success in the professional theatre, however, attests to the value of grounding the education of an actor broadly in the humanities.

The historic old Fallon House Theatre in the Mother Lode town of Columbia has been restored by the State and will operate as the College summer theatre again during the summers of 1954 and 1955

Publications. There are two major student publications, the campus newspaper, Pacific Weekly, and the Naranjado, college annual. Both these publications have received first class honor ratings in national competition. The former is a member of the Associated College Press, the latter of the National Collegiate Press Service. Various student organizations also have their own house organs.

## EDUCATIONAL PROGRAM

## ADMISSION

The following conditions must be met to qualify for freshman entrance:

1. High school graduation in the upper half of the class or with 16 semester courses of A and B grades in the 10th, 11th, and 12th years.
Borderline cases will be considered when the application is supported by a letter of recommendation from the high school principal or someone designated by him
Applicants who do not meet one of these conditions may substitute passing scores in one of the standard examinations such as that of the College Entrance Examination Board, or other standard test of high school content. The Board holds a series of examinations, usually on four dates during the winter and spring, at a number of centers. Address inquiries to College Entrance Examination Board, 4641 Hollywood Blvd., Los Angeles 27, California.
2. Supporting recommendations as to fitness and character from a high school official and a professional person, and a statement from a parent or guardian.

Applicants may enter in advanced standing from other accredited colleges and universities on the following basis:

1. High school graduation.
2. Transferable college credit of 15 or more semester units with a C average or higher.
3. Evidence of fitness and good character.

Special or unclassified standing will be granted to qualified adults taking limited courses for which they have the necessary prerequisites.

## Recommended High School Preparation

Students planning for advanced college work will benefit by completing all or a large part of the following recommended program in grades 9 to 12: English, 3 years; foreign language, 2 or more years in one language or 2 years each in two or more languages; algebra and geometry, 1 year each; U.S. history and civics, 1 year; natural science, 1 or 2 years in the 11 th or 12 th grades.

Those completing foreign language and science as listed above will be exempt from some of the college requirements in these fields.

## Classification Tests

Classification tests will be required of all new students, except those admitted in advanced standing whose transcripts of record show the scores of the same or similar tests completed.

Since these tests are for purposes of classification and sectioning they will be given immediately before the beginning of each semester just prior to registration.

## APPLICATION PROCEDURE

Application blanks may be secured from the Director of Admissions, College of the Pacific, Stockton, California. They should be filled out and filed well in advance of the opening of the senester for which admission is desired.

Students attending school at the time of making application will receive a statement of tentative approval, of notice of other action taken, within a few days after complete records are submitted. Candidates not in school when making application will receive a statement of final approval, or notice of other action taken, immediately.

## Counseling

Each lower division student is assigned to an adviser who will assist with educational and vocational counseling in cooperation with the Deans of Men and Women. By the end of the sophomore year each student will be required to seleci a major, and will then be assigned to the chairman of the major department who will serve as adviser until the time of graduation.

The College of the Pacific subscribes to a policy of counseling which places at the disposal of every student an easily accessible, friendly, competent, and sympathetic faculty member who will listen patiently to his plans and problems and will present to him as fully as possible the various possibilities, but will encourage the student to make his own decisions and be responsible for cartying them out. In short, while recognizing the immaturity of many freshman students, the College wants to hasten their maturity in a healthy way by giving them responsibility as fast as they can take it.

## Veterans

Veteran students planning to study under Public Law 346 must present an original Certificate of Eligibility if they have not had any previous course of training, or a Supplemental Letter of Eligibility if any one or more of the following conditions prevail: change of major course, change of school or training establishment, change from undergraduate to graduate status even though in the same major and same institution, change of immediate objective such as from a degree to a credential.

Former veteran students under Public Law 346 or 550 who have been in continuous training may continue within the limitations of the preceding paragraph without further authotization by the Veterans Adminisraion.

New veteran students and others who bave studied elsewhere under Public Law 346 or 550 must present an Original or Supplemental Certificate of Eligibility at the time of enrollment.

Veterans enrolled in the College of the Pacific are under the jurisdiction of the San Francisco Regional Office of the Veterans Administration. Veteran students transferring from any other region must artange for a transfer of their case file to San Francisco to assute payments of subsistence and tuition

Veterans planning to study under the State of California Plan must secure prior approval by the appropriate State office.

Veterans who are teaching on full-time contracts and who wish to entoll for part-time study may need to secure information pertinent to their cases from the Veterans Administration prior to enrollment.

Veterans who do not possess authorization papers appropriate to their case (Original or Supplemental Certificate of Eligibility under P.L. 346, approval of a training officer under P.L. 16 or an Authorization Certificate under the State of California) at the time of enrollment will enroll as non-veteran students. Any fees paid will be subject to full or partial refund on receipt of the necessary papers.

Veterans completing an objective such as a degree or credential duting any session who wish to continue in a progression of their course of study toward an advanced degree, of those transferring to other institutions following any session,
must apply for a supplemental letter must apply for a supplemental letter of eligibility while in training.

Any questions concerning eligibility, entitlement, changes of courses, etc., should be referred to the Veterans Administration, Regional Office, 49 Fourth St., San Francisco.

Veterans' enrollment and questions pertaining thereto will be handled by the Veterans' Clerk in the Registrar's Office, Room 107, Administration Building.

## GENERAL EDUCATION

The College of the Pacific subsctibes to the theory that college education should include both the general and the special, both the cultural and the vocational. Accordingly, the requirements for the bachelor's degree, especially the Bachelor of Arts, are so arranged as to include some 50 units (depending on what the student has had in high school) of basic work in the humanities, the natural sciences, and the social sciences. The remainder of the work is grouped around a major in some one department or small group of departments.

Most of the basic courses are taken in the lower division, but not necessarily so. They are rather to be thought of as a cone of general studies tapering off as the specialized work increases up through the four years.

## REQUIREMENTS FOR GRADUATION <br> THE BACHELOR OF ARTS DEGREE

The following is an outline of the total lower-division and upper-division requirements for the Bachelor of Arts degree:
I. Total requirements

The minimum total number of units required is 124 . In addition there must be a number of quality points equal at least to the number of units attemptec. In the case of transfer students the number of points earned in the College of the Pacific must also not be less than the number of units
a. The maximum number of units acceptable from a junior college is 64 .
b. No junior college course will be accepted after a student attains upper division status.
c. At least 40 upper division units must be earned after a student attains upper division status.
d. At least 24 of the last 30 units required for graduation must be earned at the College of the Pacific.
II. Major requirements

With the total number of units presented for graduation there must be a concentration of at least 24 in some one department, called the major. (See departmental section for specific requirements.) Not less than 12 of these must be upper division units of "C" quality or better. Not more than 50 of the total 124 units, however, may be in any one department.
III. Basic requirements (minimum stated in each instance)

1. English composition-3 units passed with a grade of "C" or better, unless excused by the English Department.
2. English or American or world literature- 3 units.
3. Speech-3 units in fundamentals of speech or public speaking.
4. Language-At least four college semesters of 3 or more units each in not more than two foreign languages, with the following substitutions allowed:
a. The course "Art of Language" may be substituted for the third or fourth semester of this requirement.
b. A college course of at least 3 units in a foreign literature in trans lation may be substituted for one semester of this requirement.
c. Two or more years of one language completed in high school (grades $9,10,11,12$ ) may be substituted for the same language in college at the rate of one high school year per college semester.
5. Natural science-
a. If two or more years of science have been completed in the 11th or 12th grades, a minimum of 6 additional units must be completed in either lower or upper division. These should be so chosen that in the total both physical and biological sciences will be included
b. If one year of science has been completed in the 11th or 12 th grade, 9 units will be required in college. (This may be satisfied by a a course of 8 units in a laboratory science, however.) Distribution should be chosen as in (a) above.
c. In case no science has been taken in the 11th or 12th grades, 12 units of college science are required, distributed so as to include both physical and biological fields.
6. U.S. history and constitution, including a study of American institutions and ideals and of California government-A minimum of 3 units is required unless sufficient knowledge is demonstrated through examination. (For more detailed statement, see History Department.)
7. Social science-A total of 8 units (including any taken to satisfy the U.S. history and constitution requirement) from the fields of anthropology, economics, history, political science, or sociology.
8. Physical education activity-One-half unit each semester during the freshman, sophomore, and junior years, with a minimum of 3 units requited and a maximum of 4 units allowed from both upper and lower division. (This maximum of 4 is raised to 8 for majors in Physical Education.) For women, one-half unit of the 4 must be in sports, and one-half in modern dancing. For men, not more than 2 of the 4 units may be in the varsity sports. Persons 25 years of age or older at the time of the first enrollment in the College, however, are excused from further physical education activity requirement.
9. Personal hygiene- 2 units, unless excused by the Physical Education Department.
10. Fine art-A total of 2 units is required. One of these may be in art plus 1 unit in music, or both units may be in either art or music, except that majors in att must also take 1 unit in music and majors in music at least 1 unit in art. Any music course is acceptable for this requirement, but Music 10 is the course recommended for non-music majors. In art, any course in the department is acceptable, with Art 12 recommended for the general student. Equivalent work in art or music from other colleges is accepted.
11. Bible-2 units of Old Testament literature, history, or archaeology plus 2 units of New Testament literature, history, or archaeology, a a total of 4 units.
12. Philosophy, and home and family-At least 2 units from any of the following (or equivalent from other colleges): Home Economics 40 (developed especially for this requirement), 106, 134, or 136; Religious Education 169; Psychology 130 or 136; Sociology 155; or any course in philosophy.
IV. The following limitations are placed on number of units allowed toward any baccalaureate degree:
13. The maximum number of units accepted from all junior college work is 64 .
14. No credit is given for typing, shorthand, applied music, or work experience, and not more than 6 units for all other lower division terminal courses.
15. A total of not more than 12 units may be applied from any or all of the following: courses taken in accredited correspondence schools, or in the United State Armed Forces Institute; or courses passed by examination.
16. Not more than 12 units from any one or all of the following courses may be applied: Debate, applied dramatic art, applied radio, band, orchestra, glee club, A cappella choir, chorus, Orchesis, journalism projects, forum arts and feld work. Not more than 4 units per semester will be allowed for any course in field work, with a maximum total of 8 units allowed toward the degree.

## THE BACHELOR OF SCIENCE DEGREE

The degree Bachelor of Science is available for majors in the following fields: Botany, Chemistry, Geology, Home Economics, Physics, and Engineering Science. (It should be noted that for all except the last, the Bachelor of Aus degree is also available.) The Bachelor of Science degre closely related departgreater concentration of work in the major department and closed red ments than does the Bachelor of Arts, with correspondingly reduced requirements in liberal arts.
I. Total requirements-The same as the Bachelor of Arts degree above.
II. Major requirements-The number of units prescribed by the major department shall not be less than 36 nor more than 56 , some of which may be in related departments.
III. Basic requirements--The minimum for each subject is state below. excused by the English Department.
2. English or American or world literature-3 units.
3. Speech-3 units of fundamentals of speech or public speaking.
4. U.S. history and constitution, including American institutions and ideals and California government-a minimum of 3 units, unless passed by examination (for details, see History Department).
5. Social science-6 units, (including any taken to satisfy the U.S. history and constitution requirement) from the fields of anthropology, economics, and constitution requirement) sociology.
6. Physical education activity- 3 units, the same as for the A.B. degree, above.
7. Bible- 4 units, 2 each from the Old and the New Testament, in the field of literature, history, or archaeology.
IV. Limitations-The same as for the A.B. degree, above

THE DEGREE OF BACHELOR OF SCIENCE IN CIVII ENGINEERING
The degree of Bachelor of Science in Civil Engineering will be conferred upon those candidates who fulfill the following requirements:
I. The satisfactory completion of all admission requirements:

High school preparation should include English, 3 units; mathematics, including trigonometry, 4 units; chemistry, 1 unit; physics, 1 unit; social science or one foreign language, 2 units; U.S. history, 1 unit; and electives, 3 units. One unit of mechanical drawing is recommended as one of the 3 units. One unit of many of these subjects will handicap the stadent's electives. Shortages in any of these subjects win scholarship record which progress in college. The appl of his graduating class. The College of the places him in the upper hallowing substitute for the above grade requirePacific will consider fation from a high school principal, dean, or counselor; ment: (1) recommendation from a ghord wouild admit the applicant to a (2) evidence that the high school record woutd adm which the high school college or university of high standing a stisfactory score in a recognized pre work was completed, of (all applicants are urged to take the latter test engineering apter registration if not previously taken.
I. A minimum of 24 units must be earned in the last academic year in residence at the College of the Pacific.
III. The satisfactory completion of the prescribed subjects with a passing grade and a minimum grade point of 1.0 (average of " C "). Any substitutions for required courses not otherwise provided for will be permitted only on approval of the faculty of the Department of Civil Engineering. A minimum grade of " C " must be made in any such approved course.
IV. The satisfactory completion of a minimum of 130 academic units (in addition to physical education) ; of these, 66 are to comprise subjects specified in lower division curriculum and 64 shall be in fulfillment of lower division requirements. (For details of curriculum, see Department of Civil Engineering.)
V. Approval of the faculty of the Department of Civil Engineering.

## THE BACHELOR OF MUSIC DEGREE

See section on Pacific Conservatory of Music

## THE MASTER OF ARTS DEGREE

Students who have received their baccalaureate degree from the College of the Pacific or any other accredited college or university, who have not less than a " $B$ " average in all upper division work, and who have taken a Graduate Record Examination may be admitted to candidacy for the degree of Master of Arts. (In Examination may be admitted te candiaty for he degree of Master of Arts. (In Record Examination has not previously been taken, it must be taken in the first Record Examination
semester or term of residence after application for master's degree candidacy is semester or term of residence after application for master's degree candicacy is
submitted. In the case of applicants whose upper division work is below a " $B$ " average, the score of the Graduate Record Examination may be considered for average, the score of the Graduate
tentative admission to candidacy.

Upon the recommendation of the chairman of the department in which the candidate expects to major (for list of departments offering the Master's degree, see pages 65,66 ), the Dean of Graduate Studies will consider the application of each candidate and determine his qualification for graduate work. Application blanks for admission to graduate standing may be secured from the Director of Admissions, and blanks for admission to master's degree candidacy from the Dean of Graduate Studies. (See filing dates under College Calendar, page 8).

In addition to the requirements for the undergraduate major or its equivalent, the general requirements for the Master of Arts degree are:

1. The satisfactory completion of 30 units of graduate work, 12 units of which, plus 4 units for the thesis, must be in the major department. The other 14 units may be in not more than two other departments, with the permission of the major professor. Sixteen units of the 30, including the thesis, must be taken in courses numbered 201 or above.
2. The completion of a minimum of one academic year of "residence work," i.e., the candidate must be registered for at least 4 units per semester. Two summer sessions (at least 4 units each) will be the equivalent of one half-year of residence. Graduate work done in other institutions will be considered and evaluated by the Graduate Council, but 22 of the
required units must be done in residence at the College of the Pacific required units must be done in residence at the College of the Pacific. Off-campus courses taught by College of the Pacific teachers will be accepted up to a maximum of 6 units.
3. The passing of a departmental examination covering the major field (date to be fixed by department chairman).
4. The presentation of an acceptable thesis. It is the responsibility of the candidate to consult with the chairman of his thesis committee regarding the progress of the thesis and the fixing of dates for submitting the various the progress or the date for submitting final copies to the Thesis Librarian, however, is fixed (see Calendar, page 8).
5. The maintaining of an average grade of " $B$ " or above, both in the major department and in all work taken as a graduate student, either at the department and in all work taken as a sistitution, and whether accepted College of the Pacific or any

Other regulations concerning the Master of Arts degree are as follows:
a. Directed teaching, advanced grammar, courses in applied music, drama, debate or similar subjects and in physical education activities, and departdental method courses which are used to satisfy requirements for either the secondary or the elementary credential may not be offered for an advanced degree.
b. Lower division units will not count toward an advanced degree.
c. No more than 4 units will be allowed for the thesis.
d. The study list of a candidate for this degree in any semester or in the summer session must be approved by the chairman of the major department both as to courses and as to size of load; in the summer school, ment both as to courses and may be carried in any one session.
e. If the work for the Master of Arts degree is not finished within seven years from the date of application for the degree, a new application must years from th.
be presented.
f. A request to accept for the Master of Arts degree any graduate work taken A refore the application for the degree is presented will be considered by before the application for department and the Dean of Graduate Studies.

## THE MASTER OF SCIENCE DEGREE

The degree of Master of Science is offered in most departments of the College which grant the Bachelor of Science degree. Regulations for admission to candidacy and for course and thesis requirements are substantiany dearments, candidacy and for the Master of Science degree as for the Master of Arts. Certain departments, the Master of Science degree as for the Mich must be met by candidates for the however, may have in their particular filds.

Interested students should confer with department chaitmen and with the of Graduate Studies before the beginning of the semester in which they wish to become candidates for this degree.

## THE MASTER OF MUSIC DEGREE

The basic requirements for the degree of Master of Music are similar to those for the Master of Arts degree. For specific requirements for the degree of Master of Music, see the section on Pacific Conservatory of Music.

## THE DOCTOR OF EDUCATION DEGREE

The College of the Pacific offers work through its School of Education leading to the degree of Doctor of Education. The degree from this College will demand a high level of scholarship, good moral character, technical mastery of a demand a high level of scholarship, good moral character, technical mastery of a special field of education, and evidence of undoubted power of research. There
must be the equivalent of at least three years of successful graduate study in acmust be the equivalent of at least three years of successful graduate study in ac-
credited colleges and universities, including at least one year of full-time residence credited colleges and universities, including at least one year of full-time residence -ordinarily the final year-at this college. Declaration of intent of candidacy and advancement to candidacy are separate and distinct steps toward the degree. An essential part of the requirement is the approval of the dissertation, following which the final oral examination determines to the satisfaction of the candidate's committee whether he has reached the stage of scholarly advancement and research ability demanded for final recommendation for the doctorate.
Advancement to candidacy is based on the following:

1. Declaration of intent of candidacy, following not less than one year of approved graduate study (minimum of 30 semester hours or the master's degree) beyond the baccalaureate degree.
2. Results on the Graduate Record Examination and on the Miller Analogies Test.
3. Qualifying examinations, written and oral, in the general field of education, taken toward the end of the year of study (minimum of 24 semester hours) beyond the declaration of intent of candidacy.
4. Approval of the candidate's plan of doctoral studies.

The requirements following advancement to candidacy include:

1. Minimum of 65 semester hours beyond the baccalaureate degree, exclusive of the dissertation. At least 36 of the total 65 hours must be taken at this College.
2. Grade-point average of at least 2.0 in all work taken while in graduate status. This should be, preferably, near 2.5 .
3. Minimum full-time residence of one year or its equivalent at this college, following advancement to candidacy. This requirement may be met by the fall and spring semesters or a college year; by one full semester and a double summer session, or vice versa, taken consecutively; or by a spring semester and a fall semester in the same calendar year. To maintain residence status as a doctoral candidate, a minimum of 8 hours of work per semester or per double summer session is required.
4. An acceptable dissettation (credit value, $10-15$ units) based on an original investigation. It must represent either a contribution to knowledge and understanding, or an application of existing knowledge to the candidate's special field of study. It shall be presented to the chairman of the candidate's Cornmittee on Studies not later than April 1 before the Commencement at which the degree is to be conferred.
5. Two carefully prepared summaries, of approximately 500 and 200 words, respectively, describing the research problem, the methods used, and the results obtained. The first summary is to be used for the final oral examination; the longer form is for Abstracts of Dissertations for the college libtary.
6. Satisfactory work in a final oral examination held following approval of the dissertation.
7. Two copies of the dissertation, prepared in conformity with regulations of the college. These are to be deposited in the library immediately after successful completion of the final oral examination.

Advanced students interested in the Doctor of Education degree should consult the Dean of Gradutate Studies and the Dean of the School of Education.

## REQUIREMENTS FOR TEACHING CREDENTIALS

See section on School of Education.

## GRADES AND GRADE POINTS

The grades and their point values are as follows:
A-(exceptionally high scholarship), 3 points per unit.
B-(superior scholarship), 2 points per unit.
$C-($ good average scholarship), 1 point per unit.
D-(poot but passing), no point value.
F-(failure), no point value.

+ -(passing-given for courses passed by examination), 1 point per unit.
There is, in addition, a temporary grade of " E " (condition), which may be given to a student who has been unavoidably prevented rombscript (a, b, c, or d) of a semester. The letter " E " must be accompanied by a subscript ( a , $\mathrm{b}, \mathrm{c}$, or d ) which indicates that the permanent grade may not be higher than the subscript wsed, although it may be lower. Condition grades are expected to be made up promptly, since they definitely place in jeopardy one's academic standing. Unless promptry, smoved by the following dates, they automatically become grades of "r: they are removered in the fall semester, by the following July 1 ; in the spring for those incurred in the fall
semester, by the following Octobes 1 ; in the summer session, by the following March 1.

A letter " n " placed after a grade mark indicats a continuous course, final redit not being given for the first semester until the second semester is completed, except by written approval of the department. "p indicates approved withdrawal from a course by a student who was passing it at the time; "Wf" indicates approved withdrawal from a course by a student who was failing it at the time.

## HONORS AND AWARDS

Graduation honors are awarded according to the following averages: honors, 2.00; high honots, 2.50; highest honors, 2.82 .

A student coming from another institution, the standing of which is subantially that of this College, will have his honor points counted for honors as listed on his transcript, but he may not gain higher honors than he has eatned in the College of the Pacific.
the m: friedberger and company scholarship award is given to the student who has attained the highest scholastic record of the graduating class.

THE ASSOCIATED wWMEN STUDENTS AWARD was established in honor of former Dean of Women Beulah Lee Watson Kaiser and is given to the "outstanding graduating senior woman."
the james c. corson anfard was established by fotmer Dean Corson in honor of his father, Mr. J. P. Corson. It is awarded "to the man in each graduating class whose character and citizenship have been outstanding as revealed through his personal development and his contribution to the enrichment of college life."
the melvin lawson award is given annually "to the student whose contribution to drama has been judged most valuable duting the Pacific Theatre season."

THE KIRKBRIDE AWARD is a series of three prizes- $\$ 25$, $\$ 15$, and $\$ 10$ respectively-awarded by the California History Foundation from a fund provided by Charles N. Kirkbride for the best original studies in the local history of California.

THE Thomas o. boren amard is given annually for excellence and service in the field of student publications at the College of the Pacific. It is awarded to the member of the senior class whose contribution, in the estimation of the Publications Committee, has been most valuable to student publications of the College of the Pacific.

## MISCELLANEOUS ACADEMIC REGULATIONS

Classification of students. Graduate Students-Those who have received a bachelor's degree in this or another accredited institution and who have been accepted into graduate standing to pursue courses of an advanced nature, either on a part-time or full-time basis.

Undergraduate Students-Those who have been accepted by the Admissions Office as candidates for any of the baccalaureate degrees.

Undergraduate Class Standings-Freshmen, those who have completed less than 28 units; sophomores, 28 to $55^{1 / 2}$ units inclusive; juniors, 56 to $89^{1 / 2}$ units, inclusive; seniors, 90 units or more.

Part-Time Students-Those who have been admitted as candidates for a degree but are carrying less than 12 units.

Unclassified Students-Mature persons who are not candidates for a degree or a teaching credential may enroll as unclassified students in any course for which they have adequate preparation. Unclassified students are not required to present transcripts of record, but if they desire to become candidates for a degree, they must qualify in the regulat way by presenting a transcript of previous record and having it processed through the usual channels.

SIZE of STUDY LIST-In no case may a student register on his course card for more than 16 units of work in a semester (including any course taken concurrently in another institution), except for 1 unit of choral music, 2 units of applied music, $1 / 2$ unit of physical education activity, and $1 / 2$ unit of Forum-Arts. (Any one-unit course scheduled for the Christmas or Easter vacation period may also be added as desired.) Permission to carry excess units may be granted, but only on petition, to those with the following grade point averages: for 1 excess unit, 1.6; for 2 excess units, 2.0 ; for 3 units, 2.5. For new transfer students, the cumulative grade point average will be the one used for this purpose, but after one full semester in this College, the grade point average based on College of the Pacific work alone will be used.

REPETITION OF A COURSE-Any lower division course in which a grade of "D," "E" or "F" is received may be repeated without penalty, with the following provisions: The course must be repeated before the student has junior standing, provisions: will be awarded only once; the student will be entitled to the grade points credit will be awarded only once, the course; in computing the grade point average for the grade earned on repeating attempted will be counted only once.

CONCURRENT ENROLIMENT-Any student desiring to carry courses for credit concurrently in another institution must have such courses approved by his adviser and the Administrative Committee on a form provided by the Registrar's Office. and the units gained by such concurrent entollment will be accepted by the College of the Pacific, however, unless of the Pacific. 12 units in the College

CHANGE OF GRADE-Conditional grades (" $E$ ") must be changed to another letter within the time limits mentioned above. (See Grades and Grade Points.) Otherwise no change of grade is permitted after the grade has been handed in, except for purely clerical errors and with the approval of the Dean of the College.
late registration fee-Enrollment in classes will be reported to the instructor by the Registrar. It is important that the instructor should know early the personnel of his classes; hence a late semester. students who register after the first of the semester.

CHANGE OF STUDY LIST; IEAVE OF ABSENCE; WITHDRAWAL-No change may be made in the study list after a student has formally registered, except by petition. Permission to take up a new course after the second week of a setitions or to drop a course after the sixth week, will not ord "late" and recuire a fee submitted after these respective dates are considered late, and requie a of $\$ 4.00$. If withdrawal is permitted during the first six weeks, the designation "W" is entered in place of a grade for the course; if withdrawal is permitted after the first six weeks, then the designation is etiher "Wp" or Wf," depending on whether the student was passing or failing in the course "at the time the petin whether the student was pales are counted the same as " $F$ " grades in computing the grade point average.

If it becomes necessary for a student for any reason to withdraw from college, he must submit a petition for a formal withdrawal; otherwise, he runs the risk of having his registration privileges withdrawn and forfeiting his right to an honorable dismissal.

ACTIVITY courses-Students must formally entoll in all activity courses for which they wish credit. No retroactive credit will be allowed after the end of the semester in which the course is given.

APPLICATION FOR GRADUATION. Each candidate for a degree is required to fill out and present an "Application for Graduation" blank during the semester prior to his graduation semester, at the date specified in the college calendar. This is done in order to make sure that the student is aware of alion list. requirements, and that his name is properly entered on the graduation list.

ABSENCES-For Lower Division Courses: Regular attendance at classes is arted required of all students. Absence for a single day mes from class because of illness instructor. Students should not absent the minf who will provide written excuses. without consultation with the more consecutive days for reasons other than illness, In case of absences for two or more consecutive of Men or Women within one week the student may
of the absence of the absence.

As soon as the number of unexcused absences exceeds twice the number of times the class meets per week, instructors shall notify the Dean of Men or Women and the registration of the student is subject to cancellation by action of the Administrative Committee. The grade in such cases will be recorded as "F."

For Upper Division Courses: The regulation of class attendance is left entirely in the hands of the various instructors. No cuts are provided for. Official leaves are given only for absences authorized by the College, not for sickness or other personal reasons. Each teacher is expected to announce at the beginning of each course whatever special requirements he may wish to make regarding class attendance, but the penalties proposed are to be considered as natural consequences of absences, not as punitive measures. The teacher is under no obligation to provide for make-up except for official authorized absences. A more extended statement of the "Attitude Toward Class Attendance at College of the Pacific" may be obtained from the office of the Dean of Men.

PROBATION AND DISQUALIFICATION-Students who are not making satis factory progress toward graduation may be placed on probation. Such a status is not primarily disciplinary, but is imposed in order to call strikingly to such a student's attention his unsatisfactory record and help him to improve his standing before it is too late. Consequently, probation usually carries with it some reduction in the size of the study list and restrictions in the amount of extracurricula activity allowed.

First Probation: Students who by special administrative action are allowed to transfer into the College with a cumulative average less than "C," or students who at the close of any session fail for the first time to have a cumulative average of at least "C," or students who make grades of "E" or "F" in six or more units of work in any one semester or summer are placed on first probation. Restrictions may be imposed by the Administrative Committee depending on the extent of the deficiency. Such students remain on first probation so long as their record does not deteriorate further, or until the cumulative average has risen to at least a "C."

Second Probation: Students already on first probation whose records worsen during any semester or summer session, or students who for the first time have a total deficiency of more than 10 points, are placed on second probation and are limited to three-fourths of a full academic load during the following session, together with whatever other restrictions the Administrative Committee may impose.

Disqualification: Students already on second probation whose records worsen during any semester or summer session shall be declared disqualified, except that no one shall be thus disqualified unless his deficiency amounts to more than 10 points

A student thus disqualified is ineligible to continue in the College of the Pacific for at least one year. After the expiration of this time an application for reinstatement may be considered by the Administrative Committee provided it is accompanied by evidence that during the elapsed time the cause of the poor academic work has been removed.

A student who has been placed on probation by another accredited college may transfer to the College of the Pacific only when by the standards of the College of the Pacific he would be eligible to continue here, and when he is given the privilege of returning to the other college.

CREDIT BY EXAMINATION-An undergraduate student formally registered for four or more units at the College of the Pacific may take "by examination" any course currently being offered by the College for which, by previous private study or experience or by previous study at a non-accredited institution, he feels himself prepared. Such courses may be taken in addition to a regular study list, since they presumably do not require additional preparation on the part of the student.

The procedure for obtaining permission to take a special examination is first to fill out an application, then obtain the approval of the adviser, the teacher of the course, and the Dean of the College, and pay an examination fee of $\$ 4.00$. No such examination may be taken, however, during the semester in which the student expects to receive his baccalaureate degree.

Special examinations are ordinarily taken for one of two reasons:
A. To earn credit toward a degree. The result of the examination in this case becomes a part of the student's permanent record so far as units, grade, and grade points are concerned. A passing grade is denoted by the plus sign, which in computing grade points is considered the equivalent of a "C" grade. As soon as the instructor turns in the grade, the Registrar reports the fact to the Business Office, and tuition charges at the prevailing rate are assessed to the student's account.

Not more than 12 units earned by examination may be applied toward a baccalaureate degree. See, however, limitations 3 under IV, page 49.)
B. To waive a basic requirement. Special examinations may also be taken by a student who wishes to attempt to waive basic requirements; not for ctedit toward a degree but merely to allow more time for electives.

Such a student makes application for the examination in the way described above, but pays only the $\$ 4.00$ examination fee, not tuition chatges.

## SPECIAL SERVICES

## FORUM-ARTS

The sum of all the lectures, plays, recitals, concerts, chapel services, and convocations presented by the College in the course of a year makes an impressive total. In order to encoutage students to put as many of these as possible into their busy programs, the College has authorized the giving of one-half unit of credit in Forum-Arts each semester to each student who attends as many as 20 of these events, selected so as to have a wide coverage. The rules governing the selection are available at registration time.

## CHURCHMANSHIP TRAINING

To meet the increasing demand for laymen who are trained in the Church's purposes and program, the College of the Pacific, in cooperation with the Board of Education of the Methodist Church, offers a special training program in religion for persons majoring in other fields. The total number of course units required approximate what is generally considered a minor. A Certificate of Churchmanship is presented at commencement to those who take advantage of this opportunity and complete the work. For the list of courses and plans offered for this training, consult the Department of Religious Education.

## LECTURESHIPS

## THE TULLY CLEON KNOLES LECTURES IN PHILOSOPHY

The Knoles Lectures in Philosophy were inaugurated in 1949 as a tribute to Chancellor Tully Cleon Knoles, who was a student of philosophy as an undergraduate, and who has continued his philosophical studies as a professor of history and college administrator.

The Sixth Annual Knoles Lecures, scheduled for delivery by Paul Schilpp during the 1954 Commencement, are on the topic, "Human Nature and Progress." Previous Knoles Lecturers have been: R. T. Flewelling (1949), W. H. Werkmeister (1950), T. V. Smith, W. G. Muelder, and Gustav Mueller (1951), Robext E. Fitch (1952), and Alburey Castell (1953). The lectures are published by the Pacific Philosophy Institute.

The Knoles Foundation in Philosophy is accumulating funds in the form of gifts and memorials for a permanent endowment of the lectureship.

## LATE AFTERNOON, EVENING AND SATURDAY CLASSES

The College schedules a number of its regular courses in the late afternoon and evenings and on Saturday mornings, mainly for the convenience of teachers in service, although such courses may be taken by any student. A separate bulletin is issued in the fall listing these offerings.

## OFF-CAMPUS CLASSES

The College arranges occasional undergraduate off-campus classes in nearby centers when the demand justifies, and when College of the Pacific instructors can arrange time to give them. A minimum of 12 students is required. Tuition is charged on a sliding scale decreasing with the size of the class up to a membership of 22 (see section on Fees and Expenses).

## THE SUMMER PROGRAM

philosophy institute. Since 1948 the College has conducted the Philosophy Institute. Sessions begin immediately after the June commencement. For two weeks the Institute meets at Lake Tahoe, and for the next two weeks at Santa Barbara. Since mature reflection, rather than technical jargon, is characteristic of the Institute, it has attracted men and women from all walks of life. The Institute leadership includes America's most distinguished thinkers, scholars like J. H. Randall, Jr., Sidney Hook, Radislov Tsanoff, Yves Simon, T. V. Smith, Herbert Schneider, Alburey Castell, Fritz Kaufmann and Paul Schilpp. For further details, write the Director, Pacific Philosophy Institute.
the regular summer sessions. Each summer since 1925 the College has offered a summer term as a service to teachers and others who are not able to attend the fall or spring semester, and to students who wish to accelerate their college course or improve their record

A wide variety of courses is offered in two 5 -week sessions (see Calendar, page 8). For a catalogue or other information, address the Dean of the Summer Sessions.
the pacific marine station. A good selection of courses in matine biology is offered at the College's Pacific Marine Station at Dillon Beach, California, during both terms of the regular summer session. The facilities there are excellent for this type of study, and the region is unexcelled for abundance and variety of marine life. For a bulletin and other information, address Director, Pacific Marine Station, College of the Pacific, Stockton, California.
columbia summer theatre. Each summer since 1950 the Pacific Theatre Columbia Company has resided in the famous old Mother Lode gold town, now Columbia State Park. The group studies theatre arts, and plays an extensive schedule of productions for public performance in the historic Fallon House Theatre. Restored to its original, picturesque appeatance from the audience point of view, the theatre "backstage" is practical and well equipped for modern production.
columbia art class. In the summer the Department of Art conducts painting classes resident at Columbia State Park. Rich pictorial resources are provided in the quaint, bistoric structures of the gold-rush town and the scenic environs of the Mother Lode hills.
pacific music camp. The College of the Pacific was the first on the Pacific Coast to develop a summer music camp, in 1946, and has continued it each year during the first 5 -week summer session. During past seasons qualified high school and college level musicians and teachers from 33 states have enrolled in this intensive period of study, rehearsal and public performance under nationally known conductors and teachers. Band, orchestra, chorus and opera productions are the principal units developed, plus an extensive program including radio, conducting, theory, solo, ensemble, sectional rehearsals, baton twirling and drum majoring. The Camp provides an almost continuous schedule of concerts, and a complete recreational program. Concurrent with the regular five-week camp there is a series of one-week camps: the Twirling Camp for junior and senior high school and college students; and the Junior Choral Camp, the Junior Orchestra Camp, the Junior Band Camp for young musicians in grades 6 to 9 inclusive. For a special bulletin, address Director, Pacific Music Camp.
pacific folk dance camp. Started in 1948, Pacific's Folk Dance Camp offers each year during the first two weeks of the second summer session an opportunity for teachers, recreation leaders and therapists, folklorists, and dance enthusiasts to study intensively with a large staff of nationally recruited specialists. The curriculum includes various types of folk emphases in addition to techniques of teaching, and about eight houts of dancing each day. The registrants come from all parts of our country and many from abroad. One unit of college credit may be eatned for each week of patticipation. For further information write the Folk Dance Camp Director.

