Report of
GREGG M. SINCLAIR
President
UNIVERSITY OF HAWAI'I
1952-53
The University of Hawaii 1952-53

Report of Gregg M. Sinclair, President
Board of Regents, 1952–53

WILLIAM P. ALEXANDER
J. GARNER ANTHONY
KATSUYUKI IZUMI
FRED K. LAM, SR.
W. HAROLD LOPER, ex officio
J. FRANK MCLAUGHLIN
RICHARD PENHALLOW
GREGG M. SINCLAIR, ex officio
PHILIP E. SPALDING, Chairman
OFFICE OF THE PRESIDENT
UNIVERSITY OF HAWAII
HONOLULU, HAWAII

TO THE GOVERNOR AND THE LEGISLATURE
OF THE TERRITORY OF HAWAII

Gentlemen:

I take pleasure in submitting to you my report as President of the University of Hawaii for the fiscal year July 1, 1952, to June 30, 1953, and a record of degrees, diplomas, and certificates conferred during the same period. Transmission of the report directly to you has been authorized by the Board of Regents of the University.

Respectfully,

GREGG M. SINCLAIR
Executive Officer, Board of Regents

December 1, 1953
CONTENTS

Report of President Sinclair

7  Extention's Silver Anniversary
8  Other Notable Events
10 University Research
15 Public Events
17 Gifts
18 Scholarships
19 In Memoriam

Reports of the Deans

20 Faculties: Paul S. Bachman
23 Graduate School: Thayne M. Livesay
26 College of Arts and Sciences: Willard Wilson
28 College of Applied Science: Wilfred J. Holmes
32 Teachers College: Bruce E. White
35 College of Agriculture: Harold A. Wadsworth
39 Agricultural Experiment Station: Louis A. Henke
46 Agricultural Extension Service: Y. Baron Goto
50 College of Business Administration: Harold S. Roberts
51 Office of Student Personnel: Harold M. Bitner

Reports of Administrative Officers

57 University Library: Carl G. Stroven
62 Legislative Reference Bureau: Norman Meller
65 Social Research Laboratory: Andrew W. Lind
Psychological and Psychopathic Clinic: Colin J. Herrick
Industrial Relations Center: Harold S. Roberts
Office of Publications and Information: Thomas Nickerson
University Press
Pacific Science: Leonard D. Tuthill
Philosophy East and West: Charles A. Moore
University Extension Division: Albert J. McKinney
Hilo Branch: Frank T. Inouye
Veterans' Adviser: Edmund F. Spellacy
ROTC, Army: Colonel Paul Clark, Jr.
ROTC, Air Force: Colonel William W. Jones
Aquarium: Spencer W. Tinker
Alumni Association: Thaddeus R. Coykendall

Statistical Information

Summary of Enrollment
Financial Statement
Changes in Faculty and Staff
Promotions
Degrees, Diplomas, and Certificates
The word university stems from universe, which means all things. As applied to education, it designates a group of colleges established for man’s enlightenment.

The University of Hawaii is now composed of five colleges—those dealing with the liberal arts, applied science, teaching, agriculture, and business administration. Year by year the scope of these and other divisions of the University have been rounded out in response to the diversified needs of an increasingly complex society. This report records such growth during the last full academic year.

EXTENSION’S SILVER ANNIVERSARY

The University was originally established principally as an agricultural college. Accordingly, some of the University’s oldest entities are agricul-
tural. In 1951 the Hawaii Agricultural Experiment Station celebrated its golden anniversary. This year a silver anniversary was observed by the Agricultural Extension Service.

Hawaii being essentially an agricultural area, the occasion was of widespread interest. In response to a petition signed by more than 2,800 University Extension Club members, Mr. M. L. Wilson, Director, Extension Work, U. S. Department of Agriculture, came to Hawaii as Charter Day speaker. He chose as his topic, "The Significance of Asia to the Western World"; and, with more than a thousand enthusiastic guests, including Governor Samuel Wilder King and other Territorial officials, he attended a luau sponsored by the Alumni Association.

The principal speaker was Y. Baron Goto, Associate Director of the Agricultural Extension Service and a member since its inception in 1928.

Mr. Goto explained that it is the function of the Service to pass on to the people the results of the Experiment Station's research, teaching improved farming and homemaking practices to farmers, housewives, and their children. He stated that, in 25 years, University Extension work has expanded from 15 clubs with 108 members to 175 clubs with 2,800 members; that 4-H leaders have increased from 60 to 570 and 4-H membership from 335 to 4,111. He showed that we now have two and a half times as many fowl and swine, three times as much milk, six times the quantity of papayas, ten times as many pounds of vegetables, two hundred times as many pounds of macadamia nuts. We produce annually a million dollars worth of lettuce and tomatoes as against negligible quantities 25 years ago.

The introduction of a disease-resistant strain of elephant grass has resulted in a crop valued at $2,500,000 a year; improved coffee fertilization has netted Kona growers $5,000,000 during the last 20 years; and $10,000,000 of pineapple bran, once considered worthless, has been sold since the Station established it as a stock feed. The value of diversified crops, he said, has increased from $10,000,000 to $36,000,000 a year. These statistics offer overwhelming evidence of the dollars-and-cents value to the Territory of our agricultural activities.

**OTHER NOTABLE EVENTS**

To conserve your reading time, I have abstracted from the reports of the deans and directors which follow a selection of the outstanding achievements which I think you will find particularly interesting.

- The Rockefeller and McNerny foundations have provided $72,000 for a conference here next summer on "Race Relations in World Perspective.”
- The Legislature provided for the erection of a $1,400,000 library, a $385,000 classroom building at the Hilo Branch, and a $60,000 high school building.

- A general engineering program was made possible by a legislative appropriation for a heat-power plant, by the gift of a $22,000 turbo-generator from the Hawaiian Electric Co. and the Westinghouse Electric Co., and by the long-term loan of a steam boiler by the U. S. Navy.

- The carrying capacity of rangelands was increased by the redistribution of water and the development of pastures in wet forest lands and on irrigated dry lowlands.

- Our Dental Hygiene program was reactivated by the Legislature.

- The Carnegie Corporation contributed $200,000 to a tri-institutional program for research in the Pacific in which the University of Hawaii, Yale University, and the Bernice P. Bishop Museum will participate.

- Ke Anuenue, a University Press publication, was selected among the "Fifty Books of 1952" by the American Institute of Graphic Arts.

- Some 6,000 fireflies were imported from Japan to combat the freshwater snail, carrier of the cattle liver fluke.

- Summer session enrollment reached 3,264, a new record, some 700 students attending from the mainland.

- The new School of Nursing capped its first sophomore class at a candlelight ceremony.

- More than 2,500 homemakers participated in University Extension Club work ranging from money management to the selection of household furnishings, appliances, and fresh and canned commodities.

- Our Graduate School enrollment reached 638—36 more than last year.

- Our junior class infantry cadets won the City of Tacoma Military Achievement Award for all-around proficiency in competition with the cadets of 21 mainland colleges and universities attending the ROTC summer training camp at Fort Lewis, Washington.

- The crop log previously adapted to determine the nutritional needs of growing sugar cane was applied to the macadamia nut industry.

- Enrollment in engineering reached 327, a new high.

- The Extension Division conducted a radio course on communism for teachers and instituted special courses in co-operation with government agencies and local banking, insurance, real estate, and business interests.

- Application of a commercial borax compound soil spray was found to control effectively the kidney worm, which causes an annual loss of
$30,000 to swine raisers through the condemnation of livers and kidneys at the slaughter houses.

- The Legislative Reference Bureau and the Hawaii Social Research Laboratory conducted a housing rental survey at the request of the Citizens' Rent Control Committee.
- This was the first year in which two Ph.D. degrees in course were conferred at commencement.
- More than 1,500 cows from nine dairies were tested as part of the Agricultural Extension herd improvement program.
- The Commerce Club of the College of Business Administration issued a directory providing employers with statistical information on the graduating class.
- A well-attended lecture series was presented during the spring semester and the summer session.
- Boys and girls of the 306 4-H clubs participated in programs to raise beef steers and to gather and distribute seeds of range grasses and legumes not available commercially.
- The Alumni Association, in co-operation with the Director of Athletics, was responsible for putting the athletic program on a sound financial footing.
- Our Hawaii Marine Laboratory on Coconut Island contrived to hold tuna in captivity for the first time in history.
- Teachers College conducted summer workshops including one in Economic Education which was closely co-ordinated with local industry.
- Tropical fruit improvement programs produced improved guava varieties, selected mango varieties best suited to quick freezing, developed two new fruit products, frozen passion fruit juice and stone-free guava puree, and distributed to nurserymen a new variety of litchi, the Groff, which culminated a ten-year research program involving some 500 seedlings.

**UNIVERSITY RESEARCH**

Research to most of us is a vague activity involving persons peering into microscopes, test tubes filled with colored fluids, and an accumulation of all known facts on a subject. At best we think of research as confined to a limited number of fields.

Actually research need not deal with things at all. It frequently embraces ideas and extends into such divergent areas as art, morality, and religion. Research worth its salt involves fresh inquiry into ways in which new use may be made of knowledge for the benefit of mankind.
A glance through the following tabulation will give you a conception of the comprehensiveness of the University's research program. Agricultural research, details of which are to be found on pages 35 to 50, is not included.

**ANTHROPOLOGY**

1. Polynesian Myths and Chants (book)  
   Katharine Luomala
2. Gilbertese Ethnobotany (article)  
   Katharine Luomala
3. Anthropo-geographical Study of Ano Atoll, Marshall Islands (article)  
   Leonard E. Mason
4. Research File on Micronesian Pictorial Materials (slide and photograph collection)  
   Leonard E. Mason
   Leonard E. Mason
6. Long-Term Study of the Trust Territory (books and articles)  
   Leonard E. Mason
7. Tri-Institutional Pacific Islands Studies Program (periodic reports)  
   Leonard E. Mason
8. Anthropometric Survey of Pre-Spanish Burial Remains from the Marianas (article)  
   Saul H. Riesenber
9. Blood Groups of Bones from Burial Remains from the Marianas (article)  
   Saul H. Riesenber
10. Historical Records of Drift Voyages by Pacific Indigenes (article)  
    Saul H. Riesenber
11. Field Notes from Ponape Expedition, Including Ponapean Omens and Belt Weaving (articles)  
    Saul H. Riesenber
    Saul H. Riesenber

**ART**

13. Mexican Mural Renaissance (illustrated articles)  
    Jean Charlot
14. Historical Studies in Hawaiian Art (articles)  
    Jean Charlot
15. Liturgical Art Criticisms (articles)  
    Jean Charlot
16. Commencement at the University of Hawaii (mural painting)  
    Jean Charlot
17. Diego Rivera in Italy (article)  
    Jean Charlot
18. Catholic Art: Practice versus Theory (article)  
    Jean Charlot
19. Hawaiian Sculpture (photographic survey and critical analysis)  
    J. Halley Cox
20. Composition and Geometric Design in Chinese Paintings (book)  
    E. Gustav Ecke
    E. Gustav Ecke
    E. Gustav Ecke

**ASIATIC AND PACIFIC LANGUAGES**

23. Translation of Poems of Tao Ch’ien, with Marjorie Sinclair (book)  
    Lily P. H. Chong
    Samuel H. Elbert
25. Interrelationship of Polynesian Languages and Dialects (article)  
    Samuel H. Elbert
26. Biography of and Translations from Kotomichi (book)  
    Yukuo Uyehara
BACTERIOLOGY

27. Effects of Diets Containing Low-Grade Cane Sugar and B-Grade Molasses upon the Intestinal Microflora of Hens (article) Oswald A. Bushnell

28. Effect of Rations Containing Bagasse and Molasses upon the Bacterial Flora of the Bovine Rumen (article) Oswald A. Bushnell

29. Blood Groups of Bones from Burial Remains from the Marianas (article) Oswald A. Bushnell

30. Microbiological Analysis of the Vitamin B12 Content of Some Foods Used in Hawaii (article) Oswald A. Bushnell

31. Effect of Increasing Concentrations of Terramycin on the Growth and Intestinal Microflora of Chicks (article) Oswald A. Bushnell

32. Bibliography of Micronesia (book section edited) Oswald A. Bushnell

33. Life History and Epidemiology of a Dermatitis-producing Marine Schistosome (Pearl Harbor Itch) (article) George W. Chu

BOTANY

34. Cytological Studies on Species of Hawaiian Plants (article) Edward J. Britten

35. Identification of Hawaiian Plant Fibers (collection and article) Edward J. Britten

36. Identification of Hawaiian Woods (collection and article) Edward J. Britten

37. Investigations of Genus Gossypium (article) Edward J. Britten

38. Role of Algae in the Central Pacific (articles) Maxwell S. Doty


40. Poleward-Equatorward Distribution of Marine Algae (article) Maxwell S. Doty

41. Vegetational and Algal Ecology of Raroia Atoll, Tuamotu Archipelago (articles) Maxwell S. Doty

42. Hawaiian Seaweeds (book and articles) Harold St. John

43. Taxonomy of Hawaiian and Tropical Pacific Vascular Plants (articles) Harold St. John

44. Bibliography of Micronesia (book section edited) Donald W. Bell

BUSINESS AND ECONOMICS

45. Irrigation Development on the Waimea Plain, Hawaii (book) Charles F. Congdon


47. Correlation Between Scores Made on Numerical Aptitude Tests and Scores in University Courses (article) Charles F. Congdon


49. Substitutes for the Strike (Occasional Paper) Ralph C. Hoebber


51. Plant Grievances (article)
52. An Introduction to the Kabuki Theatre (book)  
Earle Ernst

53. Four Japanese Plays (book)  
Earle Ernst

Earle Ernst

55. Japanese Theatre in the Highlight  
(text for book of illustrations)  
Earle Ernst

56. The Individual and His World (book)  
Richard S. Alm

57. Policies Governing Faculty Participation in Politics in State-supported Universities and Colleges (article)  
Robert W. Clopton

58. Selected Basic Books for Pacific Island Central Schools (article)  
Cynthia B. Geiser

59. Selected Fiction Books for Schools of Guam (article)  
Cynthia B. Geiser

60. Selected Fiction Books for Elementary Schools in the Trust Territory (articles)  
Cynthia B. Geiser

61. Selected Basic Books for Elementary Schools in the Trust Territory (article)  
Cynthia B. Geiser

62. College-Level Education in the Islands Prior to the Founding of the University of Hawaii (article)  
Evelyn H. Castro

63. Hawaiian Country (book)  
A. Grove Day

64. Pioneer Presses of Hawaii (article)  
A. Grove Day

65. Polemical Literature Relating to the Northern Rebellion of 1569 (England) (book)  
James K. Lowers

52. An Introduction to the Kabuki Theatre (book)  
Earle Ernst

53. Four Japanese Plays (book)  
Earle Ernst

Earle Ernst

Earle Ernst

56. The Individual and His World (book)  
Richard S. Alm

57. Policies Governing Faculty Participation in Politics in State-supported Universities and Colleges (article)  
Robert W. Clopton

58. Selected Basic Books for Pacific Island Central Schools (article)  
Cynthia B. Geiser

59. Selected Fiction Books for Schools of Guam (article)  
Cynthia B. Geiser

60. Selected Fiction Books for Elementary Schools in the Trust Territory (articles)  
Cynthia B. Geiser

61. Selected Basic Books for Elementary Schools in the Trust Territory (article)  
Cynthia B. Geiser

62. College-Level Education in the Islands Prior to the Founding of the University of Hawaii (article)  
Evelyn H. Castro

63. Hawaiian Country (book)  
A. Grove Day

64. Pioneer Presses of Hawaii (article)  
A. Grove Day

65. Polemical Literature Relating to the Northern Rebellion of 1569 (England) (book)  
James K. Lowers

66. The Death of André Gide (article)  
Dorothy F. Aspinwall

67. Teaching French in the Classroom (book)  
Dorothy F. Aspinwall

68. The National Political Conventions of 1952: Alterations Made in Their Institutional Fabric (paper)  
Daniel W. Tuttle

69. Presidential Nominating Politics in 1952—Hawaii (book chapter and papers)  
Daniel W. Tuttle

70. Qualifications, Representativeness, and Activities of Delegates to National Political Conventions (book)  
Daniel W. Tuttle

71. History of Hawaiian Statehood (book)  
Charles H. Hunter

72. Fear God and Dread Nought (book)  
Arthur J. Marder

73. History of 100th Battalion of Hawaii (book)  
Thomas D. Murphy

74. Rewriting, Devising, and Adapting Caucasian and Oriental Recipes for Use in Hawaii (card file)  
Mary L. Barrow

75. Quantities of Hawaiian-grown Vegetables for Serving a Family of Five Persons (book material)  
Mary L. Bartow

76. Fruits of Hawaii (book revision)  
Mary L. Barrow

77. Foods, Customs, and Menus of the Various Peoples in the Pacific Area (book revision and articles)  
Katherine B. Gruelle

78. Fruits of Hawaii (book revision)  
Katherine B. Gruelle
| 79. | Relationship Between Freshman Grades in University Mathematics Courses and Grades in High School (article) | Frances E. Davis |
| 80. | Theory of Operator Fields (book and article) | Christopher Gregory |
| **PHILOSOPHY** |  |  |
| 81. | Source Book in Indian Philosophy (book) | Charles A. Moore |
| 82. | Thoreau's Quest for Non-Attachment (article) | Winfield E. Nagley |
| **PSYCHOLOGY** |  |  |
| 83. | Use of the Guilford-Zimmerman Temperament Survey (articles) | Abe Arkoff |
| 84. | Audible Referents for Terms Used in Describing Normal and Abnormal Speech (recording) | David H. Crowell |
| 85. | Normal and Abnormal Speech Development in Children (recording) | David H. Crowell |
| 86. | Commitment Procedures for the Mentally Deficient (recording) | David H. Crowell |
| 87. | Motivation as a Factor in the Effects of Distribution of Practice in the Learning of a Motor Skill (article) | John M. Digman |
| 88. | Terminal Level of Performance of a Motor Skill as a Function of Degree of Massing of Preliminary Learning (article) | John M. Digman |
| 89. | Distribution of Practice in Problem Solving (article) | John M. Digman |
| 90. | Validation and Improvement of the Vocational Sentence-Completion Blank (articles) | Arthur A. Dole |
| 91. | Aggressive Responses to Frustration (article) | William H. Lyon |
| 92. | Hypnotic Phenomena (article) | William H. Lyon |
| 93. | Job Orientation Practices in Industry (article) | Herbert B. Weaver |
| 94. | Arithmetical and Mathematical Proficiency of College Students (article) | Herbert B. Weaver |
| **SOCIAL WORK** |  |  |
| 95. | Community Chest Agencies on the Island of Kauai (report) | Katharine N. Handley |
| 96. | Programs and Facilities of Camp Halekipa and Camp Kokokahi (report) | Harold A. Jambor |
| 97. | Effectiveness of Social Group Work in the Development of Quantitative Participation (book) | Helen E. Northen |
| 98. | School Social Work Practice in Twelve Communities (article) | Mildred Sikkema |
| **SOCIOLGY** |  |  |
| 99. | Assimilation in Hawaii and the Bid for Statehood (article) | Ch'eng-K'un Cheng |
| 100. | Chinese Assimilation in Hawaii (article) | Ch'eng K'un Cheng |
| 101. | Sociology of Race Relations (book) | Clarence E. Glick |
| 102. | The Majors-Palakiko Case (article) | Bernhard L. Hormann |
| 103. | Labor-Management Relations (article) | Bernhard L. Hormann |
| 104. | Population Analysis of Hawaii (articles) | Andrew W. Lind |
| 105. | Cultural Movements in Hawaii (articles) | Andrew W. Lind |
| 106. | Race Relations in Hawaii (book) | Andrew W. Lind |
SPEECH

107. Trends in Compounding in American English (articles)  
108. A Certain Vowel Shift in the Speech of Louisiana (articles)  
109. One Aspect of the Required Speech Courses at the University of Hawaii (articles)  

Elizabeth B. Carr  
Elizabeth B. Carr  
Elizabeth B. Carr  

ZOVOLOGY AND ENTOMOLOGY

110. Identification of Marine Crustacea (articles)  
111. Bibliography of Micronesia (book section edited)  
113. Marine Ecology of Arno Atoll, Marshall Islands (article, chapters for and editing book)  
114. Methods of Dispersing Fish in Schools (articles)  
116. Bibliography of Micronesia (book section edited)  
117. Reactions of Tuna to Chemical and Visual Stimuli (article)  
118. Development of Spermatophoric Mass in Lobsters and Crabs (articles)  
119. New Folliculinids from Hawaii (article)  
120. Reaction of Tuna to Chemical and Visual Stimuli (article)  
121. Biology of the Aholehole (article)  
122. Spawning of the Nehu in Kaneohe Bay, Oahu (article)  
123. Taxonomy of Psyllidae of the Pacific Area (articles)  
124. Insects of Micronesia, mounting and identifying (chapter in book)  
125. Mechanical Properties of the Smooth Holothurian Muscles (article)  
126. Respiration in Marine Crustacea (article)  
127. Digestion in Marine Animals (article)  
128. Reaction of Tuna to Chemical and Visual Stimuli (article)  

Donald C. Matthews  
Donald C. Matthews  
Albert L. Tester  
Albert L. Tester  
Albert L. Tester  
Albert L. Tester  
Leonard D. Tuthill  
Leonard D. Tuthill  
Pieter B. van Weel  
Pieter B. van Weel  
Pieter B. van Weel  

A member of our research staff has placed this sign above the door to his office:  

RESEARCH IS THE KEY TO NEW KNOWLEDGE; IT IS THE CHEAPEST INVESTMENT A COMMUNITY CAN MAKE TOWARD THE PERMANENT IMPROVEMENT OF ITS ECONOMY.  
I believe that this is a thoroughly valid statement.

PUBLIC EVENTS

The principal convocations held during the year were: The Charter Day convocation on March 25 at which Mr. M. L. Wilson, Director, Extension Work, U. S. Department of Agriculture, spoke; a World Student
Scholarship Fund convocation on April 6; and a convocation on April 24 at which former President Harry S. Truman received a Doctor of Humanities degree. Doctor of Laws degrees were awarded at commencement to Governor of the Territory Samuel Wilder King, Speaker of the House Hiram L. Fong, Dr. Louis M. Hacker, Dean of the School of General Studies, Columbia University, and Colonel Adna G. Clarke, Director of Alumni Affairs.

The University played a leading role in the Governor's Conference on Educational Television and at meetings concerned with the work of the Pacific Science Board of the National Research Council and groups interested in the economic, meteorological, and hydrobiological development of the Islands.

The University sponsored the following well-attended lecture series:

**These Crucial Times**

**PAN-ISLAM AND THE WEST**
Richard H. Nolte, Representative, American Universities Field Staff, Inc.

**ASIA'S RISE TO POWER**
Shunzo Sakamaki, Associate Professor of History, University of Hawaii

**TURKEY'S STRUGGLE AGAINST COMMUNISM**
Richard D. Robinson, Representative, American University Field Staff, Inc.

**OUR WASTED WEALTH**
James H. Glasgow, Professor of Geography, University of Hawaii

**INFLATION AND WORLD STABILITY**
Ralph C. Hoeber, Professor of Economics and Business, University of Hawaii

**The New Administration and Its Problems**

**EISENHOWER'S FAR EASTERN POLICY**
Graham H. Stuart, Professor of American Foreign Relations, Johns Hopkins University

**EISENHOWER'S LOYAL OPPOSITION**
Harold W. Bradley, Dean of the Claremont Graduate School, Claremont, Calif.

**SANE CITIZENSHIP IN A TROUBLED WORLD**
John W. Dodds, Professor of English, Stanford University
Truman Convocation—One of the few public appearances in Hawaii of former President Harry S. Truman was at a convocation in the Arthur L. Andrews Theatre at which he received the honorary degree of Doctor of Humanities.