## PACIFIC TOURS

The College sponsors several regular tours in connection with established courses, and also a number of special tours to points of current historical, political or scientific interest. During the summer of 1954 and the $1954-55$ school year the following tours are projected. Information concerning any of them may be secured by writing the Director of Tours.
alaska: Two tours to Alaska will offer one way travel by air and one way by ship, with an exciting itinerary to this American frontier. Visiting Ketchikan, Juneai, Steward, Anchorage, Fairbanks, and Skagway, the trip will include visits by train and bus to the Mendenhall Glacier, the Tanana River, and McKinley National Park.

The first 1954 trip is scheduled from July 1 to July 20. The second tour from July 21 to August 8 will cover the same points of interest. Both will be under the leadership of Edward S. Betz, Dean of Men.
mexico at christmas. A sixteen-day trip by airplane and chartered bus will be offered over the Christmas and New Year's holidays. The trip will feature Mexico City and the beautiful area to the northwest. The itinerary is planned to coincide with special Christmas celebrations and local market days.
california missions. An eight-day tour during Easter week, visiting the 21 Franciscan missions and several historical landmarks. Led by Dr. Rockwell D. Hunt, noted California historian and Director of the California History Foundation, the group will study Spain's contribution to our civilization. Travel is by chartered bus.
local tours. Several one-day excursions will be organized. These will include motor launch cruises through the picturesque waterways of the famed San Joaquin Delta, the "Holland of America," and visits to the California Mother Lode area, including the Summer Theatre at Columbia.
credir. Courses are offered for credit on most tours to those wishing to entoll. Tuition charges will be at rates listed in the summer session and regular catalogs.

## PLACEMENT BUREAU

Placement services are maintained by the College to assist its students and alumni in securing desirable teaching positions and other employment. The office of placement endeavors to secure and keep on file a complete record of the education, experience and personal qualifications of each applicant for a position, to be used by prospective employers in determining whether or not the applicant is qualified to fill a specific vacancy. When notice of a vacancy is received, the placement secretaty will recommend one or more of the best available persons for the place. The College reserves the right to withhold recommendation of applicants for positions for which they are not adequately qualified.

One placement fee of $\$ 10.00$ will be charged each registrant, entitling him for life to the preparation, assembling and maintaining of the file, and the mailing of copies, as necessary, to prospective employers. The cost of telegramos, long distance telephone calls, special delivery, etc., however, will be borne by the registrant as an extra charge.

Requests for information should be addressed to the Director of Placement, College of the Pacific.

## FEES AND EXPENSES

room and board. The rate for both room in the dormitories and board at the dining hall is, for men $\$ 323$ per semester ( $\$ 10.00$ less in the Quonsets), and for women, $\$ 333$ per semester. This rate is subject to change as conditions warrant. House dues are $\$ 2.00$ per semester and the key deposit is 50 cents. Each room is supplied with the necessary furniture, but students provide their own bed linen, blankets, towels, and articles such as rugs and curtains to make their room more attractive. Laundry facilities are available for personal laundry in all dormitories. The College launders bed linen and towels.
board. Students who rent rooms in the College of the Pacific dormitories are required to board at the college dining hall in Anderson Hall. Students who room off the campus may also buy their meals here. Good food and good service in ideal surroundings are provided at the lowest possible rates. The rate is $\$ 238$ per semester for full board, subject to change as conditions warrant. No allowance will be made for meals not eaten.
manor hall apartments. For martied students desiring to do light housekeeping, accommodations are available in Manor Hall, a dormitory apartment house. Only married couples without children will be accepted for residence when at least one of them is a full-time student. The facilities and general surroundings are on a par with other halls, and the living conditions are equally pleasant. Each apartment in Manor Hall consists of living room, kitchenette, dressing room, and bathroom, and is supplied with the usual furniture. Occupants provide their own bed linen, blankets, towels, kitchen utensils and tableware. The rent in Manor Hall is $\$ 90.00$ per semester per person, with $\$ 2.00$ house dues and $\$ 1.00$ key deposits.
reservations: Reservations for all campus housing must be made through the office of the Business Manager, but new students should make application for such reservations through the Director of Admissions. Reservations may be made in advance by the paying of $\$ 10.00$ by students in school or $\$ 20.00$ for new students, which amount will be credited on the rental of the room. Refunds are made on deposits only when the applicant is denied admission, or when housing is not available. To be eligible, an applicant must be a member of the Pacific Student Association, and must have been approved for admission by the Director of Admissions. Regular College of the Pacific students are given priority for dormitory rooms, but there is often space for a number of Stockton College students. All who live on the campus, however, must pay the student activity fee and the infirmary fee, and must agree to conform to all dormitory regulations.

All reservations are subject to the approval of the Dean of Men and the Dean of Women.

Turrion. Tuition charges (including the health fee of $\$ 12.00$ and all course fees) for full time students taking 12 to $16 \frac{1}{2}$ units inclusive, per semester

$$
\text { Excess units above } 161 / 2 \text { units, per unit }-\quad-\quad-\quad-\frac{\$ 278.00}{20.00}
$$

Tuition charges for students carrying less than 12 units in the College of the Pacific, including all course fees and laboratory fees but not the health fee, per unit 20.00

Off-campus courses, not given on the College of the Pacific campus:

| Class of $12-15$ members, per unit - | - | - | - | - | - | 15.00 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Class of $16-21$ members, per unit - | - | - | - | - | - | 12.50 |  |
| Class of 22 or more, per unit | - | - | - | - | - | - | 9.00 |
| Courses given on tour, per unit | - | - | - | - | - | - | 15.00 |
| Summer courses, per unit | - | - | - | - | - | - | - |

(Note: This fee is included in the tuition charge for all students who pay the full tuition. For those who pay by the unit, however, or for Stockton College students living on campus or boarding in the dining room it is assessed as a separate fee. For students taking 7 units or less who do not room or board on the campus the fee, with resulting infirmary privileges, is optional.)

Student activity fee, required of all students who live in the College dormitories and all undergraduate students, per semester - - - . 15.00
(Note. This fee is collected at the College Business Office and administered by the Pacific Student Association. Students not living in College dormitories whose total load in both the College of the Pacific and Stockton College in any semester amounts to 7 units or less may on application be excused from the student activity fee for that semester.)

Marticulation fee, chargeable to all undergraduate students entering for the first time

Auditor's fee, participating, same basis as for those receiving credit.
Fee for instruction in automobile driving in Physical Education 19610.00
"No credit" courses are charged at the regular tuition rate, according to the number of class meetings per week.

Diploma fee (charged once, in the semester in which the student graduates).
Transcript fee, each duplicate - . - . . . . . . 1.00
Thesis binding fee, each volume (Master's and Doctor's degrees) - 5.00
Late registration fee - - - - - - - - - 4.00
Late petition fee, each petition - - . - - - 4.00
Special examination fee, each examination - - - - 4.00
Charge for meals while in the Infirmary, for students not boarding in the College Dining Hall, per day
2.00
payment of bills. All bills for the coming semester are due and payable. at the time of registration, unless other arrangements are made with the Business Manager. These arrangements, if made, require a one-third down payment and the balance in three equal monthly installments covered by signed acceptances. A carrying charge of $\$ 3.50$ is made for this service. Checks should be made payable to the College of the Pacific.

A student failing to make payment as required above will be unable to attend classes or use dining hall or dormitory facilities. No diploma, transcript of credits, or honotable dismissal will be issued until all college bills have been paid in full.

Students who are granted an honorable dismissal within the first six weeks of the semester will be allowed a refund of tuition and board based on the following schedule:

| At the end of the first week |  |  |  |  | $80 \%$ refund |
| :---: | :---: | :---: | :---: | :---: | :---: |
| At the end of the second week - |  |  | - |  | 60\% refund |
| At the enid of the fourth week - |  |  |  |  | 40\% refund |
| At the end of the sixth week |  |  |  |  | 20\% refund |
| After the end of the sixth week |  |  |  |  | no refund |

Because a room reservation ordinarily ties up a room for a full semester, no refunds can be made on room charges after the first week of a semester. No refunds will be made to students who are dismissed or requested to withdraw from the College. A student is considered as being in attendance so far as fees are concerned while confined in the College Infirmary, or otherwise under College medical care.


## COURSES OF INSTRUCTION

DEPARTMENTAL ORGANIZATION
The College is organized into the following departments, offering majors and degrees as indicated:

Ancient Languages (A.B.)
Art (A.B., A.M.)
Asian Studies (A.M., Ph.D.)
Bible and Religious Education
Group Work Agencies
(A.B., A.M.)

Religious Education in the Church (A.B., A.M.)

Week-Day Religious Education (A.B.)

Botany (A.B., B.S., A.M., M.S.)
Business Administration
(A.B., A.M.)

Chemistry (A.B., B.S., A.M., M.S.)
Economics (A.B., A.M.)
Education and Psychology Education (A.B., A.M., Ed.D.) Psychology (A.B., A.M.)
Engineering
Civil Engineering (B.S. in C.E.)
Engineering Science (B.S.)
Management Engineering (B.S.)
English and Journalism English (A.B., A.M.) Journalism (A.B.)

Geology (A.B., B.S.)
Health, Physical Education, and Recreation

Health Education (A.M.) Physical Education (A.B., A.M.) Recreation (A.B.)

History and Political Science
History (A.B., A.M.)
Political Science (A.B., A.M.)

Home Economics and Family Living (A.B., B.S., A.M., M.S.)

Mathematics (A.B., A.M.)

Modern Language
French (A.B., A.M.)
German (A.B., A.M.)
Spanish (A.B., A.M.)

Music
General Music (A.B., A.M.)
Musical Therapy (A.B., Mus.B.)
Organ (Mus.B., Mus.M.)
Piano (Mus.B., Mus.M.)
Public School Music
(Mus.B., Mus.M.)
Stringed Instruments
(Mus.B., Mus.M.)
Theory and Composition
(Mus.B., Mus.M.)
Voice (Mus.B., Mus.M.)

Philosophy (A.B.)

Physics (A.B., B.S.)
Sociology (A.B., A.M.)
Speech (A.B., A.M.)

Zoology (A.B., B.S., A.M., M.S.)

## INTERDEPARTMENTAL MAJORS

In addition to the departmental majors listed above, the College makes available a number of majors which cut across departmental lines and thus provide training in fields which require broader background than the conventional majors give.

International Relations (A.B., A.M.)

## Pre-Medical (A.B.)

Pre-Ministerial (A.B.)

## TEACHING CREDENTIALS

The College is approved by the California State Board of Education to prepare candidates for teaching credentials for elementary schools, junior high schools, secondary schools, and junior colleges, including credentials in administration and supervision and several specialized credentials. By careful planning, the elementary credential and the various special secondary credentials may be obtained at the same time as the A.B., i.e., after four years of college work, although an extra semester or summer session is often necessary. Those preparing for the an extra semester or summer session is often necessary. Those preparing for the elementary credential should major in Education; but for the secondary teaching credentials, the student should major in the subject to be taught and must then take at least one year s work beyond the A.B. degree. Those approved as can-
didates for advanced degrees may apply a part of this fifth year's work toward that didates for advanced degrees may apply a part of this fifth year's work toward that
degree. For a complete listing of the credentials and their requirements, see degree. For a complete listing
section on School of Education.

## COURSE OFFERINGS

Course numbers. Numbers from 1 to 99, inclusive, designate undergraduate lower division courses and numbers 101 to 200 designate undergraduate upper division courses, acceptable for credit toward the bachelor's degree. A certain number of upper division units may also be accepted toward a graduate degree (see requirements for the degree Master of Arts.) Number 100 is used for a few courses which carry no college credit. Numbers 201 to 299 , inclusive, designate courses carrying ctedit toward a graduate degree; these courses may not be taken
by an undergraduate student without written permission of the class insructor by an undergraduate student without written permission of the class insructor. Courses numbered above 300 are exclusively for doctoral candidates.
" $(\mathrm{L})$ " in the title line of an upper division course indicates that it is open also to lower division students, and "(U)" in the title line of a graduate course indicates that it is open also to undergraduate upper division students.

Credit designations. Credit is indicated by a number appearing in parentheses after each course title. The number refers to student credit units, each unit requiring one hour of class work (with at least two additional hours of preparation requiring one hour of class work (with at least two additional hours of preparation outside of class) or three hours of laboratory or field or studio work per week.
Where not otherwise stated it may be assumed that a class meets one hour per Where not otherwise stated it may be assumed that
week per semester for each unit of credit it carries.

Semester designations. The Roman numeral I following the title indicates a fall-semester course, the numeral II a spring-semester course. "I and II" means that the same course is repeated during the spring semester for the convenience of other students and may not be taken twice for credit. "1:II" means that the course continues under the same number for the spring semester and may be
repeated at least once for credit. "Yr." after the title designates a year-course in which the two semesters are regularly and distinctly different a year-course in are given two numbers: if the two are separated by a semicolon (eg. Year courses means that either semester may be taken without regard to the (e.g. 101;102) it are sepatated by a comma (e.g. 101,102) it means that the first semester is pre requisite to the second but that the course may be discontinued with credit at end of the first semester; if the two are separated by a hyphen with credit, at the means that no credit is given until the entire year course has (e.g. 101-102) it proper order. Thesis courses (numbered 299) are course has been completed in since registration for such a course is continued gutm a semester designation withdrawal notice is submitted by the head of the department. until a grade or

Year designations: The College reserves the right to withdraw any course for which less than ten students are enrolled. Otherwise the intention is to offer each course described every year, except as indicated by numbers immediately following semester designation. "I 54," for example, means a course planned for the spring of 1954 but not for the fall of 1955; "II 56 " mean a course planned for the spring of 1956 but not for the spring of 1955 " SS ", mean a course planned for the spring session. If neither the semester nor the year is indicated, it means in a summer will not be given at all during the $1954-56$ biennium unt means that the course develops.

ANCIENT LANGUAGES
Profersor: FARley
Lecturer: KRAUS
MAJOR REQUIREMENTS: (a) Six semester courses, totaling at least 22 units of Latin (for which high school Latin courses may fulfill 16 units) or of (c) courses in the art of the language which is not chosen under (a); and advanced Latin or Greek prose language, ancient art, literature, and history, and advanced Latin or Greek prose composition.

## General Courses

10. THE AR'T of LaNGUAGE (3) I and II and SS

A study of the grammatical framework and development of spoken and written language. May be applied towards fulfilling the college foreign language requirement. Pterequisite: one year of college language or equiv-
alent.

1. Greek and latin literature in translation (3) I 54 and SS 54 A survey of the earliest European literature, as translated into English
. GREEK AND LATIN FOR THE PROFESSIONS
The purpose of this course is to give enough knowledge of these classical languages to enable students preparing for such professions as medicine law, the ministry, and literature to use them with profit. (Given on demand.)
ANCIENT ART (2) II (See Art 10)

## Latin

21-22. ELEMENTARY Latin (4-4) Yr.
123,124. INTERMEDIATE Latin $(3,3)$ Yr. Selected readings from Cicero, Vergil, or similar authors. Prerequisite: One year of elementary Latin.
125.126. adVanced Latin reading (2,2) Yr.

Reading of classical authors suited to the abilities or desires of the students. Prerequisite: Two college years of Latii or equivalent. This course may be taken more than once with different content.

## Greek

31-32. elementary greek (4-4) Yr.
133,134. INTERMEDIATE GREEK $(3,3)$ Yr.
Selected readings from Xenophon, Plato, Homer, or Greek New Testament. Prerequisite: One year of elementary Greek.

135,136. adVanced greek reading (2,2) Yr.
Selections to be made according to the abilities and desires of the students. Prerequisite: Two years of college Greek. This course may be taken more than once with different content.

## ART

Professors: REynolds (Chairman), hodgins, and farley
Associate Professor: STANDERFER
Assistant Professor: Washburn
Special Instructors: QUYLE and YIP
Those taking courses in art usually fall into one of four categories: (a) Non-majors who ate fulfilling the basic requirement for the A.B. degree. Since these students need primarily to recognize and appreciate the part art is playing in our civilization, they ordinarily take course 12 but may take courses 10 , 11 , or 104. (b) Non-majors who wish to participate in creative experiences by electing studio courses. (c) Candidates for the elementary teaching credential. Such students should take course 150 and either 151 or 152 as a minimum. (d) Majors in ast who wish to make art their vocation, either as teachers or professional artists in some specialized direction. Those of this group who wish to prepare for a secondary credential should not only fulfill the major requitements stated below, but also the various credential requirements stated in the School of Education section of this catalogue.

MAJOR REQUREMENTS: A total of 40 units of lower and upper division courses, 20 in each. Lower division work should include courses 10, 11, 19, 21 , $22,28,29$ and 30 , or their equivalents in transfer credit. Upper division courses are $104,107,112,117,118,120,123,124,126$, and 130.
note: Courses $107,112,117,118,120,124,126$, and 130 may be repeated for credit once by qualifed students who have the permission of the instructor.
10. ancient art (2) I

A survey of ancient art and architecture.
Two lecture periods a week.
11. history of western art (3) II

The development of art expression by western man as seen from Byzantine times through the 19th century.
Three lecture periods a week.
12. ART AND SOCIETY (1) I and II

Contemporary expressions in the arts of architecture, city planning, painting, sculpture, and industrial design.
Two lecture periods a week.
16. three-dimensional advertising art (2) I 55 Practice in the solution of advertising problems in display. Two 3-bour periods a week.
19. lettering and layout (2) I 54

Fundamentals of letters and lettering with added consideration of layour problems of the advertising artist.
Three 2-bour periods a week.
21. drawing and composition (3) I 54

Drawing with an extensive range of subject matter, giving the student experience in accurate rendering and in varied approaches to composition. Three 3-bour periods a week.
22. painting (2) II 56

Introduction to varied painting methods, using several media and emphasizing student exploration.
Two 3-bour periods a week.
28. CONSTRUCTION DRAWING (2) IL

A course designed to acquaint art stadents with instrumentation, mechanical perspective, projections, and structutal design. Two 3-bour periods a week.

29;30. art structures (3;3) Yr. 55-56
The principles of design, art elements, and basic techniques and processes of the artist, with a wide scope of both two- and three-dimensional problems.
Tbree 3-bour periods a week.
104. DEVELOPMENT OF MODERN ART (2) II 55 (L)

An investigation into the determining factors responsible for the many types of expression in modern painting. Two lecture periods a week.
107. figure drawing (2) I 55 (L)

Rendering of the human figure in action and repose. Consideration of the skeletal and muscular structure.
Two 3-bour periods a week.
112. clay modeling (2) XI 56 (L)

The fundamentals of plastic form.
Three 2-bour periods a week.
117. Silk-SCREEN (2) I

The principles of silk-screen printing as applied to vatious materials, with emphasis on appropriate design.
Two 3-bour periods a week.
118. jewelry (2) II

Fundamentals of jewelty-making with emphasis on design and craftsmanship. Two 3-hour periods a week.
120. adyertising design and processes (2) II 55

Advanced training in advertising art and lettering for secondary art teachers and those entering the commercial art profession. Two 3-bour periods a week.
123. the painter's craft (2) I 54 The chemistry of paints, varnishes, and other media; the proper use of tools; use and structure of frames; application of media to canvas, wood, plaster, metal, composition boards, etc., and the correct grounds applicable to each.
Two 2-bour studio periods and 2 bours assigned work a week.
124. advanced painttng (2) II 55

Further exploration in painting with the guidance of the instructor. Individual expression encouraged. Prerequisites: Courses 22 and 123 or permission of the instructor.
Two 3-bour periods a week.
126. watercolor (2) II 55 (L)

Varied techniques of watercolor painting with emphasis on creative interpretation of landscape composition.
Two 3-bour periods a week.
130. Photography (2) I and II (L)

An introductory course describing various cameras and their uses. Lighting, exposure, developing, and printing with emphasis on composition and selectivity. The student is required to own a camera, tripod, and filters. Two 3-bour periods a week.
150. elementary grade art education (2) I and II and SS

Theory of art education with emphasis on teaching methods.
Four studio bours and 2 bours assigned work a week.
151. Crafts for trachers (2) I and II and SS

Experience with crafts adaptable to classroom activity by both elementary and secondary level pupils.
Four studio hours and 2 bours assigned work a week.
152. industrial arts for elementary teachers (2) II Basic methods of construction and manipulation of wood, metal, leather, and cardboaxd as applied to elementary grade projects. Two 3-bour periods a week.
153. ADVANCED ARTS AND CRAFTS FOR TEAChers (2) SS 54 Further development in the theory and practice of art education for elementary and secondary teachers.
Two periods daily.
154. CERAMICS (2)

Practical experience and training in the use of clay: selection, processing, and care of materials, use and care of equipment, theory and practice of glazing and firing, and methods of teaching basic techniques.
193;194. Studio problems ( 1 to 3 ; 1 to 3 ) I;II (L)
Exploration of student interests under staff direction, or advanced work in courses already completed. Coutse may be repeated with different content when permitted by the staff.
200. ART METHODS FOR SECONDARY TEAChing (2) I

Problems of curriculum development, student needs, and teaching methods in art for the secondary level.
Two lecture periods a week.
224. teaching and methods in painting (2) il 55

Graduate work will be given to students found qualified by a faculty committee. Prerequisite: course 123. Courses 22, 124, and 128 or equivalents are recommended. Two 3-bour periods a week.

293;294. STUDIO PROBLEms ( 1 to 3 ; 1 to 3 ) 1;II
Graduate projects assigned in conference with members of the staff. Course may be repeated by permission of chairman.
296. seminar in art education (2) II 55

Designed primarily for teachers in active professional service. A course in which the individual class members may develop a study dealing with a realistic situation under the guidance of the city coordinator of art education.
Two lecture periods a week (evening).
299. Thesis (4)

The Department reserves the privilege of bolding for permanent exbibition any student drawing, painting, design, sculpture, or craft work. Student property which is not retained at the request of the department and which is left on depart ment premises after the close of the term will be subject to disposal at the sole discretion of the department.

## BIBLE AND RELIGIOUS EDUCATION

Professors: colxiver (Chairman) and lindhorst
Associate Professor: L. Harris
Assistant Professor: hazblwood (on leave of absence)
Lecturer: SAjowitiz

## Bible

The objectives of these coutses are to familiarize the student with the Bible and to assist in the formation of Christian attitudes of thought and conduct. Courses 101, 102; 111, 112; or 113, 114 will meet the college requirement in Bible. Courses 101 and 102 will approach the subject from the genetic and historical point of view; courses 111 and 112 from the literary background, and courses 113 and 114 from the standpoint of archaeological science. It is advised that the student follow through with the type of course first chosen.
101. OUR hebrew heritage (2) I and II

A genetic study of the evolution of life, thought, and literature among the Hebrews.
102. our christian heritage (2) I and II

A critical and constructive study of the tise and development of Christian ideas and way of life.
126. YOUTH WORK IN THE CHURCH (2) I (L)

The program of correlated study, worship, recreation, and service will be considered.
127. ELEMENTARY METHOD IN CHRISTLAN EDUCATION (3) II (L) An introductory study of curricular materials and ways of guiding children's learning in church schools. Prerequisite: Religious Education 22 or Psychology 130.
141. PSYCHOLOGY OF RELIGIOUS EXPRRIENCE (3) I 55

A study of religious experience, and of the growing literature on social and educational psychology as applied to religion.

142;143. HISTORY OF THE CHURCH AND THEOLOGICAL IDEAS $(2 ; 2) \mathrm{Yt}$. Basic curriculum. A survey course in church history with emphasis on theological ideas as they have emerged.
144. MAN AND HIS RELIGION (3) I 54

A comparative study of the many forms of religious life and belief developed by men of all races and times.
151. MODERN METHODS OF TEACHING (2) I Creative methods, including audio-visual, group dynamics, and unit teaching.
152. PRODUCTION LABORATORY IN AUDIO-VISUAL MATERIALS (2) II 56 Filmstrips, slides and moving picture production sequences. Class and individual projects.
169. THE family living its religion (2) II 55

How the family can become a healthy environment for the growth of wholesome personality.
170. HISTORY, PHILOSOPHY, AND ORGANIZATION OF THE Y.M.C.A. AND Y.W.C.A. An orientation course for those looking toward Y.M.C.A. or Y.W.C.A. leadership.
171. principles and practices of group work (3) I

A study of the unique possibilities of moral and religious instruction in and through the club or group-organization experience. Techniques of group leadership. One unit of actual field work is a part of the course.
$180 ; 181$. WORSHIP AS AN ART $(2 ; 1)$ Yr
The purposes and methods of providing effective personal and group worship experiences. Projects in college and chapel services, vespers, and radio.
182. Laboratory school (1) I:II

A three-hour session in a children's group, kindergarten, primary or junior. Students observe, teach under direction, and prepare a unit of study for the age-group taught. Planning and evaluation periods are included.
185. DRAMATIZATION IN RELIGIOUS EDUCATION (2) II 55

The vast field of dramatic technique for the expression of religious truth and the development of character values through dramatics will be explored.
186. OUR ENGLISH HYMNODY (2) II 55

The development of the English hymn against the background of the development of Christian ideology.
188. SUPERVISION in reLigious education (2) II Introduction to principles and procedures for imptoving the education program of the church.
190. Religion and the arts (2) I 55

A survey of the materials of the fine arts; painting, music and poetry for use in the church and church school.

191;192. SUPERVISED FIELD WORK (1;1) I;II
Assigned field work projects with faculty supervision. Prerequisites 22, 23 and a theory course in the phase of field work to be done. May be repeated for a maximum credit of 4 units.

193;194. DIRECTED STUDY (1 or $2 ; 1$ or 2 ) I;II
Enrollment by permission of instructor.
203;204. CURRICULUM (2 to $4 ; 2$ to 4) Yr
A study of basic principles for building curricula and practice in building curriculum units for various church groups
205. PHILOSOPHY OF RELIGIOUS EDUCATION (2) II

The nature of persons, wholesome development of human personality fundamental teachings of the Hebrew-Christian faith, and implications of the educational procedure in character formation.
214. RELIGION AND PUBLIC EDUCATION (2) II 56 The place of religion in public education with consideration of such issues as public support, legal aspects, parochial schools, released time experiments, and vatious phases of character education now in practice.
251. GRadUate Course in modern method of teaching (2) Specific projects and experimentation.
252. GRADUATE LABORATORY IN PRODUCTION OF AUDIO-VISUAL MATERIALS Individual production of a filmstrip or movie.
(2 to 4) II 56
270. GROUP WORK IN THE CHURCH (2) I (U) A professional course for ministers and directors of religious education.
271. ADMINISTRATION IN GROUP WORK AND RECREATION (3) II (U) A professional training cousse for majors.
272. SUPERVISION IN GROUP WORK AND RECREATION (2) II (U) A professional training course for majors.
288. SUPERVISION IN RELIGIOUS EDUCATION (2 to 4) II Designed for those looking forward to administrative and supervisory
leadership in the program of the church.
291;292. GRADUATE FIELD WORK ( 1 to 3 ; 1 to 3 ) I;II
293;294. GRADUATE DIRECTED STUDY (1 or $2 ; 1$ or 2 ) I;II Enrollment by permission of instructor.

295;296. GRADUATE SEMINAR ( 1 to $4 ; 1$ to 4) I;II
Group study for graduate students of special problems in religious education
299. THESIS (4)

## BOTANY

Professor: stanford (Chairman)
Associate Professor: stocking
major requirbments for the a.b. degree: Work required for a major in botany is planned to afford a rather broad training, including not only a foundation in plant science but also a grounding in other sciences. Programs will be varied for the individual needs of prospective biologists, teachers, recreation workers, agriculturists, food processors and others. In view of this latitude, students interested in any of these areas are urged to consult with the chairman early in their college careers in order that individual course sequences may be developed. If graduate and advanced professional work in biological science is planned, a reading knowledge of German or French should be obtained.

Lower Division.-One year of general botany; one year of chemistry; one semester of zoology. Upper Division.-A minimum of 24 units in biological science, to be selected upon consultation with the chairman. It is expected at least science, to be selected upon consultation with the chairman. It is expected at ead future yeats.
major requirements for the b.s. or a.m. degree: See Chairman of the Department.
13,14. general botany (4,4) Yr.
First semester: structure and life activities of the seed plant. Second semester: survey of the plant kingdom. Relationship of plants to the world in general, and to human needs in particular, is stressed throughout.
Four 2-bour periods a week include lectures and laboratory work.
135. microbiology
(3) I

A study of micro-organisms, especially of bacteria, in their relations to public health and other interests of mankind. Prerequisites: One year of college biological science, and at least one year of high school chemistry or one semester of college chemistry.
Two class periods and one 3-bour laboratory a week.
137. miciobiologrcal projects (1) I

Additional laboratory problems correlated with the work of Coutse 135. May be elected only concurrently with course 135.
One 3-bour laboratory period a week.
151. trees and shrubs (2)

Identification and study of relationships of representative central California trees and shrubs. No prerequisite, but at least one semester of botany or general biology recommended.
Two 2-hour laboratory periods plus field work.
152. California elowering plants (3) II

Study of the principal groups of flowering plants as represented in this part of California. No prerequisite.
One class period and two 3-bour laboratory periods a week.
164. economic plants (2) (Occasionally offered in summer sessions.)
167. CROP plants (2)

This coutse is designed for students of food processing but is also useful to others wishing to develop a knowledge of the nature, history and economic significance of California crop plants. Lectures and reference assignments. No prerequisites.
Two class periods a week.
175. CONSERVATION of natural resources (3) II

Studies of such resources as soil, water, forests, wild life, and minerals, and means of utilizing, managing, and conserving these. Special attention is paid to strategic resources of the United States. No prerequisite. Two class periods a week with library assignment for third unit.

193;194. SPECIAL ASSIGNMENTS ( 1 to $3 ; 1$ to 3 ) $\mathbf{I} ; 1 \mathrm{II}$
Advanced work for sufficiently prepared students; may be elected for more than one year. Enrollment only after consultation with the chairman.

195;196. UNDERGRADUATE SEMINAR ( 1 or 2 ; 1 or 2 ) I; II
295;296. GRADUATE SEMINAR (1 to 3 ; 1 to 3 ) I; II
299. THESIS (4)
the teaching of science (2) I (See Natural Sciences 200)
general biology (4) I and II (See Zoology 11)

## BUSINESS ADMINISTRATION

Professors: beckwith (Chairman), norman, and white
Associate Professor: dale
Assistant Professor: niven
Lecturers: atherton, norton, piersa, and toms
The courses offered will provide a specialized preparation in two distinct fields, management and accounting, based upon a thorough liberal arts education. This is a combination that follows the recommendations of outstanding leaders in American business and industry. Both fields will have a number of basic courses in common and then follow those most suitable for the desired specialization.
major requirembnts: Management Emphasis: Courses 9, 10, 37, 38, 110, 113, 114, 131, 133, 134; and not less than 15 additional units in other Business Administration courses, to be arranged with the department chairman; Economics 10, 11; English 15; Mathematics 25.

Acounting Emphasis: Courses 9, 10, 37, 38, 110, 111, 112, 113, 125, 127, 128, 129, and not less than 10 additional units in orher Business Administration courses, to be arranged with the department chairman; Economics 10, 11; English 15; Mathematics 25.

9,10. elementary accounting (3,3) Yr.
Fundamental principles. Sole proprietorship, partnerships and corporations.
37,38. COMmercial law (3,3) Yr.
Brief survey of American system of law; fundamental legal concepts relating to business.
110. BUSINESS MACHINE TECHNIQUES (1) I and II Uses of principal types of mechanical equipment in modern business. Prerequisite: Elementary Accounting.
111. INTERMEDIATE ACCOUNTING (3) I Prerequisite: Elementary Accounting.
112. ADVANCED ACCOUNTING (3) II Prerequisite: Intermediate Accounting.
113. MONEY AND BANKING (3) I

Historical and present day developments; emphasis on aspects of practical interest to. business management.
114. FOREIGN TRADE (3) II

Principles and practices; foreign trade of the United States.
117,118. real estate (2,2) Yr. 54-55 Fundamental principles and practices.
120. BUSINESS statistics (2) II 56

Methods of statistical analysis as applied to the field of business and eco nomics. Prerequisite: Two years of high school algebra or equivalent.

121;122. GENERAL insurance (2;2) Yr. 54-55 Branches of insurance studied: fire, marine, inland maxine, liability, automobile, workmen's compensation, fidelity and surety bonds, life, annuity and accident.

123,124. INDUSTRIAL MANAGEMENT (2,2) Yt. 55-56
Fundamentals of plant management with particular reference to operation and controls.
125. cost accounting (3) II Prerequisite: Intermediate accounting.

127,128. TaXation and income tax accounting (3,3) Yr. United States and California taxes. Prerequisite: Elementary accounting.
129. AUDITING (3) I

Prerequisite: Advanced accounting.
131. Marketing (5) I

Distribution of all types of commodities from producer to ultimate consumer. Market research.
132. PURCHASING (2) II 56

Principles of procurement as applied to industry.
133,134. Sales management $(3,3) \mathrm{Yr}$.
Introduction to salesmanship; training salesmen; planning, direction and control of personal selling.
135. PERSONNEL MANAGEMENT (2) I 55 Modern principles; industrial relations.
136. ADVERTISING (3) II 56

Development of business executive's ability to appraise advertising
140. PRINCIPLES OF MANAGEMENT (2) II 56

Scientific management in modern business.
142. CORPORATION FINANCE (2) II 55

Financial needs and structure of the typical American business corporation.
151,152. TTTLE INSURANCE AND ESCROW (2,2) Yr. 55-56
Title examination and modern escrow practices.
161,162. advanced money and banking (2,2) Yr. 54-55
Prerequisite: Money and banking.
171,172. TRANSPORTATION (2,2) Yr. 55-56
Fundamentals of transportation; development and present day conditions in the United States.

193;194. DIRECTED STUDY (1 or 2 ; 1 or 2 ) I;II
197;198. UNDERGRADUATE RESEARCH ( 2 to $4 ; 2$ to 4 ) I;II
$293 ; 294 . \quad$ drected graduate study ( 1 or 2 ; 1 or 2 ) I; II
295;296. GRADUATE SEMINAR (1 to 3 ; 1 to 3 ) I; I
297;298. GRaduate research (2 to 4; 2 to 4) I;II
299. THESIS (4)

## CHEMISTRY

Professors: COBB (Chairman), JONTE, and BAWDEN Associate Professor: DE VaULT

The Department is approved by the American Chemical Society Committee for the Professional Training of Chemists and its recommendations form the basis for the major requirements. These courses are required to give the basic training for work in chemical industry and for graduate study. A suggested program follows:

Fresbman Year: Chemistry 11, 12; Mathematics 19; 20; English 11; Speech 59; Physics 11; electives.

Sophomore Year: Chemistry 31, 32; Mathematics 21, 22; Physics 12, 13 ; German 81-82; electives.

Junior Year: Chemistry 121, 122; German 183 or 188; electives.
Senior Year: Chemistry 161, 162 and 5 units from 211, 214, 220, 221 222, 224; and 3 units elected in physics.

MAJOR REQUIREMENTS:' Bachelor of Arts Degree.-Courses 11, 12, 31 32, 121, 122 and 163; Physics 15 and 16. Bachelor of Science Degree.- Courses 11, 12, $31,32,121,122,161,162$, and 5 additional upper division units; Physics $11,12,13$, and 3 additional upper division units.
11. GENERAL CHEMYSTRY (4) I

Designed for general interest in physical science as well as preparation for further work in chemistry.
Three class periods and one 3-bour laboratory period a week.
12. INORGANIC CHEMISTRY (4) II

Prerequisite: Chemistry 11 or equivalent by examination.
Three class periods and one 3-bour laboratory period a week.
31. QUALITATIVE ANALYSIS (4) I

Prerequisite: Chemistry 12.
Two class periods and two 3-hour laboratory periods a week.
32. Quantitative analysis (4) II

Prerequisite: Chemistry 31.
Two class periods and two 3-bour laboratory periods a week.
121,122. organic chemistry (5,5) Yr.
Prerequisite: Chemistry 12.
Three class periods and two 3-bour laboratory periods a week.
123. ELEMENTARY ORGANIC CHEMISTRY (4)

The organic compounds and their reactions, with emphasis on food, digestion, metabolism, blood, and urine. Prerequisite: Chemistry 11, 12.
Three class periods and one 3-bour laboratory period a week.
141. BIOCHEMISTRY (4)

A study of the life process, including the substances found in plants and animals and the changes they undergo in the animal body. Prerequisite: Chemistry 121 or 123.
Three class periods and one 3-bour laboratory period a week.
161,162. PHYSICAL CHEMISTRY (5,5) Yr.
Prerequisites: Chemistry 32, physics and calculus.
Three class periods and two 3-bour laboratory periods a week.
163. BRIEF PHYSICAL CHEMISTRY (3) I

A brief study of the fundamental principles of physical chemistry arranged
for students in the biological sciences or in other non-chemical fields.
Three class periods a week.
195;196. UNDERGRADUATE SEMINAR (1;1) $1 ;$ II
Presentation of recent advances in chemistry by staff members and advanced students. Prerequisite: Quantitative analysis.
One class period a week.
197;198. UNDERGRADUATE RESEARCH (1 or $2 ; 1$ or 2 ) I ; II
211. INSTRUMENTAL ANALYSIS (3) I (U)

The use of the potentiometer, colorimeter, and other instruments in analytical procedures. Prerequisite: Chemistry 161.
One class period and two 3-bour laboratory periods a week.
212. INORGANIC PREPARATKONS (1 of 2) I:II (U)

Three bours of laboratosy work per week per unit of credit.
214. INDUSTRIAL CHEMISTRY (3) II (U)

A study of unit process as exemplified by industrial procedures. Field trips to adjacent plants of the chemical industry.
221. ORGANIC PREPARATIONS (2) I:II

Individual study in problems involving special apparatus and techniques. Prerequisite: Chemistry 122
Six bours of laboratory work per week.
222. QUALITATIVE ORGANIC aNALYSIS (2) I (U)

A study of the systematic methods of separation, purification and identification of organic compounds. Prerequisite: Chemistry 122.
Six bours of laboratory work per week.
224. ADVANCED ORGANIC CHEMISTRY (2) I:II

Lectures pertaining to specific fields of organic chemistry.
295;296. GRADUATE SEMINAR (1;1) I;II (U)
Presentation of recent advances in chemistry by staff members and advanced students. Prerequisite: Chemistry 122 and 161.

297;298. GRADUATE RESEARCH (1 to 5; 1 to 5) I;II
Prerequisite: Chemistry 162 and 221.
299. THESIS (4)
the teaching of science (2) I
(See Natural Science 200)

## ECONOMICS

## Professors: NORMAN (Chairman) and DING

The courses described are offered both as a contribution to a liberal education and as a background preparation for various vocations. From the liberal arts point of view the central theme is economic organization-how the economy-as-a-whole works or fails to work, its laws and principles, the relation of its parts to each other and to the whole. Vocationally the courses serve such fields as teaching, private business, civil service, law, journalism, politics, public administration, foreign service and labor relations.

MAJOR REQUREMENTS: A minimum of 30 units of economics (upper and lower division combined) including the following courses or their equivalents: 10, 11, 103, 121, and 129. This group of required courses will acquaint alents: $\begin{aligned} & \text { the student with our economic institutions (above all, that great coordinating }\end{aligned}$ institution, the market) and with the principles of their functioning. These courses, while offering no ready-made answers or fool-proof rules-of-thumb, will give while offering no ready-made answers on fool-proof rules-of-thumb, will give
practice in economic analysis, in orderly ways of thinking about economic probpractice in economic analysis, in orderly ways of thinking about economic prob-
lems, as they are met both after college and in more specialized courses, underlems, as they are met both after college and in more specialized courses, under-
graduate or graduate. In the selection of the remaining 16 elective units of graduate or graduate. In the selection of the remaining 16 elective units of
economics, the student is urgently advised to plan for at least one area of emphasis economics, the student is urgently advised to plan for at least one area of emphasis
(selected according to his interest or vocational need) where he will have two or three closely related economics courses, supplemented by supporting courses
from other departments. Illustrative of related courses in the field of labor are Economics 137 and 138, Social Relations in Industry (Sociology 125), and Personnel Management (Business Administration 135).

10,11. elementary economics $(3,3)$ Yr.
Our economic institutions, basic economic concepts and the principles that govern our economy and relations within it, and elementary application of economic principles to particular fields and problems.
19. ECONOMIC HiStory of eURope (2) I 55

A study of the major problems of economic organization, production, trade, and labor in the leading nations of Europe.
20. eCONOMIC history of the untted states (3) I 55

The evolution of American economic life and institutions and past problems and accomplishments as the background for the study of current social, political, and economic problems.
101. general economics (3) II (L)

A course for the general citizen rather than for students specializing in economics and closely related fields. No pretequisite; not for those who have had elementary economics.
103. intermediate economic anaiysis (3) II

Subject matter similar to that of 10, but on a more mature level. Required of all majors. Prerequisite: Elementary economics or equivalent.
106. agricultural bconomics (3) I 55

The application of economics principles to agricultural problems such as the combination of factors of production, land tenure, agricultural credit, combination of factors of production, land tenure, agricultural credit,
marketing, tariff and government policies. Prerequisite: Elementary economics.
115. public finance (3) I

Public revenues; apportionment of their burden; tax shifting; kinds of taxes and their conformity to tax principles; non-tax revenues, such as public borrowing and grants-in-aid. Public expenditures and their control. Prerequisite: Elementary economics.
116. fiscai policy (3) II 55

The effects of taxes, public expenditures, and national debt in adding to or impairing business stability. Prerequisite: Elementary economics.
119. investments (2) l 55

The general prinicples of investment with application to bonds, stocks and other securities, and real estate. Analysis of corporation reports to determine investment value of securities.
121. history of economic thought (2) II Prerequisite: Elementary economics.
126. current economic problems (2) II (L) Selected economic problems of current interest.
127. ECONOMIC UNDERSTANDING in general education (2) SS What are the prime teachable essentials of public economic understanding? How may they best be taught? Intended for teachers and others.
129. business fluctuattons (3) I

Nature, causes and proposed remedies for business, employment, and price fluctuations which are probably our most serious economic problem. Prerequisite: Elementary economics.
130. THE MODERN CORPORATION, MONOPOLY, AND CARTEL (3) II The development of the corporation, monopoly, and cartel; government policies of control. Prerequisite: Elementary economics.
137. labor legislation (2) I 54

The development of labor legislation and the more important laws and decisions applicable today.
138. ECONOMICS OF LABOR (3) I 55

Deals with economic aspects of labor problems and labor organization. Prerequisite: Elementary economics.
139. CApITALISM AND other economic systems (2) II 55

Study of different economic systems, and particularly of out own against the background of other systems; similarities and dissimilarities in aims, basic problems, applicable economic principles, and institutions.
140. internattonal economic problems (2) 154 and SS

Economics aspects of international cooperation and conflict. The quest for foreign markets, raw materials, investment opportunities, and population
outlets. Principal international econemen outlets. Principal international economic institutions.
210. monetary and fiscal problems (2 to 4) II 56 (U)
295. seminar in economic theory and policy (2 to 4) I (U)
296. seminar in labor economiscs (2 to 4) il (U)
299. Thesis (4)

## EDUCATION AND PSYCHOLOGY

Professors: Jantzen (Dean of the School of Education), gore, harbert,
J. w. harras, hodgins, Jacoby, mitchell, potter, russell

Associate Professors: darden, Gregory, learned, e. norton, painter, pease
Stocking stocking
Assistant Professors: farrow, ingebo
Instructors: ESSER, SISK
Lecturer: f. Goleman

## Education

MAJOR REQURREMENTS: Education may be elected as a general undergraduate major for the Bachelor of Arts degree, and is required for students who plan to take a Master of Arts degree in the department. The minimum requirement
is 24 upper division units.

Prospective majors in education should take, as preparation for the major fundamental or introductory courses in biology or general science survey, social science ourses including a systematic presentation of European and American history, courses in the humanities (art, literature, music), and philosophy.

Majors should include the following courses or their equivalent: History of education, a foundation course in elementary or secondary education, tests and measurements, introduction to audio-visual methods, general psychology, educational psychology, and either child growth and development or adolescent psychology. The student who is an elementary credential candidate meets the education major requirements by taking the following courses: Education 130, 134, 158; and Psychology 11, 106, and 140, plus one elective course in education or psychology. In addition, the major requires a concentration of 6 units in some other department. Courses taken to meet some other bachelor of arts requirement may not be ment. Courses taken to meet toward these 6 units.

Graduate students, adequately prepared, may register for the degree Master of Arts in education and the degree Doctor of Education. The work of such candidates will be outlined and directed by the School of Education and a special committee of the Graduate Council. (See pages 51-54).

Teachers in service may be admitted to graduate courses after conference with the Dean of the School of Education.

For information concerning teaching credentials, see section on School of Education:

Students desiring personal conuseling concerning the requirements for a general elementary credential should consult the Director of Elementary Education. Those wishing additional information about the several secondary credentials should see the Director of Secondary Education. Students wanting to discuss requirements of any of the educational administration credentials should make an appointment with the Director of Educational Administration. Master of Arts degree candidates should see the Dean of the School of Education.
related courses in other departments: Art 150, 151, 152; Health, Physical Education, and Recreation 189, 202; Music 116, 117; Religious Education 152, 252; Sociology 155 .
11. introduction to education (3) II

A general overview of public education, with visits to elementary and secondary schools to see children in action, the school curriculum, and the educational plant. Prerequisite: Sophomore standing.
22. orientation to clinical services (1) II

This course will use lectures, panel discussions; and directed observation to describe the work and special functions of the campus clinical services team, but will not train students directly in clinical techniques. The clinical services staff will acquaint class members with the general responsibilities and work of remedial educators, clinical psychologists, social workers, psychiatrists, and music therapists.
100. review of elementary school subjects (no credit) I and II

Testing and personal counseling in the major skill-subjects required of the teacher in the elementary school.
Two class periods a week.
102. history of european education (3) I

A general history of education treating the development of modern educational thought with emphasis upon the European backgrounds.
103. history of american education (2) SS

A presentation of the origin and development of the American schools.
107. educational sociology (2) I

The study of education in its relation to the other social institutions. Directed field work
114. statistical methods in educatton (2) II
A. study of the more common statistical procedures, including measures of central tendency and of variability, applications of the normal curve sampling and reliability, and product-moment, rank difference, bi-serial and tetrachoric correlations.
115. TESTS AND MEASUREMENTS (2) I

A survey of methods of educational and mental testing, and the analysis and interpretation of test results. Prerequisite: General psychology.
126. introduction to audio-visual education (2) I and il

The selection and use of objective teaching materials, including slides, prints, the radio, recordings, and projection and non-projection materials. Two class periods and one 1-bour laboratory period a week.
130. PRinciples of elementary education and of child growth (6) I A study of the elementary school, its organization and general methodology the psychological and sociological basis of instruction in the light of child development. Directed observation. Prerequisite: General psychology.
132. Current theories and practices of elementary education (2) SS A study of the principles of education with relation to the practices found in elementary schools.
134. ELementary school methods and audio-visual education (6) I and il A systematic study of methods and materials in communication skills, number skills, and social studies. Includes directed observations and curriculum laboratory work. Meets the state requirement in audio-visual education.
135. elembntary school methods (2) SS

An introduction to methods of teaching the elementary school subjects.
136. CURRICUL̦UM AND METHODS IN KINDERGARTEN-PRIMARY EDUCATION (4) SS A survey of kindergarten-primary principles, procedures, and materials appropriate to the school level indicated.
137. curriculum and methods in the intermediate grades (4) SS
138. teaching of reading (2) SS

A basic study of reading readiness and of methods and materials in the elementary school reading program.
139. language arts in the elementary school (2) SS A functional elementary school program in the language arts, exclusive of
reading.
140. TEACHING ARTHMETIC (2) SS

A basic study of modern methods and materials in elementary school arthmetic.
142. METHODS AND TECHNIQUES FOR TEACHING MENTALLY RETARDBD CHILDREN
(2) II

An intensive study, with directed observation, of the principles, procedures, and materials appropriate in teaching the mentally retarded pupil.

155a. DIRECTED TEACHING IN LIP READING (1 to 3) I and II
155b. DIRECTED TEACHING IN SPEECH CORRECTION (2) I and II Directed teaching is done in cooperating public schools. A minimum of 100 hours is required. Permission and previous arrangements must be made with the instructor.

158a. directed teaching, general blementary school (2 to 8) I and II Prospective student teachers should register with the Director of Elementary Prospective student teachers should register with the Director of Elementary
School Student Teaching one month before opening of session in which directed teaching is done. Prerequisites: Education 100, 130, and 134.

158b. Directed teaching of mentalily retarded children ( 2 to 4) II Obeservation and directed teaching in classes organized by the public schools specifically for mentally retarded children.

158c. DIRECTED TEACHING OF ELEMENTARY SCHOOL MUSIC (2) I and II Directed teaching on two levels with observation at a third level.
164. PRINCIPLES AND TECHNiques of guidance (2) II Principles, objectives, and techniques of guidance and counseling procedures in the elementary and secondary school.
170. princtples of secondary mducation (2) SS

Aims, history and problems of secondary education, Prerequisite: Education 103.
172. FOUNDATIONS OF SECONDARY EdUCATION (5) I and II

The nature and meaning of education; history and purposes of secondary education; the modern secondary school, its curriculum, guidance program, and community relationships, Required of all candidates for secondary credential.
174. SECONDARY SCHOOL METHODS AND AUDIO-VISUAL EDUCATION (3) I and II Current methods of teaching in secondary schools with special attention given to the selection and use of projection and non-projection materials. Meets the state requirement in audio-visual education.
Two class periods and one 2 -bour laboratory period a week.
178a. Directed teaching in the secondary schooi (4 to 6) I and II
Prospective student teachers at the secondary level should register with the Director of Secondary School Student Teaching one month before opening of the session in which directed teaching is done. Prerequisite: Cousse requirements as outlined for the secondary credential.

178b. DIRECTED TEACHING OF ART (3 to 6) I and II
178c. Directed teaching of homemaking (3 to 6) I and II
178d. DIRECTED TEACHING OF SECONDARY SCHOOL MUSIC (2 to 4) I and II The directed teaching is done in the public schools with units of work done in instrumental, vocal, and theoretical subjects.

178e. directed teaching of physical education (3 to 6) I and II
178f. Directed teaching of speech (3 to 6) I and II
191a.;192a. PRACTICUM IN ELEMENTARY EDUCATION (1 to $4 ; 1$ to 4) I;II By special arrangement with the Director of Elementary School Student Teaching, students may entoll in this practicum which will provide an entiched practical experience in a cooperating public school.

191b.;192b. PRACTICUM IN SECONDARY EDUCATION (1 to $4 ; 1$ to 4) I;II
By special arrangement with the Director of Secondary Education, students may enroll in this practicum which will provide an enriched practical experience in a cooperating public school.

193;194. SPECIAL PROJECTS IN EDUCATION (1 to 4; 1 to 4) I;II
200. SPECIAL METHODS OF SECONDARY SCHOOL SUBJECTS Secondary School Art Methods. (See Art 200). The Teaching of Science. (See Natural Science 200). The Teaching of English. (See English 200). Teaching of the Social Sciences. (See History 200). Methods of Teaching Home Economics. (See Home Economics 200). The Teaching of Mathematics. (See Mathematics 200). The Teaching of Modern Languages. (See Modern Language 200). Secondary School Music Methods. (See Music 200). The Teaching of Speech. (See Speech 200).
201. TECHNIQUES OF RESEARCH (2) I

Methods of research, with emphasis on the means of collecting, analyzing and interpreting data, and standards for preparing a scholarly report. Limited to qualified Master of Arts degree candidates.
202. HISTORY AND PHILOSOPHY OR EDUCATION (2) SS
203. teaching moral and spiritual values in the public schools (2) II
204. PHILOSOPHY OF EDUCATION (2). II

Theoretical implications of established school practices and the expressions of leading adherents to the historical tradition, the scientific and experimentalnaturalist and sociological schools of educational thought.
205. CURRENT EDUCATIONAL Literature (2) I

Current books and journal articles dealing with matters of educational and social criticism. The course may be repeated for credit.
206. COMPARATIVE EDUCATION (2) SS
209. THE SCHOOL CURRICULUM (2) II

Development of the modern curriculum at the elementary and secondary levels. Opportunity is given students to work in the field of their major interest.
228. ORGANIZATION AND ADMINISTRATION OF THE AUDIO-VISUAL PRORGAM (2) SS Designed for school and church administrators and those responsible for directing the audio-visual education program in a city or county public school system or church organization.
260. WORKSHOPS IN EDUCATION (2 to 4) SS
280. PUBLIC EDUCATION aNd THE Law in CALIfornia (2) I

School administration as a profession, with emphasis upon the legal principles governing the public shool system of California.
281. Laws relating to children (2) I

A study of state and federal laws relating to children. Admission by permission of instructor only.
282. PROBLEMS OF SCHOOL HOUSING (2) SS

Standards and problems concerned with construction and maintenance of the school plant.
283. SChOOL FINANCE AND BUSINESS ADMINISTRATION (2) II

Principles and techniques of effective financial administration of a school system, and the various business setvices which a school system performs.
284. PUBLIC RELATIONS iN EDUCATION (2) SS
286. SUPERVISTON OF RLEMENTARY SCHOOL INSTRUCTKON (2) I

The concept of school supervision in the elementary school, with emphasis on objectives, organization, appropriate techniques, and evaluation
287. SUPERVISION OF SECONDARY SCHOOL INSTRUCTION (2) I

School supervision in the secondary school, with emphasis on objectives, organizations, appropriate techniques, and evaluation

288;289. ORGANIZATION AND ADMINISTRATION OF PUBLIC SCHOOL EDUCATION $(2 ; 2) \quad 1 ; I I$
The history, development, professional relationships and responsibilities of the administrative department of the modern American school at the elementary and secondary level.

291;292. FIELD WORK IN EDUCATIONAL ADMINTSTRATION ( 1 to $3 ; 1$ to 3 ) I;II This course deals with practical on the job problems faced by administrators. The course is open to approved graduate students pursuing one of the administration credentials through a recommendation from the College of Pacific.

293;294. DIRECTED STUDY IN EDUCATION (1 to 3 ; 1 to 3 ) $1 ;$ II
Graduate students may enroll in some special area of directed study with the consent of the instructor in charge.

295;296. SEMINAR (1 to 4; 1 to 4) I ; II
Group study of special problems. Students may register only after a conference with the dean.

297;298. INDEPENDENT INVESTIGATION IN EDUCATION (1 to $3 ; 1$ to 3 ) I;II Graduate students may enroll in some special area of independent investigation with the consent of the instructor in charge.
299. THESIS (4) I:II:SS

Students may register for the Master of Arts thesis only with permission of the chairman of the thesis committee.

393;394.. DIRECTED STUDY IN EDUCATION (1 to $3 ; 1$ to 3 ) I;II
Graduate students may entoll in some special area of directed study with the consent of the dean.

397;398. INDEPENDENT INVESTIGATION IN EDUCATION ( 1 to 3 ; 1 to 3 ) I ; II Graduate students may enroll in some special area of independent investi gation with the consent of the dean.
399. DOCTORAL DISSERTATION (1 to 8) I:II:SS

## Psychology

Psychology offers a desirable undergraduate major for students who are plan ning (1) to work toward advanced degrees with a major in psychology, (2) to ontinue professional studies in education, laws. medicine, social work, or theology, (3) to obtain an undergraduate major toward a general elementary teaching redential

The graduate program has been developed to provide a thorough training specially for the prospective school psychologist. The course offerings are extenive enough to permit concentration in child and adolescent psychology, clinical psychology, and educational psychology.

Students desiring counseling concerning the requirements for a psychology major and those desiring to do graduate work should see the chairman of the Department of Psychology.

MAJOR REQUIREMENTS: Completion of a minimum of 24 upper division units of psychology courses. The student who expects to do graduate work in psychology will be required to include in his program courses $104,112,114,126$, 132 , and 160 ; also college algebra, general biology, and general college chemistry. Music 196;197 and Music 186;187 may be included in the psychology major.
11. GENERAL PSYCHOLOGY (3) I and II

A basic, scientific study of the behavior of organism with an introduction to the field of human motivation and behavior.
12. THE PSYCHOLOGY OF ADJUSTMENT (3) II

A psychological effort to help the student discover and understand his own riner drives and conflicts and to create unified, versatile, and socialized personality traits which satisfy and enrich himself and his fellows
104. experimental psychology (3) I

A course in labotatory method and the testing of psychological hypotheses. Prerequisite: General psychology.
106. mental hygiene (3) I and II

A study of the development of personality with emphasis upon the most effective adjustment possible for the individual. Prerequisite: General psychology.
108. DYNAMICS OF ADJUSTMENT (2) SS

A study of personal adjustment and mental hygiene with emphasis on the contributions to these problems from the field of psychiatry.
110. SOCIAL pSychology (3) I

A course dealing with the relationship of culture and personality. Prerequisite: General psychology.
112. abNORMAL PSYChology (3) I

Abnormal behavior is studied in detail with emphasis laid on the causation of functional types. Prerequisite: General psychology. It is recommended that the student have had courses 132 and 136.
114. Statistical method in psychology (2) il

The more common statistical procedures, including measures of central tendency and variability, applications of the normal curve, sampling and tendency and variability, applications of the normal curve, sampling and
reliability, and product-moment, rank-difference, bi-serial, and tetrachoric reliability, and product-moment, rank-difference, bi-s
correlations. Prerequisite: Six units of psychology.
126. history and systems of psychology (3) I

A survey of the important theories, experiments, and leaders in the development of modern psychology. Prerequisite: General psychology.
130. Child growth and devilopment (2) I

The development of the child from infancy to adolescence, in its physical, intellectual, emotional, and social aspects. Prerequisite: General psychology.
132. psychology of adolescents (2) I and II

A study of the physical, intellectual, and emotional development of adolescents. Prerequisite: General psychology.
134. pSychology of the exceptional chitd (2) I

A survey of the problems of physical, mental, and behavior deviations which interfere with adjustment to normal living. Prerequisite: General psychology.
136. psychology of parent-Child relationships (2) II

Individual differences at birth, effects of environmental circumstances on organism, development of personality characteristics due to human associations, and the general study of adjustment mechanisms in childhood.
140. bducattonal psychology (2) I and II

Applications of psychology to education, with particular reference to individual differences, the learning process, and the psychological bases of general and specific classroom methods. Prerequisite: General psychology.
150. intelligence testing (3) I

The theory of individual and group intelligence testing. Experience with Stanford-Binet and Wechsler-Bellevue tests. Prerequisite: General psychology.
151. intelitgence testing (3) II

The study and practice of performance type tests. Prerequisite: General psychology.
152. Group testing (2) II

A review of group testing procedures and a project of group testing under classroom conditions. Prerequite: Course 150 or 151.
160. cainical psychology: Client-Centered Counseling. (2) I An introductory to the theory and techniques of client-centered counseling. Emphasis is placed upon methods and procedures outlined by Rogers, Axline, and Moustakas. Case materials and selected tape recordings are available for study. Prerequisite: Nine units of psychology.
161. Clinical psychology: Survey Course. (2) II A general survey of the field of clinical psychology. Prerequisite: Nine units of psycholgy.
170. pSYChology of reading (2) I

A study of the psychological process involved in reading, and of the diagnostic and remedial procedures applicable to cases of reading disability in both elementary and secondary schools.

191a;192a. clinical psychology: Introduction to Practicum (2;2) Yr. A practicum course offering training in client-centered therapy with children. Opportunities exist for assisting in the interviews with parents. Admission is by permission of the instructor. Prerequisite: Course 160.

191b;192b. field work in clinical methods (2;2) Yr.
Students arrange living conditions to spend the major part of their time in institutional situations under the supervision of psychologists. Prerequisite: Course 160 or 161.

191c;192c. reading clinic practice (2;2) Yr.
A practicum course in treatment of reading disabilities; experience is provided in specific procedures for diagnosis and correction of various types of reading difficulties. Prerequisite: Psychology 170 or its equivalent.

197;198. Individual study and research ( $2 ; 2$ ) Yr.
Each student may choose his own topic or problem in consultation with the instructor and follow a program of study under the instructor's guidance. Permission of Director of Psychology required.
201. TBCHNXQUBS OF RESEARCH

Methods of research, with emphasis on collecting, analyzing and interpreting data, and the standards for preparing a scholarly report. Limited to qualified Master of Arts degree candidates.
208. ADVANCED PSYCHOLOGY OF ADJUSTMBNT (2) I 54

Advanced theory and case study in the problems of adjustment.
209. Literature of psychotherapy (2) 55

A seminar devoted to a comprehensive coverage of the literature on psychotherapy.
15. STUDY OF CASE HISTORIES (3) II

Intensive study of case histories in abnormal and clinical psychology, Cases her chosen ty many ty of cases possible.
ADVANCED EDUCATIONAL PSYCHOLOGY (2) I
Advanced study of the psychology of learning and teaching processes, with emphasis on the evaluation of current educational theories and practices in terms of psychology principles. Prerequisite: Psychology 140.
265. PROJECTIVE METHODS: Orientation (2) SS

A preparation for learning projective techniques through development of personality theory and study of the construction, uses, and limitations of projective tests. The Rorschach, T.A.T., and M.A.P.S. will be used for demonstration, but the course will not prepare students to administer and interpret these tests.

291a;292a. CLINICAL PSYCHOLOGY PRACTICUM (1 to 3; 1 to 3) Yr. Clinical work with children, using client-centered therapy. A limited number of advanced students may have opportunities for counseling with adolescents and adults. Permission of instructor required. May be repeated for a and imum of 6 units. Prerequisite: Courses 160 and 191a or 192a.

291b;292b FIELD WORK IN CLINICAL PSXCHOLOGY (1 to $3 ; 1$ to 3 ) Yt May be repeated for a maximum of 6 units.

295;296. SEMINAR (1 to 4) I;II
Group study of special problems for graduate students. Students may register only after a conference with the Director of the Department.

297;298. INDIVIDUAL STUDY AND RESEARCH (2;2) Yr. The graduate student may choose his own topic or problem in consultaion with the instructor and then follow a program of study under the instructor's guidance.
299. THESIS (4) I:II:SS

## ENGINEERING

## Professor: wallace (Chairman)

Associate Professor: harrison
Lecturer: SNYDER, VONDRACEK

## Bachelor of Science with Major in Engineering Science

Students who are interested in engineering research or who desire a broad background in the basic and engineering sciences before specializing in any one branch of the engineering profession are advised to follow this curticulum. Grad uates may pursue advanced work in chemistry, mathematics, or physics. Require ments for the more specialized Bachelor of Science in Civil Engineering may be completed after one year of additional study.

MAJOR REQUIREMENTS: Lower Division.-Freshman year: Engineering 10, 11, 12; Chemistry 11, 12; Mathematics 18, 19, 20; Physics 11. Sophomore 10, 11, 12; Chemistry 11, 12 ; Meartistry 31, 32; Mathematics 21, 22; Physics 12, year: Engineering 30, 35 ; Chemistry 31,12 ; $120,121,130,133,141,160,164$ 13. Upper Division.-Engineerng 196 ; Mathematics 103, 105, 205; Physics 130, 150 .

171, 196 ; Mathematics "Requirements for Graduation" for total requirements for the Bachelor See Requirements 50).

Bachelor of Science with Major in Management-Engineering
Many important managerial positions in the production and construction industries are being filled by persons who have a broad background in the fundamental engineering sciences, in business administration and in the humanities. As technology advances, it is evident that an understanding of the underlying principles of techniological processes will be required before one may advance into managerial duties. The following curriculum is designed to prepare the student for managerial responsibility.

MAJOR REQUTREMENTS: Lower Division.-Freshman year: Engineering 10, 11, 12; Chemistry 11, 12; Mathematics 19, 20; Physics 11. Sophomore Year: Engineering 30, 35, 36, 37; Mathematics 21, 22; Physics 12, 13. Upper Division -Engineering 101, 111, 120, 121, 130, 141, 160, 170, 171, 196; Business Administration $9,120,123,124,125,127,135,140,142,150$.

See "Requirements for Graduation" for total requirements for the Bachelor of Science Degree (Page 50).

## Bachelor of Science in Civil Enginerring

Civil engineering, the oldest of the several branches of the broad field of engineering, is concerned with the planning, designing and construction of roads, railroads, harbors, buildings, tunnels, waterways, bridges, dams, air frelds, canals, and water and sewerage systems. Not only is the civil engineer involved in the original planning and construction of these projects; his background of education and experience prepares him to act in an administrative capacity in the operation and maintenance of many facilities under either private or public ownership.

The four-year curriculum which follows is based on the specific and general requirements of the nationally recognized accrediting agency for engineering colleges, The Engineers' Joint Council for Professional Development. Completion of the curriculum in accordance with the requirements as to scholarship and residence leads to the degree of Bachelor of Science in Civil Engnieering.

Students who desire to enter at the junior year by transfer must meet the requirements as listed below for the freshman and sophomore years, although substitution may be allowed by the head of the department for the specific courses in Psychology, Economics and Engineering 10 and 37. The applicant for admission to junior standing must have a minimum average of " C " (grade point of 1.0 ) in all subjects attempted, and must have a minimum grade of "C" in English composition and all specified lower division engineering courses.

Curriculum Lbading to Bachelor of Science in Civil Engineering

| FRESHMAN YEAR | I | II | SOPHOMORE YEAR | 1 | II |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English, Speech | 3 | 3 | Elementary Economics | 3 | - |
| General Psychology | 3 | - | American Democracy | - | 3 |
| General Chemistry | 4 | 4 | Physics II and III | 4 | 4 |
| Physics I | - | 4 | Integral Calculus | 3 | 3 |
| Analytical Geometry and |  |  | Surveying | 3 | 3 |
| Calculus | 3 | 3 | Statics | - | 3 |
| Descriptive Geometry | - | 2 | Engineering Materials | 2 | - |
| (Engineering) Orientation | 1 | - | Engineering Problerms | 1 | - |
| Engineering Drawing | 2 | - | Physical Education | 1/2 | 1/2 |
| Physical Education | 1/2 | 1/2 |  |  | 161/2 |
|  | $161 / 2$ | $16^{\frac{1}{2}}$ |  |  |  |

$\left.\begin{array}{lccccc}\text { JUNIOR YEAR } & \text { I } & \text { II } & \begin{array}{c}\text { SENIOR YEAR } \\ \text { Sewerage \& Sanitation } \\ \text { Biblical history, literature } \\ \text { or archaeology }\end{array} & 2 & 2\end{array} \begin{array}{c}\text { Water Supply }\end{array}\right)$

* Electives must be chosen from courses in philosophy, sociology, or political science. In special cases, the student may choose as an elective in his final semester Engineering 197;198.