Commencement Honorees—The degree of Doctor of Laws was conferred at commencement upon Alumni Director Adna G. Clarke, Columbia Dean Louis M. Hacker, Governor of the Territory Samuel Wilder King, and Speaker of the House Hiram L. Fong.
Frear Hall—Mary Dillingham Frear Hall, our new residence for women, provides a background for the informal aspects of a well-rounded college experience.

Summer Session—Registration lines form for the largest summer session to date. Of the 3,264 students enrolled, 759 came from 41 states, Washington, D. C., Alaska, and 11 foreign countries.
UNITY OF THE REPUBLICAN PARTY

Peter H Odegard, Professor of Political Science, University of California

CAPITALISM’S ANSWER TO COMMUNISM

Louis M. Hacker, Dean of the School of General Studies, Columbia University

The speakers included resident faculty members, visiting professors, and representatives of the American Universities Field Staff, Inc., the services of whose lecturers were made available to us through the generosity of the Juliette M. Atherton Trust, the McInerny Foundation, and the Samuel N. and Mary Castle Foundation.

GIFTS

I wish to make grateful acknowledgment of these and other donations without which it would be very difficult indeed for the University to continue many of its important activities.

<table>
<thead>
<tr>
<th>Donor</th>
<th>Purpose</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Castle and Cooke, Ltd.</td>
<td>Horticulture research</td>
<td>$2,100.00</td>
</tr>
<tr>
<td>McInerny Foundation</td>
<td>Volcanology research</td>
<td>2,400.00</td>
</tr>
<tr>
<td>Frear Eleemosynary Trust</td>
<td>Volcanology research</td>
<td>480.00</td>
</tr>
<tr>
<td>Research Corporation of New York</td>
<td>Research in chemistry</td>
<td>2,800.00</td>
</tr>
<tr>
<td>India Fund</td>
<td>Salary of Professor Chatterjee</td>
<td>7,356.00</td>
</tr>
<tr>
<td>Samuel N. and Mary Castle Foundation</td>
<td>Repairs to Castle kindergarten building</td>
<td>1,000.00</td>
</tr>
<tr>
<td>McInerny Foundation</td>
<td>Summer session expenses of Dr. Franz Alexander</td>
<td>800.00</td>
</tr>
<tr>
<td>Hemenway Hall Board of Governors</td>
<td>Carnegie Music Library</td>
<td>250.00</td>
</tr>
<tr>
<td>Associated Students, University of Hawaii</td>
<td>Carnegie Music Library</td>
<td>250.00</td>
</tr>
<tr>
<td>Research Corporation of New York</td>
<td>Research in chemistry</td>
<td>377.00</td>
</tr>
<tr>
<td>McInerny Foundation</td>
<td>Defrayal of conference costs on Educational Television</td>
<td>275.00</td>
</tr>
<tr>
<td>Tin-Yuke Char</td>
<td>Preschool books and recordings</td>
<td>100.00</td>
</tr>
<tr>
<td>Tin-Yuke Char</td>
<td>Books of the Department of Economics and Business</td>
<td>100.00</td>
</tr>
<tr>
<td>Birla India Fund</td>
<td>Library books</td>
<td>93.89</td>
</tr>
<tr>
<td>Harry Wells</td>
<td>Library books</td>
<td>25.00</td>
</tr>
<tr>
<td>G. F. Falley</td>
<td>Library books</td>
<td>25.00</td>
</tr>
<tr>
<td>University of Hawaii PTA</td>
<td>Purchase of equipment for High School</td>
<td>90.46</td>
</tr>
<tr>
<td>Various</td>
<td>Toward purchase of radio transmitter</td>
<td>215.58</td>
</tr>
<tr>
<td>Mrs. Walter Roy Blake</td>
<td>Library books</td>
<td>5.00</td>
</tr>
<tr>
<td>Anonymous</td>
<td>Legislative Reference Bureau pamphlets</td>
<td>15.00</td>
</tr>
</tbody>
</table>
Anonymous .................................................... Completion of mural in Administration Building 1,500.00
Hawaiian Sugar Planters' Association ....................... Traveling expenses of 4-H Club members representing Hawaii at the National 4-H Club Camp 600.00
Pacific Chemical and Fertilizer Company ................ Same as above 600.00
4-H Club Federation of Hawaii ........................... Same as above 104.32
Samuel N. and Mary Castle Foundation .................. Same as above 300.00
McInerny Foundation ....................................... Same as above 400.00
Sears Roebuck Foundation ................................. 4-H Club contest awards 700.00
McInerny Foundation ....................................... Development and standardization of supplementary form of the Porteus Maze test 4,000.00
Frear Eleemosynary Trust ................................. Same as above 1,000.00
Juliette M. Atherton Trust ............................... Participation in American Universities Field Staff Program 3,500.00
Samuel N. and Mary Castle Foundation .................. Same as above 1,000.00
McInerny Foundation ....................................... Same as above 1,500.00
Mrs. Edgar Wood ........................................... Edgar Wood Student Loan Fund 250.00
McInerny Foundation ....................................... Toward expenses of Institute of Race Relations 3,000.00
Carnegie Corporation of New York ........................ Program of Pacific Studies 20,000.00

$57,212.25

SCHOLARSHIPS

Katharine N. Handley, Chairman of the Scholarship Committee, reports that 98 students—five less than in the previous year—were selected for scholarships from 207 applicants. The scholarships were as follows: Territorial, 24; tuition, 20; named, handled by the committee, 35; named, handled outside the committee, 19.

Three new scholarships administered by the committee were acquired: The Li Foundation Grant of $5,000, covering two years of graduate work at a mainland university, available to a student born in the Territory and graduated from the University of Hawaii within the previous three years; the John Fee Embree Award of $300 a year, preferably for a student in anthropology or sociology; and the Scudder Association Award of $500, for a Japanese-Hawaiian student.

Four additional scholarships which are not administered by the Committee were made available. They were presented by the Buddhist Friendship Society, $200 a year; the Hawaii Mission of the Methodist Church, $600 a year; the Hui Hanalike, $200 a year awarded to a student of Okinawan
ancestry graduated from a high school on the Island of Hawaii; and the Kilmer O. Moe Scholarship, three awards of $100 per year each to junior and senior students preparing for teaching or an allied professional field.

IN MEMORIAM

THOMAS AUGUSTUS JAGGAR

In the death on January 17 of Thomas Augustus Jaggar the University and the scientific world lost an outstanding scholar in the field of volcanology. An indefatigable worker, a resourceful inventor, and a prolific writer, Dr. Jaggar founded the Hawaiian Volcano Observatory and the Hawaiian Volcano Research Association. After distinguished service with the U. S. Geological Survey and other government agencies, he joined our research staff. A kindly, enthusiastic, and dynamic friend, he dedicated his life to studying the means whereby man might be protected against Nature's most overwhelming force.

BERT SHEPARD

Bert Shepard, for six years a member of our European Languages department, died suddenly on Christmas Day. A graduate of the University of Paris, he saw service with the Austrian Army in World War I and in World War II was foreign language instructor at Ellington Field, Texas. He was popular alike with his students and his associates. We have lost a valuable member of our faculty.
The term "stability" characterized University operations during 1952–53. The effect of registration of the Korean War and Selective Service had become fairly constant. The continued decline in numbers of World War II veterans in attendance was offset by returning Korean veterans. The World War II babies had not yet reached college age. Financial adjustments due to the inadequate appropriation of the 1951 Legislature had been made the previous year, and operations during the current year continued at that same level. Any hope for a considerable expansion of programs in the immediate future has been dissipated by the "present programs to present levels" budget policy of the Governor and the Legislature. However, the year was not without significant developments in the direction of improved faculty and faculty morale.
FACULTY SALARIES

Effective July 1, 1952, the Regents made significant adjustments in maximum salaries and annual increments in the associate professor and professor grades, as it was in these grades that the salaries were especially out of line with the salaries paid by mainland universities. Effective July 1, 1953, the Regents adjusted upward the minimum salaries of the assistant professor, associate professor, and professor grades, thus eliminating inconsistent gaps between salaries.

In spite of these adjustments the University was in an unfavorable position regarding the salaries it offered, in comparison with mainland universities, because of travel costs necessarily incurred in coming to Hawaii and because of the higher living costs prevailing here. This disadvantage has currently been offset to a considerable degree by the 7 per cent increase in University salaries provided by the 1953 Legislature. This change in our competitive position was almost immediately reflected by a decrease in unfilled positions among noninstructional divisions. At no time since the outbreak of World War II have the agricultural services and the Psychological Clinic been as completely staffed as they became at the end of this year.

FACULTY CHANGES

The turnover in the instructional staff continued to be low, namely, 28, the same as that for the previous year. Of these, 12 were temporary replacements for regular faculty members on sabbatical leave or for faculty members resigning or going on leave without pay for further graduate study. Retirement accounted for two, and higher salaries paid by industry for two. Among other losses were 10 women, for the most part supervisors in laboratory schools or in food service, who resigned their positions because of marriage or family obligations on the mainland. The remaining two losses were for miscellaneous reasons. The percentage of turnover among men on the instructional staff was 7 per cent and that among women was 15 per cent. Reports from mainland colleges indicate that this situation is not unusual.

As has been true during the past several years, faculty changes were a means of improving the faculty. In each instance where replacements have been made, the qualifications of the replacement were superior in 9 instances, equal in 13, and inferior only in 1 instance.

STUDENT ENROLLMENT

As has been anticipated, student registration remained fairly constant
but showed a slight increase (a full-time equivalent of 3,943 for the first semester as compared with 3,855 for the first semester of the previous year). However, there were several significant developments.

The first factor affecting our registration during the past year was the very small drop-out at the end of the first semester. For many years this drop-out has remained constant at 8 per cent. This year the percentage declined to less than 6. This undoubtedly can be attributed to Selective Service.

The second factor was that the freshman class increased by 94 over the low point reached last year. Decreases in other classes offset this gain. However, higher freshman registration means larger upper division classes in the future and a corresponding increase in the size of our student body. This does not take into consideration the flood of students which we expect beginning about 1957 as a result of the high birth rates which occurred in the Islands during World War II.

NEW BUILDINGS

By 1962–63 we anticipate a 50 per cent increase in the size of our student body. This will require a considerable expansion of classroom, laboratory, and office space. An initial step to meet this situation was made by the 1953 Legislature in appropriating $1,400,000 for a library, the completion of which will make possible the conversion of the present library into classrooms and offices. The 1953 Legislature also appropriated $385,000 to provide currently for more adequate facilities at the Hilo Branch. In addition, $60,000 was included in the bond issue for schools to provide for the first unit of the high school building for Teachers College. The problem of adequate classroom and office space, however, is acute and is aggravated by the fact that we are caring for our present student body only by using converted army shacks, which are deteriorating rapidly. The additional facilities provided for by the 1953 Legislature are not even sufficient to replace the barracks insofar as both classrooms and offices are concerned. To take care of a 50 per cent increase in registration and to eliminate temporary structures would require two large classroom buildings, a field house of adequate size and equipment, and an additional engineering classroom and laboratory unit.

PROGRAM DEVELOPMENT

Funds were provided by the Legislature for the continued expansion of the nursing, business, and teacher-training programs. Funds were provided
also to establish a general engineering program. In view of the fact that the 1951 Legislature had not provided financial support for dental hygiene, the Regents took steps to terminate the program as of June, 1953. However, the 1953 Legislature, through a special appropriation act, provided funds for the reactivation of this program.

SUMMER SESSION 1953

The summer session registration on the Honolulu campus was 2,984, an increase of 234 over the previous year. This was accounted for by an increase in the number of students from the mainland. These totaled 759, showing an increase of 282 over the previous year. The registration for the Hilo Branch was 91, an increase of 25 over 1952. There were also 61 students registered in the Hickam Center, 107 in the Downtown Extension Center, and 21 on Maui, making a grand total of 3,264 students. However, this is an incomplete figure, as postsession classes are being held on Maui and Hawaii.

A notable feature of the summer session registration was the large attendance of local teachers. A great many teachers holding provisional appointments in the Department of Public Instruction attend our summer sessions in order to meet the requirements for the professional certificate. This year several hundred registered in workshops and other courses who will not benefit financially in any way by such attendance. This desire for professional improvement irrespective of financial considerations is a great tribute not only to the teachers themselves but also to the type of professional training courses being offered and the attitudes engendered by our teacher-training program.

Our summer session public lectures were well received. More persons voluntarily called in to express their appreciation of the lecture series than at any other summer session.

GRADUATE SCHOOL
Dean Thayne M. Livesay

The downward trend of enrollment in the Graduate School apparently reached its nadir in 1951–52, as the figures for 1952–53 show an increase. Although the actual gain was only 26, there is every reason to assume that the curve will continue to rise. The following table gives the comparative figures for the second semesters of 1951–52 and 1952–53.
COMPARISON OF SECOND SEMESTER ENROLLMENTS FOR THE ACADEMIC YEARS 1951-52 AND 1952-53

<table>
<thead>
<tr>
<th></th>
<th>1951-52</th>
<th>1952-53</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidates for advanced degrees</td>
<td>172</td>
<td>177</td>
</tr>
<tr>
<td>Candidates for five-year diploma</td>
<td>84</td>
<td>125</td>
</tr>
<tr>
<td>Candidates for professional teaching certificate</td>
<td>129</td>
<td>135</td>
</tr>
<tr>
<td>Candidates for social work certificate</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>Total candidates</td>
<td>406</td>
<td>455</td>
</tr>
<tr>
<td>Unclassified</td>
<td>206</td>
<td>183</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td>612</td>
<td>638</td>
</tr>
</tbody>
</table>

By coincidence, exactly the same number of advanced degrees (42) were awarded in both years. The following table gives the number of degrees by departments for 1951-52 and 1952-53.

ADVANCED DEGREES, BY DEPARTMENTS, CONFERRED IN JUNE OF 1952 AND 1953

<table>
<thead>
<tr>
<th></th>
<th>1952</th>
<th>1953</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M.A.</td>
<td>M.S.</td>
</tr>
<tr>
<td>Art</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Bacteriology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botany</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drama and Theatre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Education</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Entomology</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Far East Studies</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Genetics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Social Work</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Sociology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soil Science</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Speech</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zoology</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>16</td>
<td>17</td>
</tr>
</tbody>
</table>

24
The conferring of two Doctor of Philosophy degrees in Zoology (Marine) in 1953 is of more than passing interest, as this marks the first time in the history of the institution at which more than one doctorate (in course) has been awarded at any commencement.

A further indication of trends in the Graduate School enrollment is provided in the following table, which gives comparative figures for advanced degree candidates by departments for the academic years 1951-52 and 1952-53.

### ADVANCED DEGREE CANDIDATES, BY DEPARTMENTS, FOR 1951-52 AND 1952-53

<table>
<thead>
<tr>
<th></th>
<th>1951-52</th>
<th></th>
<th></th>
<th>1952-53</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M.A.</td>
<td>M.S.</td>
<td>M.Ed.</td>
<td>M.S.W.</td>
<td>Ph.D.</td>
<td>M.A.</td>
</tr>
<tr>
<td>Anthropology</td>
<td>5</td>
<td>5</td>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>9</td>
<td></td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bacteriology</td>
<td>6</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botany</td>
<td>2</td>
<td></td>
<td>3</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>8</td>
<td></td>
<td>13</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drama and Theatre</td>
<td>5</td>
<td>4</td>
<td></td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>4</td>
<td></td>
<td></td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>9</td>
<td></td>
<td></td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>3</td>
<td></td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entomology</td>
<td>4</td>
<td>6</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Far East Studies</td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genetics</td>
<td>6</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td>5</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>13</td>
<td>11</td>
<td></td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>3</td>
<td></td>
<td></td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Pacific Islands</td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studies</td>
<td>4</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>13</td>
<td>9</td>
<td>14</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Work</td>
<td>10</td>
<td>6</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td></td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soil Science</td>
<td>11</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speech</td>
<td>7</td>
<td>6</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetable Crops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zoology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>104</td>
<td>41</td>
<td>6</td>
<td>12</td>
<td>105</td>
<td>40</td>
</tr>
</tbody>
</table>

As mentioned in last year's report, the Graduate Council has for some time been concerned with the added burden of increasing numbers of candidates for advanced degrees on a faculty already carrying a heavy load.
of undergraduate courses and has debated ways and means of relief. Thorough consideration was given to the proposal of some substitute for the thesis, as practiced by many of our larger institutions, but in the end the majority of the Council voted against any modification of this requirement for the Master of Arts and Master of Science degrees, with the understanding that substitutes might be adopted for the more specialized degrees. In keeping with this, they recommended that two more such degrees be offered, the Master of Business Administration and the Master of Fine Arts, the latter to recognize creative work in Art, Drama, English, and Speech. These two degrees, together with the Master of Education and Master of Social Work, offer four areas in which graduate training other than research may be emphasized.

**COLLEGE OF ARTS AND SCIENCES**

**Dean Willard Wilson**

The College of Arts and Sciences, because of its large number and diversity of curriculums, inevitably forms the backbone of a University enrollment. It is roughly twice the size of the next largest college in the University. With approximately 1,650 students enrolled, a decrease of about 100 over the preceding year, the college continued to perform its basic function of giving a broad, fundamental education not only to future doctors, lawyers, artists, chemists, and psychologists, but also to the serious students in less specialized fields from whose ranks—according to increasingly insistent reports—come a large percentage of our real leaders not only in the professions, government, and philosophy but in business as well.

In two recent and thorough surveys of "scientists of distinction" in the United States it was discovered, to the amazement of some people, that the liberal arts colleges were producing a disproportionately high percentage of our leading scientists. This is no anomaly, if one understands that "liberal arts," including the social sciences and the humanities, could much better be interpreted as "liberating arts," studies which, by a broad underscoring of man's accomplishments and potentialities, liberate the modern man for intellectual exploring just as they did the ancient Greeks and Romans. In a startling article in *Fortune* magazine for May, 1953, entitled "Should a Businessman Be Educated?" the statement is made that ". . . colleges are giving less fundamental education than ever before. Businessmen are rightfully alarmed." President Swensrud of Gulf Oil is quoted as saying: "It is the broader-gauged man who is scarce, the man who sees beyond today's job, the man who knows his fundamentals well and learns details as he needs them . . . . The men who come into management
must understand the whole sweep of modern economic, political and social life."

With large and fairly sure monetary rewards awaiting the successful man in practically all the specialized professions and quasi-professions (aside from teaching!), it is encouraging that so many of our students of good calibre make the decision for a liberal arts education. Although they are running a risk on the immediate job when they graduate, there is a good chance that they may help to save our souls in this age of dangerous and stultifying over-specialization—when our whole world economy, because of rapid communication, travel, and possible atomic power, may be revolutionized rapidly. In increasing numbers we need young men and women of tough fibre but mental elasticity who have a sense of history as well as of expediency.

The Dean of the College of Arts and Sciences understands it to be part of his obligation to resist, pleasantly when possible, the natural pressures from various groups to increase beyond a safe point the specialized requirements in a particular field, to drop requirements of the college (such as World History and a foreign language) because the immediate value is not patent, and in general to yield to the plea for an "easier" education. Although he values and listens constantly to the student voice, he does not feel that the immature student is in an advantageous position to dictate the wisest subject matter or indeed the most effective manner of teaching.

It is the intention of the college to provide, therefore, in all curriculums a firm, consistent, and comprehensive core of knowledge in the physical and social sciences, in history, and in literature and the arts. It is our conviction that education must continue to concern itself with more than the materialistically expedient if man as a civilized animal is to continue to exist.

During the year several improvements in the advising system designed to bring this about have been made, and departmental rapport with major candidates strengthened; complete background material on transfer students has been put on permanent file in appropriate major offices; and in the course of the year the Dean has had upward of 500 personal conferences with individual students. In addition, scores of referrals were made to department chairmen and to the advisers in the Bureau of Testing and Guidance. The new undergraduate curriculum leading to the Bachelor of Fine Arts in Art was put into operation. Some old courses were dropped; a few new courses, after adequate substantiation of need, were added. In addition, some standard courses affecting many students, such as Government 150, were re-evaluated by departments and revised.

Men still outnumber the women in the college by about 200, reversing somewhat the unfortunate situation in Teachers College.
During the year we transferred 44 students to the College of Applied Science, 54 to Teachers College, 34 to Business Administration, and 10 to Agriculture. In return we received about one third that total number of transfers from assorted sources. These numbers indicate no significant drift in any direction, although quite probably the bulk of the increased enrollment in Engineering and in the new School of Nursing came from potential Arts and Sciences students.

It is encouraging that, although we took in a freshman class of about 150 more this year than last in the college, the over-all academic achievement of the class (1.9) was slightly higher than last year's (1.8) for the second semester. This would indicate that the quality of student work, contrary to the tired professor's annual fear, has not seriously declined.

Choices of general curriculums remain in approximately the same balance as previously: Social Sciences, 956; Physical and Biological Sciences, 356; Languages, Literature, and Art, 188.

We like to believe that, whatever the field of specialization, under our present system of required basic courses, a graduate of the College of Arts and Sciences has been given many of the keys to the increasingly complex world in which he must live.

COLLEGE OF APPLIED SCIENCE
Dean Wilfred J. Holmes

For peace or for war, our most critical national shortage is in the number of our young people who have the capacity to absorb a professional education. The College of Applied Science has, as its function, professional training in Engineering, Medical Technology, Prearchitecture, Recreation Leadership, and Nursing. Within these limits, it is our responsibility that none of Hawaii's youths capable of professional training be denied their opportunity. We fall far short of that goal. In the face of great national shortages of engineers, medical technologists, and nurses, the College of Applied Science turns away each year many students whom we do not have the facilities to accommodate. However, we can look back on the year 1952-53 with the satisfaction that, despite delays, frustrations, and inadequate funds, we have made some progress toward our objective.

Last year the enrollment in the University as a whole decreased by a small percentage. The total enrollment in the College of Applied Science, however, increased by 18 per cent. This increase is even more significant when we consider that the freshman enrollment of the College increased by 38 per cent. It is, therefore, evident that the enrollment of the College
of Applied Science will continue to expand for the next few years, whereas the University's total enrollment will not commence to increase until about 1957. It can be anticipated that our growing pains will be acute and complicated by dislocations incidental to expansion within the framework of a nonexpanding University budget.

ENGINEERING

Last year we had the largest enrollment in engineering in our history, 327 students. We graduated 46 civil engineers. Yet, on the day of graduation, our bulletin boards were plastered with notices of job opportunities for more engineers than we can possibly supply with our present facilities. Last year for the first time there was active recruiting for our engineers on our campus by mainland hiring agencies, giving rise to the hope that we will yet see the day when Hawaii might have a more favorable balance of trade with the mainland in professional personnel.