10. ORIENTATION (1) I

A survey of the field of engineering. Fundamentals and use of the slide tule. A nationally recognized pre-engineering aptitude test will be given to all students.
One class period a week.
11. ENGINEERING DRAWING (2) I

Principles and application of orthographic, isometric and oblique projections in the making of working drawings; sectioning; dimensioning; lettering; standard symbols and conventions.
One class period and 5 bours of drafting room problems a week.
12. DESCRIPTIVE GEOMETRY (2) II

Principles of projection and application to points and lines in space; curved lines and surfaces; intersections and development; special drafting room problems. Prerequisite: Course 10.
One class period and 5 bours of drafting room problems a week.
30. SURVEYING (3) I

Theory and practice of elementary plane and topographic surveying; care, use, and adjustment of equipment. Prerequisite: Sophomore standing. Two class periods and 3 bours of field and office problems a week.
31. SURVEYiNG (3) II

Highway, railroad route, public land, municipal, and advanced topographic urveying; solar observations for latitude and longitude; advanced triangulation and leveling. Prerequisite: Course 30.
Two class periods and 3 bours of field and office problems a week.
35. STATICS (3) II

The center of forces, moments and couples as applied to the equilibrium of particles and bodies. The resolution and resultants of force systems by analytical and graphical methods. The laws of friction between dry bodies. Center of gravity and moments of inertia. Prerequisite: Mathematics 21 and enrollment in Mathematics 22.
Three class periods a week.
36. ENGINBERING MATERIALS (2) I

A study of the composition and physical properties of various metals and alloys, woods, masonry materials and plastics used in engineering construction and machines. Prerequisite: Sophomore standing.
tion and machines, Prereq
Two class periods a week.
37. ENGINEERING PROBLEMS (1) I

The solution of a series of simple problems in the field of engineering. A transitional course to close the gap between the basic sciences and their application to engineering problems. Prerequisite: Mathematics 21 and Physics 12 or concurrent enrollment.
One 3-bour laboratory period a week.
101. PRINCIPLES of blectrical engineering (4) I 54

Principles and application of alternating and direct current circuits and machinery. Prerequisites: Caclulus and physics.
machinery. Prerequisites: Caciulus and physics.
111. DYNAMICS (3) I

Principles governing the linear and curvilinear motion of a particle; translation and rotation of rigid bodies; work and energy, impulse and impact; momentum. Prerequisite: calculus, physics, and statics.
Three class periods a week.
120. Strength of materials (3) I

Fundamental relationships underlying stress, strain and deflection in simple structural and machine members. Prerequisites: Calculus, physics (mechanics) and engineering materials.
and engineering materials.
Three class periods a week.
121. MATERIALS LABORATORY (2) I

Verification and limitations of principles studied in course 120 by actual testing of metallic and non-metallic materials in the laboratory. Design and testing of plain concrete. Prerequisite: Course 120 or concurrent enrollment.
One class period and one 3-bour laboratory period a week.
130. FLUID MECHANICS (3) II

Properties of fluids, hydrostatics, flow in pipes, flow in open channels, similitude, orifices, weirs, tubes, nozzles, jets and dynamics of fluid flow. Prerequisite: Course 111 .
Three class periods a week.
131. SEWERAGE AND SANITATION (3) I

Design and construction of sanitary and storm water sewers; quality and chatacteristics of municipal and industrial wastes; sewage disposal and treatment. Prerequisite: Course 130.
Three class periods a week.
132. WATER SUPPLY (3) II

Sources and availability of water; industrial and residential consumption; distribution networks and appurtenances; methods of treatment and purification. Prerequisite: Course 130 or concurrent enrollment.
T'bree class periods a week.
133. HYDRAULIC LABORATORY (I) II

A laboratory course to supplement course 130.
One 3-bour laboratory period a week.
141. heat powbr (3) II 56

Elementary study of heat energy, heat transfer, and conversion. Prerequisites: Physics (heat), calculus, and coutse 111.
Three class periods a week.
154. ROUTE SURVEYING (3) I 55

Simple and compound curves; transition curves; earthwork; haul and overhaul; mass diagrams. Prerequisite: Lower division requirements in surveying Two class periods and 4 bours of field and office problems a week.
155. HIGHWAY ENGINEERING: (3) II 55

Traffic capacity, location, alignment, foundations and correlated soil mechanics, drainage, road and pavement design; materials, construction and organization. economics and finance of city, state, and national highways. Prerequisites: Courses 121, 130, and 154.
Tbree class periods a week.
160. ELEMENTARY THEORY OF STRUCTURES (3) II

Analytical and graphical methods of stress analysis in beams, girders, simple trusses and bridges subjected to fixed and moving loads. Prerequisites: Courses 120 and 121.
Two class periods and two 2-bour laboratory: periods a week.
161. REINFORCED CONCRETE DESIGN (3) II

Theory and application of reinforced concrete to reinforced concrete beams, girders, columns, slabs, walls, floor systems and frames. Current specifications are discussed and used in the design of members and connections. Prerequisite: Course 160.
Two class periods and two 2-bour laboratory periods a week.
162. Steel and timber design (3) I

The proportioning of structural steel and timber members in beams, girders, trusses, and simple framed structures. Bolted, riveted, and welded connections are considered. Pretequisite: Coutse 160.
Two class periods and two 2-bour laboratory periods a week.
163. FOUNDATIONS (3) II

Consideration of the engineering properties and the mechanics of soils as foundation material in civil engineering design. Prerequisites: Courses 161 and 162
Three class periods a week.
164. ANALYSIS OF INDETERMINATE STRUCTURES (3) I

The principles of virtual work, elastic weights, moment distribution and the column analogy are developed and applied to the analysis of stresses and deflections of indeterminate beams, girders, trusses and frames. Prerequisites: Courses 161 and 162.
Three class periods a week.
170. CONSTRUCTION PLANNING, CONTRACTS AND SPBCIFICATIONS (3) I 54 Planning and construction of selected engineering projects. Preparation and execution of bids, contracts and specifications. Prerequisite: Junior standing.
Two class periods and one 3-bour laboratory period a week.
171. ENGINEERING ECONOMICS AND ADMINISTRATION (3) II 56

Investment analysis as a basis for the economical selection of an engineering structure, equipment or machinery. Financing and administration of engineering projects and organizations. . Prerequisite: Junior standing. Three class periods a week.
196. SEMINAR (2) II 55

Oral and written reports on current engineering literature or projects, selected by the student and approved by the instructor and the head of the department. Pterequisite: Junior standing
Two class. periods a week.
197;198: PROJECT (2 to 4; 2 to 4) I;II
Individual study, research or design of an engineering problem or project selected by the student and approved by the head of the department. Open only to advanced students who have shown a capacity for individual work.

## ENGLISH AND JOURNALISM

Professors: olson (Chairman) and farley
Associate Professors: pierce and woodall
Assistant Professors: humbargar, morrison, and osborne
Lecturer: KIZBR
MAJOR REQUIREMENTS IN ENGLISH: 24 to 30 upper division units, including 120, 130;131, 142;143; and one semester of 155;156. Students planning to work for a master's degree in English should fulfill the college language requirement in Latin, French, or German.

REQUIREMENTS FOR THIE DEGREE OF MASTER OF ARTS IN ENGLISH: Course taken must include 201, 207 and 152 (if not taken as undergraduate work). The final examination for the degree will covet courses 201, 207, 152, the fields of English and American literature, and the field of the thesis. (See also "Requirements for the Master of Arts Degree")

MAJOR REQUIRBMENTS IN JOURNALISM: 24 units in English and Journalism, in addition to project courses, at least 10 of the 24 being in theoretical courses in journalism.
recommended elective in journalism: Political Science 160.

## Courses in English

11. BASIC COMPOSITION (3) I and II

Expository writing; preparation of a library paper; readings in recent literature; review of grammar, spelling, and punctuation. Must be passed, with a grade of " C " or better, by all candidates for a bachelor's degree.
12. introduction to imterature (3) I and II

A study of various types of literature, such as the novel, short story, poetry, essay, and drama, primarily from the standpoint of literary values.
15. BuSiness engliṣh (2) I

Emphasizes the type of writing that the business man or executive will be called on to use in conducting various business enterprises. Normally taken in the sophomore year.
48. Literature of the west (2) II

The westward movement in America as seen in literature, with emphasis upon the rise of naturalism. Mark Twain, Garland, Lewis, Dreiser, Cather, Stienbeck, and others are considered.
106. LITERATURE FOR THE BLEmentary grades (2) SS

A survey of good reading for children. Designed for teachers, parents, and others who work with children from the kindergarten through the sixth grade.
107. IITERATURE FOR ADOLESCENTS (2) SS

Designed for teachers, parents, and others who work with young people.
111. CREATIVE WRITING-SHORT STORY (2) I

A study of the forms of the modern short story, with exercises on specific problems in writing fiction. Several short stories are written during the semester. Prerequisite: Consent of the instructor.
112. CREATIVE WRITING-PLAYWRITING (2) II 56

Problems in writing plays. Both one-act and three-act plays are considered, and several plays are written during the semester. Prerequisite: Consent of the instructor.
113. CREATIVE WRITTNG-VERSE (2)

Practice in writing poetry in various forms. Prerequisite: Course 120 or consent of the instructor.
116. ADVANCED GRAMMAR (2) I

A study of grammar, sentence structure, spelling, and punctuation. Designed especially to prepare teachers for elementary and secondary schools. This course will not be counted toward a Master's degree.
117. ADVANCED COMPOSITION (2) II

The four forms of discourse, with particular emphasis upon exposition.
120. APPRECIATION OF POETRY (2) I

The technique of poetry is studied as a basis for an appreciation of its artistic power.
122. Literature and the fine arts (2) SS

A study of literature, music, and painting as media for expressing man's thoughts and emotions.

130;131. SURVEY OF ENGLISH LITERATURE (3;3) Yr. (L) A general survey course which stresses the shaping influences in the development of English literature, and includes a detailed study of important writers.

142;143. SURVEY OF AMERICAN LITERATURE (3;3) Yr. (L) A general survey course which stresses the shaping influences in the development of American literature, and includes a detailed study of important writers.
152. CHAUCER (3) II 54

Most of the Canterbury Tales will be read and discussed. Previous training in Old or Middle English not required.

155;156. SHAKESPEARE (3;3) Yr.
In the first semester, special attention to Shakespeare's background, biography, and most important early comedies and histories. In the second semester, his later plays and greatest tragedies are studied in detail.
157. MILTON (2)

A study of Milton's poetry and prose with a consideration of his life and times.
165. ROMANTICISM (2)

The development of the romantic school of thought in the eighteenth century and its culmination in the great poets of the early nineteenth century.
166. VICTORIAN LITERATURE (2) A study of the political, social, religious, scientific, and artistic thought of the middle of the nineteenth century, and its expression in poetry and prose.
168. BROWNING (2

A detailed study of the life and major works of the poet.
172. MODERN EUROPEAN DRAMA (2) I 55

Ibsen and the beginnings of modern drama; Hauptmann and the growth of Ibsen and the begise of expressionism; Maeterlinck and symbolism; drama naturalism; the tise of
and the modern world.
174. MODERN AMERICAN DRAMA (2) II

The drama of revolt; Eugene O'Neill and the influence of European drama; the drama of regionalism; the modern American comedy; naturalism and American problems; the new poetic drama.
182;183. DEVELOPMENT OF THE ENGLISH DRAMA (3;3) Yr. 54-55
In the first semester, the rise of drama from the mitacle plays to the In the first orme theatres in 1642 is studied; in the second semester, plays from the Restoration to Coward and Shaw art read and discussed.

184;185. development of the english novel (3;3) Yr. 55-56 In the first semester a historical and critical study is made of the novel from its beginning to George Eliot; in the second semester, a critical study of the important novels from George Eliot to the present.
200. the teaching of english (2) I

The presentation of literature and composition in secondary schools.
201. methods and matbrials of resbarch (2) II 55

An introduction to the methods and materials of research used in preparing theses for the Master's degree in the field of English. Prerequisite: Graduate standing.
203. LItERARY CRiticism (2)

A study of literary values and critical principles. Prerequisite: Upper division courses in literature.
207. SEmantics and history of the english language (2) il 56 (U)

The development of the language from Old English to contemporary usage in England and America.
208. ANGLO-SAXON (2) II 55

A study of Anglo-Saxon grammar and the reading of simple Anglo-Saxon prose.

210;211. advanced comparative literaturb (2 to 4; 2 to 4) Yr. 55-56 (U) The inter-relations between the history and development of various foreign literatures from ancient times to the present day. Extensive readings in translation. Prerequisite: Upper division courses in literature.
212;213. advanced american utterature ( 2 to 4; 2 to 4) Yr. $54-55$ (U)
A critical and historical study of the personalities and writings that have contributed to American literary culture from 1620 to 1940. Prerequisite: Course $142 ; 103$ or its equivalent.
215. AdVanced shakespeare (2)

A detailed study of four or five plays. Prerequisite: Course $155 ; 156$ or its equivalent.
295;296. seminar ( 2 to 4; 2 to 4) I;II
Advanced study of some author or aspect of English Literature. Prerequisite: Upper division courses in literature.
299. THESIS (4) I:II:SS

Prerequisite: Course 201 or its equivalent.

## Courses in Journalism

4. blementary journalism projegcts in newswriting (1 or 2) I:II A coaching course for lower division members of the Pacific Weekly staff.
5. blementary projects in yearbook editing (1) I:II
6. COPY bditing (2) II 56

An advanced course in copy editing for students who have had at least two semesters of general work in journalism.
103. NEWSWVRITING (2) I

A practical course in newsroom procedure.
104. JOURNALISM PROJECTS IN NEWSWRITING (1 to 4) I:II

A course primarily for the upper division members of the Pacifc Weekly staff. All staff members are required to enroll for either this course or course 4 above, either as credit students or as auditors.
105. Journalism projects in yearbook editing (1 to 4) I:II
109. FORMS of journalism (2) II 55

General analysis and comparison of newspapers as to makeup, news content, use of photographs, and features.
110. history of journalism (2) II 56

The growth and development of American journalism, the idea of the freedom of the press, and the place of the newspaper in the American cultural pattern.
111. ethics of journalism (2) II 55

A study of the ethics of newswriting, the responsibility of the newspaper and the magazine to the American public, and the forces behind the press and public opinion.

## ROOD PROCESSING ADMINISTRATION AND CONTROL

## Adviser: совв

The fact that the College of the Pacific is located in the midst of the nation's most important food processing area gives the College a unique advantage in preparing students for participation in the administration and laboratory control activities of this giant industry.

Consequently, a curriculum has been organized in which the student majors in either chemistry, botany, or zoology (A.B. degree), but includes courses in all thee of these sciences and also in business administration, in addition to the courses

103. Introductory food technology ( 2 to 5)

A study of entomology and mycology as applied particularly to the processing of the more common food crops of Central California, including materials to provide an adequate, fundamental background. Prerequisite: At least 8 units of general chemistry and 8 units of biological science, including laboratory work.
Two bours of class work and 9-15 bours of laboratory work a week.
107. methods of measurement (1 to 4)

A study of and actual use of various instruments and apparatus used in a modern industrial food control laboratory. Approximately four hours of laboratory work per unit of credit, amount to be based on the actual needs of the student.
108. directrd laboratory work exprrience ( 1 to 4 )

Supervised examination of commercial samples under laboratory procedures acceptable to the pure food and drug regulations of the federal government. May be repeated for a maximum total of 8 units.

193;194. SPECIAL Studibs ( 1 to $4 ; 1$ to 4 )
Advanced work for sufficiently prepared students.

## GEOLOGY

Professors: STICHT (Chairman), and JONTE
MAJOR REQUREMENTS: Bachelor of Arts Degree.-Courses 10, 11, and in addition a minimum of 22 units, including courses 103, 105, 106, 112, 113, 125, 126; and Chemistry 11, 12. Chemistry 31; Mathematics 19, 20; Physics 15, 16; and Zoology 11 are recommended. A course in field geology at a summer geology field camp (four to six weeks) should be taken. Language requirements should be fulfilled in either German or French, Bachelor of Science Degree.Requirements same as for A.B. degree, plus Chemistry 31; Mathematics 19,20; Physics 15, 16; and 6 additional units of geology chosen in consultation with the head of the department.
10. general geology, physical (4) I and SS 54

A study of the physical structure and surface features of the earth, their origin and the agents responsible. No prerequisites.
Three class periods and one 3-bour laboratory period a week and field trips.
11. general geology, historical. (4) II

A study of the development of the earth and the life upon it. Prerequisite: Geology 10.
Three class periods and one 3-bour laboratory period a week and field trips.
101. INTRODUCTION TO ECONOMIC GEOLOGY (3) I and II

A study of geologic deposits of economic importance. Prerequisite: Geo$\operatorname{logy} 10$ and 11 , Chemistry 11.
Three class periods a week.
103. STRUCTURAL GEOLOGY (3) II 55 (L)

Geologic structures and their origin. Prerequisite: Geology 10.
105,106. mineralogy (2,2) Yr. 55-56 (L)
Survey of the important crystal classes; blowpipe analysis and identification of the commoner minerals. Prerequisite: Chemistry 11 (may be taken concurrently with course 105).
One class period and one 3-bour laboratory period a week.
107. optical mineralogy (2) I and II

Optical properties of crystals. Identification of minerals under the microscope. Prerequisites: Geology 105, 106; or course 107 may be taken concurrently with course 106.
One class period and one 3-bour laboratory period a week
112,113. petrology (2,2) Yr.
Characteristics, origin, occurrence and nomenclature of rocks. Identification of rocks and determination of their mineral components and textures in of rocks and determination of their mineral components and textures in hand specimens and under the microscope. Prerequisites: Chemis
and Geology 10, 105, 106 ; or concurrently with courses 105 , 106 .
One class period and one 3-bour laboratory period a week.
125. physiography (3) II 56 (L)

Advanced treatment of the principles of landscape development. Prérequisite: Geology 10.
Three class periods a week.
126. InVERTEBRATE PALEONTOLOGY (3) I

Introduction to the evolution and morphology of the major groups of fossil invertebrates.
One class period and two 3-bour laboratory periods a week.
151. ELEMENTS of geography (2) $X$ and II

The solar system, seasons, time, map reading, map projections, landforms and their origin, weather and climate, vegetation and soil types, agricultural regions, mining, manufacturing and trade. T'wo class periods a week.
152. ECONOMIC GEOGRAPHY (3) I

A survey of world resources and industries.
Three class periods a week.
153. POLITICAL GEOGRAPHY (2) Il 56

A geographical interpretation of international relations.
Two class periods a week.
193;194. SPECIAL ASSIGNMENTS ( 1 to $3 ; 1$ to 3 ) I;II
Advanced work for majors in geology and other sufficiently prepared students. Entollment only after consultation with the chairman of the department.
195;196. TECHNICAL PAPERS (1 or $2 ; 1$ or 2 ) I; II
An undergraduate seminar. Prerequisite: A semester of general geology or course 151.

## HEALTH, PHYSICAL EDUCATION, AND RECREATION

Professors: W. s. KNox (Administrative Director), JACKson (Chairman for Men), MATSON (Chairman for Women), and voltmer

## Associate Professors: L. harris and KyEldSEN

Assistant Professors: antitla, MYers, and sheldon
Instructors: SWEET, ROHDE, NIKCEVICH and MELICK
This department offers undergraduate majors for the A.B. degree in physical education and recreation, and graduate work leading to secondary school teaching credentials and to master's degrees in health education and physical education.

LOWER DIVISION REQUIREMENTS FOR ALL MAJORS: Activity courses, 4 units (see next paragraph) ; personal hygiene, 2 to 3 units; community hygiene, 2 units; safety and first aid, 2 units; biology, 4 units; human anatomy, 2 units; physiology, 3 units. At least 4 units of chemistry are recommended (required for health majors).

Activity courses: A total of 8 units is required for all majors except in health, distributed so as to include at least $1 / 2$ unit in each of the following: Women: Team games, tennis, swimming, folk dancing, modern dancing, archery, Women: Team games, tennis, swimming, folk dancing, modern danimg, folk and golf. Men: Team games (or equivalent), tennis, archery, swimming, fork dancing, tumbling and apparatus, and varsity sports. Not more than 4 units in all ( 2 units) in any one varsity sport are accepted, nor more than 4 units in all varsity sports.

UPPER DIVISION REQUIREMENTS FOR THE MAIOR IN PHYSICAL EDUCATION ACHELOR OF ARTS DEGREE: Activity courses, 4 units (see above); 25 additional BACHELOR OF ARTS DEGRBE: Activity (see School of Education)

UPPER DIVISION REQUIREMENTS FOR THE MAJOR IN RECREATION, BACHELOR OF ARTS DEGREE: Activity courses same as for the physical education major except that there is no requirement in varsity sports; 25 additional units including courses $175,180,186,189,191,192$, and 193; for men, 187, for women, 178. Recommended electives include course 190, Psychology 106 and 130, Religious Education 77 and 78.

REQUIRBMENTS FOR THE TEACHING CREDENTIAL IN PHYSICAL EDUCATION and in heaith education: See School of Education.

REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN PHYSICAL EDUCATION: A total of 45 undergraduate units and a minimum of 16 graduate units in physical education, including courses 202, 204, 206, 208, and 225, Education 201, and Sociology 155.

REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN HEALTH EDUCATION: A total of 45 undergraduate units and a minimum of 16 graduate units in health education, including courses 202, 204, 206, and 299, Education 201, and Sociology 155.

## Activity Courses

Any activity course, except varsity sports, restricted activities, dance drama, and Orchesis, may be repeated once but not more than once for credit.

Half-unit courses meet for two one-hour periods a week; one-unit courses meet for four one-hour periods a week.

## 5;6. TEAM GAMES (men) ( $1 / 2 ; 1 / 2$ ) Yr.

Regulation gymnasium suit required.
13. tumbling and apparatus (men) (1/2) I:II

Regulation gymnasium suit required.
21. freshman football (men) (1/2) $l$
22. FRESHMAN BASKETBALI (men) ( $1 / 2$ ) I
30. Restricted activities (1/2) I:II

34a. ELEMENTARY TENNIS ( $1 / 2$ ) I:II
White suit, racquet and balls required.
34b. INTERMEDIATE TENNIS ( $1 / 2$ ) I:II
White suit, racquet and balls required.
36. ARCHERY (1/2) I:II

Six arrows, arm guard and finger tabs required.
37. ELEMENTARY SWIMMING ( $1 / 2$ ) I:II Swim cap and suit required.
41. ELEMENTARY BADMINTON (1/2) I:II

Racquet, shuttlecocks and regulation gymnasium suit required.
43. ELEMENTARY FOLK DANCING ( $1 / 2$ ) I:II

Regulation gymnasium suit required.
51. bLEMENTARY MODERN DANCING (men and women) ( $1 / 2$ ) $\mathrm{f}: \mathrm{II}$ Regulation dancing costume required.
55. TEAM GAMES (wqmen) (1/2) I:II

Regulation gymnasium suit required.
102. BOXING (men) (1/2)

Regulation gymnasium suit required.
103. ADVANCED TUMBLING AND APPARATUS (men) (1/2)
104. Wrestling (men) (1/2) I:II

Regulation gymnasium suit required.
105;106. TEAM GAMES (men) ( $1 / 2 ; 1 / 2$ ) Yr.
Regulation gymnasium suit required.
107. TRACK AND FIELD SPORTS (men) (1) I
110. Varsity water polo (men) (1) I
111. VARSITY FOOTbALL (men) (1) I
112. VARSITY BASKETBALL (men) (1) I
113. VARSITY TRACK AND FIELD (men) (1:1) I:II
114. Varstity baseball (men) (1) II
115. Varsity tennis (men) (i) II
117. Varsity swimming (men) (1) II
118. VARSTTY GOLF (men) (1)
119. VARSITY GYMNASTIC TEAM (men) (1/2:1/2) I:II
130. RESTRICTED ACTIVITIES ( $1 / 2$ ) I:II
131. GOLF ( $1 / 2$ ) II

For beginners. Clubs and balls required. (Municipal golf fee.)
135. ADVANCED TENNIS ( $1 / 2$ ) I:II

White suit, racquet and balls required.
137. INTERMEDIATE SWIMMING ( $1 / 2$ ) I:II
138. ADVANCED SWIMMING (1/2) I:II
142. ADVANCED BADMINTON (1/2) I:II

Racquet, shuttlecocks and regulation gymnasium suit required.
143. ADVANCED FOLK DANCING ( $1 / 2$ ) I:II

Regulation gymnasium suit required.
144. FOLK DANCING FOR ELEMENTARY TEACHERS (1/2) I:II
152. intermediate modern dancing (men and women) (1/2) I:II Regulation dancing costume required.
153. intrrmediate modern dance-Dance drama (men and women) (1/2) Regulation dancing costume required.
154. advanced dance-orchesis (1)

Only by permission of instructor.

## Theory Classes <br> For Men, and Women

90. personal hygient (2) I and II

Health information that affords a basis for intelligent guidance in the formation of health habits and attitudes.
92. community hygiene (2) I

The characteristics of a healthful community; essentials of group action for better living.
93. safety and first aid (2) II
95. orientation in health, physical education, and recreation (2) I Scope and significance of health , physical education, and recreation in the $^{\text {a }}$ modern school program. Open to all prospective teachers who may be interested in a major or minor in any of these fields.
155. principles of physical bducation (2) il

A course dealing with the history, theories and principles of physical education.
156. community recreation method (2) I (L) Techniques of leadership; community resources; supervision and evaluation; methods of converting leisure into useful, cultural, creative activities.
157. organization and administratton of community recreation (2) I 56 A study of organization, administration, and leadership in community recreation in which participation plays an important role.
162. health protection (2) I 54

A study of the principal communicable diseases-their history, source, etiology, modes of infection, and methods of control. Prerequisite: Hygiene.
163. CONDItioning of athletbs and Carb of injuries (2) I 56

The theory and practice of the first-aid treatment and care of athletic injuries, and the conditioning of athletes for the various sports.
165. principles of public health (2) II 54

Basic principles and organization of community resources for health protection.
166. Safety bducation-driver education (3) II

Organizing the curriculum, with special emphasis on methods of teaching safety and driver education. ( $\$ 10.00$ fee for driver training only.)
167. teaching trchniques in gymnastics and swimming (men) (2) I (L) Teaching methods in calisthenics, tumbling, and heavy apparatus and pyramid building; teaching of swimming and diving. Prerequisite: Courses 103 and 137.
168. administration of intramural athletics (2)

Purposes of intramural athletics and organization and administration of the program, problems of tournament organization and drawing, publicity, awards, point systems, records and seasonal activities.
170. teaching the dance (2) SS

Methods and materials in teaching the dance in secondary schools: how to construct a well-balanced lesson; how to organize and lead a group in the social dance and in modern dance techniques and composition.
171. Folk dance curricula (2) II 55

The development of curricula for elementary school, secondary school and social groups will be stressed. A large resource library and many social dances will be arranged.
172. SPORTS TBCHNXQU (women) (2) I 54

The techniques and methods of teaching basketball, hockey, soccer and speedball.
173. SPORTS TRCHNiQUE (women) (2) II 55

The techniques and methods of teaching swimming, tennis, softball, and volleyball.
174. SPORTS OFFICIATING (women) (2) II 56

A study of N.S.W.A. rules and techniques of officiating hockey, speedball, basketball, volleyball, and softball. Official W.N.O.R.C. ratings given.
175. folk dancr leadership (2) II 55 Advanced folk dancing with supervised practice teaching.
176. SPORTS TECHNLQUE (men) (2) I

The techniques and methods of teaching the major intercollegiate sports of football and basketball.
177. sports technique (men) (2) II The technique and methods of teaching the spring intercollegiate sports.
178. gamb teaching trchniqus (women) (3) I 54 A course designed to give students techniques in teaching low-organized individual, dual, small, and large group games.
179. tests and measurements in physical bducation (2) I 55

Theory, application and practice of tests and measurements in physical education for use in measuring pupil program and evaluation of content and in grading.
180. camping and camp leadership (2) II 56

This course aims at developing camp counselors. Theory, techniques, activities, trends, problems, and coordination in the modern organized camping program.
181. thb american square dance (2) SS

Instruction in dancing and calling American Squares. All members will be recorded to aid in voice control and leadership.
182. methods in physical education for thr handicapped (2) XI 56 Techniques, including that of play therapy, for speech correction and music therapists. Special attention is directed toward physical therapy.
183. ADMINISTRATION OF PhYSICAL EDUCATION (2) I

Planning and constructing the gymnasium, arrangement and care of equipment; care and administration of courts, fields, buildings; organization of staff, leaders; programs, schedules, and other administrative problems.
185. life saving and water safety (1) II (L)

Theory and practice. Open to both men and women. Prerequisite: Ad vanced swimming.
186. Kinesiology (2) I

A practical study of the muscles and their action in maintaining correct posture, and analysis of their action in all forms of exercise. Prerequisite: Anatomy.
187. physical education teaching technique (men) (2) il Teaching methods for individual and team sports adapted for group or class instruction in the secondary school.
189. Physical education in blementary schools (2) I and II Activities adapted to the capacities and needs of different age groups in the elementary school; learning of activities, and methods of presentation.

191;192. FIELD WORK (1 to 3 ; 1 to 3 ) I; II
A minimum of three weeks of full-time field experience per unit, or its equivalent. This laboratory work must be taken in athletic coaching in a physical education activity, playground, community center, summer camp or similar activity, but must be approved in advance by the major adviser.
201. techniQues of research (2) I

Methods, sources of materials, analysis of problems, in preparation for individual research. See Education 201.
202. health education in elementary and secondary schools (2) I (U) The general program of health teaching; subject matter and methods in health teaching in elementary and secondary schools. Prerequisite: Per sonal hygiene.
203. the curriculum in physical education (2) SS

Principles of curriculum building; selection and organization of program content in relation to the needs of pupils; experience in curriculum making.
204. advanced hygiene (2) I (U)

Analysis of basic principles involved in personal health. Special study of selected subjects for presentation in conference. Prerequisite: Personal hygiene.
205. MODERN trénds in hralth, physical education and recreation (2) SS A survey of new developments, procedures, programs, and facilities as reported in recent literature and research.
206. administration of school health program (2) SS

Organization and administration of the school health program, with special consideration of the teacher's part in the health program.
207. administration of interschool athletics (2) SS

Problems related to interschool athletics and standards for their administration; budget, scheduling and control of games, travel, equipment, publicity, medical care, facilities and awards.
208. physiology of exercise (3) II (U)

A study of the effects of exercise on the body. Prerequisite: General physiology.
209. advanced theory of track and fibld athletics (2) SS

Emphasizes daily schedules of practice, team balance, and advanced theories of the technique of the sport.
210. advanced theory of football (2) SS

Analysis of modern football strategy, offense and defense, with special emphasis on current problems.
211. advanced theory of basketball (2) SS

Analysis of modern basketball strategy; offensive and defensive patterns; advanced coaching methods.
213. sports orficiating (2) SS

Principles and philosophy of officiating, guides to play situations, techniques in various sports.
214. physical education and mental health (2) SS

Psychology of athletic coaching; mental hygiene aspects of class organization and teaching method; play therapy in social adjustment.
215. Survey of professional itterature in physical bducation (2) SS A study of recent research and examination of professional literature, for the advanced student.

296a. seminar in health and physical bducation (2) II
296b. seminar in polk dance curriculum (1 or 2 ) SS
299. Thbsis (4) I:II:SS

## HISTORY AND POLITICAL SCIENCE <br> \section*{(On the Asa M. Fairchild Foundation)}

Professors: miselen (Chairman), baker, hunt, l. knoles, and t. c. knoles Associate Professor: moulb
Assistant Professor: wood
MAJOR REQUIREMENTS IN HISTORY: Total of 32 units, of which 18 must be in upper division. These must include two semesters of United States history, two semesters of general European or English hitsory, and one of the following courses: 116, 118, and 150,151 . Up to 10 units of political science may be counted toward this major

MAJOR REQUIREMENTS IN POLITICAL SCIENCE: Total of 32 units, of which 18 must be in upper division. These must include American national government; courses $141,144,146$; a course in political philosophy and a course in international relations. Up to 10 units of history may be counted toward this major.

MAJOR REQUIREMENTS IN INTERNATIONAL RELATIONS: See page 116.
STATE REQUIREMENTS FOR GRADUATION: The state law requires for graduation certain work in United States constitution, United States history, and California state and local government. This requirement may be satisfied in any one of the following ways:

1. By completing one of the following course patterins at the College of the Pacific:
a. Political Science 30
b. History 17 and 18
c. Political Science 140 and 141
d. One semester of U.S. government (Political Science 30 SS or 140) and one semester of U.S. history (History 17, 18, 130, 132, 134, 135, $138,140,144,147,148,149$, or 160 )
2. By examination without credit. An examination meeting the state requirement in full is offered once each semester (see college calendar for dates, page 8). Fee for examination: Enrolled students, original examination $\$ 1.00$, re-examination $\$ 4.00$; persons not currently registered, $\$ 4.00$.
3. By submitting an official statement from another California college or junior college that the state requirement has been met there.

Note-Students who started their college work prior to September, 1951, may make special artangements for satisfying the California state and local government requirement.

## History

11;12. HISTORY OF WESTERN CIVILLZATION (3;3) Yr.
A historical survey of the significant cultural, social, and political backgrounds from which our present society has developed.

17;18. HISTORY OF THE UNITED STATES $(3 ; 3) \mathrm{Yr}$.
A historical study of the main currents of American political, social, and cultural life. Both semesters must be taken to satisfy the state requirement.

110;111. NINETEENTH CENTURY EUROPE (3;3) Yr. 54-55
A consideration of the political, economic, social, and intellectual institutions of Europe between the French Revolution and the First World War.
112. EUROPE RETWEEN TWO WARS (2) II 56

A study of the breakdown of collective security, 1919-1939.
114;115. GREAT BRITAIN AND THE EMPIRE (3;3) Yr. 55-56 A history of Great Britain, the overseas dominions and the British empire, with special attention to constitutional development and social change,
116. U.S.S.R.: HISTORY AND POLITICS (3) I 55

The development of Russian political, economic, and cultural life, with special emphasis on recent developments.
118. THE FAR EAST: HISTORY AND POLItics (3) I 54

The development of the Far Eastern nations, with particular emphasis on the more recent period.
120. AFRICA: HISTORY AND POLITICS (2) II 55

The colonization and the rise of nationalism in Africa.
130. MAKERS OF THE NATION (3) II 56

Biographical studies of leading American statesmen.
132. HISTORY OF THE FRONTIER (3) II 55

The westward movement of settlement from the Appalachians to the Pacific, with special reference to the Trans-Mississippi area.

134;135. HISTORY OF UNITED STATES FOREIGN RELATIONS (2;2) Yr. 55-56 (L) The history of our relations with foreign nations from 1776 to the present.
138. CONSTITUTIONAL HISTORY OF THE UNITED STATES (2) SS 54

A study of the basic political institutions of Ametican democracy on the national; state, and local level.
140. the colontal period (2) I 55

A history of the English colonies in America from the first explotation to the American Revolution.
144. CIVIL WAR AND RECONSTRUCTION (2) II 56

The rise of sectionalism in the United States; the secession movement; military and home front aspects of the war; problems of reconstruction.
147. EARLY TWENTIETH CENTURY UNITED STATES (2) SS 55

United States history from 1900 to 1932, with special emphasis on the administrations of Theodore Roosevelt and Woodrow Wilson.

148;149. THE ROOSEVELT ADMINISTRATION (2;2) Yr. 54-55
The administration of Franklin D. Roosevelt, including the historical background, problems, policies and personalities of the New Deal; American ground, problems, policies and parbonalithes military events, diplomacy, and foreign policies prior to Pear Harbor; the
home front activities in World War II.

150;151, HISPANIC-AMERICAN NATIONS (2;2) Yr. 54-55
A study of Spanish colonial policy and the political, social, and economic development of the Latin-American republics.
160. HISTORY OF CALIFORNIA (2) I and II and SS

A survey of California history from the Spanish period to the present. Given under the auspices of the California History Foundation.
166. CALIFORNIA MISSIONS (2) II

A study tour of the Franciscan Missions during the spring vacation. Conducted under the auspices of the California History Foundation.
200. TEACHING OF THE SOCIAL STUDIBS (2) I Methods and techniques of teaching the social studies on the secondary level.
223. THB BRITISH DOMINIONS (2) SS 54 The historical evolution of the principal British dominions and "near dominions": Canada, Australia, New Zealand, South Africa, Ireleand, India, and Pakistan. Open only to graduate students.
295a;296a. SEMINAR IN CALIFORNIA HISTORY (2;2) Yr. (U)
Research problems in California local history. Given under the asupices of the California History Foundation.
295b. SEMINAR-EUROPEAN SOURCES OF THE AMERICAN GOVERNMENT (2) I 54
295c. SEMINAR-UNITED STATES AND THE NBAR EAST (2) I 55
296b. SEMINAR-UNITED STATES AND MEXICAN RELATIONS IN THR TWENTIETH CENTURY (2) II 55
296c. SEMINAR-FALL OF COLONLALISM IN THE TWENTIETH CENTURY (2) II 56
299. Thesis (4) I:II:SS

## Political Scibnce

10;11. CONTEMPORARY WORLD GOVERNMENTS (2;2) Yr. The structure and functions of government as found in the leading nations of the contemporary world.
30. AMERICAN DEMOCRACY (3) I and II and (2) SS A study of the basic political institutions of American democracy on the national, state and local level. Three-unit course satisfies state requirement In full; two-unit course requires additional one semester of U.S. history.

101;102. THE WORLD TODAY (2;2) Yr.
A discussion of current national and international problems and developments.
108. WESTERN POLITICAL THOUGHT (3) I 55 An examination of the basic postulates undergirding the political, economic, An exial and religious institutions of the western world. Emphasis on the fundamental tenets which form the basis for the American way of thought and life.
110;111. INTRODUCTION TO INTERNATIONAL RELATIONS (2;2) Yr. 54-55 (L) An introduction to the policies, rivalries, and conflicts of the "great powers."
112. INTERNATIONAL LAW AND ORGANIZATION (3) II 56 and (2) SS 54 A study of the legal principles underlying international relations. The rise and present status of the machinery for international cooperation, with particular attention to the United Nations and affliated organizations.
140. National government: structure (2) I and SS

The historical development of the national government, with particular attention to the executive, legislative, and judicial branches. Satisfies the state requirement if taken in conjunction with Political Science 141 or one semester of United States history.
141. NATTONAL GOVERNMENT: FUNCTIONS (2) II

The work of the national government in such areas as law enforcement, foreign relations and national defense, and economic and social activities. Satisfies the state requirement if taken in conjunction with Political Science 140.
144. AMERICAN STATB GOVERNMENT (3) II 55

The structure and functions of state government, with special reference to The structu
146. AMERICAN CITY GOVERNMENT (3) II 56 The structure and functions of urban government in the United States.
160. PUBLIC OPINION (3) I

The newspaper, radio, and other devices for influencing public opinion; an evaluation of leading publishers, columnists, and commentators; propaganda techniques; public opinion polls. Recommended as an introduction to the field for political science, radio, and journalism majors.
164. PRACTICAL POLITICS (3) I 54

A workshop type of course, dealing with various phases of the American party battle. Given only in general election years, so that students may observe and participate in campaign activities.
168. CONSTITUTIONAL LAW (3) II 55

An examination of the broad and basic principles underlying the United States Constitution. Includes a case study of many of the most notable decisions of the United States Supreme Court.
299. THESIS (4) I:II:SS

HOME ECONOMICS AND FAMILY LIVING

## Professor: GEHLKEN

Associate Professor: Garrigan
Assistant Professor: ALBXANDER
Lecturer: F. GOLEMAN
Modern education in homemaking is focused on the family. It no longex consists in learning how merely to cook and sew and clean, although these are still important, but rather in studying the entire art and science of family living and creative homemaking, including child care and guidance, clothing and textiles, foods and nutrition, housing and home furnishings, and the health, economics, and community relationships of the family as a whole.

Majors in the field usually find opportunities to use their training in one of four general areas: (a) homemaking itself or in home and family counseling, (b) teaching homemaking in the public schools, (c) business, such as demonstration work, journalism, or broadcasting, or (d) dietetics. Consequently the major requirements are set up to allow for any one of these emphases.

MAJOR REQUIREMENTS, HOME AND FAMILY LIVING EMPHASIS: Bachelor of Arts degree only.-Eighteen units in lower division and twenty units in upper division in the Department, together with the chemistry, physiology and bacteriology prerequisite thereto. In addition, appropriate work in psychology, sociology, and religious education should also be selected in consultation with the head of the Department.
major rbouirbments, homemaking rducation emphasis: Bachelor of Arts degree.--Lower Division: General chemistry 4 units; general biology 4 units; physiology 3 units; courses $11,12,15,19,20,23,25,33,35$ and 40. Upper Division-Courses 101, 102, 103, 106, 128, 134, 136, 137, 138, and 200; Botany 135. In addition, students should include the education courses required for the teaching credentials (see section on School of Education). Bachelor of Science degree.--The department requirements are the same as for the A.B., except that an additional 4 units of organic chemistry and 2 additional units in Home Economics are required. (See, however, the general requirements for the B.S. degree, page 50 ).

MAJOR REQUIREMENTS, HOME ECONOMICS IN BUSINESS EMPHASIS: Bacbelo of Arts degree.-All reguirements are the same as for the emphasis on Homemaking Education, except that in the upper division courses in speecn, journalism, busines administration, etc, are substituted for most courses in education. Consult th Department chairman for details. Bachelor of Science degree:-Departmental reguirements are the same as for the A.B. degree, except that an additional 4 units of inorganic chemistry and 2 of Home Economics are required.

MA JOR REQUIREMENTS, DIETETICS EMPHASIS: For this emphasis the Bachelo of Science degree is ordinarily taken. Requirements are similar to those for the Homemaking Education emphasis; except that more chemistry is taken and the work in education is not required. Detailed curriculum available on request.

11,12. FOODS AND NUTRITION (3,3) Yr.
An experimental approach to the fundamentals of food preparation. Meal selection, preparation, and serving for various income groups; nutrition needs of the individual and the family. For both majors and non-majors. One class period and two 3-bour laboratory periods a week.
15. textiles (2) II 55

A general introduction to the field of textiles. Basic facts concerning textiles commonly used in clothing and household furnishings are presented through a study of the characteristics of fibers and their manufacture and finish for particular uses.
One class period and one 3-bour laboratory period a week.
17. elements of home furnishing (3) I 54

Application of the principles of design to home planning and furnishing for both majors and non-majors. The course is planned for personal interest, general education or vocational goals. Practical projects are part of the class activities.
Two class periods and one 3-bour laboratory period a week.
19,20. Clothing construction (2,2) Yr. 55-56
A laboratory course in the planning and construction of becoming garments. The selection of suitable pattern designs in relation to figure and to the fabric selected; basic techniques required in clothing construction.
Two 3-bour laboratory periods a week.
23. COLOR AND DESIGN (2) II 55

Application of principles of color and design to the home; creation of original designs in various media to be used in the home; development of criteria for buying good design.
One class period and one 3-bour laboratory period a week.
25. COSUMER PROBLEMS (2) II

Management of personal income; relationships with business; use of informative labeling, grading, and standardization; government, private and business-sponsored agencies for consumer protection and information; consumer cooperation.
Two class periods a week.
32. COSTUME DESIGN (2)

Principles of color and design applied to clothing; adaptation of historic design to modern dress; drawing of original designs for garments in accord with the color and line movement of the individual.
One class period and one 3-bour laboratory period a week.
33. NUTRITION (3) II

Fundamentals of nutrition and their practical application to the needs of family members; study of special dietary problems.
Three class periods a week.
35. CLOTHING SELECTION (2) I

A course planned to develop good taste in dress. The effects of line, texture, and color upon the individual members of the class; practical wardrobe planning.
Two class periods a week.
40. marriage and family living (2) II

An interdepartmental course dealing realistically and creatively with modern problems of marriage and the rearing of a family. Included also are such topics as family finance, the fine arts in family life, contributions of religion to family life, and the relations of the family to the community. Prerequisite: Personal Hygiene or General Biology.
101. ADVANCED CLOTHING (2) I 54

Techniq̧ues used in handling fine fabrics such as sheer cotton, rayon, or silk; more advanced fitting problems. Garments constructed in consideration of individual wardrobe needs.
Two 3-bour laboratory periods a week.
102. TAILORING (2) II 56

Principles of tailoring; independence and initiative in planning and constructing coats and suits.
T'wo 3-bour periods a week.
103. HOUSE FURNISHINGS (2) II 55

Selection and arrangement of both period and modern furnishings.
One class period and one 3-bour laboratory period a week.
106. HOME MANAGEMENT (2) II 55

Management of time, money, and energy; study of home appliances and streamlined homemaking practices.
Two class periods a week.
128. MEAL PLANNiNG AND SERVICE iN HOME MANAGEMENT (3) I 55

Planning and serving of typical meals, and the relation of this to the family budget at various income levels.
One class period and one 3-bour laboratory period a week.
134. FAMILY HEALTH (2) I

Fundamentals of physical and mental health for the individual, the family, and the community; the homemaker's responsibility.
Two class periods a week.
136. CHILD CARE AND DEVELOPMENT (2 or 3) I 55

Importance of nutrition, clothing, diseases, surroundings, etc., to the habits and character of the pre-school child. Observation and participation in nursery school are included.
Two class periods and one nursery school laboratory period a week.
137;138. RELATED ART (1;1) Yr.
Basic art principles applied in various home economics areas.
One 3-bour laboratory period a week.
193;194. DIRBCTED STUDIES IN HOME ECONOMICS (1 to 3 ; 1 to 3 ) $X ; 11$ Individual study in some special area for those sufficiently prepared.
200. METHODS OF TEACHING HOME RCONOMICS ( 2 to 4) I

Philosophy of home economics education; critical evaluation of home economics courses; methods of presentation.
Three class periods a week.

## INTERNATIONAL RELATIONS

## Counselor: BISELEN

The International Relations major has a two-fold objective: (1) To meet the pre-professional needs of the student who is interested in diplomacy, foreign prade or other vocational fields requiting a broad knowledge of world conditions; (2) to meet the needs of the general student who finds that under present conditions 2) to broad compres to citizenship. Up to 12 ung may be applied on the major from such lower division courses as the following: History of Western Civilization, History of the United States, Introduction to Politic
and Principles of Economics.

MAJOR REQUIREMENT: Total of 36 units of which 24 units must be upper division. These must include History $134 ; 135$, and Political Science 111;112. Electives may be chosen from a wide variety of courses in the departments of business administration, economics, geology, history and political science, modern language, philosophy, sociology, zoology. See chairman of Department of History and Political Science for complete list of approved electives. Speaking and readin proficiency in one foreign language is strongly recommended, but not required

## MATHEMATICS

## Professor: white (Chairman)

MAJOR REQUREMENTS: Lower Division.-Trigonometry, 3 units, unless taken in high school; college algebra, 3 units; analytic geometry and introduction to calculus, 6 units; intermediate calculus, 6 units; and mathematics of finance, 3 units.

Upper Division:-Courses 103 and 105, and at least 10 units from any of the other upper division courses, except course 200.
15. INTERMEDIATE ALGEBRA (3) I

This course is the equivalent of advanced algebra in high school, but covers the topics more rapidly.
16. PLANE TRIGONOMETRY (3) II

Basic definitions of the trigonometric functions; solution of triangles, both right and oblique; logarithms, trigonometric equations and identities.
18. COLLEGE ALGEBRA (3) I

A brief review of high school algebra followed by consideration of many new topics. Prerequisite: Plane geometry and two years of high school algebra.
19,20. CALCULUS AND ANALYTIC GEOMETRY (3,3) Yr.
A unified course presenting plane analytic geometry and both differential and integral calculus. Prerequisite: Two years of high school algebra, plane geometry, and trigonometry.

21,22. Calculus (3,3) Yr.
A continuation of course 19,20. Systematic integration and the usual applications; partial differentiation; multiple integration; infinite series and other topics. Prerequisite: Mathematics 19,20.
23. COLLEGE ARITHMETIC (2) I

An analysis of the bases, processes, and problems of arithmetic, including some history of mathematics.
25. MATHEMATICS OF FINANCE (3) Il

Business applications of simple and compound interest; installment buying, Burtization of debrs; bonds, and other topics. Prerequisite: Some algebra beyond first year high school algebra.
102. MATHEMATICS OF Life insurance (2) II 56

An introduction to actuarial science: mortality tables, life annuities, insurance policies and their premiums; reserves, including modern systems. Prerequisite: Two years of high school algebra or its equivalent; course 25 is recommended.
103. AdVANCED CALCulus (3) I 55

Includes functions of two independent variables, gamma and beta functions, ine integrals, introduction to Fourier series, and functions of a complex variable.
104. THEORY OF EQUATIONS (3) II 55

Includes Cardan's and Ferrari's methods of cubic and quartic equations, Sturm's functions, determinants, eliminants and discriminants.
105. differential equations (3) II 56

Ordinary differential equations, with applications.
107. SYNTHETIC PROJECTIVE GEOMETRY (2) I 55

Includes projectively related forms, duality, Desargues' Theorem, projective generation of conics, Pascal's and Brianchon's Theorems.
110. history of mathematics (2) I and II
112. STATISTICAL METHODS (3) I 54 (L)

Includes statistical distributions, measures of central tendency and dispersion, normal curve, correlation, sampling, chi-square test. Prereçuisite: Two years of high school algebra or its equivalent.
116. ADVANCED PLANE GEOMETRY (2) II 55 (L)

Advanced theorems and construction in Euclidean geometry with an introduction to more modern developments.

193;194. special studies ( 1 to 3 ; 1 to 3 ) I; II
Individual study on selected topics with frequent consultations to be arranged.
200. the teaching of mathbmatics (2) I and II

The methods and philosophy of the teaching of mathematics.
205. FUNCTIONS OF A COMPLEX VARIAble (2) I 54 (U)

Includes deriviatives, integrals, conformal representation, infinite series, Taylor's Theorem
217. ANALYTIC PROJECTIVE GEOMETRY (2)

Includes homogeneous and projective coordinates, transformations, invariants, projective properties of figures developed analytically.

295;296. SEMINAR (1 to 3 ; 1 to 3 ) I;II
299. THESIS (4) I:II

## MODERN LANGUAGES

## Professors: STEINHAUSER (Chairman), SMITH, O'BRYON

MAJOR REQUTREMENT: Lower Division.-A minimum of 16 lower division units or equivalent; knowledge of a second foreign language satisfactory to the department Upter Division--FRENCH: 16 units above intermediate French department. Upper Division.-FRENCH: 16 units above intermediate 16 units including a literary survey course and courses 107 and 111. sPANish. above intermediate Spanish, including a literary survey course and couding courses 150, and 157. GERMAN: 16 units above intermediate German, including courses 185 and 197.

## French

11-12. Elementáry french (4-4) Yr.
13,14. intermbdiate french (4,4) Yr.
A survey course in French literature or its equivalent is prerequisite to the following courses:
102. FRENCH LITERATURE OF THE SEVENTEENTH CENTURY (2)

A study of representative authors, including Corneille, Racine, Moliere, Pascal, Descartes, etc.
103. MODERN FRENCH DRAMA (2) I 55 (L)

From 1850 to the present time. A study of the main ideas and tendencies of its most important authors, beginning with Hugo.
104. CONTEMPORARY FRENCH LITERATURE (3)

From Anatole France to the present time.
105. FRENCH LITERATURE OF THE EIGHTEENTH CENTURY (3) A special study of Voltaire, Diderot, and Montesquieu and their influence.
106. THE FRENCH NOVBL OF THE NINETEENTH CBNTURY (3) II 56 (L) Novels of George Sand, Balzac, Maupassant, Daudet, Flaubert, Zola, France, and others.
107. FRENCH CIVILIZATION (3) I 55

A brief survey in English of the growth of the French nation, its geography, history, painting and music. Slides, motion pictures, and other illustrative materials will be used. The aim is to give the student a better understanding of present-day France, its institutions and culture. Open to tudents without a knowledge of French. Required of French majors.
108. MOLIERE (3)

A study of Moliere's plays. Moliere the man, the author, and the actor will be the center of the course. Much attention will be paid to the social, intellectual, religious, and artistic background and the great problems which stirred the 17 th century.
109. FRENCH PHONETICS (2) I 54

A study of French pronunciation. Required of majors.
110. intermediate composition and coversation (2) II 56

The course aims to strengthen the background and broaden the range of the American teacher of French. Prerequisite: Two years of college French or permission of instructor. Course may be repeated, on permission of instructor, as long as progress of student warrants.
111. ADVANCED COMPOSITION (2) II 56 Required of French majors.
112. THE FRENCH SHORT STORY (2)

A survey of the development of the French short story. Oral summaries in French of the stories read.
113. FRENCH CONVERSATION (1)

The course is designed to afford practice and promote fluency in the use of oral French.

114,115. SURVEY OF FRENCH LIterature (2,2) Yt. 54-55
116. THE FRENCH REALISTIC NOVEL (3)

A study of the French novel from 1850, including Stendhal, Balzac, Flaubert, Daudet, Zola. The origins of realism will be studied as well as its relations with the general movement of ideas during the period.
117. FRENCH Sight reading (1)

Reading of stories with instructor. Open to people who wish to brush up on reading for comprehension. No outside preparation.
118. FRENCH FREE RBADING (1 to 3) I:II (L)

This course may be taken more than once with different content.
119. NINETEENTH CENTURY CENTURY FRENCH LITERATURE (3) II 55

Given in English, and open to students with a knowledge of French. Not for French majors.
200. the teaching of foreign languages (2) I
201. HISTORY OF THE ROMANCE LANGUAGES (3)

A brief survey of the development of the Romance languages, with special reference to the linguistic changes brought about by historical and literary events.

295;296. SEMINAR (2;2) I;II
Critical investigation of some selected author or period.
299. THESIS (4) I:II

## Russian

138. RUSSIAN LITERATURE IN TRANSLATION (3)

## SpANISH

41-42. blementary spanish (4-4) Yr.
43,44. INTERMEDIATE SPANISH (4,4) Yr.
An elementary Spanish survey course is prerequisite to the following courses. All are given in Spanish unless otherwise indicated.
140. SPanish pronunciation (2) II 56

Required for credential candidates. Recommended for majors.
141. COMMERCIAL SPANISH (2) I 54 (L)

Commercial law, forms, and correspondence. Prerequisite: Three semesters of college Spanish or equivalent.
142. INTERMEDIATE SPANISH COMPOSITION (2) I 55 (L)

Review of grammar and introduction to Spanish style. Recommended for teachers.
143. SPANISH CONVERSATION (1) II
144. DRAMA OF THE GOLDEN AGB (2) I 54 (L)

Selected plays of Lope de Vega, Titso de Molina, Ruiz de Alarcon, Calderon, and lesser playwrights.
145. ADVANCED COMPOSITION (2) II 55
147. MODERN SPANISH DRAMA (2) II 55 (L)

From the Romantic drama to the end of the nineteenth century.
148. SPANISH LYRIC POETRY (2)
150. SPANISH-AMERICAN LITERATURE (3) I 54

A brief survey of the contributions of Spanish America, culminating in the Modernista movement.
151. THE PICARESQLUE NOVEL (2) I
153. SPANISH FREE READING ( 1 to 3) I:II (L)

This course may be taken more than once with different content.
156. CONTEMPORARY SPANISH NOVEL (2)

Works of Baroja, Perez de Ayala, and other twentieth century novelists.
157. SPANISH CIVILIZATION (3) I 55

A brief survey in English of Spanish art, letters, music, etc. Open to students without a knowledge of Spanish. Required of Spanish majors.
159. Latin american litiratures in translation (3) Il 56

Given in English, and open to students without a knowledge of Spanish. Not for majors, who should take course 150 .
200. The teaching of foreign languages (2) I
201. History of the romance languages (3)

See under French.
295;296. SEMINAR (2;2) I;II
299. THBSIS (4) I:II:SS

## German

81-82. ELEMENTARY GERMAN (4-4) Yr.
83,84. INTERMEDIATE GERMAN $(4,4)$ Yr.
Two years of college German or equivalent are prerequisite to the following courses, except 183 and 188 which require one year:
181. THE CLASSICAL PERIOD (3) I 55

Lessing, Schiller and Goethe, their predecessors and contemporaries.
183. GERMAN free reading (1 to 3 ) I:II

This course may be taken more than once with different content.
185. ADVANCED COMPOSITION AND CONVERSATION (3) II 55

Required of German majors.
186. THE GERMAN SHORT STORY (2) I

The German Novelle from Goethe to the present.
187. MODERN GERMAN DRAMA (2) I 54
188. SCIENTIFIC GERMAN (3)

190;191. SURVEY of german literature (2;2) Yr. 54-55
First semester: Pre-classical period. Second semester: Classical and modern periods.
197. GERMAN CIVILIZATION (3) II 56

A brief survey in English. Open to students without a knowledge of German. Required of German majors.
199. GERMAN IItERATURE IN TRANSLATION (3) I 55

Given in English. Open to students without a knowledge of German. Not for German majors.
200. THE TEACHING OF FORBIGN LANGUAGES (2) I

295;296. SEMINAR (2;2) I;II
299. THRSIS (4) I:II

## MUSIC

MAJOR REQUIREMENT'S: 14 lower division and 18 upper division units (plus 6 units of applied music, which do not count toward the total of 124 required for the A.B. degree).

Those desiring to major in music as a cultural subject are not restricted to the courses prestcribed for credentials, but must secure the approval of the Dean of the Conservatory in their selection of courses.

Students not majoring in music may elect any course for which they are prepared.

RECOMMENDATION FOR SECONDARY CREDENTIAL: See section on School of Education.

Description of all music courses will be found in the section on the Pacific Conservatory of Music.

## NATURAL SCIENCE

## Profersors: JONTE and bawden

## Associate Professor: stocking

No major is offered in this department.
101. SCience for blementary teachers (2) I and II

A study of the content and methods of developing desirable science activities in various school situations. Lectures, laboratory, field work, and discussion.
121. PROBLEMS OF ALCOHOL (2) II (L)

A study of alcohol and alcoholic beverages, physiological and psychological effects of alcohol, and problems arising from its use.
200. The teaching of science (2) I

## NURSING

## Counselor: BERTHOLF

The following program leads to the degree of Bachelor of Science with a major in Nursing. It involves the completing of three years of standard college major in Nutsing. It involves the completing of three years of standard college
work and two years in an accredited school of nursing. At least one year of college work and two years in an accredited school of nursing. At least one year of college
work must precede the work in the school of nursing, but the sequence can be work must precede the work in the school of nursing, but the sequence can be
either 2-2-1 (two at college, two at nutsing school, followed by one again at either 2-2-1 (two at college, two at nutsing school, followed by one again at
college), or $3-2$. Of the three college years, at least the last one, consisting of college), or $3-2$. Of the three college years, at least the last on
not less than 24 units, must be spent at the College of the Pacific.

The Bachelor of Science degree will be conferred at the completion of the full 5 -year program; that is, a maximum of 30 units will be credited toward the nursing major for work done in the school of nursing, and a minimum of 94 units of college work will be required as follows:

First year-General biology (4), elementary physiology (3), general chemistry (8), English composition (3), speech (3), physical education activity (1) In addition, 3 units of mathematics are required unless algebra and geometry have been completed in high school with a grade of "B," or unless algebra, geometry, intermediate algebra, and trigonometry have been completed in high school. Two semesters of foreign language, preferably Spanish, are also required, with each year of language in high school counting as one college semester.

Second year.-Organic chemistry (4), biochemistry (4), microbiology (3), anatomy (2), nutrition (3), history and constitution (3 to 6), psychology (3), literature (3), marriage and the family (2), and physical education activities (1)

Tbird year.-Bible (4), fine art (2), and electives.
For those who wish merely to qualify to enter a school of nursing according to the Alternate Plan of the State Board of Nurse Examiners (Section 1433.1) the following one-year curriculum is recommended as meeting minimum requirements:

## COurse

II
Chemistry 11, or Zoology 11, depending on high school science Zoology 35, Anatomy Zoology 33, Physiology Botany 135, Microbiology
Home Economics 33, Nutrition
Psychology 11, General Psychology
Mathematics 15, Intermed. Algebra; or 18, College Algebra English 11, Basic Composition
Speech 59, Fundamentals of Speech

-     -         -             -                 -                     - .- 3

Political Science 30, American Democracy - . - - - 3
Physical Education Activity -

## PHILOSOPHY

Professors: nietmann (Chairman), ding
Associate Professor: pannter
Philosophy is especially valuable in developing critical and balanced thinking, which is an asset in such fields as law, the ministry, and journalism. A pilo major is appropriate for students preparing for a career in tibe ars. It is also appropriate for those whose main concern is to obtain a liberal arts It is also
education.
mayor requirbment: A minimum of 24 units selected in consultation with the depattment chairman.
11. philosophy for beginners (3) I Selections from Plato are used to develop an understanding of the nature of philosophical inquiry.
13. greek and latin-christian philosophy (3) II

Selections from Plato, Aristotle, Plotinus, Augustine, and Thomas Aquinas.
35. introduction to logic (3) Il 55

The problem of proof, with especial reference to scientific inquiry.
115. MODERN PHLLOSOPHY (3) I 54

Selections from Descartes, Leibniz, Spinoza, Hobbes, Locke, Berkeley, Hume Kant and Hegel.
117. recent philosophy (3) II

Selections from Kietkegaard, Bergson, James, Dewey, Comte, Schlick, Whitehead and Royce.
119. oriental philosophy (2) I and SS Philosophical thinking in India, China, and Japan.
130. thinking philosophically (2) SS (L)

May be repeated for credit with different content.
137. introduction to metaphysics (3) I 55 Ultimate reality as it is understood in the light of coherent thought.
155. philosophy of religion (3) I 55

An inquiry into the truth-claims of religion.
165. soclal philosophy (3) II 56

Ethical and metaphysical- principles underlying social process, with especial reference to the state.
175. ethics (3) I 54

Standards for judging conduct are considered.
193;194. directed Study ( 1 or $2 ; 1$ or 2 ) I;II (L)
Enrollment by permission. (Ordinarily limited to majors and those who have completed the Institute Seminar).
196. INSTTTUTR SEMINAR (1 to 3) (L)

1954: June $14-25$ at Lake Tahoe and June 28 -July 9 at Santa Barbata.
1955: June 13-24 at Lake Tahoe and June 27-July 8 at Santa Barbara. May be repeated for credit with different content. The 1954 topic: The Human Outlook. Also offered on graduate level For further details see page 60 above.

293;294. directed study ( 1 or $2 ; 1$ or 2 ) I;II
Enrollment by permission. (Ordinarily limited to students who have completed a philosophy major, and to those who have completed the Institute Seminar.)
296. insttutut seminar (1, 2 or 3) See description under 196 above.

## PHYSICS

## Associate Professor: de vault

high school preparation: A high school prepatation consisting of four years of mathematics, one of chemistry and one of physics is preferred but not years of mathematics, one of chemistry and one of physics is pref
required. Shop practice and mechanical drawing are also helpful.
major requirements: Lower Division.-Physics 11, 12, 13; Mathematics 19, 20, 21, 22; Chemistry 11, 12; or equivalents to these courses. Upper Division.Mathematics 103, Civil Engineering 101, Physics 101,102 and 18 units of other upper division physics courses.
recommended blectives: Civil Engineering 130 (Fluid Mechanics), 141 (Heat Power).

11,12,13. PRINCIPLES OR pHYSICS (4,4,4) II,I,II
A rigorous course for those planning advanced study in physics, engineering or chemistry. Pretequisite: Two semesters of analytic geometry and calculus. The second semester may be concurrent with course 11. Course 11 is prerequisite to 12 and 13.
Tbree class periods and one 3 -bour laboratory period a week.
15,16. general physics (4,4) I,II
A general course intended for those planning to enter medicine, dentistry, optometry, and most biological fields. Prerequisites: Intermediate algebra, plane geometry, and trigonometry. Trigonometry may be concurrent with course 15. Course 15 is prerequsite to 16.
Three class periods and one 3-bour laboratory period a week.
19. problems in radio broadcasting (2) II

The purpose of this course is to give non-technological majors some The putpose of this course is to give non-technological majors some
acquaintance with scientific methods through direct participation. Students acquaintance with scientific methods through direct participation.
assist a trained engineer to conduct actual experimental work. assist a trained engineer to conduct actual experimental work.
One class period per week for theoretical background, and times for experiments to be arranged.
21. physical basis of sound (3) II

Prerequisites for all upper division courses: One year of college physics (including mecbanics, beat, sound, ligbt, electricity and magnetism) and differen(including mechanct integral calculus.

101,102. mathematical physics (4,4) I,II
Fundamentals of mathematical methods used in physics; classical mechanics; statistical mechanics; electromagnetics; special relativity.
Four class periods a week.
110. atomic structure (3) I 54

A study of the electronic structure of atoms; quantum mechanical basis; atomic spectra; correlations with chemical properties and the periodic table; nature of the chemical bond. Additional prerequisite: One year of general chemistry.
Three class periods a week.
130. ELECTRONICS (4) II 56

A study of vacuum tubes and electronic circuits. Applications in control, A study of vacuum tubes and electronic circuits. Applical
and communication equipment. Complex variables used.
Three class periods and one 3-bour laboratory period a week.
140. nucleonics (4) II 55

A study of the nucleus of the atom with special emphasis upon applications to chemistry.
T'bree class periods and one 3-bour laboratory period a week.
150. cybernetics (3) I 55

A study of automatic control mechanisms, feedback circuits, computing devices, and the theory of information.
Three class periods a week.
193;194. SPECIAL Studies ( 2 to 4; 2 to 4) I;II
Individual study on selected topics with frequent consultation to be arranged. Possible topics include: electricity and magnetism, optics, spectroscopy, thermodynamics and statistical mechanics, quantum mechanics, relativity; laboratory work in any of these, research, current literature, seminars if enrollment warrants.

## PRE-MEDICAL MAJOR

## Counselor: jonte

All first-class medical schools now require at least three years of college training, and prefer that their candidates have the full four years with bachelor's degree. They specify a minimum amount of biology, chemistry, mathematics, and physics in the undergraduate curriculum, but definitely desire that the pre-medical student secure a broad cultural background in such fields as literature, history, political science, sociology, philosophy, and the fine arts. College of the Pacific pre-medical graduates have been unusually successful in the field of medicine.

The following curriculum is designed to equal or exceed the requirements of the best medical schools. It may be noted in passing that it is not necessary to take a pre-medical major in order to prepare for medical schools; their requirements may be met by choosing suitable electives with a major in any of the sciences or sometimes even in social sciences or humanities. If a major other than premedicine is chosen the student must, of course, take full responsibility for meeting the specific admission requirements of the medical school he wishes to enter.

LOWER DIvision: General chemistry, including qualitative analysis, 10 to 12 units; quantitative analysis, 3 to 5 units; general physics, 8 units; general zoology or general biology, 8 units plus 2 units of micro-technique; English composition and literature, 6 to 12 units; social studies, 6 to 12 units; a reading knowledge of German or French (some schools require both, some will accept Spanish); general psychology, 3 units.

UPPER DIVISION: Chemistry 121, 122, 163, 195; Zoology 102, 104. Elective units should be chosen from among the following: history, literature, philosophy, political science, sociology, the fine arts, and accounting.
note: The field of medical technology offers an attractive career to many students interested in medical activities who do not wish to spend the five to six years of graduate study necessary in order to engage in the practice of medicine. The course in a school of medical technology usually lasts for 18 months, and qualifies one to take the examination for registered Medical Technologist (M.T.) given by the American Society of Clinical Pathologists.

In preparing to enter such a school, the student should take a college course similar to the pre-medical program outlined above. The pre-medical counselor or the head of the Department of Chemistry or Zoology will be glad to advise.

## Pre-MINISTERIAL MAJOR

## Head Counselor: COLliver

The wide range of services which the minister today is challenged to give makes it increasingly imperative that all of his educational work be planned very carefully, and always with his ultimate goal in mind. The theological seminaties are giving careful attention to the undergraduate as well as graduate training of the prospective minister, and through the American Association of Theological Schools have suggested a basic undergraduate course for these students.

The College of the Pacific offers this major with the expectation that it weill strengthen the training of the pre-ministerial student. It is in harmony with the suggestions of the American Association of Theological Schools. It provides a broad foundation with an introduction into many fields of study. It also offers the opportunity for the student to do additional work in such departments as he may wish, yet not be required to take the full number of units in any given department that are necessary for a full major in that department.

Students preparing for this major are encouraged to complete their college language requirement in their first two years and to acquire in their high school years skill in typing and shorthand.

MAJOR REQUREMENTS (in addition to the basic requirements for the A.B. degree): Advanced composition 2, speech 4, history 6, philosophy 6, economics $8-9$, psychology $8-9$, recreation 2 , sociology $8-9$, and religious education 8 including 2 units of supervised field work. Majors should recall that for the A.B. degree at least 40 units earned after attaining junior standing must be in upper division courses.

## SOCIOLOGY

## Professor: Jacoby. (Chairman)

Associate Professor: BRUNER
Lecturer: F. GOLEMAN
Sociology is the systematic study of the structure and functioning of human society, oriented toward the effective understanding and handling of the social problems of the modern world. Training in sociology is offered for use in social research and analysis, in various fields of social planning and legislation, and in the operating of community, state and national programs for the welfare of society. It also provides a background for teaching at secondary and higher educational levels, and a foundation for professional training in such fields as law, the ministry, and social work.

For the latter field, the department offers courses on the pre-professional level designed to acquaint and orient the student with respect to the aims, opporunities and requirements of the profession. This program is in harmony with porunities and requirements of the ptatement of the National Council on Social Work Education that the student should bring to professional education a broad background of general education, including knowledge of fundamental principles in the social and biological sciences.

MAJOR REQUIREMENTS: Lower Division.-Sociology 11 and 12, or their equivalent, 6 units. To become eligible to meet certain upper division requirements, the student should take both Principles of Economics and General Psychology. To meet the science requirement, the study of biology is suggested, although not required.

Upper Division.-Economics 115, Psychology 110, Sociology 160, a course in statistics or social research methods, and sufficient additional upper division courses in sociology, selected in conference with the chairman of the department, to make a minimum total of 23 upper division units.
11. INTRODUCTION TO SOCIOLOGY (3) I

A study of the way societies, both primitive and modern, are organized, how they grow and change, and of man's role in bringing about improved social living.
12. Social problems (3) II

A survey-analysis of the more widely recognized problems of modern society and of the measures designed to meet them.
101. SOCIAL INSTITUTIONS (2) II

An advanced analysis of the institutional structure of society with particular reference to the modern scene
104. THE FAMILY (3) I

A study of the changing family in modern society, and of the social measures being advocated to strengthen it.
110. URBAN SOCIOLOGY (2) I 54

An analysis of the nature and characteristics of modern urban life, particularly as they affect personality.
112. COMMUNITY ORGANIZATION (2) I 54

A study of the structure and process of community organization, with special reference to organization for civic welfare.
115. RURAL SOCIOLOGY (2) II 56

A study of contemporary rutal life under the impact of industrialization and urban growth.
118. POPULATION PROBLEMS (2) II 56

An examination of the social consequences of the changes in quantity, quality and distribution of the world population.
120. RACE RELATIONS (3) I

A study of the practices and trends in inter-group relations.
125. SOCLAL RELATIONS IN INDUSTRY (3) If

A study of the background, current practices and trends in labor-management relations in the United States.
130. SOCIAL PATHOLOGY (2) SS

An analysis of the meaning and nature of social "ill health"; major social problems and measures to meet them.
135. CRIMINOLOGY (3) II

An examination of the causes of crime and delinquency, and of current methods of treating offenders.
137. JU̇VENILE DELINQUENCY (2) SS

An analysis of the nature, extent and causes of juvenile delinquency, and of the methods being employed to deal with this problem.
140. THE FIELD OP SOCLAL wORK (2) I and SS

A survey of the major types of social work, and of the more important public and private social agencies. Prerequisite: Senior standing or work experience.
142. PRINCIPLES OF SOCIAL WORK (2)

A survey of the more general concepts and methods employed in all types of social work. Prerequisite: Course 140 or work experience.
145. PUBLIC WELFARE (2) Il 55

A study of the philosophy, organization, and operating practices of public welfare activities in the United States, with particular reference to California; Prerequisite: Course 140 or work experience.
147. social security programs (2) II 56

An intensive examination of statutory provisions and operational problems of current social security legislation.
151. CHILD WELPARE (2) SS 55

An analysis of the conditions affecting the health and welfare of the child, and of the measures being taken to protect child life.
155. METHODS Of FAMILY LIfe EDUCATION (2) II

A critical examination of current provisions for family life education and the methods employed in the various programs. Prerequisite: Senior standing.
159. SOCIAL FIELD WORK (2 to 4) I:II

Supervised observation and experience in social work agencies and other community situations. Prerequisite: Course 140.
160. PRINCIPLES OF SOCIOLOGY (3) II

An advanced theory course designed primarily for department majors in their senior year. Open only by permission of the instructor.
165. THEORIES OF SOCIAL REFORM (2

A survey of various political, social and economic proposals that have been advanced as desirable substitutes for current arrangements in these fields.
180. Cultural anthropology (2) SS

The study of social arrangements and social change as revealed primarily by the study of primitive cultures.
190. Method of social research (2) I

An introductory study of the research methods currently being successfully employed in the field of sociology.