The 1953 Legislature granted funds for a heat-power laboratory. These funds have been supplemented by a gift of a $22,000 laboratory turbo-generator plant by the Hawaiian Electric Company and the Westinghouse Electric Company and the long-term loan of a steam boiler by the Navy. The heat-power laboratory is being installed in a building previously used as a carpenter shop, and the carpenter shop is being moved to the quonset beyond Edmondson Road. These improvements will permit accommodation of approximately 25 more upper division engineering students. Incidentally, the removal of the carpenter shop from the engineering quadrangle will improve this whole area of the campus. When these improvements are complete we will have about reached the limits of our expansion in engineering without additional permanent buildings. We hope to ask the 1955 Legislature for funds to complete the engineering quadrangle and provide classrooms for engineering and for mathematics.

The student chapter of the American Society of Civil Engineers continues to be an important factor in the professional orientation of our engineering students. Last year the Hawaii postconvention tour of the national convention of ASCE met on campus with the University of Hawaii student chapter as host, and many students were able to attend the technical session. At the annual joint meeting of the Hawaii section and the student chapter of ASCE, our students presented a technical demonstration of such excellence that it reflected credit upon the whole engineering department.

PREARCHITECTURE

The prearchitecture curriculum is designed to offer two years of instruction to students who intend to transfer then to a school of architecture
on the mainland. It is impossible to offer a program which dovetails all the
different architectural curriculums without involving some loss of time by
transferring students. Last year minor changes were made in the curri-
culum, increasing the proportion of work required in broad fundamentals
at the expense of the more professional architectural engineering courses.
These changes were designed to facilitate transfer at the end of the sopho-
more year with minimum loss of academic credit.

There were 41 students registered in Prearchitecture last year.

The Hawaii chapter of the American Institute of Architects continued
their interest in the program, awarding prizes in architectural and art design
contests to prearchitectural students.

MEDICAL TECHNOLOGY

Sixteen students graduated in June with the degree of Bachelor of
Science in medical technology. This was our largest class to date. It filled
all known Territorial vacancies in the profession. Next year's class of 15
also promises to be larger than the Territory can absorb, putting Hawaii in
the position of being about the only area in the United States that has a
surplus of medical technologists. Many of last year's graduates have already
migrated to the mainland, where excellent job opportunities await them.

Our capacity to train medical technologists is fixed at 18 by the hospital
facilities available to offer internship. Of the 18 internships available, 12
are offered at Tripler Hospital, where the interns are an important factor in
the operation of the laboratories. It is obvious that anything seriously
affecting the workload at Tripler will have an almost immediate effect upon
the number of medical technologists who can complete their training in
Hawaii. Bearing this in mind, permission was obtained from the Council of
Deans to make arrangements when necessary to complete intern require-
ments on the mainland. It has not yet been necessary to do so.

NURSING

The first class of the basic nursing curriculum of the School of Nursing
entered in September, 1952. They have completed their first year's work and
this fall will commence their sophomore year, including clinical work in
medical and surgical nursing in the Queen's Hospital. The experience with
this first class has been very encouraging. Only 9 per cent of the freshmen
in nursing were dropped for poor scholarship, the lowest percentage of any
freshman group in the College of Applied Science.

Applications for admission to nursing continue to be many times the
number that can be admitted. Under the pressure of so many well-qualified applicants, we have increased the size of the next entering class from 30 to 40 students. To permit this increase we have lengthened the nursing arts laboratory by extending the side of one wing of Hale Aloha. This exhausts the simple means of expanding our facilities, and it is probable that the maximum size of our entering class in nursing must remain fixed at 40 students until a building program for the future of Nursing becomes a reality. We believe that no further expansion should be contemplated until after the first class is graduated and the many programs with co-operating hospitals and agencies are worked out and running smoothly.

In addition to the students in the basic nursing program, over 60 registered professional nurses were enrolled last year. Of these nurses, eight completed their requirements and received the degree of Bachelor of Science in Nursing. The degree program and the public health nursing program offered to graduates of three-year programs in basic nursing continue to be an important responsibility of the School of Nursing.

RECREATION LEADERSHIP

Fourteen students graduated in recreation leadership during the academic year. Our capacity to train recreation leaders is limited by the number that can be given field work in the senior year. In practice we have never reached this limit. Last year we admitted 47 freshmen to the program, but of this number over 50 per cent failed to meet the scholastic standards of the University and were dropped. Of the sophomores, 25 per cent were also dropped for the same reason. Examination of the records of students who failed discloses that without doubt this appallingly high percentage of failures is due largely to the attraction to this program of students with college aptitude far below the average of the University. The appointment of a committee to study this entire situation has been requested.

SECOND-SEMESTER ENROLLMENT STATISTICS FOR THE YEAR 1952-53

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>Freshmen</th>
<th>Sophomores</th>
<th>Juniors</th>
<th>Seniors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Engineering</td>
<td>113</td>
<td>80</td>
<td>71</td>
<td>40</td>
<td>304</td>
</tr>
<tr>
<td>Prearchitecture</td>
<td>17</td>
<td>17</td>
<td>1</td>
<td>—</td>
<td>35</td>
</tr>
<tr>
<td>Medical Technology</td>
<td>22</td>
<td>20</td>
<td>21</td>
<td>16</td>
<td>79</td>
</tr>
<tr>
<td>Recreation Leadership</td>
<td>31</td>
<td>26</td>
<td>36</td>
<td>10</td>
<td>103</td>
</tr>
<tr>
<td>Nursing</td>
<td>22</td>
<td>15</td>
<td>5</td>
<td>5</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>205</td>
<td>158</td>
<td>134</td>
<td>71</td>
<td>568</td>
</tr>
</tbody>
</table>
Teachers College continues to fall far short of meeting the Territorial demand for teachers. While the Department of Public Instruction anticipates a need for approximately 250 new teachers during the coming year, only 126 are expected to complete requirements for certification. Although this is an increase over the 114 who completed requirements during 1951–52, it still falls far short of meeting the demand. Enrollment in Teachers College and gradual expansion of facilities indicate that the output will increase by approximately 12 each year for the next three years. On the other hand, the Department of Public Instruction expects its demand, also, to increase, because of the continuing high birth rate in the Territory. Thus, it appears most probable that Teachers College will continue to be able to prepare only about 50 per cent of the teachers required.

Some temporary relief of this situation is provided by the increasing tendency of Teachers College students to accelerate their programs through summer session attendance and to take employment following completion of only the intern teaching semester of the fifth year. In the latter case, requirements for certification are completed in later summer sessions. A recent survey of this type of acceleration shows that at present approximately 14 per cent of our students complete all requirements for certification with four years of regular attendance plus summer sessions, that an additional 38 per cent complete these requirements with four and one-half years of regular attendance plus summer sessions, and that the remaining 48 per cent attend regularly for five full years. This tendency is increasing, giving reason to believe that within a few years at least 60 per cent, and perhaps more, will complete their requirements with four or four and one-half years plus summer sessions. It must be kept in mind, however, that this acceleration is of temporary benefit only. Since the number of fully qualified graduates for any year is reduced by the number of those who take employment before completing all requirements, the net output over a period of years is not affected. The limiting factor, with or without acceleration, is the capacity of the laboratory schools.

It seems particularly unfortunate that Teachers College cannot prepare more than half the teachers needed when it is noted that there are large numbers of qualified college freshmen every year who wish to enter Teachers College but who cannot do so because of limited facilities.
New Bookstore—A functionally planned bookstore permits free-flowing lines of registrants to obtain text books and stationery supplies with a minimum of delay and confusion.

The Quadrangle—Air view of the campus from Varney Circle toward Honolulu Harbor.
New School of Nursing—Members of the first sophomore class of the new School of Nursing were capped at a candlelight ceremony, an observance which marked their entrance into specialized training as bedside and public health nurses.

Summer Workshop—A summer session workshop in Economic Education was conducted in co-operation with local business and community leaders. Here Robert S. Craig of the Industrial Research Advisory Council discusses new industries.
<table>
<thead>
<tr>
<th></th>
<th>Semester I</th>
<th></th>
<th></th>
<th></th>
<th>Semester II</th>
<th></th>
<th></th>
<th></th>
<th>Year*</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M  F  Total</td>
<td>M  F  Total</td>
<td>M  F  Total</td>
<td>M  F  Total</td>
<td>M  F  Total</td>
<td>M  F  Total</td>
<td>M  F  Total</td>
<td>M  F  Total</td>
<td>M  F  Total</td>
<td>M  F  Total</td>
<td>M  F  Total</td>
<td>M  F  Total</td>
<td>M  F  Total</td>
</tr>
<tr>
<td>Freshmen</td>
<td>14 127 141</td>
<td>15 126 141</td>
<td>16 127 143</td>
<td>Freshmen</td>
<td>15 140 155</td>
<td>15 143 158</td>
<td>15 140 155</td>
<td>15 143 158</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophomores</td>
<td>13 141 154</td>
<td>15 140 155</td>
<td>15 143 158</td>
<td>Sophomores</td>
<td>25 146 171</td>
<td>25 142 167</td>
<td>25 149 175</td>
<td>25 146 171</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juniors</td>
<td>28 110 138</td>
<td>21 90 111</td>
<td>23 93 116</td>
<td>Juniors</td>
<td>27 112 139</td>
<td>27 92 119</td>
<td>27 94 120</td>
<td>27 112 139</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seniors</td>
<td>24 110 134</td>
<td>17 72 89</td>
<td>28 123 151</td>
<td>Seniors</td>
<td>28 110 138</td>
<td>21 90 111</td>
<td>23 93 116</td>
<td>28 110 138</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total degree and diploma candidates</td>
<td>104 634 738</td>
<td>93 570 663</td>
<td>108 635 743</td>
<td>Total degree and diploma candidates</td>
<td>104 634 738</td>
<td>93 570 663</td>
<td>108 635 743</td>
<td>Total degree and diploma candidates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional certificate:</td>
<td></td>
<td></td>
<td></td>
<td>Professional certificate:</td>
<td></td>
<td></td>
<td></td>
<td>Professional certificate:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>23 73 96</td>
<td>35 100 135</td>
<td>39 127 166</td>
<td>Graduate</td>
<td>23 73 96</td>
<td>35 100 135</td>
<td>39 127 166</td>
<td>Graduate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>2 1 3</td>
<td>13 8 21</td>
<td>14 7 21</td>
<td>Undergraduate</td>
<td>2 1 3</td>
<td>13 8 21</td>
<td>14 7 21</td>
<td>Undergraduate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand total</td>
<td>129 708 837</td>
<td>141 678 819</td>
<td>161 769 930</td>
<td>Grand total</td>
<td>129 708 837</td>
<td>141 678 819</td>
<td>161 769 930</td>
<td>Grand total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Year data include students registered for first or second semester only, and also those registered for both semesters, with no duplications.

Special attention is called to the small proportion of males: 17 per cent of total registration and only 14 per cent of degree and diploma candidates. This is a continuation of a trend of the last few years. That it is a continuing tendency is indicated by the fact that, of 384 applications for admission next September, only 22, or 5.5 per cent, are males. It is hoped that the increase in teachers' salaries provided by the Legislature may effect a reversal of this undesirable trend. Last year 370 individuals who had met requirements for admission to the University applied for admission to Teachers College, compared with the 384 applications received this year. Thus, although there is a decrease in male applicants, the total number of applicants remains well above twice the number which can be accommodated.

Below are listed the numbers of students who received the Bachelor of Education degree or the Five Year Diploma in August, 1952, in February, 1953, and in June, 1953.

<table>
<thead>
<tr>
<th></th>
<th>August</th>
<th>February</th>
<th>June</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed.B. degree</td>
<td>1</td>
<td>19</td>
<td>109</td>
<td>129</td>
</tr>
<tr>
<td>Five-year diploma</td>
<td>17</td>
<td>42</td>
<td>67</td>
<td>126</td>
</tr>
</tbody>
</table>

CURRICULUMS

There was little change in curriculums during the past year. Teachers College continues to offer curriculums in the three major areas of preschool-primary education, elementary education, and secondary education. In the
last named, special teaching-field concentrations are offered in art, commercial subjects, counseling, English, health and physical education, library science, mathematics, music, science, social studies, speech, vocational agriculture, and vocational home economics. With the exceptions of industrial arts and languages, this list includes all the areas for which the Department of Public Instruction endorses the Professional Teachers Certificate in Secondary Education. Without exception, the number of credits in subject matter courses for each teaching field required by the Teachers College curriculums is in excess of the minimum number required by the Department of Public Instruction for certification. Normally, a student in the secondary curriculum qualifies for certification in two teaching fields, occasionally in one only, as in music, and even more infrequently in three, by attending additional summer sessions or an additional semester.

The first two years of all curriculums in Teachers College are practically identical. The courses in these two years are designed to provide a broad background of general cultural education, including art, English, health and physical education, history (including a course in American history), natural and biological sciences, psychology, social sciences (including a course in U. S. government), and speech. Courses to provide subject matter background for special teaching fields in the secondary curriculum are in addition to these basic courses which are required of all students.

LABORATORY SCHOOLS

The laboratory schools are operated primarily for the purpose of providing supervised teaching experience for senior students in Teachers College. For the year 1952–53, these schools included two kindergarten groups, five groups in the preschool, two groups each in grades I through IX, and one group each in grades X through XII. The preschool groups and grade I constitute the University Preschool, grades II through VI the University Elementary School, and grades VII through XII the University High School. For 1953–54 an additional grade X group is planned, thus increasing the maximum capacity for supervised teaching by six (three each semester).

Although the primary purpose of the laboratory schools is to provide supervised teaching experience, they also serve the needs of the approximately 675 pupils enrolled. The popularity of these schools is indicated by the fact that in May, 1953, there were 540 applicants for 49 vacancies existing for September in the Preschool. Although the demand is not quite so great in the Elementary and High schools, there always are at least twice as many applicants as vacancies.
INTERN PROGRAM

Teachers College co-operated with the Department of Public Instruction in the operation of 12 intern centers, providing supervised teaching experience for 128 fifth-year students. No additions are anticipated for next year, but for 1954-55 it probably will be necessary to add two new intern centers.

IN-SERVICE TRAINING

One of the important functions of Teachers College is to provide opportunity, through course offerings, for the professional improvement of teachers in service. This is accomplished by scheduling certain courses on the campus at late afternoon, evening, and Saturday hours and by offering off-campus courses both in Honolulu and on the other islands. Approximately 185 teachers are attending one or more of these courses on this campus. Instructional staff members offer a number of courses in Honolulu, rural Oahu, and on the other islands. Some staff members also offer courses on the other islands, and considerable assistance is given to the DPI in its in-service program.

The greatest need appears to be for more course offerings on the other islands. Teachers in Honolulu schools and in the nearby rural Oahu schools can get to the campus, but opportunities are extremely limited on Hawaii, Maui, and Kauai, and such opportunities are practically nonexistent on Molokai and Lanai. In recent years an increasing number of summer session courses have been offered on the other islands. Although this practice does help the situation, much more could be done in the way of in-service training if funds were available.

COLLEGE OF AGRICULTURE

Dean Harold A. Wadsworth

Unlike other colleges in the University, the College of Agriculture includes two services financed in part by federal appropriations: the Agricultural Experiment Station, devoted to agricultural research, and the Agricultural Extension Service, which carries the findings of the research workers to the farmers and brings new problems confronting the farmers to the attention of the scientists. The consolidation of these activities with the teaching program in agriculture continues to be productive and economical.

ENROLLMENT

Total enrollment of undergraduates in both agriculture and home economics continues to exhibit the small reduction which was noted last year.
STUDENTS REGISTERED AT OPENING OF SECOND SEMESTER

<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Home Economics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1950-51</td>
<td>1951-52</td>
</tr>
<tr>
<td></td>
<td>1952-53</td>
<td>1950-51</td>
</tr>
<tr>
<td></td>
<td>1951-52</td>
<td>1952-53</td>
</tr>
<tr>
<td>Freshmen</td>
<td>51</td>
<td>58</td>
</tr>
<tr>
<td>Sophomores</td>
<td>44</td>
<td>35</td>
</tr>
<tr>
<td>Juniors</td>
<td>70</td>
<td>56</td>
</tr>
<tr>
<td>Seniors</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>192</td>
<td>177</td>
</tr>
</tbody>
</table>

FIELDS OF SPECIALIZATION

Regular students in agriculture may major in vocational agriculture, tropical crop production, technical agriculture, or general agriculture. Young women interested in home economics may major in vocational home economics, institutional management, foods and nutrition, or general home economics.

The following table gives the distribution of the graduates of 1952-53 among these fields of specialization.

GRADUATES OF THE COLLEGE OF AGRICULTURE, 1952-53, BY FIELDS OF MAJOR INTEREST

<table>
<thead>
<tr>
<th>Agriculture</th>
<th>Graduates</th>
<th>Home Economics</th>
<th>Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational agriculture</td>
<td>11</td>
<td>Vocational home economics</td>
<td>13</td>
</tr>
<tr>
<td>Technical agriculture</td>
<td>13</td>
<td>Institutional management</td>
<td>5</td>
</tr>
<tr>
<td>Tropical crop production</td>
<td>7</td>
<td>Foods and nutrition</td>
<td>0</td>
</tr>
<tr>
<td>General agriculture</td>
<td>15</td>
<td>General home economics</td>
<td>10</td>
</tr>
<tr>
<td>Totals</td>
<td>46</td>
<td></td>
<td>28</td>
</tr>
</tbody>
</table>

The program of student advisers has been strengthened during the year. Entering students are assigned to a faculty adviser upon the student's initial registration. This adviser is responsible for the program undertaken by the student until change of curriculum makes a new adviser desirable. The adviser recommends course work which will fulfill the technical requirements for graduation and at the same time contribute to the student's social and economic understanding.

The program in vocational agriculture, designed in large measure by the Territorial Board of Vocational Education, has been under review by interested persons in an effort to set up a new five-year program in more realistic accord with the local needs and with the resources of the University. Graduates from the program in vocational agriculture find employment in the public school system and in the Agricultural Extension Service.
Graduates from the curriculum in technical agriculture continue to gain admission to graduate schools, both in the University of Hawaii and in mainland schools, without question as to the adequacy of their preparation.

Work in tropical crop production prepares men for productive work with the locally grown plantation crops. Carefully selected graduates move into the advanced training program maintained by the Hawaiian Sugar Planters' Association.

General agriculture is a more flexible program than the others. It is designed for students who propose to participate personally in diversified crop production in Hawaii. Although numerous elective subjects are allowed, they are carefully chosen by the student, in consultation with his adviser, so that the completed program will prepare the student for his specific interest. The generous scholarships provided by the Sears Roebuck Foundation are available to students in the general agriculture curriculum.

SHORT COURSES AND FIELD EXHIBITS

As a result of the College organization, demonstrations in new agricultural practices can quickly be carried to practicing farmers. Field days, one-day short courses, and demonstrations have become an increasingly important part of the program of agricultural instruction.

The following short courses were parts of this Territory-wide instructional program during the year:

Field day at Waimanalo, Oahu, on October 11, 1952, which exhibited recent findings by the Experiment Station and demonstrated new farm tools and practices.

Calf school at Waimea, Hawaii, on October 24, 1952.

Range management school at Waimea, Hawaii, on November 21 and 22, 1952, devoted to range grass improvement, conservation methods, and pasture weed eradication.

Two fruit clinics involving a demonstration of pruning and spraying methods on Maui in March, 1953.

Truck crop short course in Hilo, Hawaii, on May 27–29, 1953, devoted to the introduction of new vegetable varieties developed by the Agricultural Experiment Station and to vegetable disease control.

OTHER COMMUNITY SERVICES

Members of the College faculty continue to contribute to community activities. During the year staff members participated in the completion of the program for emergency food production and delivered their findings to the Director of Civilian Defense. Other major activities included participation in the work of the Council of Economic Advisers for Hawaii,
created by the Twenty-seventh Legislature, continued work on the Pasture Land Advisory Committee of the Commissioner of Public Lands, and participation in the administration of the Soil Conservation District Act of 1947. Members of the staff have contributed to the planning and presentation of economic seminars promoted by the Department of Public Instruction.

Foreign students under the sponsorship of the Mutual Security Agency of the federal government continue to come to the College for short periods, primarily for instruction in Agricultural Extension methods. The College of Agriculture was compelled to withdraw from the original co-operative agreement in September, 1952, because of its limited facilities and an inability to secure outside support commensurate with the cost to the Territory. Trainees who are now accepted come in large groups under special arrangements with Washington. The last group consisted of 27 Pakistani interested in Agricultural Extension methods, and in sugar and pineapple production.

HOME ECONOMICS

The 1952 summer session was highlighted by a workshop in family life, sponsored jointly by the Territorial Department of Public Instruction and the University of Hawaii and conducted by Dr. Muriel Brown, of the U. S. Office of Education. This workshop provided an opportunity for people engaged in various aspects of social work to consider together the content and goals of family life educational programs and to explore methods, approaches, and materials for such programs.

Thirty-seven participants registered for the three-week session and 28 for the six-week session. They included public health nurses, staff members of the DPI and the University, a school principal, a health clinic supervisor, and teachers in adult education and kindergarten, elementary, and secondary schools.

Five home economics majors were employed by the DPI, one fifth-year major was employed at Ewa and another at Hawaiian Electric Company, nine are candidates for vacancies in home economics on neighbor islands, and one fourth-year major is now on the staff of the University Extension Service.

Two fifth-year intern teachers were chosen by the DPI as advisers for the Future Homemakers annual convention on Hawaii, and fifth-year intern and fourth-year practice teachers participated in the Home Economics Teachers conference in November.

Interest in hospital dietetics and institutional management is increasing. Five students graduated in this field and were appointed to internships in mainland hospitals for a year of additional training. Because of the large
number of students who wish to enroll in Problems in Hospital Management, which requires 200 hours of work in a local hospital, arrangements have been made for them to train at Leahi, Kuakini, The Queen’s, and St. Francis hospitals.

Experimentation with a photographic method of figure analysis is continuing and has already become invaluable as a teaching aid.

Uniforms worn by the Menehune Service Committee, a student guide group, were made by sophomore students in Family Clothing as a group project to develop speed techniques in clothing construction. Draperies for the Veterans’ Dormitory were made from fabrics woven by Art Department students. Home Management House was refurbished with new draperies and slip covers, and classroom cupboards and file cabinets were remodeled and repainted.

Household Art students organized and produced the annual Pan-Pacific Festival fashion show. This year emphasis was on the proper costume to express and develop one’s personality.

As a service to the School of Nursing, a freshman course in food and nutrition was offered and very well attended. In addition, a sophomore course in diet therapy will be offered next year.

This year, the recipient of the American Association of University Women Pacific Fellowship Award, a dietitian from Australia, has been working for her master’s degree in nutrition. Upon completion of her thesis, the degree will be granted at the end of summer school, 1953.

HAWAII AGRICULTURAL EXPERIMENT STATION
Associate Director Louis A. Henke

The improvement of beef cattle through the application of breeding methods, a co-operative experiment involving five ranches, has been in progress during the year, and data on the first calf crop are now being accumulated.

CANE MOLASSES AS CATTLE FEED

More than 100 calves have been utilized in a study to reduce the feed cost of raising dairy replacement animals by using milk substitutes. Gains of the calves fed milk substitute were slower but were made at a materially lower cost—27 cents per pound as compared with 44 cents for those fed some milk during the first six months. At 30 months of age, the milk-substitute-fed calves weighed as much as the milk-fed calves.