193;194. SPECIAL ASSIGNMENTS (2 or $3 ; 2$ or 3 ) I;II
Special readings or projects designed to enable the student to complete gaps in his sociological training. Open only by permission of the chairman of the department.
200. teaching of social studies (2) I (See History 200.)
202. HISTORY OF SOCIAL THOUGHT (2)

A historical survey of the growth of man's thinking about group lifeits origin, importance, techniques of change, etc.
203. CONTEMPORARY SOCIOLOGY THEORY (2)

A study of current theory and research concerning some of the more persistent problems of scientific sociology.

293;294. ADVANCED ASSIGNMENTS (2 to 4; 2 to 4) I; II;SS
295;296. sEMINAR (3;3) $1 ;$ II
299. Thesis (4) I:II:SS

## SPEECH

Professors: RUNION (Chairman), BETZ, and DE M. BROWN
Associate Professor: CRABBE
Assistant Professors: ASHBY, BaSye, farrow, and ramsey
There is, strictly speaking, only one major in the Speech Department, but within this major four different emphases are possible, depending on the courses chosen. These are general speech, broadcasting, drama, or speech correction.

MAJOR REQUIREMENTS: 30 units, of which 18 units must be upper division.
recommended electives: For the Broadcasting empbasis.-Art 12, 16, 130; Economics 101; Journalism 103; Music 35,36; Political Science 160. For the Drama emphasis.-Art 11, 12, 15; English 155,156, 172, 174, 182,183; the Drama emphasis.-Art 11, 12,
Physical Education 51; History 11,12.
rbquirements for the master of arts in speech will be determined by the Department Chairman in conformity with the candidate's special field of interest.
10. fundamentals of radio and television (3) I

Organization, regulation, and procedure in station and network radio and television equipment and materials for all broadcast types.
16. radio and television writing (3) I

A foundation for the writing of all forms of materials for radio and television. Opportunity provided for laboratory production of these materials.
17. radio production laboratory (3) II

Basic laboratory studies in writing and directing talks, musical, dramatic, news and special events programs; evaluation and interpretation of scripts of all types.
29. applied radio and television (1) I:II

Credit is given for participation in radio and television activity. Four units may be accumulated through re-entollment.
30. elembntary radio production (3) II

Introduction to program planning and broadcasting procedure. Practice and use of microphones, sound effects, transcribed music and script materials in building programs for broadcasting.
41. applied drama ( 1 or 2 ) I:II

Credit is given to those who appear in public productions or assist therewith according to the number of class hours spent under the instructor.
45. stagecraft (2) I

Lectures and practical work in scenic construction, painting and lighting. Laboratory work on sets for major productions.
47. development of the theatre (3) I

Contemporary theatre, showing the relationships and deviations from historic theatre.
50. ACTing (3) I and II

Introduction to acting, covering pantomine, characterization, movement, and working with other actors in scenes.
51. activg (3) I and II

Continuation of course 50 for more advanced students.
59. fundambntals of spebch (3) I and II

Basic principles of speech activities with emphasis on public speaking and proficiency in the every-day speaking process.
60. FUNDAMENTALS OF SPEECH (3) I

Continuation of 59 with emphasis on discussion techniques and parliamentary procedure.
61. Voice and diction (2) I

Basic training in the elements of normal and effective speech, with special attention to problems of voice and articulation. Individual conferences.
63. ART OF INTERPRETATION (2) I and II

Attention to the principles of discovering and conveying the meanings of the printed page. Emphasis upon prose and poetry.
68. argumentation (2) I

A study of the use of evidence and the logical procedures in the discussion of social problems.
70. INTERCOLLEGIATB FORENSICS (1 or 2) I:II

Special conferences for members of the forensic squad. May be repeated for a maximum of 4 units.
106. Lip reading (3) I and SS 55

Problems of the hard-of-hearing child, criteria for lip reading, theory and methods of teaching lip reading, selection and preparation of material for use in public school classes.
107. AUdIOMETRY (2 or 3) II and SS 55

Consideration of medical education and acoustical aspects of hearing loss. Preparatory to training of school audiometricians and teachers of the hard of hearing.
109. Lif reading Laboratory (1 or 2) I and II and SS 55 (L)

Directed practice in lip reading with children and adults.
116. FILM FOR TELEVISION (2) I

Production and use of film materials in television. Projects in motion and slide production, and preparation of film materials for television transmission.
117. Radio and television station management (2) I

Analysis of all aspects of administering a radio or television station. Directed projects in station operation.
118. RADIO DRAMA (2) II

Forms of drama as applied in the radio situation. Directed projects in the production of selected dramas for release through available facilities.
119. TELEVISION DRAMA (2) II

Forms of drama as applied in the television situation. Directed projects in the production of selected dramas for release through available facilities.
121. TELEVYSION PRODUCTION LABORATORY (3) II

Lecture, discussion and production experience in planning, writing and execution of television broadcasts.
122. EDUCATIONAL RADIO AND TELBVISTON (2) I 54

Lecture, discussion and laboratory practice in educational and television program planning, production, and classroom utilization.
129. Applied radio and television (1) I:II

Credit is given for patticipation in radio and television activities. Four units may be accumulated through re-enrollment.
130. ADVANCED Radio laboratory
(3) $\mathrm{I}: \mathrm{II}$

Advanced discussion and experience in radio broadcast procedure. Directed projects as studio production director. Six units may be accumulated through re-enrollment.
141. APPLIED DRAMA (1 or 2 ) I:II

Credit is given to those who appear in public productions or assist therewith according to the number of class hours spent under the instructor.
145. STAGE TECHNIQUES (3) II (L)

A basic course in technical problems of the theatre. Practical project work forms a portion of the course.
146. PRODUCTION TECHNIQUES (2) I

A basic course in selecting, casting, and producing a play. Includes a study of rehearsal patterns and organization of stage and technical personnel.
150. READING REHEARSALS (3) I

Line reading and action blocking in the various styles of acting.
151. MODERN WORLD THEATRE (3) II

A study of the physical theatre and its relation to the great plays and
players from Ibsen to Miller. Lectures and reading of major plays.
155. Stage costume design (2) II

Theory and practice in theatric design and historic costume. Open to all students.
156. DIRECTING (3) I:II

Lectures, readings, demonstrations, and practice in ways of handling the problems involved in play direction. Enrollment by permission of instructor.
163. ADVANCED ART OF INTERPRETATION (2) II

A continuation of course 63, with special attention to plays. Prerequisite: Speech 63.
165. PUBLIC ADDRESS (2) I

Advanced course in platform technique as well as a study of criticism and public address.
166. SPEBCH FOR TEACHBRS (2) II

Especially designed for prospective teachers who need speech improvement. Oral reading, speaking, and articulation drills.
167. Group leadership ( 1 or 2 ) $\mathrm{I}: \mathrm{Il}$

This is a project course for students in leadership positions in student government. Enrollment by permission of instructor.
168. argumentation, prrsuasion, and debate (3) II

A study of the logical and psychological principles of persuasive discourse, with special attention to controversial speaking.
170. intercollegiate forensics (1 or 2) I:II

Special conferences for members of the forensic squad. May be repeated for a maximum of 4 units.
171. PROJECT SPEAKing (1 or 2) I:II

Speaking assignments in community groups. Prerequisite: Speech 165 and permission of instructor.
172. phonetics (2) I and SS 54

An analysis of English speech sounds and their synthesis in connected speech. Consideration of the physiological and acoustical nature of speech production and speech perception.
174. Speech problems of school children (2) II

Speech development, speech disorders, and speech correction for prospective teachers, supervisors and administrators.
175. corrective speech tbchniQues (2) I and SS 54 (L)

A course to acquaint the student with the principles of corrective techniques.
177. principles of speech correction (2) II and SS 54 (L)

Continuation of Speech 175, with special emphasis on principles of correction of organic speech defects.
183. clinical laboratory in spebch correction (2) I:II:SS 54

Supervised work in the diagnosis and treatment of various types of speech defects. May be repeated for a total of 4 units.
184. speech pathology (2) II

A study of the major speech disorders from a pathological point of view.
193;194. directed study ( 1 or 2 ; 1 or 2 ) I;II;SS
200. the teaching of spebch (2) il

The nature and function of speech in the growing and maturing individual in school; methods and materials of teaching adequate to each level of instruction and conducive to an interesting program.
205. CIINical methods ( 1 or 2 ) I:II:SS

Lectures and demonstration in diagnostic and therapeutic procedures. Super vised clinical practice with all types of defective speech. Prerequisite: Permission of instructor.
213. the stutterer (2) II (U)

An exhaustive investigation of the etiology and therapies of stuttering. Prerequisites: Speech 175, 183, and 184, or 6 units of equivalent work in speech correction.
223. radio, trlevision and society (2) I 55 (U)

Study of the contributions of broadcasting to the public welfare; the broadcaster's responsibilities in programming in the public interest and fulfilling community obligations.
293;294. Directed graduate study ( 1 to $3 ; 1$ to 3 ) I;II;SS
295;296. seminar ( $2 ; 2$ ) $1 ;$ II
297;298. research problems ( 1 to 3 ; 1 to 3 ) I;II;SS
299. thesis (4) I:II:SS

## ZOOLOGY

Professors: noble (Chairman), bertholf, and stanford Associate Professor: ARNOLD
Lecturef: hivezey
major requirements for the bachelor of arts degree: A minimum of 30 units in biological science to be selected upon consultation with the chairman of the department, at least 18 of which must be in upper divison courses. Part of the work should be in botany, and studies in the physical sciences should include at least 8 units of general chemistry. Organic chemistry and basic courses in both physics and geology are recommended.

MAJOR REQUIREMBNTS FOR The bachelor of sCience degree: A minimum of 32 units in biological science, including some botany and some marine biology, and the following courses or their equivalent from other departments: Chemistry 11, 12, 121, or 163; Geology 11, 12; Physics 15, 16; German 81-82, 183 or 188; or French 11-12, 13.
major requtrements for the master of arts degree: For general requirements, see that section in this catalogue. Twelve units of graduate work in zology are required, plus the thesis. In addition to his zoological prerequisites, zoology aid tequould receive as much training as possible in physiology, botany, bacteriology, and statistics. Work toward the degree may be pursued either in Stockton or at the Pacific Marine Station, but at least one session should be spent at the sea.
11. general brology (4) I and II

Basic plant and animal structure, physiology, and ecology are studied in the laboratory, in the field, and through demonstrations.
Three class periods and one 3-bour laboratory period a week.
13. microtechnique (2) I

Training in the preparation and study of microscopic materials. Prerequisite: An introductory college course in biology, botany or zoology.
Two 3-bour laboratory periods a week.
15,16. general zoology (4,4) Yr.
A standard introductory course in the animal sciences. Recommended for all students with major interests in biology. The first semester stresses general biological principles, animal structures and functions, and a survey or the invertebrates. The second semester features the vertebrates, with
atory emphasis on the shark and the foetal pig. No pretequisites.
atory emphasis on the shatk and the foetal pig. No preequis.
21. Introductory marine biology (2) Il

An introduction to biological principles as illustrated by the fauna of the intertidal zone of Central California. No prerequisite. Given at the Pacific Marine Station during spring vacation, with followup work in Stockton.
25. fibld biology (2) if

Study of plant and animal life in the open; methods of making field observations; collecting, mounting, and preserving specimens. No prerequisites. Given at Pacific Marine Station during spring vacation, with preparation and followup work in Stockton.
30. general entomology (3) II 56

Studies in the classification, life history, structure, and basic physiology of insects, including some attention to practical control measures. Prerequisite: An introductory course in biology or zoology.
Two class periods and one 3-hour laboratory period a week.
33. elementary physfology (3) II

A study of the functions of the various systems in the human body. The course is intended mainly for physical education majors. Prerequisite: An introductory college coutse in biology or zoology.
35. mammalian anatomy (2) I

A course to preçede or accompany Zoology 33, dealing primarily with human anatomy as illustrated by dissection of the cat and the use of human charts and models. Prerequisite: An introductory college course in biology or zoology.
One bour of lecture and three of laboratory work a week.
101. heredity and bvolution (2) II

The mechanism of inheritance and the application of these principles to some economic plants and animals and to man, and to the understanding of evolution. Prerequisite: An introductory course in biology or zoology, or upper division standing.
Two class periods a week.
102. embryology (4) I

Comparative study of the development of vertebrates, mainly frog, chick and pig, with some attention to man. Prerequisite: One year of college zoology or biology.
Two class periods and two 3-bour laboratory periods a week.
104. comparative anatomy (4) II

Comparative study of representative vertebrates with special attention to the evolution of the human body. Prerequisite: One year of college zoology or biology.
Two class periods and two 3-bour laboratory periods a week.
108. parasitology (4) I 54

Studies on parasitism with emphasis on the parasites of man. Prerequisite: One year of college zoology or biology.
Two class periods and six hours of laboratory work a week.
110. animal bcology (2 to 4) SS (at Pacific Marine Station) Relation of animals to each other and to their environment.
112. invertebrate zoology (4) SS (at Pacific Marine Station) Studies on the morphology, taxonomy, embryology, life history and economic importance of invertebrate animals. Prerequisite: An introductory course in biology or zoology.
120. physiological bases of behavior (4) II A study of mammalian physiology with emphasis on the endocrines and the nervous system. Prerequisite; A college course in vertebrate zoology or anatomy, and a college course in chemistry.
Three class periods and one 3 -bour laboratory period a week.
122. marine biology ( 2 to 4).. I and SS (at Pacific Matine Station) Principles of life with special reference to the fauna of the intertidal zone of Central California. No prerequisites. Lectures, laboratory and field trips.
132. human brology (4)

A presentation of those main features of human evolution, embryology, physiology, and genetics which are considered valuable in a liberal eduphysiology, and genetics which are considered valuable in a
cation. No prerequisites. Some laboratory work is included.

195;196. zoology seminar ( 1 or $2 ; 1$ or 2 ) $\mathrm{I} ; \mathrm{II} ; \mathrm{SS}$
Readings, conferences and reports on selected biological subjects. The course may be re-elected as often as progress in the work warrants. Prerequisite: One year of college zoology or biology.
One (or two) 1-bour class periods a week.
197;198. investigational zoology ( 1 to 4 ; 1 to 4 ) $\mathrm{I} ; \mathrm{II} ; \mathrm{SS}$
Supervised individual studies on selected biological problems. The course may be re-elected as often as progress in the work warrants. Prerequisite: One year of work in zoology or biology.
One 3-hour laboratory period per unit of credit.
295;296. graduate seminar in zoology ( 1 to $4 ; 1$ to 4 ) I;II;SS Readings, conferences and reports on a selected field of zoological research. The course may be re-elected as often as progress in the work warrants.
297;298. graduate research in zoology ( 1 to4; 1 to 4) I; II;SS Advanced research in selected problems in zoological science. The course may be re-elected as often as progress in the work warrants. Prerequisite: Graduate status with a completed undergraduate major in zoology.
299. thesis (4) I:II:SS

## Pacific Maring Station

The College of the Pacific's Marine Station at the mouth of Bodega Bay, 50 miles north of San Francisco, offers a well-rounded program of courses in the summer (most of which are listed above), and has facilities available for research work the year around. For more detailed information, including that concerning living accommodations, address Dr. A. E. Noble, Pacific Marine Station, Dillon Beach, California.

## PACIFIC CONSERVATORY OF MUSIC

John Gilchrist Elliott, Dean

## ORGANIZATION

The Conservatory, while considered a department of the College, is a definite organization which aims to prepare trained students for professional work in the field of music. Students registered in Liberal Arts may major in the Department of Music for the Bachelor of Arts degree. Those deciding to do professional work in music should register in the Conservatory.

The Conservatory of the College of the Pacific is a chatter member of the National Association of Schools of Music, and is accredited by that organization. The requirements for entrance and for graduation as stated in this catalogue are The requirements for entrance and and regulations of the National Association of Schools of Music.

The College of the Pacific gives the students in the Conservatory who come from outside Stockton a home that offers them the valuable opportunity of sharing the social life of the College.

## EQUIPMENT

The Conservatory activities and equipment are housed in the main Conservatory building and two recently completed music buildings which provide 17,000 square feet of additional floor space. The main building was completed in 1925 at a cost, including equipment, of over $\$ 200,000$, and is one of the finest buildings devoted to the study of music in any college in the West. In addition to studios, practice rooms, classrooms and offices, the building contains an auditorium with a seating capacity of 1256 , in which is located the Watt Memorial Organ, gift of Rolla V. Watt, former president of the Board of Trustees, and Mrs. Watt. It possesses a tonal appointment of 58 stops of great richness and beauty, making it one of the largest organs in the West. This organ is available for practice and recital work by advanced students. Three smaller organs are also available for practice.

The new buildings contain large acoustically treated choral, band and orchestra rehearsal halls, classrooms, offices and 25 practice rooms. The equipment includes 14 grand and 54 upright pianos, together with several reproducing machines and radios. The music library contains listening rooms for recorded music.

## ADMISSION

The requirements for admission to the Conservatory of Music are the same as for admission to the College in general, and may be found on page 45.

Students may take applied music in the Conservatory without having to present academic credentials for entrance. Such students may enroll at any time during the year.

## CURRICULA OF THE SCHOOL OF MUSIC

The Conservatory offers courses leading to the degrees of Bachelor of Music and Master of Music, and the special secondary credential in music.

## MASTER'S DEGREES

The requirements for the degree Master of Arts with a major in music, and the general requirements for the degree of Master of Music, are found on pages 51 and 52.

Requirements for the master of music degrer: The degree Master of Music may be granted to students who have received their baccalaureate diplomas from music schools recognized by the National Association of Schools of Music, upon the completion of one year of work in residence.

With Composition as a Major:
I II
Composition II (Music 254;255) - $\quad$ ) - $\quad$ ) 44
Orchestration 11 (Music 207;208) - - - - - 2 2
Piano - - - - - - - - - - 2 2
Musicology Seminar (Music 295a;296a) - - - - 2
Thesis
22
Advanced Music Elective - $-\therefore \quad-\quad-\frac{2}{14} \frac{2}{14}$

During the year the candidate should submit the following as original work: a. A string quartet.
b. A symphonic poem for full orchestra. This will be regarded as the thesis; two copies must be deposited with the College library before granting of the degree.

With Applied Music (except in the field of voice) as a major: II
Composition I (Music 154;155) - - - - - - 2
Orchestration II (Music 207;208) - - - - . 2 2
Applied Music (Major instrument) - - . . . . . 44
Musicology Seminar (Music 295a;296a) - - - - 2 2
Thesis - - . - - - - . : $-\quad$ - $\quad 2 \quad 2$
Electives - - - - - - - - - - 2 2
$14 \quad 14$

With Voice as a Major: I II
Composition I (Music 154;155) - - - . - . $2{ }^{2}$
Voíce - . - - - - - - . - - 4 : 4
Musicology Seminar (Music 295a;296a) - - - - 2 2
Thesis - . . - . . - . . - - 2
Cultural subjects - $-\quad-\quad-\quad-\quad-\quad-\quad-\quad-\quad 4 \quad 4$
(2) Prepare those students who are interested in the four-year course leading to the general elementary teaching credential. Such students should take the following courses in their freshman and sophomore years:

(3) Provide an adequate cultural preparation in music for those students who also wish a general liberal arts background. Lower division, same as No. 2.
(4) Prepare those students who wish special training in musical therapy in connection with their music major. Such students should take the following courses in their freshman and sophomore years:


UPPER DIVISION REQUIREMENTS FOR MUSICAL THERAPY MAJORS: Two units each of the following: Orchestration, conducting, special music history, social objectives in music, physical basis of sound, elementary music methods, socondary music mathods. Musical guidance and therapy, 4 units; music therapy practicum, 4 units. Psychology, 12 units, to include mental hygiene, adolescent practicum, 4 units. Psychology, 12 units, to inchoge abnormal psychology, and clinical psychology. Electives sufficient to psychology, abnormal psychology, and clinical psychology. Electives suffiemeter the major; membership in college chorus and solo class each semester. In addition to the above, the equivalent of 6 units of voice study and 6 units of In addition to the above, the equivalent of 6 units of voice study and 6 units of piano study mu
of the Pacific.

## BACHELOR OF MUSIC DEGREE

The College of the Pacific confers the degree of Bachelor of Music upon talented students who complete satisfactorily the prescribed courses in applied music musical theory, and academic subjects. Candidates for the degree may major in any branch of applied music, in musical therapy, in theory, composition, church music or public school music.

In public school music, the candidate must have the approval of the chairman of the department before taking up third-year work. In applied music the candidate should refer to the yearly requirements as stated in the section entitled "Private Instruction in Applied Music," page 153

During the senior year candidates must give proof of their fitness for the degree by doing some special work along the lines of their major subject. If a candidate is majoting in applied music, this special work will take the form of a public recital, and a solo appearance with orchestra. Candidates for the degree with a major in theory must maintain a high standard of scholarship throughout the prescribed course, and in their senior year show their aptitude for a majo subject by writing a thesis which will show not only the results of careful research but also the application of personal deduction and theories.

Curriculum Leading to the Degree, Bachelor of Music, with a Major in Piano or Organ

| Freshman Year | I | II | Sophomori Year | I | II |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Harmony and Ear Training | 3 | 3 | Advanced Harmony and |  |  |
| General Music History | 2 | 2 | Ear Training | 3 | 3 |
| Chorus | $1 / 2$ | 1/2 | Form and Analysis I | 3 | 3 |
| Solo Class | 1/2 | 1/2 | Chorus | $1 / 2$ | 1/2 |
| Piano (or Organ) | 2. | 2 | Solo Class | 1/2 | 1/2 |
| English, Speech | 3 | 3 | Piano (or Organ) | 2 |  |
| Physical Education | 1/2 | $1 / 2$ | Physical Education | 1/2 | 1/2 |
| American History and Inst. | - | 4 | Physical Basis of Sound | - | 3 |
| Electives | 4 | 1 | Academic Electives | 3 |  |
|  |  |  | Music Electives | 3 | 3 |
|  | 151/2 | $15^{1 / 2}$ |  | $15^{1 / 2}$ | 151/2 |
| Junior Year | I | II | Senior Year | I | II |
| Form and Analysis II | - | 2 | Orchestration I | 2 | 2 |
| Counterpoint I | 2 | 2 | Piano Ensemble | 1 | 1 |
| Piano Ensemble | 1 | 1 | Pedagogy of Piano | - | 2 |
| Chorus | 1/2 | 1/2 | Pedagogy of Harmony | 2 | - |
| Solo Class | 1/2 | 1/2 | Instrumental Conducting | - 1 | 2 |
| Advanced Piano (or Organ) | 4 | 4 | Chorus | 1/2 | 1/2 |
| Modern Harmony | - | 3 | Solo Class | 1/2 | 1/2 |
| Biblical History, Literature |  |  | Counterpoint II | 2 | - |
| or Archaeology <br> Physical Education | 2 | $2^{1 / 2}$ | Instrumental Ensemble | 1 | 4 |
| English, American or |  |  | Music Survey Courses | 2 | 2 |
| World Literature | 3 | - |  |  |  |
| Music Survey Courses | 2 | 2 |  | 15 | 14 |
|  | $15^{1 / 2}$ | $17^{1 / 2}$ |  |  |  |

Curriculum Leading to the Degree, Bachelor of Music, with a Major in Vorce

| Freshman Year | I | II | Sophomore Year | I | II |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Harmony and Ear Training | 3 | 3 | Advanced Harmony and |  |  |
| General Music History | 2 | 2 | Ear Training | 3 | 3 |
| Chorus | \% | 1/2 | Form and Analysis I | 3. | 3 |
| Solo Class | 1/2 | 1/2 | Chorus | 1/2. | 1/2 |
| Applied Music, Voice | 2 | 2 | Solo Class | $1 / 2$ | 1/2 |
| Applied Music, Piano | 1 | 1 | Applied Music, Voice | 2 | 2 |
| English, Speech | 3 | 3 | Applied Music, Piano | 1 | 1 |
| Physical Education | 1/2 | 1/2 | Physical Education | 1/2 | 1/2 |
| American History and Inst. | - | 3 | French, German or Italian | 4 | 4 |
| Electives | 3 | - | Electives | 2 |  |
|  | $15^{1 / 2}$ | $15^{1 / 2}$ |  | 161/2 | 141/2 |


| Junior Year | I | II | Senior Year | I | II |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Choral Conducting | 2 | - | Music Survey Courses | 2 | 2 |
| Counterpoint I | 2 | 2 | Chorus | 1/2 | 1/2 |
| Music Survey Courses | 2 | 2 | Solo Class | 1/2 | 1/2. |
| Chorus | 1/2 | 1/2 | Advanced Voice | 3 | 3 |
| Solo Class | 1/2 | 1/2 | Vocal Ensemble | 2 | 2 |
| Advanced Voice | 3 | 3 | Pedagogy of Harmony | 2 | - |
| English, American or |  |  | Appreciation of Poetry | 2 | - |
| World Literature | 3 | - | Choir . | 1 | 1 |
| Vocal Ensemble | 2 | 2 | Drama Elective | - | 3 |
| Physical Education | 1/2 | 1/2 | Electives | 2 | 3 |
| Biblical History, Literature or Archaeology | 2 | 2 |  | 15 | 15 |
| Pedagogy of Voice | - | 2 |  |  |  |

Curriculum Leading to the Degree, Bachelor of Music, with a Major in Stringed Instruments

| Freshman Ybar | I | II | Sophomore Year | I | II |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Harmony and Ear Training | 3 | 3 | Advanced Harmony and |  |  |
| General Music History | 2 | 2 | Ear Training | 3 | 3 |
| Chorus . | 1/2 | $1 / 2$ | Form and Analysis I | 3 | 3 |
| Solo Class | 1/2 | 1/2 | Chorus | 1/2 | 1/2 |
| Applied Music, Major | 2 | 2 | Solo Class | 1/2 | 1/2 |
| Applied Music, Piano | 1 | 1 | Applied Music, Major | 2 | 2 |
| Orchestra | 1 | 1 | Applied Music, Piano | 1 | 1 |
| English, Speech | 3 | 3 | Orchestra | 1 | 1 |
| Physical Education | $1 / 2$ | $1 / 2$ | String Ensemble | 1 | 1 |
| American History and Inst. | - | 3 | Physical Education | $1 / 2$ | 1/2 |
| Electives | 2 | - | Physical Basis of Sound | - | 3 |
|  | - |  | Electives | 3 | - |
|  | 151/2 | $16^{1 / 2}$ |  |  |  |
|  |  |  |  | 151/2. | $15^{1 / 2}$ |
| Junior Year | I | II | Senior Year | I | II |
| Counterpoint I | 2 | 2 | Orchestration I | 2 | 2 |
| Music Survey Courses | 2 | 2 | Music Survey Courses | 2 | 2 |
| Chorus | 1/2 | 1/2 | Pedagogy of Harmony | 2 | - |
| Solo Class | 1/2 | $1 / 2$ | Chorus | $1 / 2$ | 1/2 |
| Advanced Applied Music, Major |  |  | Solo Class | 1/2 | 1/2 |
|  | 4 | 4 | Advanced Applied |  |  |
| String Ensemble | 1 | 1 | Music, Major | 4 | 4 |
| Form and Analysis II | - | 2 | String Ensemble | 1 | 1 |
| Orchestra | 1 | 1 | Orchestra | 1 | 1 |
| Biblical History, Literature or Archaeology |  |  | Counterpoint II | 2 | - |
|  | 2 | 2 | Modern Harmony | - | 3 |
| Physical Education | $1 / 2$ | $1 / 2$ |  |  |  |
| English, American or World Literature | 3 | - |  | 15 | 14 |
|  | 161/2 | 151/2 |  |  |  |

Curriculum Leading to the Degree, Bachelor of Music, with a Major in Theory or Composition

| Freshman Year | I | II | Sophomore Year | I | II |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Harmony and Ear Training |  | 3 | Advanced Harmony and |  |  |
| General Music History | 2 | 2 | Ear Training | 3 | 3 |
| Chorus | $1 / 2$ | $1 / 2$ | Form and Analysis I | 3 | 3 |
| Solo Class | 1/2 | $1 / 2$ | Chorus | 1/2 | 1/2 |
| Applied Music, Piano | 2 | 2 | Solo Class | 1/2 | 1/a |
| English, Speech | 3 | 3 | Applied Music, Piano | 1 | 1 |
| Physical Education | 1/2 | 1/2 | Applied Music, Major Interest 2 |  | 2 |
| American History and Inst | - | 3 | Applied Music, Major Interest $21 / 2$Physical Education |  | 1/2 |
| Electives | 4 | 1 | Physical Basis of Sound Electives | - | 3 |
|  | 151/2 | 151/2 |  | $\frac{3}{151 / 2}$ | 1 |
|  |  |  |  |  | 141/2 |
| Junior Year | I | II | Senior Year | I | II |
| Counterpoint I | 2 | 2 | Orchestration II | 2 | 2 |
| Orchestration I | 2 | 2 | Music Survey Courses | 2 | 2 |
| Form and Analysis II | - | 2 | Composition I | 4 | 4 |
| Music Survey Courses | 2 | 2 | Pedagogy of Harmony | 2 | - |
| Composition I | 2 | 2 | Chorus | 1/2 | 1/2 |
| Solo Class | 1/2 | 1/2 | Solo Class | 1/2 | 1/2 |
| Chorus | 1/2 | 1/2 | Counterpaint II | 2 | - |
| Instrumental Ensemble | 1 | - | Instrumental Conducting | - | 2 |
| Applied Music | 2 | 2 | Applied Music | 2 | 2 |
| Modern Harmony | - | 3 | Elective | - | 2 |
| Biblical History, Literature or Atchaeology | 2 | 2 |  | 15 | 15 |
| Physical Education | 1/2 | 1/2 |  |  |  |
|  | 141/2 | $18^{1 / 2}$ |  |  |  |

Curriculum Leading to the Degree, Bachelor of Music, with a Major in Musical Therapy

| Freshman Year | I | II | Sophomore Year | I | II |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Harmony and Ear Training | 3 | 3 | Advanced Harmony and |  |  |
| General Music History | 2 | 2 | Ear Training | 3 | 3 |
| Chorus | 1/2 | 1/2 | Form and Analysis I | 3 | 3 |
| Solo Class | 1/2 | 1/2 | Chorus | 1/2 | 1/2 |
| Applied Music | 1 | 1 | Solo Class | 1/2 | 1/2 |
| Brass Instruments | 1 | 1 | Applied Music | 1 | 1 |
| Physical Education | 1/2 | 1/2 | Woodwind Instruments | 1 | 1 |
| English, Speech | 3 | 3 | Physical Education | 1/2 | 1/2 |
| General Biology | 4 | - | Physical Basis of Sound | - | 3 |
| Electives | 1 | 4 | General Psychology | 3 | " |
| Introduction to Sociology | - | 3 | Physiology | - | 3 |
|  | 161/2 | $15^{1 / 2}$ | American History and Inst. | 3 | - |
|  |  |  |  | $15^{1 / 2}$ | $15^{1 / 2}$ |


| Junior Year | I | II | Senior Year | I | II |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Choral Conducting | 2 | - | Music Survey Course | 2 | - |
| Instrumental Conducting | - | 2 | Orchestration I | 2 | - |
| Choir | 1 | 1 | Choir | 1 | 1 |
| Solo Class | 1/2 | $1 / 2$ | Solo Class | 1/2 | 1/2 |
| Elem. School Music Methods | 2 | - | Organ | 1 | - |
| Applied Music | - | 1 | Applied Music | - | 1 |
| Violin | 1 | - | Musical Therapy Practicum | 3 | - |
| Musical Therapy | 2 | 2 | Hospital Orientation | - | 4 |
| Sec. School Music Methods | - | 3 | Abnormal Psychology | 3 | - |
| Musical Therapy Practicum | - | 2 | Clinical Psychology | 2 | 2 |
| Art or Crafts | 2 | - | Sociology | - | 2 |
| Psychology of Adolescence | 2 | - | Parent-Child Relationships | - | 2 |
| School Band and |  |  | Mental Hygiene | - | 3 |
| Orchestra Methods | - | 2 | Elective | 2 | - |
| Folk Dancing (Phys, Ed.) | 1/2 | 1/2 |  |  |  |
| Biblical History, Literature or Archaeology | 2 | 2 |  | $16^{1 / 2}$ | 151/2 |
|  | 15 | 16 |  |  |  |

Curriculum Leading to the Degree, Bachelor of Music, with a Major in Public School Music and Recommendation for the Special Music Credential

| Freshman Year | I | II | Sophomore Year | I | II |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Harmony and Ear Training | 3 | 3 | Advanced Harmony and |  |  |
| General Music History | 2 | 2 | Ear Training | 3 | 3 |
| Chorus | 1/2 | 1/2 | Form and Analysis I | 3 | 3 |
| Solo Class | 1/2 | 1/2 | Chorus | $1 / 2$ | $1 / 2$ |
| Applied Music | 2 | 2 | Solo Class | 1/2 | 1/2 |
| Band or Orchestra | 1 | 1 | Applied Music | 2 | 2 |
| English, Speech | 3 | 3 | Band or Orchestra | 1 | 1 |
| Physical Education | 1/2 | $1 / 2$ | General Psychology | 3 | - |
| Social Science Elective | 3 | - | Physical Education | $1 / 2$ | 1/2 |
| American History and Inst. | - | 3 | Physical Basis of Sound | - | 3 |
| Woodwind Instruments | 1 | 1 | Brass Instruments | 1 | 1 |
|  |  | - | Hygiene | 2 | - |
|  | $16^{1 / 2}$ | 161/2 | Electives | - | 2 |
|  |  |  |  | $16^{1 / 2}$ | $16^{1 / 2}$ |


| Junior Year | I | II | Senior Year | I | II |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Choral Conducting | 2 | - | Orchestration I | 2 | 2 |
| Instrumental Conducting | - | 2 | Choir or Chorus | 1 | 1 |
| Counterpoint | 2 | 2 | Solo Class | $1 / 2$ | 1/2 |
| Choir or Chorus | 1 | 1 | Applied Music, Violin | 1 | - |
| Solo Class | 1/2 | 1/2 | Stringed Instruments | - | 1 |
| Elem. School Music Methods | 2 | - | Pedagogy of Harmony | 2 | - |
| Practice Teaching, Elem. | - | 2 | Band or Orchestra | 1 | 1 |
| Applied Music | 1 | 1 | Soc. Objectives in Music | - | 2 |
| Band or Orchestra | 1 | - | Pactice Teaching, Sec. | 3 | - |
| Sec. School Music Methods | - | 3 | Education Psychology | 2 | - |
| Physical Education | 1/2 | 1/2 | Music Survey Course | - | 2 |
| Foundations of |  |  | Percussion Instruments | - | 1 |
| Secondary Education | 5 | - | Humanities Electives | - | 3 |
| School Band and Orchestra Methods | - | 2 |  | $12^{1 / 2}$ | $13^{1 / 2}$ |
| Advanced Grammar | 2 | - |  |  |  |
|  | 17 | 16 |  |  |  |

Summer Session
Biblical History, Literature
or Archaeology
Adolescent Psychology

Curriculum Leading to the Degree, Bachelor of Music, with a Major in Church Music

| Freshman Year | I | II | Sophomore Year | I | II |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Harmony and Ear Training | 3 | 3 | Advanced Harmony and |  |  |
| General Music History | 2 | 2 | Ear Training | 3 | 3 |
| Chorus | 1/2 | 1/2 | Form and Analysis I | 3 | 3 |
| Solo Class | 1/2 | 1/2 | History of Church Music | 2 | 2 |
| Applied Music, Voice | 1 | 1 | Chorus | $1 / 2$ | 1/2 |
| Applied Music, Piano | 1 | 1 | Solo Class | $1 / 2$ | 1/2 |
| Chapel | 1 | 1 | Applied Music, Voice | 1 | 1 |
| Physical Education | 1/2 | 1/2 | Applied Music, Piano | 1 | 1 |
| American History and Inst. | - | 3 | Chapel Choir | 1 | 1 |
| Philosiphy for Beginners | 3 | - | Physical Education | 1/2 | 1/2 |
| English, Speech | 3 | 3 | Orient. in Christian Educ. | - | 3 |
|  |  |  | General Psychology | 3 | - |
|  | 151/2 | 151/2 |  | 151/2 | 151/2 |


| Junior Year | I | II | Senior Year | I | II |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Counterpoint I | 2 | 2 | Choir Administration | 2 | 2 |
| Chorus | $1 / 2$ | $1 / 2$ | Music Survey Courses | 2 | - |
| Solo Class | $1 / 2$ | $1 / 2$ | Chorus | $1 / 2$ | $1 / 2$ |
| Applied Music, Organ | 1 | 1 | Solo Class | $1 / 2$ | $1 / 2$ |
| Chapel Choir | 1 | 1 | Chapel Choir | 1 | 1 |
| Form and Analysis II | - | 2 | Psalms of Israel <br> Biblical History, Literature <br> $\quad$ or Archaeology | 2 | 2 | | Religion and the Arts |
| :--- |
| Physical Education |

## SCHOLARSHIPS

Scholarships of $\$ 500$ each and extending over a period of two years are offered instrumentalists and vocalists who can qualify for important positions in the orchestra, band, opera, and choir. These grants are given solely on performing ability for the first semester and renewed thereafter as the holder demonstrates such qualities of musicianship, application, and character as will promise professional uccess. Applications are received at any time, and the awards will be made befor registration.

## DESCRIPTION OF COURSES

Professors: ELLIOTT (Chairman), BODLEY, H. I. BROWN, HARBERT, SHORT
SHADBOLT, UNDERWOOD, and WELTON
Associate Professors: Bowling, NORTON
Assistant Professors: holton, La MOND
Director of Band: CORRA
10. MUSIC AND SOCIETY (1) I:II

The course demonstrates the significance of music in society and how the development of it reflects the growth of the Western civilization.
11,12. Harmony and ear training (3,3) Yr.
13,14. advanced harmony and ear training $(3,3)$ Yr.
15. CHORUS ( $1 / 2$ ) I:II

Required of all music majors.
16. ELEMENTS OF MUSIC (2) I and SS

A course for candidates for the general elementary credential who are not yet ready for course 117

18;19. A CAPPELLA Choir (1;1) Yr.
20;21. ORCHESTRA (1;1) Yr.
22. SOLO CLASS ( $1 / 2$ ) I:II

Required of all music majors. A weekly meeting of the entire Conservatory student body, in which the students gain experience in public appearance by playing and singing for each other. Recital attendance is a part of the course.

23,24. FORM AND ANALYSIS I $(3,3)$ Yt.
25. MARCHING BAND ( $1^{1 / 2}$ ) I

Open to all qualified students and required of music major credential candidates. Plays for all football games and presents a concert.
26. CONCERT BAND (1) II
27. WOODWIND INSTRUMENTS (1) I:II
28. bRass instruments (1) I:II

These courses are designed to give public school music majors and others interested a chance to play a brass and woodwind instrument and to learn about the rest of the brass and woodwind families as a whole. Study in embouchure, articulation, breath control, posture and fingerings. A standard approved instruction book is used.
29. PERCUSSION INSTRUMENTS (1) I:II
30. OPERA (1 to 4) I:II

The aim of the course is to study parts from the operatic literature, with emphasis on ensemble numbers. The program varies according to the enrollment in class. As time and space. advantages allow, there is also included among the aims of the course the acting out of scenes from the various operas. The work in the class should culminate in a full production of any opeta for which the cast is available.

35,36. GENERAL HISTORY OF MUSIC (2,2) Yr.
59. WOODWIND ENSEMBLB (1 or 2 ) I:II
60. BRASS ENSEMBLE (1 or 2 ) I:II
101. INSTRUMENTAL CONDUCTING (2) II (L)

Baton technique and principles of music interpretation. Study of suitable music literature from small ensemble to symphonic orchestra and band.
103. MODERN HARMONY
(3) II

The study and practice of harmonic techniques which have prevailed from the time of Wagner to the present. Prerequisite: Course 13, 14.
104. FORM AND ANALYSIS II (2) II

Detailed structural analysis of rondo, sonata-allegro and other larger forms. Prerequisites: Courses 13, 14; 23, 24.

105,106. counterpoint (2,2) Yr. (L)
The various species of counterpoint in two, three and four voices. Second semester includes contrapuntal writing in small vocal and instrumental forms.

107,108. orchestration I (2,2) Yr. and SS
A study of the instruments of the orchestra, together with practical study of the art of scoring for the various choirs and for full orchestras.
113. pedagogy of piano (2) II (L)
114. string ensemble (1 or 2) I:MI (L)

Trios, quartets, etc.; performance of a wide range of chamber music literature.
115. chorus (2) SS
116. elembentary school music methods (2) I

A detailed survey of the philosophy, methods and materials which look toward a broad music program, including singing, listening, and the place of instrumental music on the elementary level.
117. elembntary school music education (2) I and II and SS For elementary credential candidates who are not music majors. Includes a review of the theoretical fundamentals, the development of the child voice, and a survey of methods and materials. Prerequisite: Course 16 or equivalent.

118:119. A CAPPBLLA Choir (1;1) Yr.
Admission by audition. The choir tours each spring and in addition sings for chapel service and college convocations, and appears in several concerts each year.
$120 ; 121$. ORCHESTRA ( $1 ; 1$ ) $1 ; \mathrm{II} ; \mathrm{SS}(\mathrm{L})$
Conservatory Symphony Orchestra. Open to all qualified students, and required of music credential candidates.
126. concert band (1) II:SS

Open to all qualified students and required of music major credential candidates. Gives one or more concerts, plays for commencement exercises, and frequently makes concert trips.
130. opera theatre ( 1 to 4) II:SS
131. pedagogy of voice (2) II

Required of voice major seniors. Study of vocal organs and approved methods of tone placement; extension of teaching repertoire.
134. history of church music (2) II (L) Required of church music majors.
136. Survey of the classical prriod (2) I

A study of the great masters from Bach and Handel to Beethoven; surveys the music achievements of the period against the background of European music since 1600 and evaluates their meaning in conjunction with an appraisal of religious, scientific, and political developments of their time.
137. SURvey of the romantic period (2) I

A study of music from C. M. V. Weber and Schubert to Brahms and Wagner against the background of human aspirations in religion, politics, art and literature during the flowering of Romanticism, mainly in Germany and France.
138. survey of oprra (2) II
140. COUNTERPOINT II (2) I

Continuation of Counterpoint I. The devices of free counterpoint as applied to the figured chorale and fugue.
141. choral conducting (2) I (L)

The principles of conducting and training choral organizations. Practice in conducting choral literature.
142. accompanying ( 1 or 2) I:II (L)
143. piano ensemble ( 1 or 2 ) I:II (L)

144;145. church choir administration (2;2) Yy.
146;147. chapel choir ( $1 ; 1$ ) Yr. (L)
154;155. COMPOSITION I (2 to 4; 2 to 4) Yr.
Creative musical expression to suit the needs of the individual student. Prerequisite: Music 13, 14; 23, 24.
160. Stringed instrumbnts (1) I:II

Prerequisite: One or more units of applied music in violin at the College of the Pacific.
166. Practical keyboard harmony (2) I (L)

Application of harmony to the piano keyboard. Drill in tranposition, improvisation, and harmonizing of established melody lines.
170. advanced piano (1 to 4) I:II

For advanced piano students in the junior and senior years. Approval of the dean necessary.
171. Advanced voice ( 1 to 4) I: II

For advanced voice students in the junior and senior years. Approval of the dean necessary.
172. advanced organ (1 to 4) I:II

For advanced organ students in the junior and senior years. Approval of the dean necessaty.
173. ADVanced violin ( 1 to 4) I:II

For advanced violin students in the junior and senior years. Approval of the dean necessary.
174. AdVANCED Cello ( 1 to 4) I:II

For advanced cello students in junior and senior yeats. Approval of the dean necessary.

184;185: MUSICAL THERAPY $(2 ; 2)$ Yr. (L)
The course includes the study and evaluation of the history, principles, practices, and techniques of music as a theraputic agent in general education, in clinical work in relation to other therapies, and in institutional work. Students are prepared for field work through directed observation, field trips, and projects assigned by the instructor.
186;187. MUSICAL THERAPY PRACTICUM (2;2) Yr.
188. SOCIAL OBJECTIVES IN MUSIC (2) II

A study of the agencies of music education, production and consumption in Stockton and other communities, through classroom discussions, guest speakers, field trips, and group surveys. Work with community organizations in music during the course is encouraged as a means of orientation and practical experience.
189. PRDAGOGY OF HARMONY (2) I

A study of the problems involved in the presentation of sight-singing, melodic, rhythmic, and elementary harmonic dictation.

193;194. DIRECTED STUDY ( 1 to 4 ; 1 to 4) $\mathrm{I} ; \mathrm{II}$
200a. SChOOL BAND aND ORCHESTRA methods (2) I
A laboratory course offering opportunity to play elementary, junior and senior high school material with an accomplished group. Prerequisite: Class in strings, brass or woodwind.

200b. SECONDARY SCHOOL MUSIC METHODS (3) I
The philosophy underlying the subject; the creating of professional attitudes; general problems relating to adolescence, the community, and the teacher; methods, materials and planning for the teaching of vocal, instrumental and music classes; types of tests, programs, festivals, and contests.

207,208. ORCHESTRATION II $(2,2) \mathrm{Yr}$. and SS
A course designed for master's degree candidates. The composition and orchestration of original work is the main objective throughout the year. Prerequisite: Course 107, 108.
239. HISTORY OF CHORAL PRELUDES (2) SS

254;255. ADVANCED COMPOSITION ( 2 to $4 ; 2$ to 4) Yr.
286;287. hospital orientation (2 to 5; 2 to 5) Yr.
Clinical experience under direct supervision in individual projects in musical cherapy as a part of education for home bound children, in speech and recreational therapy, in work with spastics, and in institutional work in connection with occupational and psychotherapy.
295a.;296a. MUSICOLOGY SEMINAR (2;2) I;II;SS
296b. SEminar in music education (2 to 4) II and SS
299. THESIS (2 to 4) I:II:SS

## Related Courses in Other Departments

directed teaching of elementary music (2) I and II (See Education 158c.)
directed teaching of secondary school music (2 to 4) I and II (See Education 178d.)

## PRIVATE INSTRUCTION IN APPLIED MUSIC PIANO

MR. ELLIOTT, MR. bACON, MISS bOWLING, MR. SHADBOLT
MR. LA MOND

## Plano Examinations

Non-music majors are exempt from all the following auditions and examinations.

Music majors (candidates for the Mus.B. degree or for the A.B. degree with a major in music) are required to appear for an audition before a jury of the piano faculty at the end of each semester of their piano study. These auditions will take the form of examinations at certain times, as specified below.

MINIMUM REQUIREMENT EXAMINATION IN PIANO: All music majors (piano and organ majors excepted) must take the following examination at some time during their piano study. Satisfactory performance of this examination is a requirement for graduation. All music majors (organ majors excepted) must take a minimum of 3 units of piano, and as many more units as may be necessaty to pass this examination.

1. All major and harmonic minor scales; all major and minor triad arpeggios.
2. A minuet or similar piece of Bach or Haydn or Mozart; or a Bach two-part Invention; or a Clementi or Kuhlau Sonatina.
3. A piece of the approximate difficulty of a selection from the Schumann Album for the Young.
4. The sight-reading of a hymn or the accompaniment to a simple school song or similar material.
5. Item 1 to be performed from memory; either Item 2 or 3 to be performed from memory.

## EXAMINATIONS FOR PIANO MAJORS

freshman: Piano majors will take the following examination at the end of the second semester of their freshman year. Satisfactory performance of this examination is a prerequisite for sophomore standing as a piano major.

1. Scales, axpeggios and other technic as required by the instructor.
2. Bach: a two-part Invention.
3. One of the easier sonatas of Haydn or Mozart or Beethoven (Op. 49 of Beethoven excepted).
4. A piece from the romantic repertory of the approximate difficulty of the Chopin Prelude in D Flat Major or the Schumann Romance in F Sharp Major.
5. A piece from the modern repertory of the approximate difficulty of Debussy's Girl with the Flaxen Hair.
6. All the above to be performed from memory.
7. Sight-reading of appropriate difficulty.

SOPHOMORE: Piano majors will take the following examination at the end of the second semester of their sophomore year. Satisfactory performance of this examination is a prerequisite for junior standing as a piano major.

1. Scales, arpeggios and other technic as required by the instructor.
2. Bach: a three-part Invention or one of the easier Preludes and Fugues from the Well-Tempered Clavier or selections from the Suites or Partitas.
3. One of the more difficult Haydn or Mozart Sonatas, or a Beethoven Sonata of the approximate difficulty of those in Op. 2 or Op. 10.
4. A concert piece of moderate difficulty from the romantic repertory.
5. A concert piece of moderate difficulty from the modern repertory.
6. All the above to be performed from memory.
7. Sight-reading of appropriate difficulty.

JUNIOR: Piano majors will take the following examinations at the end of the second semester of their junior year. Satisfactory performance of this exam ination is a prerequisite for senior standing as a piano major

1. Scales, arpeggios and other technic as required by the instructor.
2. Bach: a Prelude and Fugue from the Well-Tempered Clavier; or a complete Suite, Partita or Toccata; or a latge work of the scope of the Italian Concerto or the Chromatic Fantasy and Fugue.
3. A Beethoven Sonata of the approximate difficulty of those in Op. 27 or Op. 31 ; or some other large work of comparable scope and difficulty.
4. A concert piece from the romantic repertory of the approximate difficulty of a Chopin or Liszt Etude or a Brahms Rhapsody.
5. A concert piece from the modern repertory of the approximate difficulty of one of the Debussy Images.
6. All the above to be performed from memory.
7. Sight-reading of appropriate difficulty.

SENIOR: Piano majots are not required to appeat for an examination at the end of the second semester of their senior year. However, as a requirement fos graduation, the student must satisfactorily present two contrasted groups in a senior recital. He must also present at least one movement from a concerto of the approximate difficulty of the Grieg or Schumann, to be performed with orchestral accom paniment.
graduate ybar (master of music degrer): The candidate will, upon matriculation, be required to present to a jury of the piano faculty proof of pianistic ability, musicianship and repertory attainments equal to the above listed requirements for graduation with the Bachelor of Music degree with a major in piano.

The candidate will be required to complete successfully at least 4 units of piano study in residence.

The candidate will satisfy the following repertory requirements before granting of the degree:

1. The mastering by memory, at some time during graduate study, of five large works for solo piano and a public recital offering at least three. These five works shall represent the range of piano literature from Bach (or before) to the present. Examples: Bach English Suite, Partita, Toccata, Italian Concerto, Chromatic Fantasy and Fugue. Mozart Fantasy and Sonata in C Minor. Beethoven Sonatas, opp. 53, 57, 101, 109, 110, 111. Schubert Sonatas op. posth. Schumann: Fantasy, op. 17, Carnaval, Symphonic Etudes. Brahms: Sonatas or Handel Variations. Chopin Sonatas, Liszt Sonata in B Minor. Franck Prelude, Choral and Fugue. Bartok Liszt Sonata in B Minor. Franc
Sonata. Hindemith Sonata No. 3.
2. The mastering of a large chamber work, involving the ensemble of piano with string(s) or other instrument(s), to be performed in public.
3. The mastering of a complete standard concerto, to be performed by memory, either with orchestra or second piano.
4. The demonstration of the ability to read at sight and accompany competently.

## ORGAN

MR. BACON
The work of this department is organized to meet the needs of students planning to be concert performers, church or radio organists, or intelligent amateurs whose knowledge of the instrument and ability to perform on it are looked upon as a cultural asset. Although the outline of the course of study is intended for those who are preparing to graduate with organ as a major subject, special students may enroll at any time, whatever their degree of proficiency.

Candidates for the Bachelor of Music degree with organ as a major subject who expect to complete the requirements in four years, and who have not studied the instrument previously, will be expected to demonstrate the results of three or four years of previous study of the piano, which should yield a firmly established manual technic as well as the knowledge of how to study music. Where les than this technical ability is manifest, the student will be required to make up the deficiency by continuing the piano as a minor study so long as the instructor may deem necessary.

## REQUIREMENTS

FIRST YEAR: Study of the various types of organ touch; phrasing; manual and pedal coordination, rudimentary principles or registration; hymns, and simple choir accompanying. The easier chorale preludes and other pieces by Bach and other composers. A study of the technique of memorizing.

SECOND YEAR: Practical applications of principles of modern organ registration; further study of hymn playing and choir accompanying; development of repertoire and discovery of many advantages of playing from memory. Works by Bach, Mendelssohn, Franck, Karg-Elert and other moderns.
third year: More advanced compositions by Bach, Handel, Franck, Vierne Sowerby and other moderns. Constantly increasingly repertoire, one-half of which should be memorized.
fourth ybar: The larger works of Bach; the Franck chorals; symphonies by Vierne and Widor; piece by Dupré, Sowerby, Maleingrean, Max Reger, etc.
N.B. All organ students have the privilege of attending a 'DemonstrationLecture" class which will meet with the instructor once a week, at which time various subjects will be discussed, such as: organ construction; organ specifications; tuning organ pipes; repertoire; great organists and great organs of the world, past and present; the problem of the so-called "electronic organ," etc.

As a requirement for graduation the student must present a work for organ and orchestra comparable to the Handel concerto, the Boellman Fantasie Dialogue, or the Medieval Poem. He must also render from memory a program as a graduation recital, of the degree of difficulty of the following: Bach, Toccata and Fugue in D Minor. Franck, Grande Piece Symphonique. Mendelssohn, Sixth Organ Sonata. Sowerby, Prelude on the Benediction.

## VOICE

mr. Welton, mr. oliver, miss spelts
Instruction in voice is based upon the needs of the individual student, and methods flexible enough to fit varying requirements are used. The aim is to enable each student to produce tones of even quality, free emission and desired intensity, and to use this technical proficiency as means of self-expression and interpretation of interesting music. During the four years of work required for a degree, songs of increasing difficulty are mastered, opetatic and oratorio selections studied, and lectures on vocal pedagogy, song interpretation and programbuilding attended.

The A Cappella Choit, the College Chorus, and the opera classes offer opportunity for ensemble in addition to the studio work, and the weekly solo clases and numerous student recitals give practice ine public appearance. Completion of the course inds the serious student well equipped technically, musically, and pedagogically with an extensive repertoire and considerable platform experience.

## Minimum Requirement Examination in Voice

In order that their progress and accomplishment may be evaluated, all students studying voice in the Conservatory who are pursuing courses leading to the Bachelor of Music degree, or to the Bachelor of Arts degree with a major in music, are required to sing for the voice faculty at the end of each semester of their study.

The satisfactory performance of a minimum requirement examination in voice, to be taken at the end of some semester of their stady, is required of Bachelor of Music candidates who are majoring in public school music or musical therapy, and Bachelor of Arts candidates who are majoring in music. All such candidates must take a minimum of 3 units of voice, and as many more units as may be necessary to pass this examination. Sufficient proficiency in vocal technic must be shown in the minimum requirement examination by the singing of songs from memory and vocalises as demanded.

## Major Requirbments in Voice

first year: Work in production of a good tone through the development of the tone concept of the pupil and of correct physical prerequisites. Vocalises ment of the tone concept of the pupil and of correct physical prerequisites. Vocalises
by Vaccai, Sieber, Gallozzi, Concone, and others are used. Simple songs are studied.

SECOND YEAR: Continued work in the development of good tone. Vocalises by Panofka, Marchesi, and others are used, with material from the Anthology of Italian Songs, Golden Age of Bel Canto, and songs of increasing difficulty. Easier selections from oratorios and operas are studied.

THIRD YEAR: The development of flexibility with studies of greater technical difficulty. Song literature of the Romantic period is studied in addition to selected arias and modern songs. A junior recital is required.

FOURTH YEAR: The development of an extensive repertoire of various schools and nationalities. A senior recital consisting of two groups of songs is required. The more talented of the voice majors are selected to sing an aria with orchestral accompaniment in the commencement recital.

## VIOLIN

## MR, BROWN

Minimum requirement for teaching credential candidates:

1. Through knowledge of position and method of holding the instrument and the mechanics of bowing.
2. Simple studies in first and third positions with good intonation and smooth shifting.
3. Beginning solos such as those from standard method books.

This work should be easily accomplished in one semester of required string study.

## Majors Requirements in Violin

first year: Violin majors will take the following examination at the end of the second semester of their freshman year. Satisfactory passing of this examination is a prerequisite for sophomore standing as a violin major.

1. Scales, arpeggios and bowing studies assigned by instructor.
2. A selected from Mazas, op. 36, Kayser op. 20, Dont op. 37 or Kreutzer.
3. One of the easier classic sonatas of Handel, Corelli or Vivaldi.
4. A concerto of the approximate difficulty of Accolay, Nardini Em or De Beriot.
5. A short solo work to be assigned.
(Items 3, 4 and 5 to be memorized)
second year: Violin majors will take the following examination at the end of the second semester of their sophomore year. Satisfactory passing of this examination is a prerequisite for junior standing as a violin major.
6. Scales, arpeggios and bowing studies continued:
7. A study from Kreutzer to be selected.
8. A classic sonata or one of the easier portions of one of the Bach solo sonatas or partitas.
9. A concerto of De Beriot, Rode or Kreutzer.
10. A short repertoire work to be assigned. (Items 3, 4 and 5 to be memorized).

THIRD YEAR: Violin majors will take the following examination at the end of the second semester of their junior year. Satisfactory passing of this examination is a prerequisite for senior standing as a violin major.

1. Scales, arpeggios (double stops), and bowing studies.
2. A study to be selected from Kreutzer, Fiorillo or Rode.
3. A classic sonata: Nardini D Major, or a Bach harpsichord sonata.
4. A concerto of Haydn, Mozatt, Spohr, Bruch or Mendelssohn.
5. A repertoire work to be assigned.
(Items 3, 4 and 5 to be memorized)
fourth year: Violin majors during their senior year will continue their study of technic and standard repertorie and will be required to perform two groups of contrasting works in a formal recital. They will also perform in the commencement concert, one movement from a standard concerto such as Bruch, Mendelssohn, Wieniawski or Lalo, with orchestral accompaniment.
graduate year (master of music degreb): Candidates for this degree must show proficiency and repertoire equal to that of senior candidates for a Bachelor's degree. Successful completion of the work required for this degree will comprise the following:
6. At least 4 units of study in violin.
7. The presentation of a recital program which must include as a minimum one of the solo sonatas or partitas of Bach, a concerto and a representative group of solos approved by the instructor.
8. The preparation of one large example from the chamber music repertoire such as a Sonata by Brahms, Franck, Strauss or Bartok; or the quintet of Schumann, or piano quartet of Brahms or an equally important work.

## PRACTICE REQUIREMENTS

The Conservatory offers practice facilities for all its students at a reasonable rate. Instrumental majors are expected to average 3 hours per day practice and vocal students 2 hours per day.

## THE COLLEGE ORCHESTRA

The College Orchestra, composed of students of the Conservatory and College, is directed by Professor Brown. It is required of all string players in the Conservatory. In addition to the preparation and performance of orchestra programs the organization supplies the accompaniments to the fall and spring oratorios, and at the final commencement concert it accompanies the degree candidates in concertos and arias.

## THE COLLEGE BAND

The College Band is a uniformed organization of eighty students under the direction of Mr. Corra. In addition to playing for the athletic games and rallies, it gives several concerts on campus and on tour each year. The purpose of the College Band is to attain a high quality of ensemble playing.

## THE A CAPPELLA CHOIR

The A Cappella Choir, under the direction of Professor Bodley, is one of the most outstanding choral organizations on the Pacific Coast. It is devoted entirely to the rendition of unaccompanied choral music and especially the works of the old masters of a cappella music, Russian liturgical music, folk songs, and modern part-songs. Membership in the choir is limited to students of superior vocal ability.

## THE COLLEGE CHORUS

The College Chours is composed largely of Conservatory students, but membership is open to any College students who can sing. The aim of the Chorus is to give adequate presentation of the larger choral works, assisted by orchestra and soloists. Handel's "Messiah," Nathaniel Dett's "The Ordering of Moses," William Walton's "Belshazzar's Feast," Mendelssohn's "Elijah," Brahms' "Requiem," Puccini's "Mass," Vaughn Williams' "Donna Nobis Pacem," and Lambert's "Rio Grande" have been performed during the past six years.

## OPERA

The opera class, under the direction of Dr. Underwood has grown to such an extent duing the past six years that full-scale opeta productions have taken their place on the Conservatory schedule of major events. Recent productions have been "The Magic Flute," "II Trovatore," "The Gypsy Baron," "Don Pasquale," "La Serva Padrona," Menotti's "The Medium," "Fidelio," "Martha," and "The Marriage of Figaro."

## PACIFIC MUSIC CAMP

An important feature of the summer educational activities at the College of the Pacific is the Pacific Music Camp, which conducts its ninth season in 1954. It brings to the West Coast area a full-scale music camp embodying all that is best in the music camp idea.

The camp activities will be organized around the three main musical organiziations, band, orchestra, and chorus, and will include a wide variety of activities such as solo, ensemble, radio script writing, radio performance, conducting, harmony, appreciation, baton twirling, matching tactics, care and repair of instruments, dramatic music presentations, sections for all instrumental groups and voices, recreational and social activities, and weekly cathedral services.

Such widely known conductors as Constantin Bakaleinikoff, Kurt Adler, and Jester Hairston are regular members of the staff, and they direct the young musicians of the camp in weekly public performances. A fine list of outstanding music educators will be on hand to serve as teachers, conductors, counselors, and in many other ways to assist the regular music staff of the Conservatory of the College of the Pacific in administering the various camp activities.

Enrollment will be strictly limited to 300 students, who will be chosen from among the best school musicians of the eleven western states, and according to instrumentation, so that the organization will be well balanced. The minimum age will be 13, and the İowest grade 9. High school, junior college, and college students and teachers will be eligible.

Of special interest to music educators and college seniors will be the courses in advanced band, orchestra, and choral problems, which will carry graduate credit and present famous guest conductors in a wide variety of musical discussions.

## CONSERVATORY SOCIETIES

The Conservatory is represented in the campus organizations by a national sorority, the Mu Eta chapter of Mu Phi Epsilon, and a national fraternity, the Beta Pi chapter of Phi Mu Alpha. The objectives of these organizations are both musical and social.

Pi Kappa Lambda, a national society which is to music what Phi Beta Kappa is to the liberal arts, installed its Delta chapter on December 3, 1921. Seniors whose work during their four years of study has been of a high order are eligible, and are chosen by a committec of the faculty and officers of the local chapter

## CONCERTS AND RECITALS

The Conservatory considers the hearing of and participation in recitals of great value to the student, and makes regular attendance a definite requirement toward the various degrees and credentials. Credit is granted in course 22, one-half unit per semester. The concert fee of $\$ 3.00$ per semester is required of all music majors. During the past year, in addition to oratorio, opera and ensemble productions, there were numerous artist, faculty, senior, and student recitals. During the year weekly solo classes are held, at which attendance is required and the necessary experience in public appearance gained. The Consetvatory cooperates with local groups sponsoring attist courses and assists in every possible way in all movements for the artistic betterment of the community.

## FEES

Fees for students in the Conservatory and the rules regarding payment of bills and refunds are the same as for students registered in the College of Liberal Arts.

Note: Majors in applied music whose curricula call for 3-4 units of private lessons per semester in the major field will take and pay for only 2 units. The remaining credit will be earned by extra bours of intensive practice.


CHARGES FOR PRACTICE ROOM AND INSTRUMENTAL RENTAL
Organ practice, one hour per day, large organ
$\$ 45.00$
Organ practice, one hour per day, Hammond organ .................................... 25.00
Organ practice, one hour per day, small organ ........................................................... 15.00
Organ practice, one hour per day, small organ .............................................. 15.00
Practice room rental (required of all students in applied music)
Practice room rental (required of all students in applied music) .................- 9.00
No refunds will be given for occasional absences due to sickness or other causes. Students who are granted an honorable dismissal within the frrst six weeks of the semester will be allowed a refund of applied music fees based on proportionate time attended. On withdrawals after the six week period, no refunds will be allowed.

Final examinations in applied music subjects will be given, each semester during examination week in place of lessons, except where students are enrolled for two lessons per week in which case one of the lessons will be given.

## SCHOOL OF EDUCATION

J. Marc Jantzen, Dean
J. WIlliam harris, Dean Emeritus
roy e. Learned, Director of Elementary Education
MARION O. PEASE, Director of Elementary Scbool Student Teaching
WILlis N. POTTER, Director of Secondary Education
WAlter r. Gore, Director of Educational Administration
In December, 1923, the School of Education was organized in harmony with the practice of other colleges and universities qualified to issue recommendations for the general secondary credential in the State of California.

On January 10, 1924, the School of Education was recognized by the State Board of Education, and the College of the Pacific was placed upon its list of accredited colleges and universities.

## REGISTRATION

Registration in the School of Education is not distinct from that of the College, but is in addition to it. The fees for instruction and the rules governing uch items as requirements for degrees, entolment in classes, inco
At the beginning of the junior year and thereafter all students who are eeking recommendations for teaching in any subject should file with the Dean of he School of Education application for the type of credential desired, and by such action come under the supervision of the School of Education insofar as the preparation for teaching is concerned. Lower division students are encouraged to consult the Dean concerning their possible interest in teaching.

## TEACHING AND ADMINISTRATION CREDENTIALS

The College of the Pacific is approved by the California State Board of Education to offer preparation to candidates leading to the following credentials: General elementary; junior high school; general secondary; special secondary in art, music, homemaking, speech arts, speech correction, and physical education junior college; administration, in secondary school administration and in elementary school administration; supervision; supervision in special subjects such as art, music, and physical education; child welfare and attendance; special secondary fo the teaching of the mentally retarded; school psychometrist, and school psychologist.
$\mathrm{In}_{\mathrm{n}}$ order to protect the standing of the College of the Pacific as a teacher education institution and to guard the interests of the prospective teacher, the School of Education has found it desirable to set certain minimum standards of scholarship and personality below which it will not accept a student as a candidate for a teaching credential. Students on a probationary basis in the College of the Pacific will not be accepted as candidates for any teaching credential, nor be permitted to take any strictly professional courses in the School of Education until meir deficiency has been removed. A student may be held for more than the minimum requirement in student teaching.

A fee of $\$ 4.25$ is payable at the Business Office thiry days before completion of the credential requirements. This includes the fee to the State Department of Education.

All candidates must appear before a credential committee from the School of Education. On the basis of scholarship, physique, and emotional and persona qualities the committee will consider each candidate, and will recommend him qualities the committee will consider each candidate, and will recommend him for guidance.

Application for recommendation for any of the teaching credentials should be made during the junior year, but under no circumstances may it be delayed later than the end of the third week of the school year at the end of which the recommendation is to be granted. The necessary application blanks may be obtained from the office of the School of Education.

## GENERAL ELEMENTARY CREDENTMAL

The School of Education will issue its recommendation for a general elementary credential upon the fulfillment of the following requirements:

1. Graduation with a bachelor's degree from a standard college, with the entire program of undergraduate work approved by or under the direction of the School of Education.
2. Completion of state requirements in United States history and constitution, and California government (see page 110). This is satisfied by the bachelor's degree requirement.
3. Presentation of evidence of successful work experience with an organized group of children. This requirement is to be met within three years of the date the credential is to be granted. Summer camp counselorships or a minimum of six months of regular youth group leadership will be accepted.
4. Completion of a college aptitude test.
5. Completion of a diagnostic speech test and any remedial program recommended by the Department of Speech.
6. Completion of 3 units of general psychology. This is usually completed in the lower division.
7. Completion of the following courses in other departments of the College: Art 150, and either 151 or 152; Music 117; Natural Science 101 or Geology 151; Physical Education activity course 143.
8. Completion of the following courses in the School of Education with a minimum grade of "C": Junior Year: Education 100, 130, and 134, Senior Year: Education 158 and Psychology 140.
9. Scholarship:

For admission to candidacy a cumulative grade point average of 1.00 must have been attained.
For admission to Education 158, Directed Teaching, an upper division grade point average of 1.25 must have been achieved.
10. Approval of the Credential Committee based on the applicant's professional interest and growth.
11. Approval on a health examination.

Students planning to meet requirements for the elementary credential should consult the Director of Elementary Education or some other staff member directly concerned with the preparation of elementary school teachers.

## THE SECONDARY CREDENTIAL

The School of Education will issue its recommendation for a general or special secondary credential to applicants who meet the following requirements, with certain exceptions as indicated for the special secondary credential applicants:

1. Graduation with a bachelor's degree from an accredited college or university.
2. Completion of at least one year of graduate study with a minimum of 26 units of upper division and graduate courses, including at least 6 units in the teaching major and minor and 6 units in education and psychology courses. It is necessary that the major portion of this graduate study be done at the College of the Pacific if the applicant is to be recommended by the School of Education.