Twenty-five per cent cane molasses has long been used in rations fed
milking cows at the University dairy. In recent trials this was increased to 35 per cent with only a slight reduction in local products. This is one of many trials designed to use more locally produced by-products in animal nutrition.

Although koa haole is widely used as a forage crop for cattle, rumors persist that continuous feeding of koa haole has detrimental effects. One female sheep was fed only koa haole over a period of two years and 22 days, after which the animal was slaughtered. In general, the sheep appeared to be in normal health. Histological studies of vital organs of this animal have not yet been completed.

Co-operating with the Experiment Station of the Hawaiian Sugar Planters' Association, which supplied much of the feed, studies have been continued to further evaluate cane molasses and bagasse pith in animal nutrition. Bagasse pith, which is the finer part of the bagasse, has a remarkable capacity to absorb molasses. One part of pith will readily absorb four parts of molasses, leaving a reasonably mealy feed. This facilitates the use of molasses for farmers and others who have no facilities for handling molasses in the liquid form. Nineteen dairy heifers and 56 Hereford steers have been fed various combinations of feed including bagasse and molasses from which the following conclusions appear to be justified:

1. Gains on molasses-bagasse pith rations are very slow or actual losses result during the first month or two.

2. Reducing the bagasse pith and increasing molasses result in better gains and more efficient feed utilization. The value of the bagasse pith seems largely one of being a carrier for molasses and making a usable feed mixture that can be bagged.

3. B-grade molasses, in general, gave superior results to "final" molasses. However, since its cost is about three times that of final molasses, it may not result in cheaper gains, and it is not as readily available everywhere as is final molasses.

4. A mixture of approximately 25 per cent bagasse pith and 60 per cent final or B-grade molasses with suitable protein and mineral supplements has produced about the best gains, ranging around 3 pounds per steer per day in the latter part of the feeding trials. However, in the earlier months of these feeding trials, gains were much lower, or actual losses resulted.

Apparently, after the animal becomes adjusted to the molasses-bagasse combination of feeds, satisfactory gains are made, but generally the period of adjustments has been too long. The reason for this and the possible ways of improving and getting better results need to be investigated further.
Sugar by-products including both final and B-grade molasses have also been fed extensively to pigs with generally satisfactory results, but when molasses is fed in too large amounts, diarrhea results. Experiments are now underway to determine which mineral constituents or combinations of minerals are primarily responsible for causing diarrhea.

**PASTURE PROBLEMS**

Pasture fertilization studies conducted over the years have shown that the response to nitrogen fertilizers up to about 60 pounds of nitrogen per acre per crop or per grazing or 400 to 500 pounds of nitrogen per acre per year is almost a straight-line function of the amount of nitrogen applied. In terms of forage production and present prices of fertilizer, the cost of increases in production averaged: green forage, $3.00 to $5.00 per ton; digestible protein, 10 cents to 25 cents per pound.

Several of the newly developed varieties of alfalfa have proved to be higher yielding than the Hairy Peruvian variety commonly grown in Hawaii. Fertilizer investigations have shown that, in addition to lime, phosphates, and potash, alfalfa also requires boron and molybdenum.

A project, financed largely by the Industrial Research Advisory Council, is underway to determine the feasibility of dehydration of locally produced legumes, such as koa haole and alfalfa.

**CROP LOG**

Principles and practices involving the crop log which were developed for use at irrigated plantations are now being applied with considerable success on unirrigated plantations, notably through the use of airplane distribution of dry fertilizers. Aerial application enables the farmer of unirrigated cane to feed his plants with the same precision as is being practiced on irrigated cane lands. Irrigation studies conducted co-operatively with a sugar plantation are yielding results which show the tensiometer to be an instrument which can be used with considerable precision in determining the point in soil moisture depletion at which irrigation water should be applied.

The crop log is now being adapted to serve as a guide in the proper fertilization of macadamia nuts. Leaf concentrations of nitrogen, potassium, and phosphorus in trees suffering from deficiencies of these elements were determined. On the basis of this information, leaf concentrations indicative of adequate supply of these elements were suggested which form tentative values as a guide to fertilizer requirements until more precise values are determined from other experiments now in progress.
FRUIT FLY STUDIES

Research studies on the evaluation of the parasites introduced to combat the Oriental fruit fly indicate that the parasites have now exerted their maximum influence. The infestation or damage by this fly is only a fraction of what it was five years ago.

Considerable progress has been made with taxonomic studies of fruit flies. A comprehensive revisional study of the Dacinae from a large part of the Pacific area has been completed. The manuscript will be published in an early number of Pacific Science.

Some 6,000 fireflies were obtained from Japan and released to combat fresh-water snails, which are known to be carriers of the cattle liver fluke. A survey has been made and studies started on the biology and control of the cattleyafly which is a serious pest of cattleya orchids.

POULTRY STUDIES

Studies conducted by the Poultry Department showed that as much as 40 per cent of a B-grade molasses-bagasse pith mixture (10 to 1, by weight) of total ration can be fed to young chicks up to 42 days of age with concomitant growth and feed efficiency equal to a standard mainland-style ration, provided care is taken to replace the protein lost by the substitution of the cereal grains. In two trials, when this "sugar" mix was fed to laying pullets at 35.5 per cent of the total ration, egg production was 91.9 and 92.2 per cent that of the respective controls. Higher levels have been fed to chickens of all ages, even to the complete exclusion of the cereal grains. However, feedings above these levels show diminishing returns. These experiments demonstrate that, when supplies of cereal grains are not available due to interruptions in shipping service between the mainland and Hawaii, B-grade molasses, locally produced, can be utilized as a satisfactory partial feed replacement.

A study of out-of-season hatching showed that fall-hatched chicks were more profitable than others hatched in the winter, spring, and summer. Out-of-season hatching tends to create a more orderly flow of eggs into the Honolulu market, thereby helping to prevent the springtime glut and to stabilize egg prices.

It was shown that second-year egg production is inefficient. In this study, the layers during their second year of production required 39.8 per cent more feed to produce a dozen eggs.

PARASITES IN HOGS AND HUMANS

Surveys have indicated that 22 per cent of the local hogs are infected with kidney worms and losses at slaughter from condemned livers and kid-
neys amount to approximately $30,000 yearly. Research at the Hawaii Station has shown that a commercial borax compound, when applied as a spray on the soil, is effective in destroying kidney-worm larvae which are present. This finding is of great importance not only to Hawaii but to other areas where the swine kidney worm is present.

Nineteen cases of liver fluke infections in humans have been reported. One of these, which occurred recently, proved fatal. Watercress is a possible source of liver fluke infection in man, provided the location of the watercress area is such that drainage from places where cattle are kept goes into the ponds. All the known commercial watercress growing areas on Hawaii and Oahu have been surveyed for the presence of lymnaeid snails and the possible pollution from cattle or pigs. These have been classified as satisfactory, doubtful, and unsatisfactory. Following these surveys, meetings with watercress growers were held for the purpose of explaining and recommending proper agricultural practices aimed at protecting human health.

PLANT VARIETIES

A new F₁ hybrid tomato with good horticultural characters and combining inherited resistance to four diseases was named Kalohi and released for farmers' trials.

A new cucumber variety developed by the Vegetable Crops Department was named Ilima, and seed has been made available to farmers troubled with cucumber mosaic virus. This variety has an exceptionally high degree of inherited resistance to this virus and will produce good crops where other varieties fail.

A new variety of litchi named Groff, resulting from a ten-year study of approximately 500 seedlings, was introduced during the year. Propagation material of this litchi variety is being distributed by county agents to nurserymen in the Territory who, it is expected, will produce trees for public sale.

Selection of superior varieties from a collection of over 90 guava seedlings is now being carried on. This work anticipates that the source of superior guavas will eventually be tree fruits rather than wild plants in the expansion of our guava jam and jelly industry. Selection of superior passion fruit is in progress.

A system for training stronger macadamia trees for orchard planting was devised. This system takes into account the natural growth habit of the macadamia and the observed tendency of certain specific buds to form stronger branches than others.

Twenty varieties of mangoes were frozen during the summer of 1952 to test their suitability for quick freezing. Some of the most popular eating varieties are proving not to yield the best quality of frozen products.
PLANT DISEASES

Numerous diseased plant specimens were submitted for diagnosis and recommendations for control. In most instances, visual examination or microscopic test disclosed the nature of the disease, but in some instances cultured tests were necessary. Over 123 separate isolations were made. Further tests to control carnation root rot showed that Dithane Z-78 was most effective.

Much work, largely supported by an Industrial Research Advisory Council grant, was done on the control of yellow bud blight and flower, spike, and sheath rot of Vanda Joaquim in the Hilo area. Research has established that three nematocides, Shell Compound 1836, Methyl Parathion, and Systox, were the most effective in killing the nematode in the flower buds. One hundred per cent kill of nematode was obtained, but all open flowers and buds were killed. The plant itself was not apparently injured. Complete recovery from the effects of the disease on the spikes and buds was evidenced by the new clean flower spikes which emerged. Further studies are needed to determine the most effective and optimum dosages, the least phytotoxic concentration, and the interval of spray applications.

CONSUMER PREFERENCE STUDIES

Research studies of consumer preferences for six vegetables disclosed that family consumption varied by race and income groups. More cabbage is bought in the low income group but, more tomatoes were consumed by the high income groups. Three fourths of all families purchased canned vegetables as well as fresh, but only 35 per cent used frozen vegetables.

A study of meat consumption showed that the civilian population of the Territory used nearly 57 million pounds of which 46 per cent was of Territorial origin, 53 per cent from the mainland, and 1 per cent from foreign sources. Nearly half the total meat consumed was beef and veal, and about one third was pork. Lamb and mutton accounted for only 2 per cent of the total. Per capita consumption of all meats on Oahu was 139 pounds for 1952.

OTHER MAJOR PROJECTS

1. The Agricultural Engineering Department designed two irrigation gates for aluminum flumes which have been demonstrated to representatives of the sugar industry.
2. The macadamia nut harvester has been completed and tested on Oahu and Hawaii. Tests indicate need for further modifications, especially in the stony soil areas.
3. A standard hammer mill has been modified to provide independently controlled variable speeds for the hammers and for the blower to adapt this machine for threshing locally produced seed. During the year 3,000 pounds of seeds were produced as a service to local ranchers which greatly alleviated a major problem in the development of Hawaii's pastures—the securing of a supply of suitable seeds of the forage and pasture species of tropical origin.

4. A milking parlor was designed for a local dairyman, and a sprinkler irrigation system was planned for a ranch.

5. Experiments have shown that ethylene chlorohydrin can be used to break the rest period of gladiolus corms in place of the standard cold storage treatments.

6. Other tests have demonstrated that the practice of pinching back seedling papaya trees, which has been done in the belief that it induces lower bearing, has no foundation in fact. Recommendations for its discontinuance have been publicized.

7. Two fruit products have been developed during the past year. These products—frozen passion fruit juice and stone-cell-free guava puree—are ready for industrial development, as they are superior in quality to present commercial products and can be processed at the same or lower cost.

8. Studies which will provide a basis for selecting varieties of avocados suitable for shipment to the mainland as well as for local markets are underway. Experimental shipment of selected avocado varieties are being made to the mainland to determine the marketability of these selections and to compare the market price they will bring in competition with mainland avocados.

9. To round out the survey of local foods for vitamin values, 68 samples of foods have been tested for ascorbic acid, 20 for the B vitamins, and 32 for carotene.

10. The influence of climate and time as soil-forming factors in the genesis of tropical soils has been established through studies of mineral associations. The identification of soil minerals in Hawaiian soils follows the order predicted in a sequence of mineral weathering of rocks under a given climatic condition and under a given time of exposure. Also, the effect of the protective role of a vegetative cover to tropical soils has been fully established in that it protects soils from the deteriorating effects of dehydration.

PLANT ADDITIONS AND IMPROVEMENTS

Both the orchid house and the anthurium house were enlarged during the year so that they now have twice the former capacity.

Major building improvements include a new roof on a poultry building, painting and floor repairs in the nutrition laboratory, and new benches in the Plant Pathology house.
The irrigation system was slightly extended at both the Mid-Pacific Tract on University Farm and at the Waimanalo Experimental Farm.

PUBLICATIONS

Publications issued by the Station during the year included:

- Bulletins: 2
- Technical Bulletins: 5
- Circulars: 3
- Progress Notes: 8
- Agricultural Economics Bulletins: 2
- Agricultural Economics Reports: 3
- Technical Papers: 32
- Miscellaneous Papers: 3
- Biennial Report: 1
- *Farm Science* quarterly: 4 issues

AGRICULTURAL EXTENSION SERVICE
Associate Director Y. Baron Goto

Although handicapped by limited funds and many unfilled positions, the Agricultural Extension Service carried on its work during the fiscal year in creditable fashion. Highlighting the year's activities were 6,864 Extension-planned meetings with a total attendance of 161,822. Other Extension teaching methods were used to disseminate information and develop new skills among the people of Hawaii. There were 35,138 farm and home visits by Extension workers, and 7,305 individuals called in person for information at Extension offices throughout the Territory. Those who received information by telephone totaled 17,853. Extension information was brought to the attention of the public through 906 articles, 48,258 circulars and bulletins, and 286 radio talks.

REVISED CROP AND MARKETING SERVICES

Crop and market reporting services and publications were revised, and farmers were informed how this new information could be utilized to advantage in the face of increasing costs and fluctuating prices. New techniques of marketing Island agricultural produce with minimum loss were developed and demonstrated to grower, wholesaler, and retailer. Postharvesting treatments and new and cheaper types of containers adapted to air freight and surface transportation were among the more important improvements.

Many farmers, particularly cane growers, were assisted in production-cost studies after the completion of a similar study for rice growers and the initiation of another for coffee planters. The Extension account book was improved and republished, and the usual tax preparation services were extended to farmers through the county agents of the Extension Service.
The production and marketing phases of the swine, fruit, and truck crop industries were brought into closer co-ordination. Farm co-operatives were given advisory assistance.

NEW SOIL CONSERVATION DISTRICTS

Co-operative soil conservation activities increased as a result of the formation of three additional soil conservation districts. Approximately 64 per cent, or 3,383, of the Territory's farms may now obtain assistance from this source. Approved soil conservation practices brought in a total of $182,000 to farmers in compliance payments from the Production and Marketing Administration.

POULTRY PROJECTS

The major accomplishment in poultry was the pullorum control and eradication program under which 12,295 breeders were tested, making it possible to hatch thousands of chicks free of this highly infectious disease. Additional information in turkey production and marketing assisted Molokai Ranch in stepping up production to 5,000 birds from a previous year's total of 500.

Approximately 223 members were enrolled in 4-H poultry projects, with the home broiler-fryer contest now in its fourth year as the major activity. Some 6,463 circulars and bulletins relating to poultry production were issued. Nineteen circular letters containing the latest information on poultry husbandry were sent to county agents. Meetings held totaled 29, with an attendance of 1,729. Fourteen demonstrations were presented to a total audience of 568.

LIVESTOCK AND PASTURE IMPROVEMENT

There was a moderate expansion in the dairy herd improvement program, nine dairies having had over 1,500 head of cows on test. Interest in raising more dairy cow replacements locally continued. Consequently, the number of imported cows showed a decline over that for the previous year. Calf schools held in three major localities were attended by 340 people. The 4-H beef steer project continued to expand, with 75 steers in the hands of 4-H'ers compared with 47 the previous year. There was also increased interest in exhibition of 4-H steers at fairs.

The more promising ranching developments were the use of wet forest lands for pasture, the development of irrigated pastures in the dry lowlands, water distribution in the rangelands, and increased interest in seed production. Drought conditions during the past 18 months led to the clearing and seeding of undeveloped wet forest lands. Increased interest in irrigation
for dry lowland pastures stepped up the carrying capacity of these range-lands with satisfactory results. Production of tropical forage seed under irrigation has proved profitable for local ranchers and eliminated the accidental introduction of pasture plant pests. Ranchers also realized the advantage of good land preparation through increased use of mechanical equipment.

4-H PROGRAMS

The youth educational program continued and made good headway with the assistance of 335 senior and 104 junior volunteer leaders who were trained through schools conducted by specialists and provided with special leader leaflets covering various simple job instructions. Agents devoted over one third of their time to this project.

There were 306 clubs with a total membership of 4,111—1,783 boys and 2,328 girls. Agents conducted 298 training meetings for leaders and their assistants, who in turn gave 3,282 method demonstrations before a total group attendance of 19,848 persons. A combined attendance of 7,299 was reported for 110 tours and 97 achievement days. Three new contests were added to the special contests and awards programs designed to create interest in, and the development of, better 4-H project work.

MORE HELP TO HOMEMAKERS

Assistance in all phases of home living were geared to major family problems brought about by the high cost of living and by the increased number of appliances, utensils, fabrics, and furniture available. About 2,500 homemakers received information which promoted better practices in money management and in the selection and purchase of household appliances and furnishings and of fresh and canned products.

Over 2,958 families received instructions in basic principles of nutrition and have planned and served meals carrying out these fundamental principles of good health. A total of 3,665 families were assisted with food production, 4,700 with food preparation, and 3,342 in the canning, freezing, drying, and storing of food.

There were 67 4-H clothing project clubs with a total enrollment of 844 girls, 615 of whom completed their projects and made 2,419 garments. In addition to making clothes and accessories for themselves, they were also taught to make miscellaneous equipment, to improve their grooming and personal health habits, and, moreover, to share their knowledge with others.

Economy and improvement of sewing skills were the chief goals in the adult women's clubs. A total of 7,346 families were assisted either with clothing construction problems, selection of clothing and textiles, care, ren-
ovation, and remodelling of clothing, or clothing budgets. This was accomplished with the assistance of 576 leaders who were trained at 35 separate meetings in nine counties. Six counties held 13 schools with 224 participants who were given training in skills of selection and construction of clothing for the family.

**FILMS AND FILM STRIPS**

The use of audio-visual aids in Extension group education continued to rise, with 1,832 films shown 4,664 times to a total attendance of 195,347 persons.

The permanent file of 142 motion pictures and 150 film strips was increased by the acquisition without cost of 48 prints of movie films and 12 film strips. Facilities of the department were augmented with the loan from various co-operators of 177 movie films on a part-time basis. This field of service is steadily widening and now embraces portions of the Trust Territory. Forty-one circulars were issued to acquaint Extension personnel with the latest developments in the audio-visual aids program.

**VEGETABLE CROP IMPROVEMENT**

Visits to 250 farms in the nine Extension counties with our respective county agents were necessary to carry out the work of the Truck Crops Department. Twelve method-demonstration meetings with a total attendance of 270 were held on specific phases of seed treatment, soil fumigation, fertilization, insecticides, fungicides, herbicides, and cultural practices. Vegetable production meetings numbered 15, with a total attendance of 530. There were 14 vegetable variety adaptability trials conducted, 9 fertilizer trials, and 15 result demonstrations on vegetable varieties, herbicides, surface mulches, and nematode resistance.

Educational exhibits were prepared for the Waimea, Hawaii, Kauai, and 49th State fairs.

About 3,500 packets of various seeds produced by the Experiment Station's Vegetable Crops Department were distributed for seed production and trial. Cuttings of four Experiment Station sweet potato varieties were distributed to 50 growers.

**OTHER MAJOR PROJECTS**

1. The surveying of Territorial lands at Kamuela, Hawaii, suitable for irrigation and exchange with Parker Ranch.
2. Installation of eight result demonstrations on pasture fertilization and the effect of minor elements on coffee and flowers. These were in addition to several demonstrations on vegetables.
3. Recommendations of fertilizers based upon soil analysis, crops to be grown, and past treatment. About 40 recommendations per month were made as a result of 5,548 determinations on 1,387 soil samples.

4. Introduction to all counties of a new gooseberry-like fruit (*Dovyalis abyssinica*) that tastes like an apricot.

5. Trials run in two counties on a table variety of pineapple.

6. Training of University Extension club leaders in all counties in landscaping, dish gardening, ornamentals, and fruit production.

7. Preparation of two club leader leaflets and outlines for banana fertilization, chrysanthemum lighting, and macadamia and papaya varietal demonstrations. Revision of a circular on air layering of litchi.

8. Promotion through varietal demonstration trials of good chrysanthemums with nine co-operators in six Extension counties.

9. Organization of a hibiscus society to standardize the Territorial flower was started with the assistance of the Experiment Station and South Oahu County.

**COLLEGE OF BUSINESS ADMINISTRATION**

**Dean Harold S. Roberts**

The College of Business Administration graduated 115 men and women in June. This is the second class to graduate since the founding of the College in 1949.

The College student body showed a slight increase. Enrollment for the year was 634. The freshman class, numbering 211, was the largest of the four. The junior class numbered 167; the sophomore, 141; and the senior, 115. Men students predominated in the College, accounting for 80 per cent of the total. The 20 per cent enrollment for women, however, indicates a substantial interest for work opportunities in the business field.

The accounting specialization has continued to be the most popular field in the College. Thirty per cent of the graduates were awarded degrees with majors in the accounting curriculum. Merchandising accounted for 23 per cent; Personnel and Industrial Relations, 14 per cent; General Business, 14 per cent; Banking and Finance, 13 per cent. The office management curriculum continued to attract the smallest number of students. Part of the difficulty in attracting students to this field may have been the lack of adequate equipment and the inability to train students in the techniques of typing and shorthand. Business interest and support in this area may lead to substantial progress in this field. Efforts have also been made to initiate work in the real estate and insurance field. The Legislature approved our budget request for exploratory efforts in this area.
Adult Education—The University Extension Division offers afternoon and evening courses all the way from A, Agriculture, and B, Business, to Z, Zoology. Here members of a television workshop rehearse at a local station.

Student Counseling—Katherine H. Wery of the Office of Student Personnel acts in the dual capacity of counselor on off-campus student housing and director of part-time student employment, an increasingly vital service to the undergraduate.
Air Force ROTC—A C-54 navigator explains the details of his job to Air Force ROTC cadets during one of a series of orientation flights made for their benefit from Hickam Field Air Base to a neighbor island.

Army ROTC—A professor of military science and tactics checks a pistol-range target at Fort Lewis, Washington, where Infantry ROTC cadets attended a six-week summer camp.
The College of Business Administration has continued its efforts to prepare its students for an understanding of the structure, functions, and objectives of American business enterprise, and to provide a realistic program of training in a number of specializations. It is hoped that from this pool of trained young men and women will come many of the junior executives for the business community of the Territory. To this end we have encouraged labor, management, and government agencies to recommend and suggest areas of training which will more effectively meet the needs of our community.

The present four-year program leads to the degree of Bachelor of Business Administration. During the first two years the student obtains an understanding of the world in which we live. He is required to take courses in the History of World Civilization, American History, General Psychology, American Government, and English literature. He also receives his introduction to the basic principles, functions, and objectives of American business enterprise. In addition, each student is required to take courses in Business Ethics, Principles of Economics, Elementary Accounting, Elementary Business Law, Business Calculations, Economic Geography, General Composition, and Business English.

During his junior and senior years he specializes in one of the following six fields: General Business; Banking and Finance; Personnel and Industrial Relations; Office Management; Accounting and Merchandising. Last year, curricular revisions, based on experience with the program, resulted in making Money and Banking and Business Statistics requirements for all six fields. It is necessary to review the course offerings regularly in order to meet the changing needs of our community. It would be helpful if graduates as well as members of the business community would let us know how our program can be made most effective in serving those needs.