NOTE: This paragraph does not apply to applicants for a special secondary credential.
3. Completion of a teaching major and minor to be selected from the subjectmatter headings listed below. A teaching minor is not required of a candidate for a special secondary credential.
4. Completion of state requirements in United States history and constitution, and California government (see page 110).
5. A minimum grade point average of 1.5 in all work taken beginning with the junior year. This minimum average must be attained before a candidate will be admitted to directed teaching.
6. Meeting of the following tests and standards before registration for directed teaching:
a. A college aptitude test.
b. Approval on a speech test and a hearing test for classroom teaching, and completion of prescribed courses in speech, if any.
c. A satisfactory score on a special test in English, or completion of English 116, Advanced Grammar, with a minimum grade of "C."
d. Approval on a health examination and chest $x$-ray.
e. Completion of an acceptable pattern of general education courses.
f. Evidence of satisfactory experience with adolescent youth in one or more activities during the pre-service preparation for teaching.
g. Evidence of good professional attitudes and growth during pre-service courses and activities.
h. Approval by the credential committee as a candidate for a secondary credential.
i. Completion of the approved course requirements in the major and minor fields.
j. Completion of the following courses in Education and Psychology with a minimum grade of " C ":

1. Psychology 11, General Psychology.
2. Psychology 106, Mental Hygiene, (recommended for, but not required of, special secondary credential candidates).
3. Education 172, Foundations of Secondary Education.
4. Psychology 132, Psychology of Adolescence.
5. Methods course in the major.
6. Methods course in the minor (not required of special secondary credential candidates).
7. Education 178, Directed Teaching in the Secondary School, in all major and minor subjects.
8. Education 174, Secondary School Methods and Audio-Visual Education (recommended for, but not required of, special secondary credential candidates), taken concurrently with Directed Teaching
9. Psychology 140, Educational Psychology, taken concurrently with Directed Teaching.

The teaching major and minor may be selected from the following fields:
Major or Minor Department Counselor
Art - - - - - - - - Professor Reynolds
Business Education - . . . . . . Professor Beckwith

Merchandising
Business Management
English - - - - . - . . - - Professor Olson

Modern - - . . - - - Professor Steinhause
Health Lducation - - - - - - -
Homemaking - - - - - - - - - Professor Gehiken
Life Sciences and General Science - - - - - Dean Bertholf

| Mathematics | - | - | - | - | - | - | Professor White |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Music (not accepted as a minor) | - | - | - | - | Dean Elliott |  |  |
| Physical and General Science |  |  |  |  |  |  |  |

Physical and General Science - . . . . . Professor Cobb

Physical Education
Men -
Professor Voltmer
Women Professor Matson
Social Science Professor Eiselen Professor Runion

Students planning work for a special or general secondary credential should consult the Director of Secondary Education at the beginning of their junior year concerning registration, general requirements, and course planning.

A candidate must present adequate preparation in the major field and minimum or adequate preparation in the minor field.

## Adequate Preparation:

Lower division: 20 units as follows: Ancient art, 2; history of Western art, 3; lettering and layout, 2; drawing and composition, 3; painting, 2; conistruction drawing, 2; art structure, 6.

Upper division: 20 units as follows: Development of modern art, 2 ; figure drawing, 2; clay modeling, 2; silk-screen, 2; jewely, 2; advertising design and processes, 2 ; painter's craft, 2; advanced painting, 2; watercolor, 2; photography, 2 ; a total of 40 units of lower and upper division study. Secondary credential candidates must add Art 151, Crafts for Teachers, and will be required by the School of Education to include Art 200, Art Methods for Secondary Teaching, prior to entolling in directed teaching.

## Minimum Preparation:

Lower division: 14 units as follows: History of Western art, 3; art and society, 1 ; lettering and layout, 2; drawing and composition, 3; construction drawing, 2; art structure, 3 (preferably the fall semester).

Upper division: 12 units as follows: Figure drawing, 2; clay modeling, 2; jewelry, 2; advertising design and processes, 2; watercolor, 2; crafts for teachers, 2. The combined lower and upper division unit total is 26 .

## Business Education

## Adequate Preparation:

A total of 45 units, with at least 25 units in subjects basic to business and commerce, and at least 20 units in accounting, merchandising, and business management

Lower division: Business English, mathematics of finance, elementary economics, elementaty accounting, commercial law, typewriting.

Upper division: Scope and function of business education, business machine echniques, money and banking, foreign trade, marketing, sales management, intermediate accounting, advanced accounting, taxation and tax accounting, advertising, principles of management, economic geography, teaching of business.

Six months of practical experience or 1,000 clock hours in a business occupation.

## Minimum Preparation:

Lower division: Minimum of 10 units, including business English, elementary accounting and commercial law.

Upper division: Minimum of 10 units, including scope and function of business education, money and banking, marketing, and teaching of business.

## ENGIISH

Adequate Preparation:
A minimum of 38 units of work so distributed over the fields of English and American literature, grammar, composition, speech, and dramatics or journalism as to insure essential understanding of these fundamental aspects of the field. At least 24 units should be upper division. Courses will be selected in conference with the chairman of the Department of English. Supporting courses in history. language, philosophy, and psychology are recommended, and in some instances will be required.

Minimum Preparation:
A minimum of 20 units to be selected in conference with the chairman of the Department of English. At least 10 units must be upper division. Four units of the 20 may be taken in the department of speech; Speech 59 may not be included.

## Foreign Languages

FRENCH
Adequate Preparation:
Lower division: Elementary and intermediate French or equivalent.
Upper division and graduate courses: 24 units beyond intermediate French, as follows: French civilization, one semester of composition, advanced composition and conversation, phonetics; electives, 15 units chosen with the advice of the chairman of the Department. Six units of these electives may be lower division work beyond intermediate French. The student shall have a speaking knowledge of French.

## Minimum Preparation:

Lower division: Elementary and intermediate French or equivalent.
Upper division and graduate courses: 16 units beyond intermediate French, as follows: French civilization; advanced composition and conversation; phonetics; electives, 8 units, chosen with the advice of the chairman of the Department. Six of these units may be lower division work beyond intermediate French. The student shall have some speaking knowledge of French.

## Adequate Preparation:

LATIN
Lower division: Elementary and intermediate Latin or its equivalent.
Upper division and graduate courses: 24 units beyond intermediate Latin, including courses in translating Latin, Latin prose writing, teaching Latin in the high school, ancient art, and Greek and Latin literature in translation.

## Minimum Preparation:

Lower division: Elementary and intermediate Latin or its equivalent.
Upper division and graduate courses: 16 units beyond intermediate Latin, including the fields listed under "Adequate Preparation."

SPANISH
Adequate Preparation:
Lower division: Elementary and intermediate Spanish or its equivalent.
Upper division and graduate courses: 24 units beyond intermediate Spanish, as follows: Spanish civilization; Hispanic American literature; advanced composition and conversation; phonetics; electives, 14 units, chosen with the advice of the chairman of the Department. Six units of these electives may be lower division work beyond intermediate Spanish. The student shall have a speaking knowledge of Spanish.

## Minimum Preparation:

Lower division: Elementary and intermediate Spanish or its equivalent.

Upper division and graduate courses: 16 units beyond intermediate Spanish, as follows: Spanish civilization; Hispanic American literature; advanced composition and conversation; and 8 units of electives chosen with the advice of the chairman of the Department. Six of these units may be lower division work beyond intermediate Spanish. The student shall have some speaking knowledge of Spanish.

## GERMAN

## Adequate Preparation:

Lower division: Elementary and intermediate German or its equivalent.
Upper division and graduate courses: 24 units beyond intermediate German, as follows: Survey of German literature or the classical period; advanced composition and conversation; German civilization; and electives chosen with the advice of the Department chairman. Six units of these electives may be lower division work beyond intermediate German. The student must have a speanking knowledge of German.

## Minimum Preparation:

Lower division: Elementary and intermediate German or its equivalent.
Upper division and graduate courses: 16 units beyind intermediate German, as follows: Survey of German literature or the classical period; advanced composition and conversation: German civilization; and electives chosen with the advice of the department chairman. Six of these units may be lower division units beyond intermediate German. The student must have some speaking knowledge of German.

## Health Education

## Adequate Preparation:

Lower division: Personal hygiene, community hygiene, nutrition, physiology, chemistry, and 2 units of activity courses.

Upper division activity courses: Same as general requirement, 1 unit. Professional courses: 24 units including epidemiology, corrective physical education, methods and materials of health education, advanced hygiene, physiology of exercise; Mental Hygiene (Psychology 106), Child Growth and Development ( $P_{\text {sychology 130 }}$ ), and Methods of Family Life Education (Sociology 155). Recommended electives, Zoology 101, 120; Psychology 110, Sociology 151; safety education and driver training (Physical Education 196).

## Minimum Preparation:

Lower division: Personal hygiene, community hygiene, nutrition, physiology, and chemistry.

Required courses on upper division and graduate level: Physiology of exercise, methods and materials in health education, advanced hygiene, and Bacteriology (Botany 135).

Physical Education credential majors who wish to minor in health education must have a total of 28 units in physical education theory upper division courses, exclusive of the courses required for the health minor.

## Adequate Preparation:

## Homemaking

Requirements are the same as those set forth for the general home economics major in the Department. A total of 40 units in home economics courses, at least 20 of which must be upper division; units to be distributed approximately as follows: Consumer buying, 2 ; child care, 2 ; textiles and clothing construction, 10 ; nutrition, 3; food preparation and service, 9 ; art in relation to home problems (including home decoration, costume or crafts), 8; family health, 2 ; management in home living, 2 ; and family and social relationships, 2 . In addition, a minimum of 4 units of chemistry is required.

## Minimum Preparation:

A total of 25 units in home economics courses, at least 15 of which must be upper division; units to be distributed approximately as follows: Textiles and clothing construction, 6 ; consumer buying, 2 ; nutrition, 3 ; food preparation and service, 6 ; art in relation to home problems (including clothing selection), 5 ; child care, 2; and family relationships, 2.

## Adequate Preparation:

## Language Arts

A minimum of 38 units of work so distributed over the fields of English and speech as to insure essential understanding of fundamental aspects of composition, literature, journalism, public speaking, dramatics, and radio; and additional preparation in one or more of these subjects to complete the required number of units. A candidate presenting adequate preparation in Language Arts must present minimum preparation in English or Speech. Courses will be selected in conference with the chairman of the English and Speech Departments.

## Life Sciences and General Science

## Adequate Preparation:

Lower division: Eight units in either chemistry, physics, or physical science; and a minimum of 12 units of introductory biological science. Courses in botany, zoology, physiology, and bacteriology are recommended.

Upper division and graduate courses: 20 units to be selected with the advice of the Department counselor; but work in both botany and zoology must be in-
cluded.

## Minimum Preparation:

Lower division: Eight units in either chemistry, physics, or physical science; and a minimum of 10 units of introductory biological science.

Upper division and graduate courses: 10 units to be selected with the advice of the Department counselor.

## Adequate Preparation:

## Mathematics

Lower division: Trigonometry, 3 units, unless taken in high school; college algebra, 3 units (this course has as a prerequisite two years of high school algebra or its equivalent, plane geometry, and trigonometry; analytic geometry and introduction to calculus, 6 units (prerequisite, two years of high school algebra or its equivalent, plane geometry and trigonometry) ; intermediate calculus, 6 units; and mathematics of finance, 3 units.

Upper division and graduate courses: Advanced calculus, differential equations, advanced plane geometry, statistical methods, teaching of mathematics, synthetic projective geometry, and enough electives to make the total at least 18 units.

Minimum Preparation:
Lower division: Trigonometry, 3 units, unless taken in high school; college algebra, 3 units (prerequisite to this course: plane geometry and two years of high school algebra) ; analytical geometry and elementary calculus, 6 units (this course has as a prerequisite two years of high school algebra, plane geometry, and trig onometry) ; and mathematics of finance.

Upper division and graduate courses: Synthetic projective geometry or mathematics of life insurance, advanced plane geometry, statistical methods; a total of 9 units.

In some cases, substitutes may be accepted for certain of the above courses.

## Adequate Preparation:

Lower division: 12 units of harmony (under the general heading of harmony, such subjects as ear-training, notation, and sight-singing, etc., may be included in addition to the actual study of harmony itself); history of music, 4 units; form and analysis, 6 units.

Upper division and graduate courses: Two units each of the following: Orchestration, instrumental conducting, choral conducting, brass instruments, wood wind instruments, school band and orchestra methods, elementary music methods secondary music methods, 3 units; music survey courses, 4 units; electives sufficent to complete the major; membership in college chorus and solo class each semester. In addition to the above, with due allowance for previous study, the equivalent of 6 units of voice study and 6 units of piano study must be secured at least one-half of which must be taken at the College of the Pacific.

## Physical and General Science

## Adequate Preparation

Lower division: General chemistry, 8 units; general physics, 8 units; geology, 4 units; and botany or zoology, 4 units.

Upper division and graduate requirements: 16 units to be selected in conference with the chairman of the Department from the fields of chemistry and physics.

Any student showing weakness in any phase of physical science may be required to take special additional courses ni order to fill in his background.

## Minimum Preparation:

Lower division: General chemistry, 8 units; either general physics, 8 units, geology, 8 units, or a biological science, 8 units.

Upper division and graduate courses: 10 units to be selected in conference with the chairman of the Department from the fields of chemistry and physics.

## Physical Education MEN AND WOMEN

## Adequate Preparation:

Lower division: Personal hygiene, community hygiene, physiology, anatomy, and safety and first aid; chemistry is recommended

Upper division: Sports technique (women, 172 and 173 ; men, 176 and 177); game teaching techniques (women, 178; 172 and 173 ; men, 176 and physical education, principles of physical education, kinesiology, life saving of water safety; physical education in the elementary school (women) saving and technique in gymnastics and swimming (men); and 9 units (women), teaching following courses: Open to men and women, $156,157,162,165,166$ from the $180,182,189$, and either 191 or 192 ; open to men $162,165,166,175,179$, open to women only, 170.

Graduate work: Methods and materials in health education, physiology of exercise, and 4 units elected from the following: 203, 204, 205, 206, 207,220 and 224 ; open to men only, 209, 210, 211, 213, and 214.

## Minimum Preparation:

Activity courses: A total of 8 units distributed so as to include at least $1 / 2$ unit in each of the following

Women-Team games, tennis, swimming, folk dancing, modern dancing.
Men-Team
Men-Team games, tennis, swimming, folk dancing, archery, golf, tumbling and apparatus, and two seasons of varsity sports

## Minimum Preparation:

Lower division: Personal hygiene, and anatomy.
Upper division: Sports technique (women 172 and 173 ; men 176 and 177); game teaching technique (women, 170; men, 187) ; and principles of wate safety. Men may substitute gymnastic technique for 2 units of sports technique.

Activity courses: A total of 8 units distributed so as to include at least uvit in each of the following:

Women-Team games, tennis, swimming, folk dancing, modern dancing, archery, and golf.

Men-Team games, tennis, swimming, folk dancing, archery, golf, and tumbling and apparatus.

## Adequate Preparation:

## Social Science

A minimum of 40 units in the social sciences of which 26 units shall be upper division. The work shall include two semesters of European history, two semesters of American history, two semesters of American government, and at least one course each in any two of the fields of economics, geography, and sociology; and additional preparation in one or more of the fields of the social sciences to complete the 40 units.

## Minimum Preparation:

A minimum of 22 units in the social sciences, of which 12 units shall be upper division. This work shall include two semesters of European history, two semesters of American history, and one semester of American government. Electives may be chosen from the fields of economics, history, political science, sociology, and geography.

## Adequate Preparation:

A minimum of 36 units so distributed over the field of original speech drama, broadcasting and speech correction as to insure essential understanding of all four of these fundamental areas. At least 18 units of such work must be upper division.

Lower divisions Fundamentals, 3-6 units; drama, 3 units; broadcasting, 3 units.

Upper division: Radio production laboratory, 3 units; play production, 2 units; advanced interpretation, 2 units; advanced public speaking, 2 units; persuasion and debate, 3 units; phonetics, 2 units; corrective techniques, 2 units; teaching of speech, 2 units.

Minimum Preparation:
A mininmum of 21 units of which 11 units shall be upper division.
Lower division: Fundamentals, 3-6 units; oral interpretation of literature, 2. units; broadcasting, 3 units

Upper division: Play production, 2 units; advanced public speaking, 2 units; persuasion and debate, 3 units; corrective techniques, 2 units; teaching of speech, 2 units.

## THE JUNIOR HIGH SCHOOL CREDENTIAL

The School of Education will issue its recommendation for a junior high school credential to applicants who satisfy the following requirements:

1. Graduation with a bachelor's degree from an accredited college or university.
2. Completion of a teaching major of not less than 24 units and a teaching minor of not less than 15 units to be selected from the subject-matter minor of not less than 15 units to be selected from the subject-matter
headings listed on page 166 . The requirements for the teaching major and headings listed on page 166 . The requirements for the teaching major
minor ate to be selected in confereace with the department chairmen.
3. Completion of state requirements in United States history and constitution, and California government (see page 110).
4. A minimum grade point average of 1.5 in all work taken beginning with the junior year. This minimum average must be attained before a candidate will be admitted to directed teaching.
5. Meeting of the standards listed on page 164 as items 6 and 7.

## THE JUNIOR COLLEGE CREDENTIAL

The School of Education will issue its recommendation for a junior college credential to applicants who meet the following requirements:

1. At least a master's degree from the College of the Pacific or from some other accredited college or university.
2. Subject-matter preparation with a teaching major selected from the fields of biological science (botany and zoology), English, music, physical science, (chemistry and physics), physical education, social science, or speech plus a teaching minor selected from one of the fields available to general secondary credential candidates. (See page 166).
3. Completion of state requirements in United States history and constitution, and California government (see page 110).
4. The following professional courses to be taken in the sequence indicated:

## Undergraduate Work

Education 172 Foundations of Secondary Education 5 units
Psychology 132 Psychology of Adolescene 2 units

Education 126 Introduction to Audio-Visual Education 2 units

## Graduate Work

(Department) 200 Special Methods in Teaching Major 2 units
(Department) 200 Special Methods in Teaching Minor 2 units
$\begin{array}{cccc}\text { Education } & 220 & \begin{array}{c}\text { Seminar in Curriculum and Methods } \\ \text { of the junior College }\end{array} & 2 \text { units }\end{array}$
Psychology 240 Advanced Educational Psychology 2 units
Education 178 Directed Teaching in Major and/or Minor 6 units

## SPECIAL SECONDARY CREDENTIALS

The College of the Pacific, through its School of Education and allied departments, is prepared to give the work required for the credentials to teach the special subjects of art, music, homemaking, physical education, speech arts, and speech correction. The general requirements and standards and the prescribed courses in education and psychology are indicated on pages 110 above. It should be noted that Psychology 106, Mental Hygiene, and Education 174, Secondary School Methods and Audio-Visual Education, are highly recommended, though not required, for special secondary credential candidates.

The general education requirement for special secondary credentials includes a minimum of 16 semester hours of work in the subject groups of English, natural science, social science and physical education. Note, however, that this general education requirement has been revised in the case of the special secondary credential in physical education, and that, effective September 15, 1955, 40 semester dential in physical education, and that, effective September 15, 1955, 40
hours of general education will be tequired, to include the following:

1. Sciences basic to physical education, 12 units.
2. Practical and fine arts, such as art, music, homemaking, health education, industrial arts and similar fields, 6 units.
3. Social sciences, 6 units.
4. Communicative arts, such as languages, literature, speech arts and similar fields, 6 units.

Special requirements in the fields of art, homemaking and physical education are the same as the major requirements for the general secondary credential, and are stated under "Adequate Preparation" in the various fields, as indicated:

Art: See page 167.
Homemaking: See page 170.
Physical Education: See page 172.

The special requirements in the field of music are listed in the section on the Pacific Conservatory of Music (See pages 146, 147).

Requirements for the special credential in speech correction are described below.

Further information regarding any of the special secondary credentials may be had by conference or correspondence with the chairman of the department concerned or with the Director of Secondary Education.

## Sperch Correction

The applicant for the speech correction credential must possess a valid general elementary or general secondary credential, or a special secondary credential in speech. He must have had two years of successful teaching experience or have completed 4 units of superior directed teaching. His personal characteristics must indicate an interest in teaching handicapped children.

The specific college work for this credential must include the following courses or their equivalents: voice and diction, phonetics, corrective speech techniques, speech pathology, clinical methods; 4 units in clinical laboratory in speech correction; mental hygiene; and at least one of the following: abnormal psychology, psychology of parent-child relationships, or introduction to clinical psychology.

## CREDENTIALS FOR PSYCHOLOGIST, PSYCHOMETRIST, AND TEACHER OF MENTALLY RETARDED

The College of the Pacific is fully approved to recommend for the school psychologist credential, the school psychometrist credential, and the special secondary credential for teaching the mentally retarded. The requirements for each are outlined below:

The School Psychologist Credential
Minimum requirements include the possession of a general elementary or general secondary credential; verification of at least one year of successful teaching experience; possession of a master's degree with a major in psychology or educational psychology; and the following courses, or their equivalent, during either undergraduate or graduate study: Mental hygiene, abnormal psychology, statistical methods, child growth and development, psychology of the exceptional child, educational psychology, individual intelligence testing (courses 150 and 151), group testing, clinical psychology, client-centered counseling, clinical psychology, introduction to practicum, psychology of teading, case histories, clinical psychology practicum, tests and measurements, principles and techniques of guidance, curriculum for the mentally retarded, directed teaching of mentally retarded children, the field of social work, and social field work.

## Thr School Psychometrist Credential

Minimum requirements include the possession of a bachelor's degree with the following specific courses, or their equivalent: Mental hygiene, abnormal psychology, statistical methods, child growth and development, psychology of the
exceptional child, educational psychology, individual intelligence testing (courses 150 and 151), group testing, clinical psychology, client-centered counseling, clinical psychology, introduction to practicum or clinical psychology, survey course, and tests and measurements.

Each candidate will notify the Director of Psychology of his intention to make application for this credential at least one semester prior to the completion of the course requirements listed above. Each candidate then will be required to appear before a faculty screening committee appointed by the Dean of the School of Education.

Special Secondary Credential for Tbaching the Mentally Retarded
Minimum requirements include possession of a general elementary teaching credential, a junior high school credential, or a general secondary credential; and the following specific courses, or their equivalents: Child growth and development, mental hygiene, abnormal psychology or clinical psychology, psychology of the exceptional child, cutriculum for the mentally retarded; principles and techniques of guidance, or parent-child relationships; art for elementary teachers, ctafts for elementary teachers, and directed teaching with mentally retarded children.

## ADMINISTRATION AND SUPERVISION CREDENTIALS

The School of Education will issue its recommendation for administration and supervision credentials to applicants who complete a major part of their credential requirements at the College of the Pacific and who meet the following general and specific requirements. Students planning to meet requirements for administration and supervision credentials should consult with the Ditector of Educational Administration.

1. Presentation of an application giving the following information: Personal philosophy of education; previous experience in education; previous academic training; other work experience; membership and participation in organizations; reasons for pursuing additional education.
2. Approval on a speech test.
3. Approval in a health examination.
4. Satisfactory passing of a test in English.
5. An acceptable score on one of the following: National Teachers Examination; Graduate Record Examination; A.C.E. Psychology Test; Miller Analogies Test.
6. Approval by the Credential Committee on Administration.

The specific requirements for the various administration and supervision credentials are:

1. Elementary School Administration Credential:
a. Possession of a general elementary credential.
b. Two years of successful teaching experience in public elementary schools.
c. 30 units of upper division or graduate work in addition to the requirements for a general elementary credential.
d. The upper division or graduate work should include the following courses or their equivalent: History of American education, tests and measurements, couseling and guidance, curriculum, public education and the law in California, educational sociology, educational philosophy, school finance and business administration, supervision of elementary school instruction, elementary school organization and administration, city school administration; and field study in elementary education.
2. Secondary School Administration Credential:
a. Possession of a general secondaty credential.
b. Two yeats of successful teaching experience in public secondary schools.
c. 18 units of upper division or graduate work in addition to the requitements for a general secondary credential.
d. The upper division or graduate work shall include the following courses or their equivalent: History of American education, tests and measurements, counseling and guidance, school curriculum, public education and the law in California, school finance and business administration, supervision of secondary school administration, secondary school organization and administration, city school administration; and field study in secondary education.
3. Elementary School Supervision Credential:
a. Possession of a general elementary credential.
b. Two years of successful teaching experience in public elementary schools.
c. 24 units of upper division and graduate work in addition to fulfilling requirements for the general elementary credential.
d. The upper division or graduate work should include the following courses or their equivalent: History of American education, tests and measurements, counseling and guidance, school curriculum, educational sociology, philosophy of education, supervision of elemention; and field instruction, elementary school organization and administration; and field study in elementary education.

## 4. Secondary Scbool Supervision Credential:

a. Possession of a general secondary credential.
b. Two years of successful teaching experience in public secondary schools.
c. 15 units of upper division and graduate work in addition to fulfilling the requirements for the general secondary credential.
d. The upper division or graduate work shall include the following courses or their equivalent: History of American education, tests and measurements, counseling and guidance, school curriculum, philosophy of education, supervision of secondary school instruction, secondary school organization and administration; and field study in secondary education.

## 5. Supervision Credential in Special Subjects:

a. Possession of a special secondary credential.
b. Two years of successful teaching experience in a public secondary school in the applicant's special field.
c. 4 units of work from at least two of the following courses: Child growth and development, history of American education, philosophy of education.
d. 6 units of work from the following: Organization, objectives and supervision of instruction; tests and measurements, counseling and guidance, school supervision.
6. Cbild Welfare and Supervision of Attendance Credential:
a. Graduation from an accredited college or university with a bachelor's
degree.
b. Possession of a general elementary or general secondary credential.
c. Two years of successful teaching experience.
d. The following courses or their equivalent are required: Counseling and guidance, tests and measurements. child growth and development, public education and the law in California (with emphasis on child labor law), field of social work; social pathology or juvenile delinquency; psychology of the exceptional child, or introduction to clinical psychology; social field work.

## THE AMERICAN ACADEMY OF ASIAN STUDIES

## OFFICERS

louis p. gainsborough, Chairman of the Board of Governors ALAN w. Watts, Dean B. LoIS Thille, Registrar

Correspondence should be addressed to The Amercian Academy of Asian Studies, 2030 Broadway, San Francisco 15, California.

## FACULTY

Professofs: alan w. Watts (Dean), haridas chaudhuri, rom landau,
frederic spiegelberg (visiting from Stanford University)
Instructors: saley alash, harvey sun, charles yick

## HISTORY AND OBJECTIVES

The American Academy of Asian Studies was founded in the spring of 1951 as an independent graduate school for advanced study of the institutions, phil osophical viewpoints, languages, arts, and social and economic conditions of Asia Its function is not only to prepare students for professions and careers directly related to Asia, but also to enrich higher education in the United States with the vast cultural contribution of the Asian world.

The Academy was formed to meet the need for an approach to the study of Asia based on two principles: firstly, to tespect the peoples and cultures of Asia as equals, having quite as much to contribute to the West as the West to Asia as equals, having quite as much to contribute to the west as the them; and secondy,' to give a central place in the curriculum to those philosophical
and spiritual viewpoints which are, in fact, the historical roots of Asian cultures.

In the spring of 1954 the Academy became affiliated with the College of the Pacific, and now constitutes the College's graduate school of Asian Studies, retaining its own corporate status and Board of Governors. In addition to graduate studies leading to the A.M. and Ph.D. degrees, the Academy also conducts a pro gram of adult education by means of which a variety of courses and lectures. on Asian life and thought are offered to the general public without academic credit.
THE GRADUATE DIVISION

Complete details of requirements for admission to graduate standing, for the Master's and Doctor's degrees, and for courses and seminars to be offered may be had by writing to the Registrar of the Academy. What follows is a summary, subject to modification.

AdMISSION TO GRADUATE STANDING: The bachelor's degree from an accredited institution with a " B " average in upper division work, or the equivalent thereof from a foreign university.
the master's degree: 30 semester units of study at the Academy, of which at least 8 must be either the Arabic, Chinese, or Sanskrit language unless dispensed by examination. A grade of at least " $B$ " must be maintained, and a thesis presented.

THE DOCTOR'S DEGREE: Three full academic years of graduate study, of which the last must be taken in residence at the Academy; 8 semester units of either Arabic, Chinese, or Sanskirt, unless the student already has the A.M. from French, German, or a modern Asian by examination; and a reading kich the 8 units are requited. The student must pass a written comprehensive examination, and must submit an acceptable dissertation.

FEES are the same as those for other schools of the College, minus the $\$ 12.00$ infirmary charge.

CALENDAR: The 1954-1955 fall semester begins Monday, September 27 1954. Registration may be made at any time between September 24 and 29.

## COURSES OF INSTRUCTION

The following is a list of the regular courses given at the Academy. In addition to these, special courses are offered by the various visiting professors from Asia who come to the Academy at frequent intervals
203. COMPARATIVE MENTALITY, EAST AND WEST (4) I

An introductory course on the differing attitudes to life in East and West as reflected in philosophy, religion, social structure, literature, and the arts
210. BudDhism (4) I

Teachings and practices of the main forms of Buddhism, both Theravada and Mahayana, with reference to the relations of Buddhist philosophy and psychology to modern thought.
212. ZEN BUDDHISM (4) II

Ch'an or Zen Buddhism has been one of the most important forces in shaping the culture of the Far East, and its unique methodology of con and expression give it a special semantic and psychological interest
216. THE TAO IN FAR EASTERN CUITURB (2) I

Influence of Taoist philosophy upon Chinese and Japanese culture.
220,221. PSYCHOLOGY SEMINAR $(3,3)$ Yr.
Contributions of Asia to our psychological knowledge, with special reference to implications for psychotherapy, general semantics, and communications
230. CULTURAL HISTORY OF INDIA (2) II

History of uniting and separative tendencies in Indian calture from the Indus Valley civilization to the present day.
231. Indian literature (2) I

A discussion of the masterpieces of Indian literature-epics, dramas, story-
books, and Iyrics.
23
2. CLASSICAL INDIAN PHILOSOPHY (2) II

The six "systems" or views of classical Hindu philosophy.
234. VEDAS AND UPANISHADS (2) I

An outline and interpretation of the two most ancient groups of Hindu
236. BHAGAVAD-GITA (2) II

A comparative study of the most celebrated classic of Hinduism, and of
its manifold interpretations thtoughout the ages.
238. VEDANTA AND ITS INTERPRETATIONS (2) I

The central philosophy derived from the Upanishads, and its interpretations according to Shankara, Ramanuja, Nimbarka, Madhava, etc.
239. Sharva, vaishnava, and tantra (2) II Special cults, devotional and mystical, developing out of the main stream
of Hinduism.
240. CONTEMPORARY iNDIAN PHILOSOPHY (2) I

Indian philosophy from Ramakrishna to the present, including Aurobindo, Gandhi, Radhakrishnan, etc.

242,243 . SOCIAL CONDITIONS OF INDIA (4,4) Yr
A comprehensive survey of social and economic conditions in India, past and present, including problems of caste, population, village life, agriculture, and education.
244. INDIA IN POLITICS AND WORLD AFFAIRS (4) II

History and present status of contemporary political movements in India, and of India's place in world affairs.
250,251. SANSKRIT (4,4) Yr.
First year course.
254,255. HINDI (4,4) Yr. First year course.
258,259. BENGALI (2,2) Yr
First year course.
272. ISLAMIC CIVILIZATION (4) II A cultural history of Islamic civilization in the Near East and North Africa, with special reference to Islamic contributions in literature, medicine, mathematics, philosophy, and natural sciences.
274. NORTH AFRICA (4) II

Political, economic, and social affairs of the Islamic peoples of North Africa at the present time.

276,277. ARABIC $(4,4) Y_{1}$
First year course.
280. Cultural history of china (4) I
282. CHINESE PHILOSOPHY (4) II
283. The teachings of lao-tzu (2) II

The study of the philosophy of the Tao Te Cbing and its place in the history of religions.

284,285. CHINESE (NORTHERN MANDARIN) $(4,4) \mathrm{Yr}$. First year course.
288,289. CHINESE (CANTONESE) (3,3) Yt.
First year course.
293;294. DIRECTED STUDY (1 to 4; 1 to 4) I;II
295;296. SEMINAR ( 1 to $3 ; 1$ to 3 ) $1 ;$ II
$297 ; 298$. MASTER'S RESEARCH ( 1 or 2 ; 1 or 2 ) I;II
299. MASTER'S THESIS (4) I:II

397;398. DOCTOR'S RESEARCH ( 1 to 4; 1 to 4) I; II
399. DOCTOR'S DISSERTATION (8 to 12) I:II

## ADULT EDUCATION DIVISION

The work of the Adult Education Division is divided into four sections: Philosophy and Psychology
Social Sciences
Arts
Languages
Full information about the courses being given in these sections, as well as special public lectures and exhibitions, may be had from the Registrar of the Academy.

## STATISTICAL SUMMARY

NUMBER OF CREDENTIALS RECOMMENDED AND DEGREES AWARDED Jung 1953 June 1954
General Elementary credentials．
$\qquad$ General Secondary credentials．
$\qquad$

| 66 | 75 |
| ---: | ---: |
| 23 | 22 |
| 17 | 14 |
| 2 | 2 |
| 0 | 1 |
| 0 | 1 |
| 0 | 1 |
| 1 | 0 |
| 0 | 2 |
| 0 | 0 |
| 4 | 5 |
| 1 | 1 |
| 21 | 16 |
| 12 | 10 |
| 147 | 150 |
| 245 | 200 |
| 0 | 5 |
| 5 | 4 |
| 14 | 6 |
| 29 | 33 |
| 2 | 2 |
| 0 | 1 |
| 0 | 1 |
| 295 | 252 |

ENROLLMENT SUMMARY FOR THE YEAR 1953－54

| First Summer | ssion， | 1953 |  |  |  |  | $\begin{gathered} \text { MBN } \\ 423 \end{gathered}$ | $\begin{gathered} \text { women } \\ 539 \end{gathered}$ | $\begin{gathered} \text { TOTAI } \\ 962 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Second Summe | Sessio |  |  |  |  |  | 263 | 214 | 477 |
| Total． |  |  |  |  |  |  | 686 | 753 | 1439 |
| Regular |  | LI Se |  |  | G |  |  | Rand Tom | TAL |
| Session |  |  |  |  | G |  | Indivi | iduals | OR YR． |
|  | 总 | $\begin{aligned} & \text { 兽 } \\ & \text { B } \end{aligned}$ | 넚 | 芴 | $\begin{aligned} & \text { z } \\ & \text { 荡 } \\ & 0 \end{aligned}$ | $\stackrel{\underset{H}{3}}{\underset{H}{2}}$ | 営 | 宕 | － |
| Graduate | 111 | 57 | 168 | 136 | 58 | 194 |  |  | 272 |
| Senior | 122 | 105 | 227 | 130 | 107 | 237 | 148 | 131 | 279 |
| Junior | 144 87 | 115 85 | 259 172 | 130 73 | 123 81 | 253 | 154 | 4133 | 287 |
| Freshmen | 101 | 109 | 172 | 73 82 | 81 | 154 | 91 | 95 | 186 |
| Unclassified | 63 | 120 | 183 | 82 | 127 | 179 | 100 | 110 | 210 |
| Applied Music |  | 7 | 11 | 6 | 12 | 19 | 121 | 214 | 335 |
| Auditor | 1 | 1 | ． | 1 |  | 4 | 1 | 3 | 4 |
| Totals | 633 | 599 | 1232 | 629 | 599 | $\stackrel{-}{1228}$ | 804 | 789 | 1593 |

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