In June, 1953, the Commerce Club issued its second directory of students who received degrees. The directory was enlarged and improved, and the community response to it has been excellent. In behalf of the students and faculty, I would like to extend thanks to the many business people who inquired about our students and found places for them with their companies. Continued co-operation in this area should prove of mutual advantage to the University and to the community of which it is an integral part.

**STUDENT PERSONNEL**

*Acting Dean Harold M. Bitner*

The services of the Office were expanded and improved in response to the nation-wide demand of students for personal development through
extracurricular activities and the increased interest of employers in activity records.

| Individual counseling contacts | 2,917 |
| Registration conferences | 531 |
| Psychological tests | 237 |

Total individual contacts: 3,685

| Attendance at group tests | 228 |
| Attendance at tests for mainland institutions | 341 |
| Attendance at group guidance sessions | 149 |

Total group contacts: 718

Grand total of contacts: 4,403

These figures compare favorably with those of universities with testing and guidance staffs twice the size of ours. The students' increasing demand for our services threatens to place so great a burden on our staff that conference appointments will have to be delayed and conference periods limited.

The Bureau of Testing and Guidance worked with the college deans and the Office of Student Personnel regarding students who were readmitted or dismissed, or who voluntarily withdrew from the University. It worked also with the Admissions Office on the special problems of students who had been denied admission to the University, or whose admission had been reconsidered, as well as with precollege freshmen who wished help in choosing a field of study.

The liaison relationship between the Territorial Vocational Rehabilitation Service and the 40 students under its sponsorship was successfully continued. A similar relationship was instituted with the Bureau of Sight Conservation and its seven students.

The Bureau of Testing and Guidance professional personnel participated actively in many campus and community activities during the year. They served on committees, helped organize campus charity drives, worked on the Freshmen Orientation program, chaperoned parties, advised clubs, held official positions in professional organizations, served as resource people or speakers for a variety of community groups, participated in high school career days, and talked on the radio.

BUREAU OF STUDENT ACTIVITIES

Essentially, this year has been a period of transition and an attempt "to keep our finger in the activities dike" as we worked toward the important step of completing the separation of the Bureau of Student Activities from the Bureau of Student Residences—a step that will eventually provide more effective service in both growing areas.
Although the number of students who participate in student activities seems to be increasing, the leadership still remains in the hands of a few. This concentration of leadership is resulting every year in a number of "overactive" leaders who are not doing themselves, their groups, or the University a service and who actually are eliminating other students from opportunities to gain leadership skills and experience.

Further, many of these students are beginning to let their excessive student activities serve as the excuse for their lowered scholastic averages. There is a point (varying with the individual) beyond which a student harms his health, loses sight of his primary reason for being in college, and with the growth of ego satisfaction in being a "BMOC" denies his own development as a socially responsible citizen. Obviously some serious attention is needed to counteract this trend. There seems to be an undercurrent tendency among "lesser wheels" on campus to evaluate present student leadership, an increasing recognition of the need for responsible leadership, and a growing resentment against opportunism at the expense of others.

Hemenway Hall operations under the management of the Board of Governors and the Program Counselors continued without curtailment during the 1952-53 school year, although staff changes occurred at the beginning of and during the year. Social, cultural, recreational, and educational interests of the University community were served through the Hall's program, facilities, and services.

The Director of Student Activities has been appointed the past few years by the University President to serve as University chairman of the orientation program for new students. During the past two years, and we hope this fall, the University will have had the three most complete orientation periods in its history. This has been accomplished by enlisting over 300 students annually to help us offer a program to the incoming 1,200 or more students.

The 1952 Summer Sessions Activities program was co-ordinated and sponsored by the University for the first time. A temporary part-time Coordinator of Student Activities administered the program. As a result, Hemenway Hall was in constant use throughout the summer for organized and unorganized use.

The Coordinator worked under the general supervision of the Director of the Bureau of Student Activities and the Director of the Summer Session. The program was well received.

STUDENT HOUSING

Taking stock, gaining perspective, and organizing the Office to handle our responsibilities under the Approved Housing program while maintaining
our Part-Time Employment Service for a growing student body have been our emphases this year. Of special concern to us have been the students in the categories listed below:

1. Dormitories and Rooming Houses
   Students living in 18 dormitories operated by churches and other organizations:
   Men . . . . 206  Women . . . .  73  Total . . . . 279
   Students living in 25 dormitories and rooming houses operated by private groups or individuals:
   Men . . . .  97  Women . . . .  25  Total . . . . 122

2. Room and Board Employment
   Students who work for room or room and board in private homes:
   Men . . . .  54  Women . . . . 200  Total . . . . 254

3. Single Rooms in Private Homes
   Men . . . .  67  Women . . . . 101  Total . . . . 168

Our work has been limited to gathering information, exploratory sessions with dormitory operators, close supervision of room and board placement, and learning how big the job of Approved Housing is.

Adequate housing for our students will continue to be one of our greatest problems as we work toward additional campus residences.

PART-TIME EMPLOYMENT

About 90 per cent of our students worked at some time during the calendar year. The following table indicates the extent to which our part-time employment services were used.

<table>
<thead>
<tr>
<th></th>
<th>Wages</th>
<th>Live-In</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student applications</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>609</td>
<td>50</td>
<td>659</td>
</tr>
<tr>
<td>Women</td>
<td>608</td>
<td>114</td>
<td>722</td>
</tr>
<tr>
<td>Total</td>
<td>1,217</td>
<td>164</td>
<td>1,381</td>
</tr>
<tr>
<td>Employers' job orders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>363</td>
<td>56</td>
<td>419</td>
</tr>
<tr>
<td>Women</td>
<td>471</td>
<td>300</td>
<td>771</td>
</tr>
<tr>
<td>Total</td>
<td>834</td>
<td>356</td>
<td>1,190</td>
</tr>
<tr>
<td>Job orders filled</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>287</td>
<td>38</td>
<td>325</td>
</tr>
<tr>
<td>Women</td>
<td>391</td>
<td>94</td>
<td>485</td>
</tr>
<tr>
<td>Total</td>
<td>678</td>
<td>132</td>
<td>810</td>
</tr>
</tbody>
</table>
The work in this office has far outstripped the ability of the one employment counselor assigned to it. Clerical help is a desperate need if this important service to our students is to be continued.

STUDENT RESIDENCES

This year marked the end of the first full year of the operation of the new Women's Residence Hall. There were 126 women living in the hall during the first semester and 98 during the second semester. They brought in less income than had been anticipated, causing anxiety on the part of all who are charged with the operation of the building. It is expected that the hall will operate at capacity during the summer session. Significant steps forward have been the establishment of deposit and refund policies, of a house council, and of a snack bar concession, and encouragement of the girls to help handle problems brought about through this type of daily living. Every effort is being exerted by the Office to educate students and parents to the advantages that come from campus living.

Hale Laulima, a co-operatively run dormitory, provided good facilities for 28 women. Extensive improvements have been made which will add to the student's comfort and the life of the building.

The pressing need for housing for men continues and is being met at present only by the use of reconverted barracks-type buildings. Every effort must be made to provide more adequate facilities for our male students.

ADMISSIONS OFFICE

For the summer and fall semesters, 1952, and the spring semester, 1953, 2,662 applications for admission were received, and the college aptitude examinations were given 47 times throughout the Territory. There was a slight increase in the number of applications for 1953 admissions.

Accepted students included:

- 1952 graduates of Territorial high schools, public and private: 1,681
- Graduates of mainland and foreign schools: 47
- Adults, part-time, and full-time: 516

Total accepted: 2,244

For seniors in the Territorial high schools, tests were again given in the early spring and notifications sent out by May 1. Rejected students were encouraged to arrange interviews with the Director of Admissions and with the counselors of the Bureau of Testing and Guidance to assist them in making alternate educational plans.
The Office of Admissions co-operated with the Associated Students of the University of Hawaii in sending out selected groups of students to all high schools on Maui and Kauai and to many city high schools to establish closer relationships with the University. In almost every case they were well received in the schools, and numerous expressions of approval came from high school administrators and counselors.

FOREIGN STUDENTS

During the past year, 42 students representing nine countries and the Trust Territory registered as full-time students. Of this group, 13 registered in the Graduate School, and the remainder (29) were admitted as freshmen or transfer students.

A foreign-student orientation week was held at the beginning of the term under the direction of the Foreign Students' Adviser. Orientation classes were held for approximately 20 students during each semester.

Our foreign students appeared as speakers at a large number of civic and community meetings. One student, Tomas Fruto of the Philippines, received an all-expense-paid trip to Kauai during the semester recess under the sponsorship of the Kauai Rotary Club.

Because of our location at this international crossroads we are in a position to provide additional education to students from all Pacific countries and islands. It is desirable that the program be further developed and that it be implemented by a full-time, instead of a part-time, position.

COMMITTEE ON SCHOLASTIC STANDING

The Committee ratified the dropping for academic failure of 683 students during the past year; 584 were officially advised that their work was not meeting standards that would eventually permit them to graduate. It was necessary to place 134 students on grade-point rule and to continue another 213 under its provisions.

On the more positive side, 63 students were removed from the condition of the grade-point rule and restored to good standing. Approximately 200 students applied for readmission after having been out of school for a time. The Committee accepted 151 of these on academic probation.
The past year marks one of the most important events in the history of the University: the Territorial Legislature provided for the construction of a new library building with an appropriation of $1,400,000. The architect's plans, which have been in process for over two years, are nearly completed; construction can be started whenever funds for the purpose are made available.

The plans call for a building that contains 117,000 square feet of floor space, with capacity for about 530,000 volumes and 900 readers. It is expected that this will provide adequate book and reader space for between 15 and 20 years. The building is designed so that, by the addition of two floors, there will be space eventually for nearly a million volumes and for 1,200 readers.
In planning the building, the architect and the librarian have kept in mind four basic principles: it must be made as comfortable for readers as is possible without air conditioning; it must be arranged for efficient operation; it must be flexible enough to be readily adapted to changing needs and conceptions of service; and, without loss of adequate control, it must make the books and other library materials as accessible and convenient for use as possible.

The building will have four floors. Located on the ground floor, a semibasement, there will be a large closed-stack area for books and back files of periodicals, an audio-visual center with a projection room for viewing films and a room for listening to recordings through ear phones, a reading room and offices to house the Legislative Reference Bureau, and the Oriental Library.

The main floor, which is on the same level as the entrance, will be occupied by the reference room, the reserve room, the central control desk, the processing division, the public catalogue, and the administrative offices. On two upper floors, adjacent to recent periodicals and a general collection of about 200,000 books, will be space for 400 readers. Here will be located also the Hawaiian Collection, the Teachers College Library, and the collection of government documents. It is believed that by bringing books and readers together in these areas, in a pleasant and comfortable yet studious atmosphere, a great deal can be done to stimulate voluntary reading as well as efficient study and research.

In designing the new library building the architects have worked closely with members of the library staff, the faculty Library Committee, and the University administration. This co-operative process has resulted in plans for a library that we believe will be well adapted to the needs and conditions of this University. The Territorial Legislators, by appropriating the funds for the building, not only have greatly aided the University but also have done much for the advancement of science and culture in Hawaii.

CIRCULATION

The Library's circulation of books dropped sharply from that reported last year, when we had the highest circulation in our history. The total circulation was then 224,573; this year it was 176,558. There is no entirely satisfactory explanation for this sudden decline in the use of the Library, but one plausible reason is the falling off in the quality of service that the Library has been able to offer. During most of the year there were several vacancies that could not be filled by qualified personnel simply because our salary scale for professional librarians has remained static, whereas in most
mainland university libraries it has moved ahead with the advancing cost of living. University students, in their search for reading and research materials, need the assistance of trained and capable librarians. Lacking that help, many of them go away empty handed or turn to the public libraries. With new rulings that make it even more difficult to fill vacancies, it is not expected that we will be able to improve the service next year.

ACQUISITIONS

A somewhat more optimistic report can be made on acquisitions than on circulation. Whereas last year the number of volumes added was 9,590, the lowest number reported since 1947, this year we have added 10,726 volumes. This, however, is still far below the median for university libraries in the United States which for the 70 libraries reporting in 1952 was 22,000 volumes.

It is not possible to indicate here the scope and variety of the many desirable books that were acquired during the year. Some of the most noteworthy sets and files of journals are listed below:


Juan Ferrando, Historia de los pp. Dominicos en las Islas Filipinas y en sus Misiones del Japon, China, Tung-Kin y Formosa ... Madrid, 1870-72. 6 vols.


GIFTS

Each year the Library receives from many friends of the University hundreds of gifts in the form of books or money for the purchase of books. These add a welcome supplement to the books that can be purchased from the budgeted funds. Among the donors the following should be especially mentioned:

Mr. Tin-Yuke Char presented $100 to be used for the purchase of standard reference books on insurance.

Mrs. C. Montague Cooke, Jr., presented a selection of titles recently published by Yale University Press, given in memory of Dr. C. Montague Cooke, Jr.
Mrs. Arthur L. Dean gave a useful collection of 81 volumes in general literature and science.

Mr. and Mrs. G. F. Falley and Mr. and Mrs. Harry L. Wells, visitors from Chicago, gave $50 for the purchase of books in the fields of chemistry and speech.

Mrs. Philip E. Spalding gave a valuable collection of 85 books chiefly on art and architecture. Also, from her private library, she loaned for exhibition and use a large number of beautifully illustrated volumes on landscape gardening.

Mr. Philip E. Spalding presented the library with Arnoldus Montanus, *Atlas Japonnensis: The Embassys to the Emperours of Japan*, London, 1670. This is one of the earliest and rarest volumes in English on Japan. A large folio, in an excellent state of preservation and illustrated with many engraved plates, this is now one of the Library’s treasures.

We are grateful to many other friends who each gave us one or more volumes. Their names are listed below:

Mr. Arthur C. Alexander  
Mr. Riley H. Allen  
American Board of Commissioners for Foreign Missions  
The American Chemical Society  
The American Council of Learned Societies  
The American Legion, Department of Hawaii  
Archives of Hawaii  
Lt. Commander Richard W. Arey  
University of Arizona Library  
Mr. William R. Bacon  
Mr. Ray J. Baker  
Mr. Louis P. Benezet  
Dr. Henry A. Bess  
Prof. Otto J. Beyers  
Mrs. Agnes C. Bickerton  
Dr. Leonora N. Bilger  
Bernice Pauahi Bishop Museum  
Mr. William J. Bonk  
Dr. Charles S. Bouslog  
Dr. Philip Brooks  
Mrs. Julia W. Brown  
Bureau of Sight Conservation and Work with the Blind  
Business Historical Society, Inc.  
Mr. C. Wendell Carlsmit  
Carnegie Endowment for International Peace  
Carnegie Institution of Washington  
Mr. and Mrs. George R. Carter  
Mr. Walter Carter  
Mrs. Alfred L. Castle  
Central Union Church  
Chamber of Commerce of Honolulu  
Dr. Wing-Tait Chan  
Mr. H. H. C. Chang  
Dr. Satis Chandra Chatterjee  
Mrs. James H. Chun  
Dr. Robert W. Clotpton  
Dr. Charles G. Coit  
Mr. Fred Max Colland  
Columbia University Libraries  
Mr. Melvin A. Conant  
Miss Agnes C. Conrad  
Miss Genevieve B. Correa  
Miss Virginia Crozier  
Mr. Preston Davis, Jr.  
Dr. A. Grove Day  
Dr. Otto Degener  
Mr. Meiric K. Dutton  
L’École française d’Extrème-Orient  
Mr. Kenneth P. Emory  
Mr. Max Ernst  
Prof. John B. Ferguson  
Mr. and Mrs. Stewart E. Fern  
Dr. Reuel L. Pick  
Mr. William S. Fincke  
Dr. James W. Frierson  
Mrs. Abraham N. Geller  
The Geological Society of America  
Dr. William A. Gosline  
Miss S. Alice Goss  
Government of Guam  
Miss Caroline Parker Green  
Mrs. Herbert E. Gregory  
Mr. Robert Halvorsen  
Dr. Edward S. C. Handy  
Haverford College Library  
Hawaii Natural History Association  
University of Hawaii Press  
Hawaiian Entomological Society  
Hawaiian Historical Society  
Hawaiian Mission Children’s Society  
Hawaiian Sugar Planters’ Association  
Dr. Colin J. Herrick
Mr. R. Renton Hind
Hiroshima University
Dr. Ralph C. Hoeder
Honolulu County Medical Library
Dr. Bernhard L. Hormann
Mr. Jason Horn
Mr. Volney A. K. Howard
Hunter College
University of Illinois
Industrial Research Advisory Council
Mr. Walter Y. Ing
Institute of Pacific Relations, Hawaii
Group
International Longshoremen's and
Warehousemen's Union Library
Prof. Harold A. Jambor
Japanese Consulate-General
Miss Virginia A. Jones
Mr. Lawrence M. Judd
Mr. Fred R. Kingman
Mr. Edgar C. Knowlton, Jr.
Mr. Noel L. H. Krauss
Miss Loretta Kuhns
Prof. Ralph S. Kuykendall
Dr. Nils P. Larsen
Legislative Reference Bureau
Dr. Arthur Lerner
Library of Hawaii
Mr. Russell Long
Mrs. Jules Magnette
Dr. Arthur J. Marder
Mr. Shelley M. Mark
Mr. Charles E. Martin
Prof. Leonard E. Mason
Dr. William M. Meredith, Jr.
Rev. Kanryu Michizuki
Prof. Carey D. Miller
Mr. Donald D. Mitchell
Mrs. Anne M. Morris
Mrs. Raymond S. Mukai
National Association for the
Advancement of Colored People
National Diet Library, Japan
The Newberry Library
Prof. Karl H. Niebyl
Mrs. Tomeki Nishioka
Prof. and Mrs. Ben Norris
Oahu Squadron, Air Force Association
Ohio State University Press
Mr. Gustaf W. Olson
Mr. Katsumi Onishi

Mr. Shigeo Oshita
Pacific Oceanic Fishery Investigations
Pacific Science Board
Dr. Harold S. Palmer
Prof. Irving O. Pecker
University of Pennsylvania
Mr. Henry E. Petersen
Miss Mary P. Pringle
Mrs. Virginia P. Ransburg
University of Redlands
Dr. and Mrs. John E. Reinecke
Dr. Saul H. Riesenberg
Mrs. Mary E. Riggs
Mrs. Miriam O. Rodenhurst
Mrs. Maybelle F. Roth
Royal Society of New Zealand
Mrs. Betty Sapaugh
Dr. Harold St. John
Dr. Allan F. Saunders
Mrs. Paul J. Scheuer
Scott Polar Research Institute
Mr. Earl Edward Sherff
Mr. Motomi Shindo
President and Mrs. Gregg M. Sinclair
Mrs. Archibald N. Sinclair
Miss Miriam E. Sinclair
Mr. Robert Sparks
Col. Thomas M. Spaulding
Dr. Edmund F. Spellacy
Mrs. Mary J. Stark
Rev. Houn Tamayo
Dr. Albert L. Tester
Trust Territory of the Pacific Islands
Tuesday Morning Study Club
Mr. Justin G. Turner
United States Federal Security Agency
United States Office of Education
Mr. K. Urada
Dean Harold A. Wadsworth
Dr. Claude Walker
The Watumull Stores
Dr. Chester K. Wentworth
Dr. Herbert F. West
Mrs. Edith B. Williams
Williams College Library
Dean Willard Wilson
Dr. Claude M. Wise
Mr. John H. Wrenn
Mr. John Wright
Yale University Library
Mr. James L. Yount
EXHIBITS

Through exhibits the Library has an opportunity for developing student interest in books, displaying some of the Library's special collections, and observing important anniversaries. Commemorating the five-hundredth anniversary of the printing of the Gutenberg Bible, the Library exhibited its valuable facsimile edition of that famous book. An interesting exhibit was shown of first editions in American literature, selected from the collection presented to the Library by Alice and Philip Spalding. An exhibit of European communist propaganda was prepared for the Library by Dr. Arthur J. Marder. Again this year, as she has for several years past, Mrs. Alfred L. Castle loaned exhibits from her private library. These included a collection of first editions of books by the Brontë family, a selection of great travel books, early illustrated books on insects, a remarkably complete Robert Frost collection, and an exhibit of the writings of T. E. Lawrence.

STATISTICS

A summary of the year's statistics on the Library follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bound volumes added by purchase</td>
<td>8,916</td>
</tr>
<tr>
<td>Bound volumes added by gift</td>
<td>820</td>
</tr>
<tr>
<td>Bound volumes added by binding</td>
<td>990</td>
</tr>
<tr>
<td>Total additions</td>
<td>10,726</td>
</tr>
<tr>
<td>Withdrawn</td>
<td>133</td>
</tr>
<tr>
<td>Net increase</td>
<td>10,593</td>
</tr>
</tbody>
</table>

Inventory

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of bound volumes</td>
<td>238,454</td>
</tr>
<tr>
<td>Total number of unbound parts</td>
<td>628,955</td>
</tr>
<tr>
<td>Total number of microfilm titles</td>
<td>3,419</td>
</tr>
<tr>
<td>Total number of maps (duplicates included)</td>
<td>31,831</td>
</tr>
<tr>
<td>Number of current periodical titles received</td>
<td>3,708</td>
</tr>
</tbody>
</table>

Circulation

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>General circulation</td>
<td>100,676</td>
</tr>
<tr>
<td>Reserve book circulation</td>
<td>75,882</td>
</tr>
<tr>
<td>Total circulation</td>
<td>176,558</td>
</tr>
</tbody>
</table>

LEGISLATIVE REFERENCE BUREAU

Director Norman Meller

In previous annual reports the Legislative Reference Bureau has recorded an ever-widening scope of research and an ever-increasing number of requests for services. Last year was no exception. The Bureau for the first time undertook major research designed to develop basic socio-economic
data and handled almost twice the number of requests as in the busiest previous year of its history.

At the request of the Citizens' Rental Committee, appointed by the mayor of the city and county of Honolulu, the Bureau conducted a survey of private rental housing in Honolulu. Through use of sampling techniques, information was gathered concerning housing, landlords, tenants, and rent control in Honolulu. The factual findings of the survey contained in the published report of the Bureau—*Honolulu Rent Control Survey*—enabled the city and county to reach a decision on the continuation of rent control. However, probably even more significant are the unpublished socio-economic data which were amassed as part of the survey. These materials will facilitate further sociological research by other University faculty members and permit a better understanding of community stresses.

The Legislative Reference Bureau first undertook administrative survey work in 1950. Since then, the Bureau has conducted surveys upon request of various governmental agencies. In 1952 a survey project was undertaken for the Hawaiian Homes Commission. After several months of observation and analysis of Commission activities, the Bureau prepared a report of its findings and recommendations and developed a series of manuals on Commission policy, administration, and accounting practices. The contents of the report have been used by both the Hawaiian Homes Commission and an investigating legislative committee in evaluating Commission administration.

Most of the Bureau's activities have been directed toward servicing legislative requests. Between two fifths and one half of all measures introduced in the Twenty-seventh Legislature of the Territory were drafted by Bureau staff. Almost one fourth of all measures enacted and signed by the governor were either initially prepared or subsequently redrafted by the Bureau. This represents a material increase in legislative requests, which is well illustrated by the following comparative figures on major requests—that is, those official requests requiring sufficiently extended research or bill drafting to warrant making a formal record for subsequent reference.

In addition to legislative drafting, the Bureau has continued to render legislative reference services, supplying materials from its library and furnishing factual reports as requested. During the past legislative session it has also been called upon to assist legislative standing committees and to advise on legislative “housekeeping” problems. It has again prepared cumulative weekly indexes and status tables and published an index and digest of laws enacted as soon as the Twenty-seventh Legislature had adjourned and the bill-signing period ended.
The Bureau is now the Territorial correspondent for most of the encyclopedic yearbooks and almanacs containing references to Hawaii. It also prepares the replies to the United Nations’ questionnaires seeking information concerning the “non self-governing” Territory of Hawaii. Due to its association with the Council of State Governments and its exchange relations with legislative research agencies of the various states, the Bureau supplies data on the government of Hawaii which appear in comparative government research studies published on the mainland.

As the research library of the Legislative Reference Bureau grows, it has become increasingly useful. Over 200 pamphlets and other transitory materials are currently being received monthly. These Bureau facilities are being utilized more and more by government employees as they seek to determine mainland methods of meeting problems similar to those encountered in the Territory. The Bureau library also maintains a public administration collection for University students.

Members of the staff continue to teach part-time and devote most of their efforts to Bureau work. Staff members have been encouraged to participate in community activities, especially where their own skills and Bureau duties could make the greatest contribution.

In previous reports mention has been made of the Bureau being called upon to render a variety of services far afield from legislative reference work. The conclusion of the year saw the Bureau functioning as the general research agency of the Territorial government. Primary research, administrative surveys, comparative governmental studies, and legislative reference are all encompassed. Legislative requests take precedence, of course, but the
work of the Bureau is no longer limited primarily to servicing the legislative branch of government. Bureau services are restricted only by Bureau appropriations, and, embarrassingly enough, even this has proven to be no deterrent to requests to undertake additional tasks. Contracts have furnished money for extra staff once the Bureau agreed to supervise a project. Thus the Bureau is preparing, under contract, to aid in compiling the Revised Laws of Hawaii 1955. In view of this expansion of activities, the Bureau may be entering a phase where its small, trained staff will be mainly concerned with the supervision and co-ordination of research on governmental problems for which temporary personnel will be hired, as needed. Should this occur, the Bureau will serve as a mobilizer of specialized talents available in the community. In particular, it will encourage other University personnel to become associated with the Bureau when their expertise (government parlance for expert services) is required, as was the case when Department of Sociology personnel participated in the recent rent control survey. In this way, a maximum of resources may be brought to bear upon governmental problems of any nature while keeping fixed costs to a minimum.

HAWAII SOCIAL RESEARCH LABORATORY
Director Andrew W. Lind

Recognition of Hawaii as an ideal place for race relations research received considerable impetus as a result of several substantial grants from Island and mainland foundations. A grant of $72,000 from the Ford Foundation and the McInerny Foundation to finance a conference on "Race Relations in World Perspective" during the summer of 1954 is, in part, a recognition of the rich resources which Hawaii has to offer and of the progress in research already made in this area by the Laboratory. This conference is being sponsored jointly by the University of Hawaii, the University of California, and the University of Chicago. Plans are now well advanced for the four-week conference. Dr. J. S. Furnivall, famous authority on colonial relations in Southeast Asia and an expected leader in the conference, has characterized the undertaking "as a valuable contribution to the study of racial relations that may well have practical results on the future policy of the nations of the world."

As in previous years, the Island community and its changing problems of social adjustment have provided the major focus of attention for the staff of the Hawaii Social Research Laboratory.

The decennial census of population and housing provides the community with one of its most reliable and extensive sources of social information, and
a major function of the Laboratory has been to assist in the effective prosecution of the census and in the analysis and interpretation of its results. As a consequence of our Territorial status, Hawaii census returns have always been among the last to be published, and the 1950 census was no exception. Although detailed reports have not yet been released (more than three years after the census was taken), the Laboratory staff has made extensive progress in the analysis of the preliminary reports.

Hawaii's position in the struggle for statehood has been adversely affected by the numerous conflicting myths and "official reports" with regard to the racial character of our population which have circulated in the Territory and in continental United States during the past five or six years. In the interest of fair treatment at the hands of Congress and of sound interpretation of social trends in Hawaii, it has seemed wise to give considerable attention to this problem. A preliminary report of the analysis of population trends by ethnic groups was released just prior to the 1953 Senate hearing on statehood for Hawaii. It probably assisted somewhat in controverting the myth of an orientalized population by calling attention to sources of inaccuracy in the public announcements regarding the movement of population from Hawaii since the war, and by contesting the erroneous assumption that only Caucasians have been involved in this exodus.

Hawaii's continuing concern about its economic prospects has compelled attention also to problems of population growth and redistribution, in which the resources of the Laboratory are of special value. Some of these population changes have occurred with such startling rapidity during the past 30 years that even the community leaders are unprepared for their consequences. This is especially true of the increasing concentration of Hawaii's people in the urban centers. An analysis of this problem has been completed by the Laboratory staff, and a report is ready for publication. Other aspects of the same general area of concern, such as the changing age and sex structure, fertility and mortality trends, and marriage and divorce rates, have been partially analyzed and will be reported as soon as completed.

Numerous requests for assistance on social research projects were directed to the Laboratory by both public and private agencies such as the Governor's Office, the Territorial Legislature, the departments of Health and Public Welfare, the Chamber of Commerce, the daily newspapers, and private research groups. In several cases, the staff has been able to render valuable assistance; in others, it has been necessary to refuse aid chiefly because of the pressures of other responsibilities. These public-service functions contribute relatively little to the long-term, scientific research program of the Laboratory, but they do require the attention of persons with research
training and assist in building goodwill toward the University as a center of research. One of the continuing problems of the Laboratory has been to evolve an equitable and mutually satisfactory relationship with commercial research agencies which desire our assistance.

Staff members and graduate and undergraduate students devoted much of their summer vacation period to a survey of rent control in Honolulu in collaboration with the Legislative Reference Bureau. This study of 1,491 tenants and 695 landlords provided the Citizens’ Rent Control Committee with necessary information on private rental units in Honolulu and their geographical distribution, character, and price, as well as on the attitudes of landlords and tenants toward rent control. It is expected that a supplementary study of racial factors operating in Honolulu’s rental market will be published in one of the mainland sociological journals.

Several members of the sociology staff assisted the Territorial Commissioners on Children and Youth in the compilation and analysis of data on truancy in Hawaii, and the initial steps have been taken in a long-term study of the etiology and treatment of juvenile delinquency in Honolulu. In process is a study of the response in the Japanese community to the opportunities for the naturalization of aliens under the provision of the McCarran Act.

Several additional chapters have been written in the study of the assimilation of the Japanese population—research which has both practical and scientific significance. Further material has been written on the attitudes of the Issei toward the changing marriage practices of the second generation, and an earlier study on the attitudes of the Nisei with regard to marriage has been translated and published in the Japanese papers for the benefit of the first-generation parents.

**PSYCHOLOGICAL AND PSYCHOPATHIC CLINIC**

**Director Colin J. Herrick**

Compared with last year, services rendered to individuals dropped 15 per cent, but there was a drop of only 5 per cent in total number of contacts. The reduction in number of psychologists available for service was larger, 18 per cent, because of staff vacancies. However, all positions for which funds were available were filled by the end of the year.

The following table lists our services.
### PSYCHOLOGICAL EXAMINATIONS

<table>
<thead>
<tr>
<th></th>
<th>1950–51</th>
<th>1951–52</th>
<th>1952–53</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individuals examined</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1,006</td>
<td>1,019</td>
<td>868</td>
</tr>
<tr>
<td>Female</td>
<td>568</td>
<td>570</td>
<td>482</td>
</tr>
<tr>
<td><strong>Total individuals</strong></td>
<td>1,574</td>
<td>1,589</td>
<td>1,350</td>
</tr>
<tr>
<td><strong>Total contacts</strong></td>
<td>2,246</td>
<td>2,157</td>
<td>2,043</td>
</tr>
<tr>
<td><strong>Age groups</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0–6</td>
<td>226</td>
<td>241</td>
<td>231</td>
</tr>
<tr>
<td>7–12</td>
<td>548</td>
<td>620</td>
<td>554</td>
</tr>
<tr>
<td>13–15</td>
<td>352</td>
<td>334</td>
<td>278</td>
</tr>
<tr>
<td>16–20</td>
<td>276</td>
<td>255</td>
<td>156</td>
</tr>
<tr>
<td>21–25</td>
<td>67</td>
<td>58</td>
<td>47</td>
</tr>
<tr>
<td>26–51 plus</td>
<td>105</td>
<td>81</td>
<td>84</td>
</tr>
<tr>
<td><strong>Agencies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courts and correctional institutions</td>
<td>517</td>
<td>393</td>
<td>347</td>
</tr>
<tr>
<td>Educational institutions</td>
<td>539</td>
<td>667</td>
<td>561</td>
</tr>
<tr>
<td>Social agencies</td>
<td>187</td>
<td>203</td>
<td>153</td>
</tr>
<tr>
<td>Health agencies</td>
<td>244</td>
<td>239</td>
<td>215</td>
</tr>
<tr>
<td>Private and miscellaneous</td>
<td>87</td>
<td>87</td>
<td>74</td>
</tr>
<tr>
<td><strong>Islands represented</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oahu</td>
<td>1,042</td>
<td>1,028</td>
<td>758</td>
</tr>
<tr>
<td>Hawaii</td>
<td>213</td>
<td>178</td>
<td>196</td>
</tr>
<tr>
<td>Kauai</td>
<td>114</td>
<td>89</td>
<td>92</td>
</tr>
<tr>
<td>Maui</td>
<td>205</td>
<td>294</td>
<td>304</td>
</tr>
</tbody>
</table>

In addition to the psychological examinations tabulated above, consultation service was provided in the cases of another 322 individuals. The staff has had a wide variety of other activities, too numerous to list in full detail. A partial list would include services on at least five thesis committees, participation in an in-service training program for custodial personnel at Oahu Prison, and extensive service on advisory boards and working committees of such agencies as the Sultan Foundation, Mental Hygiene Society, Oahu Health Council, and other health and welfare agencies.

Graduate students at the University, working under close supervision, participated in the work with approximately 100 cases during the year. A tape recorder was acquired during the year, the use of which facilitates the teaching of test and interview techniques.

During the last six months we have had a psychiatric consultant on a half-time basis. The only previous time that the Clinic had a psychiatrist on the staff was for a few months in 1941. At that earlier time the psychiatrist did direct treatment work. At present the psychiatrist is doing no
College of Agriculture—Donald C. McGuire of the Hawaii Agricultural Experiment Station turns over to Yukuo Nakagawa of the Agricultural Extension Service an improved brand of tomato for introduction to Island farmers.

Goodwill Ambassadors—The trip of these 4-H club members and their leader to the National 4-H Conference in Washington, D. C., was financed by their Territorial organization and by local firms and foundations.
Manoa Arboretum—An arboretum in upper Manoa Valley was offered to the University by the Hawaiian Sugar Planters’ Association, one of the former directors of whose Experiment Station, Dr. Harold L. Lyon, is shown pointing out features to University President Gregg M. Sinclair and botanist Harold St. John.
treatment, and there is no intention that he should undertake any. Approximately 80 per cent of his time has been devoted to research. He is well advanced in a study of long-term trends in commitment rates to the Territorial Hospital and to Oahu Prison, broken down according to the ethnic origins of the persons committed.

His clinical services have included participation in staff conferences and consultations with individual staff members about the psychiatric aspects of cases they are handling. There have been approximately 150 such consultations. The whole staff regards this service as of very real value because it not only makes for better handling of the individual case, but also provides valuable in-service training for the staff.

INDUSTRIAL RELATIONS CENTER
Director Harold S. Roberts

Substantial progress has been made by the Industrial Relations Center in carrying out the basic objectives established by the Board of Regents, namely: "To promote in the community a sound understanding of labor-management problems, labor-management techniques and policies; and to provide for labor, management and the community, sources of information in the field of industrial relations." These objectives were to be implemented through a five-point program. Some progress has been made on each of these points.

Point one calls for the training of young men and women for industrial relations work through a curriculum of credit courses at the University and of non-credit courses for the general public.

The curriculum which has been set up in the field of Personnel and Industrial Relations compares well with universities of comparable size which offer majors in the field of labor-management relations. Thirteen courses covering the legal, economic, and practical aspects of labor-management relations are now offered. These include:

Bus 230 Industrial Safety and Health
Bus 245 Time and Motion Study
Bus 261 Collective Bargaining
Bus 263 Personnel Management
Bus 268 Employment Interviewing
Bus 282 Business Statistics
Econ 256 Money and Banking
Econ 265 Government and Business
Econ 281 Labor Problems
Econ 282 American Trade Unionism
Econ 283 Labor Legislation
Econ 289 Arbitration of Grievances
Econ 294 Research in Industrial Relations
In addition to these required courses, the following are recommended for majors in Personnel and Industrial Relations:

- Bus 248 Wage Determination
- Bus 255 Analysis of Financial Statements
- Bus 256 Income Tax Problems
- Econ 275 Trends in Labor-Management Relations
- Econ 287 Public Relations
- Econ 310 Seminar in Labor Problems
- Psy 256 Industrial and Business Psychology
- Psy 257 Principles of Counseling
- Psy 258 Group Techniques of Guidance

In June, 1953, 17 seniors who majored in this field graduated from the College. We have had requests from both management and labor to use these graduates for work in the industrial relations field.

Apart from the courses offered to regular students, we have continued to offer the introductory course in industrial relations for trainees in sugar technology.

We also offered two non-credit courses during the year in the field of Human Relations and Plant Grievances. Many of the men and women attending were from supervisory ranks dealing with the practical plant problems on a day-to-day basis. Members of labor organizations and the general public were also represented in the classes. The community response to these non-credit courses has been gratifying.

Point two calls for an industrial relations library devoted to maintaining current materials on industrial relations. We have established a reading room which is used by students for research study and report writing. The reading room contains several thousand items which occupy over 400 feet of shelf space and some 16 filing cabinets. Cataloguing has been carried on as funds permit.

We have received substantial gifts in the form of books, pamphlets, and newspapers. Among those who have contributed were the National Labor Relations Board, the U. S. Department of Labor, a number of labor organizations, and the Hawaii Employers Council. Although we have made some progress in this area, it will not be possible to carry out the program contemplated by the Regents without a research librarian. We still hope to receive funds to carry out this phase of our work from contributions by labor and management.

Point three calls for a library reference service to make available the information in the Industrial Relations reading room. We have continued to make some progress through the purchase of basic source references and in indexing much of the pamphlet material. We have continued to answer requests for information from labor, management, and the public.
Point four calls for public lectures, conferences, and discussion groups. A number of public lectures on Industrial Relations have been given during the year. We have also participated in round-table discussions with management and union groups.

Point five calls for research studies. We have continued to issue the biweekly Newsletter and a number of bibliographies. With the aid of the Extension Division we published the source book on Plant Grievances. An Occasional Paper was prepared on "Substitutes for the Strike." Professor Brissenden, who taught some of our industrial relations courses, published two articles on Hawaii labor relations. The first, "The Three Clauses' in Hawaiian Labor Agreements," was published in the March 1953 issue of the Political Science Quarterly. The second, "The Great Hawaiian Dock Strike," appeared in the April 1953 issue of the Labor Law Journal.

**PUBLICATIONS AND INFORMATION**

**Director Thomas Nickerson**

The Office continued to collect, record, edit, print, and distribute information regarding the activities of the University. Handicapped by resignations, replacements, and unfilled positions, the Office made a particular effort to maintain quality of production, observe deadlines, and adhere to production schedules.

**SOURCES**

The sources of the materials processed were Board of Regents meetings; the offices of the president, vice-president, dean of faculties, and director of the summer session; the deans of the five colleges; the directors and chairmen of some 50 divisions and departments; a faculty and research staff of 500; the officers and committee chairmen of a student body of 5,000; the University marshal and the directors of official convocations and conferences; affiliated institutions.

**MATERIALS**

The material obtained from these sources concerned the three principal obligations of a university.

*Teaching.* Information regarding registration, examinations, orientation periods, and commencement; regular, evening, and summer session courses; new faculty members, new students, and their scholastic achievements.

*Research.* Information regarding the undertaking of new research projects; periodic reports of progress; announcements of the results of
studies, experiments, and investigations; manuscripts on these subjects for editing, publication, and distribution.

Community Services. Lectures, plays, music programs, art exhibitions, and other public events; conferences, short courses, and clinics; agriculture, home economics, and community organization services such as those provided by the home demonstration and farm agents in introducing modern home economic practices and improved agricultural techniques.

FORM

This material appeared in newspaper stories and features; magazine articles; articles in the University's scientific, agricultural, and philosophical quarterlies; the books of the University Press; the faculty and staff house organ; numerous bulletins, catalogues, directories, reports, papers, brochures, leaflets, and announcements; photographs, post cards, maps, charts, chart talks, color slides, and motion picture films.

The Office was responsible for mailing this material to interested local and mainland persons and institutions. It also administered a reception center where University publications—except those concerned with agriculture—are distributed, and furnished information regarding the University in response to inquiries made in person and by phone and mail. The Office trained student guides and conducted campus tours for school children and other visitors.

AUDIENCE

Since the University is a tax-supported, land-grant college comparable to state universities on the mainland, the audience has been the half-million residents of the Islands, plus individuals and institutions throughout the world. Directly or indirectly, every citizen of the Territory is affected by the University's work, whether through college education, public school instruction under University-trained teachers, public services or private enterprise manned by University-trained clerks, engineers, technicians, and executives, or simply through the increased availability of a variety of nourishing and locally raised foods. Indeed, there is hardly a private business, public agency, or scientific, educational, or cultural institution with which the University does not co-operate. Many of these contacts are channeled through the Office, which operates as the University's public relations center.

UNIVERSITY PRESS

Three books were published during the year—Bertha Mueller's translation of Goethe's Botanical Writings, Robert M. Kamins' Tax System in Hawaii, and Juliette May Fraser's Ke Anuenue. Both the book and portfolio
edition of Ke Anuenue were included in the Western Books Exhibit and the book was chosen by the American Institute of Graphic Arts as one of the "Fifty Books" of 1952. The quarterly journal, Philosophy East and West, placed in the Institute's Magazine Show. In October the board of editors of the University's quarterly journal, Pacific Science, voted to publish under the Press imprint.

Three books now in press are scheduled for publication shortly: Diversified Agriculture of Hawaii by Perry F. Philipp, a translation of The Poems of T'ao Ch'ien by Lily Chang and Marjorie P. Sinclair, and volume two of Ralph S. Kuykendall's Hawaiian Kingdom. Among the books being edited is Thomas D. Murphy's Ambassadors in Arms, to be published in the fall.

The flow of manuscripts increased in quantity and quality and included such remote subjects as the resources of Alaska, criminology in Alcatraz, and Greenland folklore. Our promotional and distributional machinery increased in effectiveness despite limited personnel. The Press staff still remains at two editors, a half-time stenographer, and part-time student help—far below that of mainland presses with comparable output.

PACIFIC SCIENCE
Editor Leonard D. Tuthill

Pacific Science quarterly increased both in size and in range of distribution. The last four issues covered 392 pages and contained 20 papers on scientific subjects dealing with Australia, California, Ecuador, Formosa, Hawaii, Japan, Oregon, the Philippines, the Ryukyu Islands, and the Solomon Islands.

The Board of Editors included representatives from Australia, California, Hawaii, and New Zealand.

Subscriptions increased by 44 over last year; the free and exchange list decreased by 6. Each issue a total of 568 copies were sent to 6 of the 8 Hawaiian Islands, 43 of the 48 states, Washington, D. C., Alaska, and 58 foreign countries.

On hand are 28 manuscripts for future issues.

PHILOSOPHY EAST AND WEST
Editor Charles A. Moore

Philosophy East and West, the only journal devoted to the cause of East-West philosophical understanding and synthesis, has completed two and one-quarter years of publication. Although it faces financial difficulties, its high academic and scholarly standing has been maintained. Its future, in
terms of substantial contributions from outstanding thinkers throughout
the world, is apparently assured.

Contributions have been received from many of the outstanding philoso-
phers in the Oriental countries, excepting China, and from many of the
leading Oriental philosophers and orientalists in the West. The journal has
published contributions from scholars in India, China, Ceylon, Japan, Hol-
lund, Germany, Great Britain, France, Italy, and the United States, thus
giving it a truly international character. The Board of Advisory Editors and
the Board of Editors list scholars of the United States, England, India,
Ceylon, and Japan. An effort is being made to select an outstanding near-
eastern philosophical scholar to represent an area which hitherto has been
inadequately covered.

The journal has 449 regular subscribers from almost every country in
the world, excepting Russia and China. During the year some Oriental
scholars were forced to cancel their subscription for financial reasons. Efforts
are now being made to obtain funds to subsidize subscriptions for Oriental
scholars, especially in India. The journal has an exchange list of 35, strictly
limited to philosophical journals which devote at least some attention to
Oriental thought.

The journal was started on the basis of a five-year trial period, during
which time it must support itself or carry on with the aid of gifts. The
journal is completely on a subsidized basis at the present time. Money is
available to complete three and one-quarter years of publication. There
are prospects for a grant which will carry the journal through the five-year
period, at the end of which it is hoped that the University will take over the
journal as a part of its regular budget.

EXTENSION DIVISION
Director Albert J. McKinney

Despite shortage of funds and personnel and the demoralizing influence
of Civil Service job reclassification, enrollment figures mounted. Two hun-
dred and fifty-seven lecturers taught 5,086 students in 194 non-credit courses
in such diversified subjects as business and public administration, ceramics,
real estate, writing for publication, insurance, motor transportation, and the
Japanese tea ceremony.

Following are some examples of the kind of practical instruction
offered.

The Hawaii Employer's Council, with the sugar and pineapple com-
panies and other Island industries, assisted the Extension Division in offering
a Motor Fleet Supervisory Training Course to motor fleet supervisors and traffic managers. Mr. Amos Neyhart of Pennsylvania State College and Mr. Paul H. Coburn, Director of the Motor Transportation Division of the National Safety Council, were brought to Honolulu to conduct the course.

The program in Public Administration continued to attract government workers. Eight certificates were presented to students who successfully completed the basic courses. Mr. Norman Meller and the Government Department again provided friendly co-operation in setting up classes for the program.

The Division was finally fortunate enough to establish classes in both real estate and insurance on the neighbor islands. Real estate appraisal was given on Maui and Kauai, automobile insurance at Lihue, Kauai, and fire insurance in Hilo, Hawaii. The registrations in all four courses were gratifying.

Three internationally known experts in pottery, Bernard Leach, Shoji Hamada, and Dr. Soyetsu Yanagi, conducted a ceramics workshop which was filled to capacity. Enrollment was held down by the size of the laboratory. Soko Sen, leading exponent of the Yurasenke School of Tea Ceremony, presented a class to an interested group. Again space was the limiting factor to the number of students who could be accommodated. One of the most popular offerings was a writer's workshop featuring James A. Michener, author of *Tales of the South Pacific*, and conducted by Mr. William W. Davenport of the English Department, who introduced other well-known writers.

Seventy of the Bank of Hawaii's personnel attended lectures on elementary economics which were presented at the downtown branch of the bank. Later in the year, a class in business administration was conducted for 40 employees of the Bishop National Bank.

Uncertainty caused by the furor over job reclassification almost destroyed the morale of the clerical group and resulted in absenteeism and resignations.

The instructional faculty of the Division consisted of 257 individual lecturers. One hundred eighty-nine members of the faculty taught a total of 194 non-credit courses. The credit faculty totaled 56 part-time instructors. There were, in addition, four full-time administrative faculty, six full-time clerks, and two students employed as part-time clerks.

Registrations totaled 5,086.

CREDIT PROGRAM

All credit classes now carry residence (full academic) credit. The new policy was received enthusiastically by the students and was responsible for
a larger number of enrollments at the Downtown Center. Students had been wary of attending classes where credit might not be transferable to other institutions, and a few students had earned the maximum number of extension credits allowed toward a degree.

Whereas enrollments at the Hickam Center have decreased, those at the Downtown Center were satisfactory. Registration in this Center has steadily risen and indicates that an educational need is being met. The public administration program continues to attract a steady clientele of students.

SPECIAL CREDIT PROGRAM

In the field of special-credit classes, we constantly received requests from those who need credits in rural areas, mainly from teachers striving for higher certification, but it is difficult to set up classes which will please sufficient numbers to justify presentation.

The Psychological Clinic has alleviated some of the community pressures for Extension classes on the other islands. Classes have been instituted on Hawaii, Kauai, and Maui.

A radio course on the history of Russia was presented over radio station KAHU during the first semester as an aid for teachers demanding credit courses.

During the second semester, classes were offered at the Pearl Harbor Navy Yard.

CORRESPONDENCE PROGRAM

A steady decline was noted in the sale of correspondence courses last year. It was pointed out at the time that the Division did not have the necessary faculty or staff to direct, organize, and advertise the program. Actually, there was not sufficient help to process student lessons in an efficient manner.

A supervisor of correspondence study has reorganized the program, revising certain courses and setting a higher standard of instruction in a field where the Division should make a distinct contribution to the people of the community. As a result, the sale of courses has increased from 107 to 183.

NON-CREDIT PROGRAM

An enrollment of 3,245 students in the current year, as opposed to 3,167 in 1951-52, tells the story of the non-credit program. The supervisor of the program was alert to sense courses which will appeal and showed imagination in keeping a step ahead of public demand. A well-balanced, effectively advertised program was presented. The public response was gratifying.
SERVICE PROGRAM

As predicted last year, it was found necessary to cut back the amount of service offered other departments of the University. The printing of materials for the Division itself increased to the point where it was impossible to accede to the numerous special service requests of the various branches of the University. There was an increase of 209 per cent in the total number of press runs over the previous year.

The Office of Publications and Information continued to make the greatest demand on the services of the clerk-photographer, who took 4,316 photographs during the working days of the year. The requests of the Art Department were second in volume, with nearly 2,000 transparency slides requisitioned.

HILO BRANCH

Director Frank T. Inouye

The fall semester opened with 72 full-time and 10 part-time students; 47 of these were freshmen, 24 sophomores, and 1 a special student. Seven of these made the Dean's List and 17 the Honor Roll. A staff of 3 full-time, 17 part-time, and 2 commuting faculty members offered 22 lower-division courses.

The students elected a full slate of student body officers in accordance with the ASUH constitution (Hilo Branch revision). They issued a weekly newspaper, Ka Leo Iki; they conducted a Ka Palapala Beauty Pageant, the winner of which won the cosmopolitan division on the Manoa campus; they organized interscholastic and intramural programs in basketball, baseball, and bowling.

Student activities included an orientation camp for freshmen, Women's Week, Christmas programs, and a puppet show at the County Library attended by more than 500 people. In October the Branch gave a luncheon for high school principals and counselors to discuss the Branch as a community institution. Open house on November 7 was attended by some 500 Big Island high school seniors.

The Branch sponsored three spring lectures by Manoa campus faculty members and a series of four lectures by summer session visiting professors. The Director gave 33 talks during the year to high school, church, service club, association, and radio audiences.

Community interest in the Branch was evidenced by support given the Legislature's proposal for a new building, as well as measures adopted by the Alumni Association (Hilo Branch) to boost the enrollment. The teach-
ing effectiveness of the faculty and the scholastic ability of the students is attested to by the academic records. The Hilo Branch has justified the faith of its supporters.

VETERANS' ADVISER
Edmund F. Spellacy

From September, 1946, to August, 1953, 4,300 veterans, both men and women, have registered at the University of Hawaii for academic work under laws providing educational benefits. Most of them enrolled for credit courses on the main campus; the rest took credit courses at the other Oahu centers and the Hilo Branch, or non-credit courses with the Extension Division. In the past, there has been a relatively heavy registration in the non-credit field, but the Veterans Administration has tightened its requirements in this area. As a result, the number of student veterans taking non-credit courses this past year was negligible.

There was no appreciable change in the total number of veterans enrolled for academic training. Although the number of veterans getting their education under the GI Bill of World War II, Public Law 346, declined, the slack was taken up by students enrolling under the new Korean Bill, Public Law 500. Registration figures for the first and second semesters on the main campus show that, under the GI Bill, 330 men and women enrolled the first semester and 280 the second; under the new Korean Bill, 80 registered the first semester and 115 the second. Whereas veteran enrollment usually drops considerably, this year the drop was negligible, 539 registering under all laws and in all programs in the fall term and 537 in the spring. Peak enrollment of new veterans may occur this year, but as long as Selective Service continues to recruit replacements for those released by the armed forces, a steady flow of veterans seeking a university education may be expected.

Since we receive many directives from national and Territorial headquarters changing the legal requirements of the Selective Service program for colleges and universities, it is necessary to revise our methods to meet these needs. Formerly the University acted only upon request of the student or his board. Reporting therefore was intermittent. It is now required to advise the 13 local boards of the status of those men students who are in critical categories or classifications.

At present we use the following reporting procedure: at the beginning of the academic year, the boards are notified whether those men in whom they have an interest are bona fide students at the University and whether
they are registered for a minimum of at least 12 credit hours, both factors being requisite to deferment from service for study. During the year, the local boards are given such information on individual cases as they may request. Then, within 30 days following the close of the school year, each registrant's board must be advised of his standing and rank in class. This information is the basis upon which Selective Service decides whether or not the student will be permitted to continue for another year of study. Over 1,500 such reports were recently completed and sent to Selective Service.

Grateful acknowledgment is made to the Veterans Administration and Selective Service for their helpful, co-operative, and understanding appreciation of the academic problems.
Reports of Other Activities

ROTC, ARMY
Colonel Paul Clark, Jr.

The Army Reserve Officers Training Corps program, one of the special responsibilities of the University as a land-grant college, was marked by four notable achievements:

1. The City of Tacoma Military Achievement Award was won by the infantry cadets of the junior class who attended summer camp training at Fort Lewis, Washington. This award for all-around proficiency was won in competition with cadets from 21 mainland colleges and universities.

2. Seventy-six ROTC seniors were graduated and commissioned as second lieutenants in the United States Army Reserve. Of this number, seven were tendered commissions in the Regular Army—more than in any previous year.

3. Official reports indicated that recent Army ROTC graduates had distinguished themselves by attaining outstanding records at military service schools on the mainland, achieving graduation standings in the upper
fourth of their classes at the Artillery School and in the upper third of their classes at the Infantry School.

4. As a result of the annual formal inspection conducted on April 21–23, the Headquarters of the United States Army Pacific awarded the ROTC Instructor Detachment a "superior" rating for its general efficiency and conduct of training.

The ROTC unit was organized into a regimental combat team commanded by Cadet Colonel Lawrence M. Takahashi. It consisted of three infantry battalions and one artillery battalion. The average strength of the unit was 600. In addition to drills and ceremonies, cadets attended two to four classes weekly in which they received instruction in military science and tactics.

The continuing importance of this program in contributing to the national defense effort was clearly evident in the number of Selective Service deferments authorized to our cadets. First-year basic students were not eligible for deferments until mid-February, 1953. At that time a board representing the military and academic faculty screened requests to determine which applicants were best qualified as potential reserve officers; those so qualified were then eligible for deferment from induction. Deferments in effect on June 1, 1953, were as follows:

<table>
<thead>
<tr>
<th>Class</th>
<th>Enrolled</th>
<th>Deferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seniors</td>
<td>76</td>
<td>76</td>
</tr>
<tr>
<td>Juniors</td>
<td>88</td>
<td>88</td>
</tr>
<tr>
<td>Basic Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophomores</td>
<td>174</td>
<td>124</td>
</tr>
<tr>
<td>Freshmen</td>
<td>241</td>
<td>128</td>
</tr>
<tr>
<td>Totals</td>
<td>579</td>
<td>416</td>
</tr>
</tbody>
</table>

The cadet regimental combat team participated in a number of formal parades and reviews. Frequently these ceremonies honored local officials, both civilian and military, who praised the efficiency of the unit. Color and esprit de corps were added to the units through the wearing of distinguishing blue neck scarfs by the infantry cadets and scarlet by the artillery. A group of able and attractive coed sponsors provided charm for the numerous formal ceremonies. These young ladies also participated as a group in other University and civic affairs including the opening of the Territorial Legislature.

On separate occasions during the year, reviews were held for the President and the deans of the University, for General John W. O'Daniel, Com-
manding General U. S. Army Pacific, and for Brigadier General F. W. McKinney, the Adjutant General of Hawaii. The cadets also participated in Charter Day ceremonies, a special convocation for former President Harry S. Truman, and the annual Armed Forces Day parade.

Many awards were presented at formal ceremonies to the most deserving cadets. Foremost of these honors were those awarded to the outstanding cadets in each of the four classes. The outstanding advanced course senior, Infantry Cadet William A. Harada, Artillery Cadet George M. Fukumoto; advanced course junior, Artillery Cadet Richard I. Fukumoto, Infantry Cadet Edward K. Shikata; basic course sophomore, Infantry Cadet Virgil A. Brown, Artillery Cadet Edward Y. Hirata; and basic course freshman, Cadet Raymond E. Naylon. The award for the outstanding company commander was won by Cadet Thomas A. Lau.

The year's activities culminated in the joint Army-Air Force ROTC Graduation Review held on May 19. At this ceremony 76 graduating Army cadets received their reserve officer commissions and were congratulated by the President of the University. Fifteen cadets were honored as distinguished military graduates, the following seven of whom have accepted commissions in the Regular Army: Harry L. F. Ching, E. Bowen De Silva, George M. Fukumoto, Ronald D. Kamakahi, Serafin G. Mactagone, Sam C. Seto, Jr., and Lawrence M. Takahashi. The guest speaker at the Graduation Review was Judge J. Frank McLaughlin of the U. S. District Court in Honolulu.

In June, 86 cadets of the junior class departed by military transport to attend summer camp on the mainland, where they will attend six weeks of practical training: 64 infantry cadets at Fort Lewis, Washington; 21 artillery cadets at Fort Sill, Oklahoma; and 1 military intelligence cadet at Fort Riley, Kansas. The summer training is of inestimable value to the cadets. They have an all-expense paid trip to the mainland, and in addition receive pay and allowances during their active duty period. At the close of camp the cadets are given 30 days leave and have an opportunity to travel extensively before returning by government transportation to the Islands. As a guest of the Army, Acting Dean Edmund F. Spellacy is scheduled to visit the cadets during this training period. He will have an opportunity to interview the cadets and to observe the methods of instruction employed at Fort Lewis, Washington.

This year, with the continued seriousness of the international and military situation and with the increased size of our armed forces, all graduates of the Army ROTC are being called to active duty. As lieutenants of the Army they will soon be joining the ranks of earlier graduates now serving
at various posts and stations throughout the world. Personnel who have not completed their academic studies have been granted postponements; however, upon attaining their degrees, they too will be called for two years' active duty.

**ROTC, AIR FORCE**

**Colonel William W. Jones**

This was the first academic year that the Air Force ROTC operated as an independent department, previously having operated as a subordinate program under the Department of Military Science and Tactics.

During its first independent year the Air Force ROTC enrolled 550 cadets as follows:

- 71 Seniors
- 76 Juniors
- 148 Sophomores
- 255 Freshmen

Fifty-seven seniors were commissioned as second lieutenants in the Air Force Reserve in June, 1953, and called to active duty with the Air Force. Except for 12 officers who went to the mainland for training as air crew members, practically all newly commissioned officers received orders for active duty at Hickam Air Force Base.

Air Force ROTC instruction consisted of general Air Force courses for freshmen and sophomores and offered two options for juniors and seniors: Flight Operations, and Administration and Logistics.

All cadets were organized into a cadet wing consisting of a wing staff, two groups, and six squadrons. The wing was commanded by Cadet Colonel Richard H. Oi, an outstanding student who received his commission as an officer but was granted a delay on his call to active duty in order that he might complete medical training on the mainland.

Each squadron, group, and the wing had a coed as sponsor. These young ladies did much to add to the color and esprit de corps of the units.

Various awards and decorations were presented during the year both to individuals and units. These were highlighted by the presentation of the Captain H. Gaylord Dillingham Memorial Award to Victor Kobayashi as the outstanding sophomore cadet and the Wah Kau Kong Award to Squadron K, the outstanding squadron of the year, commanded by Cadet Major Kenneth D. Gomes.

As additional activities the cadet wing participated in rifle matches and an athletic program.
The Arnold Air Society, composed of senior and junior cadets, enjoyed a successful year participating in a program of meetings, field trips, picnics, two dinner dances, and attendance at the national meeting on the mainland. Approximately 400 cadets made familiarization flights in aircraft at Hickam Air Force Base.

All junior cadets attended a six-week period of on-the-job training at air bases on the mainland during the summer of 1953.

Air Force ROTC looks forward to an even better year of training college students for service with the Air Force under its new generalized curriculum.

THE AQUARIUM

Director Spencer W. Tinker

The Aquarium has completed its forty-ninth year of service to the people of the Territory and its thirty-fourth year as a part of the University. Attendance was twelfth largest in the Aquarium's history and the most lucrative of those years during which an admission fee was charged. A total of 64,665 persons paid $16,166.25 in admission fees.

PHYSICAL PLANT

The Aquarium building and its equipment, although worn out, are still operating and should continue to do so until removal to the new aquarium building. Only a minimum of repairs has been made to the buildings and equipment, and in the coming months only those repairs will be made which are absolutely necessary for the continued operation of the plant.

EXHIBITS

The exhibits of the Aquarium consist principally of the native Hawaiian marine species which inhabit the waters along the shoreline. These exhibits consist mostly of fish but include also an assortment of other reef-dwelling forms, including starfish, sea urchins, anemones, crustaceans, and mollusks.

The Aquarium obtained the greater part of its supply of fish and other animals from the commercial fishermen. This consists of about equal numbers of fish taken by hook and line and with wire traps. These specimens are either donated to the Aquarium or are purchased by the Aquarium from the various fishermen. Considerable credit is due the fishermen of Honolulu for their help in keeping this civic attraction supplied with an interesting assortment of local specimens.

During the year the Aquarium added a fresh-water display of 36 tanks in the lobby of the Aquarium building. This display, which was built by
Authentic Hulas—Eighth-grade students of Teachers College Elementary School rehearse traditional Hawaiian dances for the University's annual Pan-Pacific Spring Festival on Lei Day in the Arthur L. Andrews outdoor theatre.

Hawaiian Pottery—Ceramic classes stress Polynesian design and local materials. Here Claude F. Horan pulverises volcanic ash, valuable in heightening the glaze.
One of the "Fifty Books"—The American Institute of Graphic Arts selected Juliette May Fraser's *Ke Anuenue*, a publication of the University of Hawaii Press, as one of the "Fifty Books" of 1952.

Coconut Island—Research and graduate aspects of the University's Hawaii Marine Laboratory are conducted at Coconut Island in Kaneohe Bay, situated on the edge of the world's richest faunal area.
the Aquarium staff, contains an exhibit of the common fresh-water species which are raised by fish fanciers and hobbyists around the world.

ATTENDANCE AND RECEIPTS

The Aquarium admission fee of 25 cents for all persons 16 years of age or older was put into effect on August 22, 1951, and remained in force throughout the year. School groups on excursions were admitted free in accordance with existing statutes.

ATTENDANCE AND ADMISSION FEE RECEIPTS FOR THE FISCAL YEAR, 1952–53

<table>
<thead>
<tr>
<th>Month</th>
<th>Attendance</th>
<th>Receipts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>6,330</td>
<td>$1,582.50</td>
</tr>
<tr>
<td>August</td>
<td>6,417</td>
<td>1,604.25</td>
</tr>
<tr>
<td>September</td>
<td>4,600</td>
<td>1,150.00</td>
</tr>
<tr>
<td>October</td>
<td>5,201</td>
<td>1,300.25</td>
</tr>
<tr>
<td>November</td>
<td>4,913</td>
<td>1,228.25</td>
</tr>
<tr>
<td>December</td>
<td>4,216</td>
<td>1,054.00</td>
</tr>
<tr>
<td>1953</td>
<td></td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>5,218</td>
<td>1,304.50</td>
</tr>
<tr>
<td>February</td>
<td>5,016</td>
<td>1,254.00</td>
</tr>
<tr>
<td>March</td>
<td>5,698</td>
<td>1,424.50</td>
</tr>
<tr>
<td>April</td>
<td>6,487</td>
<td>1,621.75</td>
</tr>
<tr>
<td>May</td>
<td>5,382</td>
<td>1,345.50</td>
</tr>
<tr>
<td>June</td>
<td>5,187</td>
<td>1,296.75</td>
</tr>
<tr>
<td>Totals</td>
<td>64,665</td>
<td>$16,166.25</td>
</tr>
</tbody>
</table>

EDUCATIONAL PROGRAM AND PUBLIC SERVICE

The Aquarium resumed its program of illustrated lectures and movies on Hawaiian fishes and other marine subjects for the public schools—a service which had been curtailed the previous year due to a reduction in the Aquarium staff. During the course of the year the Director gave a total of 34 talks on marine life to schools, tourist groups, civic organizations, and youth groups. The Aquarium continued to assist the local teachers in the collection, preservation, and identification of local fishes, mollusks, and other marine forms for use in the public schools. The Director assisted the local schools and teachers in the preparation of slides on marine subjects. Much of this work has been carried on in conjunction with Teachers College.

The Aquarium has resumed the shipment of fish to the Steinhart Aquarium in San Francisco. This service has helped maintain a colorful display of
Hawaiian fishes in that city and is regarded as the Aquarium's contribution to the tourist promotion program.

NEW AQUARIUM BUILDING

In January construction work began on the new $400,000 building provided by Act 401 of the 1949 Legislature. The structure should be completed late in 1953 or early in 1954, and the building should be open to the public toward the latter part of the coming fiscal year.

The new Aquarium will include a large outdoor pool for exhibiting turtles, porpoises, and the larger fishes. The building itself will house a display of the reef and shoreline fishes in thirty-two 5-foot and four 10-foot tanks distributed along the walls and across the ends of four arcades. An additional exhibit of 18 fresh-water tanks will occupy two panels flanking the doorway leading from the display hall to the outdoor pool.

The Aquarium also includes a small museum for the display of sea shells, corals, and other marine forms, a small library and reading room, and a small lecture room adaptable to an educational program for schools, tourists, and civic groups. The usual work space, offices, toilets, and storerooms are also provided within the building. Laboratory and research rooms will be available for the Waikiki branch of the Hawaii Marine Laboratory.

The new Aquarium is a sturdy structure and should serve the community for many decades. A real factor in the promotion of our tourist industry, it cannot fail to be an outstanding educational and recreational institution.

ALUMNI ASSOCIATION

Executive Secretary Thaddeus R. Coykendall

The two principal achievements of the Alumni Association were:

1. Interpreting the University's budgetary needs to the Legislature.
2. Placing the athletic program on a sound financial basis.

Association members were informed of the University's requirements through a 100-member alumni legislative committee which operated throughout the Islands. Work began prior to elections and continued through the legislative session.

A list of some 7,000 alumni, to which the members of the Legislature were added, were sent a brochure titled "The University of Hawaii—Its Needs in 1953–55," a view book, "The Rainbow Campus," issues of the Alumni News carrying feature articles on budgetary needs, monthly newsletters carrying spot developments, and copies of Ka Leo, the student newspaper. An information center was conducted at Iolani Palace, and a
group of alumni advised a legislative committee chairman at his request on University matters.

The Association redoubled its efforts in support of the athletic program. Athletic events were underwritten, and the number of athletic scholarships was increased with a share in the proceeds of the Police Benefit football game, a swimming meet, the Homecoming basketball game sponsored by the Half-Century Club, and the Annual Rainbow Relays. Fall-semester scholarships were increased from 52 to 74 and those for the spring semester from 53 to 63. The Athletic Scholarship Fund ended the year with a credit balance of approximately $250.

The following table shows the increase in membership in the Association.

<table>
<thead>
<tr>
<th>Classification</th>
<th>1951–52</th>
<th>1952–53</th>
<th>Percentage increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustaining</td>
<td>2,051</td>
<td>2,214</td>
<td>8</td>
</tr>
<tr>
<td>Life</td>
<td>429</td>
<td>449</td>
<td>5</td>
</tr>
</tbody>
</table>

The principal amount of the Life Membership Investment Fund now stands at $10,905.

STATISTICAL INFORMATION
SUMMARY OF ENROLLMENT FOR 1952–53
(A) In University Credit Courses

<table>
<thead>
<tr>
<th>Candidates for Degrees, Diplomas, and Certificates</th>
<th>1st Semester</th>
<th>2nd Semester</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Graduate School</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Degree</td>
<td>187</td>
<td>184</td>
<td></td>
</tr>
<tr>
<td>Five-Year Diploma</td>
<td>134</td>
<td>89</td>
<td></td>
</tr>
<tr>
<td>Social Work Certificate</td>
<td>21</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td></td>
<td>342</td>
<td>290</td>
<td></td>
</tr>
<tr>
<td><strong>College of Arts and Sciences</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seniors</td>
<td>296</td>
<td>233</td>
<td></td>
</tr>
<tr>
<td>Juniors</td>
<td>292</td>
<td>358</td>
<td></td>
</tr>
<tr>
<td>Sophomores</td>
<td>344</td>
<td>284</td>
<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>655</td>
<td>609</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,587</td>
<td>1,484</td>
<td></td>
</tr>
<tr>
<td><strong>College of Applied Science</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seniors</td>
<td>97</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>Juniors</td>
<td>119</td>
<td>134</td>
<td></td>
</tr>
<tr>
<td>Sophomores</td>
<td>160</td>
<td>160</td>
<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>232</td>
<td>207</td>
<td></td>
</tr>
<tr>
<td></td>
<td>608</td>
<td>573</td>
<td></td>
</tr>
</tbody>
</table>
### Teachers College

<table>
<thead>
<tr>
<th>Grade</th>
<th>Honolulu Campus</th>
<th>Other Centers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniors</td>
<td>138</td>
<td>111</td>
<td>604</td>
</tr>
<tr>
<td>Juniors</td>
<td>171</td>
<td>168</td>
<td>329</td>
</tr>
<tr>
<td>Sophomores</td>
<td>154</td>
<td>154</td>
<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>141</td>
<td>141</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>604</strong></td>
<td><strong>574</strong></td>
<td></td>
</tr>
</tbody>
</table>

### College of Agriculture

<table>
<thead>
<tr>
<th>Grade</th>
<th>Honolulu Campus</th>
<th>Other Centers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniors</td>
<td>76</td>
<td>56</td>
<td>329</td>
</tr>
<tr>
<td>Juniors</td>
<td>85</td>
<td>85</td>
<td>307</td>
</tr>
<tr>
<td>Sophomores</td>
<td>76</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>92</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>329</strong></td>
<td><strong>307</strong></td>
<td></td>
</tr>
</tbody>
</table>

### College of Business Administration

<table>
<thead>
<tr>
<th>Grade</th>
<th>Honolulu Campus</th>
<th>Other Centers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniors</td>
<td>137</td>
<td>108</td>
<td>590</td>
</tr>
<tr>
<td>Juniors</td>
<td>146</td>
<td>151</td>
<td>583</td>
</tr>
<tr>
<td>Sophomores</td>
<td>133</td>
<td>133</td>
<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>174</td>
<td>191</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>590</strong></td>
<td><strong>583</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Not Candidates for University Degrees or Certificates

<table>
<thead>
<tr>
<th>Category</th>
<th>Honolulu Campus</th>
<th>Other Centers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates</td>
<td>198</td>
<td>176</td>
<td>574</td>
</tr>
<tr>
<td>Professional Teaching Certificate</td>
<td>99</td>
<td>156</td>
<td></td>
</tr>
<tr>
<td>Undergraduates</td>
<td>215</td>
<td>212</td>
<td></td>
</tr>
<tr>
<td>Auditors</td>
<td>28</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>540</strong></td>
<td><strong>584</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Total students

- **Honolulu campus**: 4,600
- **Hickam-Downtown centers**: 526
- **Hilo Branch**: 80
- **Correspondence courses**: 215
- **Duplicates**: 28

### Grand Total

<table>
<thead>
<tr>
<th>Category</th>
<th>Honolulu Campus</th>
<th>Other Centers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4,600</td>
<td>4,395</td>
<td>5,089*</td>
</tr>
<tr>
<td></td>
<td>526</td>
<td>339</td>
<td>662*</td>
</tr>
<tr>
<td></td>
<td>80</td>
<td>72</td>
<td>85*</td>
</tr>
<tr>
<td></td>
<td>215</td>
<td>212</td>
<td>229*</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>40</td>
<td>-40</td>
</tr>
<tr>
<td></td>
<td><strong>540</strong></td>
<td><strong>584</strong></td>
<td>6,025*</td>
</tr>
</tbody>
</table>

*Although the majority of students register for both semesters, some drop out at the end of the first semester and others enter at the beginning of the second semester. Therefore, the figures used in this column represent the total number of individuals registered for the year rather than the sum of the first and second semester registrations.*
FINANCIAL STATEMENT FOR THE FISCAL YEAR 1952-53

Income (excluding plant funds)

<table>
<thead>
<tr>
<th>Sources</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>For educational purposes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal funds</td>
<td>$478,948.27</td>
<td>11.79</td>
</tr>
<tr>
<td>Territorial appropriations</td>
<td>2,117,314.00</td>
<td>52.13</td>
</tr>
<tr>
<td>University sources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student fees</td>
<td>1,156,684.09</td>
<td>28.48</td>
</tr>
<tr>
<td>Sales and services of departments</td>
<td>265,185.47</td>
<td>6.53</td>
</tr>
<tr>
<td>Gifts and grants</td>
<td>18,459.11</td>
<td>.46</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>24,808.97</td>
<td>.61</td>
</tr>
<tr>
<td>Total educational and general income</td>
<td>$4,061,399.91</td>
<td>100.00</td>
</tr>
<tr>
<td>For non-educational purposes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auxiliary enterprises</td>
<td>$609,122.61</td>
<td></td>
</tr>
<tr>
<td>Projects</td>
<td>89,969.28</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>101,527.44</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Expenditures (excluding plant improvements)

<table>
<thead>
<tr>
<th>Activities</th>
<th>Federal</th>
<th>Territorial</th>
<th>University</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>For educational purposes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instruction and related activities</td>
<td>$101,537.75</td>
<td>$781,564.43</td>
<td>$955,372.09</td>
<td>$1,838,474.27</td>
<td>44.90</td>
</tr>
<tr>
<td>Organized research</td>
<td>190,361.13</td>
<td>489,963.97</td>
<td>158,829.31</td>
<td>839,154.41</td>
<td>20.49</td>
</tr>
<tr>
<td>Agricultural Extension Service</td>
<td>188,508.23</td>
<td>280,128.67</td>
<td>391.67</td>
<td>469,028.57</td>
<td>11.45</td>
</tr>
<tr>
<td>Library</td>
<td>102,683.75</td>
<td>71,706.06</td>
<td>174,389.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total for instruction and research</td>
<td>480,407.11</td>
<td>1,654,340.82</td>
<td>1,186,299.13</td>
<td>3,321,047.06</td>
<td>4.26</td>
</tr>
<tr>
<td>Administration and general expenses</td>
<td></td>
<td>243,887.73</td>
<td>143,708.59</td>
<td>387,596.32</td>
<td>9.47</td>
</tr>
<tr>
<td>Operation and maintenance of physical plant</td>
<td></td>
<td>161,562.74</td>
<td>156,655.04</td>
<td>318,217.78</td>
<td>7.77</td>
</tr>
<tr>
<td>Public services</td>
<td></td>
<td>57,522.71</td>
<td>10,646.95</td>
<td>68,169.66</td>
<td>1.66</td>
</tr>
<tr>
<td>Total current University expenditures</td>
<td>480,407.11</td>
<td>2,117,314.00</td>
<td>1,497,309.71</td>
<td>4,095,030.82</td>
<td>100.00</td>
</tr>
<tr>
<td>Percentages</td>
<td>11.73</td>
<td>51.71</td>
<td>36.56</td>
<td>100.00</td>
<td></td>
</tr>
<tr>
<td>For non-educational purposes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auxiliary enterprises</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total current expenditures</td>
<td>480,407.11</td>
<td>2,117,314.00</td>
<td>2,189,243.04</td>
<td>4,786,964.15</td>
<td>100.00</td>
</tr>
</tbody>
</table>
CHANGES IN FACULTY AND STAFF

INSTRUCTIONAL STAFF

Appointments

James K. Asato, Assistant in Health and Physical Education
Phillip S. Atkinson, Instructor in Business Education
Ericka Braun, Instructor in Classics (Acting Chairman, Department of Classics)
Dorothy S. Brown, Instructor in English
Grover C. Chandlee, Visiting Professor of Chemistry
Satis Chandra Chatterjee, Visiting Professor of Indian Philosophy and Culture
Fritz W. Forbes, Assistant Professor of Education
Michael M. Frodyma, Assistant Professor of Chemistry
Margaret C. Gillespie, Assistant in Education
Erma M. Gillette, Assistant in Education
James H. Glasgow, Professor of Geography (Acting Chairman, Department of Geography)
David F. Guillaume, Assistant Professor of Education
Andrew A. Hoshijo, Instructor in Business
Judson L. Ihrig, Assistant Professor of Chemistry
Sueko M. Kimura, Instructor in Art
Catherine E. Lang, Instructor in Education
William H. Lyon, Instructor in Psychology
Harue Oyama McVay, Instructor in Art
Daniel S. Noda, Assistant Professor of Education
Richard Oberdorfer, Instructor in Mathematics and Physics
Gloria M. O'Connell, Assistant Food Supervisor; Instructor in Home Economics
Forrest R. Pitts, Assistant Professor of Geography
Ruth A. Rich, Instructor in Mathematics
M. Margaret Robb, Exchange Assistant Professor of Speech
Herbert Rook, Assistant Professor of Engineering
Mildred Sikkema, Professor of Social Work
Henry B. Vasconcellos (Director of Athletics), Assistant Professor of Health and Physical Education
Herbert B. Weaver, Professor of Psychology (Chairman, Department of Psychology)
Janet Weidenkopf, Instructor in Education
Mary Ellen Williams, Instructor in Education
Claude M. Wise, Visiting Professor of Speech
Cynthia L. Wolfe, Assistant Professor of Nursing

Resignations

Gilbert F. Carpenter, Instructor in Art
Howard H. C. Chang, Instructor in Mathematics
Naomi G. Dietz, Instructor in Education
Fay B. Dresner, Assistant Professor of Classics (Acting Chairman, Department of Classics)
Arthur J. Gallon, Assistant Professor of Health and Physical Education
John S. Helmick, Assistant Professor of Psychology
Otto A. Jiskra, Instructor in Education
Archie J. Kodros (Director of Athletics), Assistant Professor of Health and Physical Education
Linnie A. Nilssen, Assistant Food Supervisor; Instructor in Home Economics
Elizabeth C. Osterlund, Instructor in Education
Charlotte G. Patnoude, Assistant in Education
Beulah R. Shoemaker, Instructor in Education
Jeannette H. Tilley, Assistant Professor of Business Education
Mary E. Toohey, Instructor in Education
Winifred K. Toyota, Instructor in Education
Lucy S. Urbain, Assistant Professor of Social Work
George N. Wago, Instructor in Art
Carl Weatherbee, Assistant Professor of Chemistry

Expiration of Contract
Charles G. Coit, Associate Professor of Economics and Business
Orda M. Mawhor, Assistant Professor of Business Education
Mary Jo Muffy, Instructor in Education (Preschool Supervisor)

Return from Leaves of Absence
Lucille Breneman, Instructor in Speech
Esther C. Jenkins, Instructor in Education
Edgar C. Knowlton, Jr., Instructor in Spanish
Orland S. Lefforge, Instructor in Speech
Harold S. Roberts, Professor of Economics and Dean, College of Business Administration
Isabel L. Snow, Instructor in Education
Daniel Stempel, Assistant Professor of English

Visiting Professors (Summer)
Franz Alexander, Director, Psychoanalytic Institute of Chicago
Floyd A. Bond, Professor of Economics and Chairman of Department of Economics, Pomona College
Harold W. Bradley, Professor of History and Dean, Claremont Graduate School
John W. Dodds, Professor of English and Director of Special Programs in Humanities, Stanford University
Martin G. Glaeser, Professor of Economics, University of Wisconsin
Louis M. Hacker, Dean of the School of General Studies, Columbia University
Charles F. Lindsley, Professor of Speech and Chairman of Speech Department, Occidental College
C. M. Louittie, Professor of Psychology and Assistant to the Provost, University of Illinois
George A. Lundberg, Professor of Sociology and Chairman of Department of Sociology, University of Wisconsin
Ernest O. Melby, Dean of the School of Education, New York University
Elwood Murray, Dean of the School of Speech, University of Denver
Rudolph H. Nottelmann, Professor of Business and Labor Law, University of Washington School of Law
Peter H Odegard, Professor of Political Science and Chairman of Department of Political Science, University of California
Jerome H. Rothstein, Co-ordinator, Special Education Department, San Francisco State College
A. J. Salle, Professor of Bacteriology and Chairman of Department of Bacteriology, University of California at Los Angeles
Celia Burns Stendler, Professor of Education, University of Illinois
Graham H. Stuarts, Professor of American Foreign Relations, School of Advanced International Studies, Johns Hopkins University
Kenichi Watanabe, Physicist, United States Air Force

91
PSYCHOLOGICAL AND PSYCHOPATHIC CLINIC

Appointments
Phyllis Coff, Assistant Psychologist
Gloria Jo Ann Roberts, Junior Psychologist

AGRICULTURAL EXPERIMENT STATION

Appointments
Wilfred H. Aragaki, Assistant in Plant Pathology
Cecilia K. Cook, Junior Chemist
Stephen M. Doue, Assistant in Agricultural Economics
Judith S. Fujioka, Assistant in Chemistry
Irwin L. Ottersen, Assistant in Chemistry
Samuel Price, Assistant Agronomist
Howard J. Weeth, Assistant Animal Husbandman

Resignations
Wilfred H. Aragaki, Assistant in Plant Pathology
Ada E. Chu, Junior Chemist
Cecilia K. Cook, Junior Chemist
Gladys S. King, Associate Chemist
Lawrence W. Larson, Assistant Agricultural Engineer
Hazel C. Murray, Nutritionist
Robert H. Reed, Assistant Agricultural Economist
Roy T. Tribble, Assistant Agricultural Engineer

AGRICULTURAL EXTENSION SERVICE

Appointments
Horace F. Clay, Assistant Specialist in Horticulture
Betty Jo Hubbard, Assistant in Extension
Irene T. Michitani, Assistant in Extension
Yukio Nakagawa, Assistant Specialist in Horticulture
Evelyn H. Nitta, Assistant in Extension
Daniel T. Shigeta, Assistant County Agent
Myra D. T. Zane, Assistant in Extension

Resignations
Gladys Anderson, County Agent
Katherine I. Carter, County Agent
Henry N. Chikasue, Assistant County Agent
Phyllis B. Corstorphine, Assistant County Agent
Norma L. Edwards, Assistant Specialist in Home Management and Furnishings
Frank T. Murphy, County Agent
Claire D. Newport, County Agent
Mary L. Sakai, County Agent
Ruth T. Sano, Assistant County Agent
Betty A. Shikada, Assistant in Extension
Barbara T. Tanji, Assistant County Agent

Leave of Absence
Betty K. K. Zane, County Agent

Reclassifications
James Y. Shigeta, Assistant Supervisor of Club Work
Fortunato G. Teho, Assistant County Agent
OFFICE OF STUDENT PERSONNEL

Appointments
Dorothy W. Liu, Assistant in Counseling
Christine S. Moon, Counselor
Mary M. Okimoto, Assistant Program Counselor
Mary M. Yamashita, Assistant Program Counselor

Return from Leave of Absence
Jane O. Komeiji, Assistant Program Counselor

Resignations
Helene N. Fujita, Program Counselor
Jane O. Komeiji, Assistant Program Counselor
Christine S. Moon, Counselor
Minnie Y. Nakatsuka, Counselor for Student Housing and Part-time Employment
Leanora I. Nishikawa, Assistant Program Counselor
Mary M. Yamashita, Assistant Program Counselor

PROMOTIONS

Instructional
Dorothy F. Aspinwall from Asst. Prof. of European Languages to Assoc. Prof.
J. Halley Cox from Asst. Prof. of Art to Assoc. Prof.
Frances E. Davis from Instr. in Mathematics to Asst. Prof.
Charles A. Engman from Instr. in Engineering to Asst. Prof.
Earle Ernst from Assoc. Prof. of Drama to Prof.
Christopher Gregory from Assoc. Prof. of Mathematics to Prof.
John P. Hoshor from Asst. Prof. of Speech to Assoc. Prof.
Edgar C. Knowlton from Instr. in European Languages to Asst. Prof.
Orland S. Lefforge from Instr. in Speech to Asst. Prof.
James K. Lowers from Asst. Prof. of English to Assoc. Prof.
Robert B. Stauffer from Instr. in Government to Asst. Prof.
Warren van Bronkhorst from Instr. in Music to Asst. Prof.

Experiment Station
Frank Haramoto from Asst. in Entomology to Jr. Entomologist
Irwin M. Newell from Assoc. Entomologist to Entomologist
Toshiyuki Nishida from Jr. Entomologist to Asst. Entomologist
Yoshinori Tanada from Jr. Entomologist to Asst. Entomologist
Tokushi Tanaka from Asst. in Poultry Husbandry to Jr. Poultry Husbandman

Extension Service
Harvey M. Vollrath from Asst. Specialist in Animal Husbandry to Assoc. Specialist in Animal Husbandry

HILO BRANCH

Appointment
Frank T. Inouye, Assistant Professor of History; Director, Hilo Branch

LEGISLATIVE REFERENCE BUREAU

Appointments
Henry T. Awana, Junior Researcher-Trainee
Richard H. Kosaki, Junior Researcher
Kathleen M. Schutte, Research Fellow
DEGREES, DIPLOMAS, AND CERTIFICATES

HONORARY DEGREES

DOCTOR OF HUMANITIES
Harry S. Truman
Milburn Lincoln Wilson

DOCTOR OF LAWS
Adna Girard Clarke
Hitam Leong Fong
Louis Morton Hacker
Samuel Wilder King

ACADEMIC DEGREES

DOCTOR OF PHILOSOPHY
Austin Wyatt Pritchard
Donald Wishart Strasburg

MASTER OF ARTS
Bumpei Akaji
Nora Kam Young Chang
James Christopher Ching
Barney Chung
Betty Ann Cochran
Douglas Charles Dorough
Linton Freeman
Betty June Garrett
Hazel Lucille Hill
Anthony Holbrook
Ruth Willard Iams
Patrick Henry Jennings
Patricia J. Reile
Brother Richard Louis Roesch, S.M.
Alice Scheuer
Kathleen Secord Scott
Robert Lee Scott
Donald E. Van Gieson

MASTER OF SCIENCE
Alvin K. Chock
David Ely Contois
Mary Baldovi Falces
Harold Haruo Hagihara
Frank Hiroshi Haramoto
Sarah Ellen Nye Harris
Richard Koon Bow Ho
David Choh Liu
Michio Takata
Tokushi Tanaka
Kenneth Allen Wilson
Ralph Franklin Wiseman
John R. Woodworth
Yoshio Yamaguchi

MASTER OF EDUCATION
Walter Lee Curtis
Kilmer O. Moe, Jr.
Sarah Lee Yang

MASTER OF SOCIAL WORK
Asa Asami Higuchi
Mary Utsumi Kashiyamura
Sunao Murata
Jack Takuro Nagoshi
Thomas Tomohiro Oyasato

94
BACHELOR OF ARTS

Alma Theresa Aiu
Kazuki Akashi
Paul Fumio Aki
Richmond Ah See Apaka
William Ahsee Apaka, Jr.
Samuel Kamakaipolani
Apuna, Jr.

Yasuko Arakaki
(with honors)
Makoto Araki
Goro Asato
Richard Yat Cho Au
Shay Whitney Auerbach
Charles Shiro Azumi
Manuela Andrade Badua

Marianne Bagley
Jacquelyn Barbara Anne
Bennett
Jean Townsend Berg
John Bonell Bonsey
Donnette Mary
Brekenridge

Jesse Irman Brown
Juliet Cabral
Peter Gary Carson
Charles K. C. Chang
Clara Boo Kin Chang
Harold Mun Tuck Chang, Jr.

Robert Whak Sil Chang
Benjamin Pau Seong Char
William Kui Char, Jr.

Shigeru Chinen
Harry Len Fong Ching
Loretta Kwai Jun Ching
Gilbert Yoon Bong Choi
Dorothy Poon Ing Chong
Lillian Yuk Seong Chong

Philip Wai Tong Choy
Walter Wah Tung Choy
Eva Choye

Henry Bing Chong Chun
Jeanette Mew Go Chun
Paul Hing Chinn Chung
Daniel Jan Nam

Chunnung
Donald Amos Claggett
Katherine Clement

Patricia Eileen Creel
Ernest Bowen DeSilva, Jr.
Herbert Diama
Raymond Yukio Doue

Jane Tomiko Ege
Manuel Emiliano, Jr.
Caroline Marie Enos
Laura Bowers Evensen
Gilbert Fooks
Mitsuru Fujimoto
Takui Fujimura
George Mamoru Fujiwara
Toshie Fujiyoshi
Akira Fukuda
George Masaru Fukumoto
(with honors)
Betsy Shizuye Furushashi.
James Haruki Fushikoshi
Douglas Cable Garlick
Evan Lee Gillespie
Kenneth Douglas Gomes
Blanche Ohiaokalani

Gomez
Sarah Alice Goss
(with honors)
Douglas Patrick Hagen
Amy Emiko Hamai
Janette Marie Hannus
William Aiji Harada
(with honors)
Charles E. Hawkins
Lenley Rand Hawksworth

Harry Sumio Hayashi
Walter Meheula Heen
Gilbert Winston Hicks
Shizuko Higa
Jordan Reid Higgins
Mieko Hihara
Hilda Sumie Hino
Kei Hirano
George Hajime Hiyama

Takeo Hokama
(with honors)
Yukio Arthur Honda
Thomas Hoon Hoo
Harold Kam Chong Hu
Stanley Paul Hu
William Kwan Wai Hu

Thomas Hachiro Ida
Ayame Ide
Takashi Iinuma
June Ijiri
Herbert Hiroshi Ikenaga
Ronald T. M. H. Ing
Evelyn Inn
Lincoln Jitsuo Ishida

Oliver Masashige Ishikawa
Sadie Sakae Ishino
Ehel Katsuyue Izumigawa
Ronald David Kamakahi
Wallace Masayoshi
Kameoka
Masamu Kami
Richard Kazuo Kanayama
Richard Shigeru Karimoto
Beatrice Mitsuye Katamoto
(with honors)
Hiroko Kataoka
Gladys Yaeko Kawakami
Francis Ahloy Keala
Gaylien Leiola Kealoha
Kenneth Sun Won Kim
Makoto Kimura
Thomas Seizo Kimura
Stanley Fusao Kitagawa
George Hideo Kitamura
Wayne Shuji Kiyosaki
Eunice Mae Knowles
Calvin Seiso Kobayashi
(with honors)
Charles Reiji Kodama
Setsuko Kodama
James Katsumi Kojiro
David Michio Komori
George Kono
Daniel Kam Wah Kop
Ernest Hisao Kubota
Kay Kazuko Kutaka
Melvin Mitsuo Kuwamoto
Sachiko Kuwaye
David Ying Fat Lai
Ernest Sun Sing Lam
Alastair Rolland Haldane

Lamberton
Bertha Foong Kim Lau
David Hoy Chun Lee
Dorothea Sam Lee
Hoover Kwai Tim Lee
Lilian Pauline Kekealani

Lee
Wilfred Lanakila Lee
John Harrison Lennox
Fusae Ozeki Lim
Ronald Lin
Joan Lorraine Lindsey
Leroy Ernest Linsley, Jr.
Richard Jun Chenn Loo
Stanley Koon Yew Loo
David King Luke, Jr.
Roland Jesse Lunday
Serafin Gregory Matagone
Thomas Kiyoshi Maeda
Dorothy Tsuuko
Matayoshi
Christine Sumie
Matsumoto
Robert Kenji Matsumoto
Jane Michiko Matsuura
Mildred Fung Moi Mau
Barney Bonifacio Menor
Charles Richardson
Middleton
Robert Lee Ruley Miller
Edward H. Misaki
James Sunao Mishima
Stephen Hiroshi Miura
Michael Yukio Miyahira
Teru Miyahira
Walter Susumu Miyake
Noboru Miyamoto
Clara Chizu Miyashiro
Walter Masami Miyoshi
Gloria T. Morifuji
Grace Mieko Morikawa
Ellen Kikue Morita
Tsugio Motobu
Shizue Murakami
Mildred Ritsuko
Muranaka
Kooji Murayama
Betty Shizue Nagamine
Albert Takeo Nagata
William Matsuo Nagata
Kunio Nagoshi
Mildred Toshiko
Nakahara
Lillian Yuriko Nakai
Albert Kiyoshi Nakakura
Setsuko Nakata
Thomas Kazuo Nakayama
Albert K. Nishikawa
Charles Haruto Nishimura
Toshio Nishioka
Eleanor Chizuko Nishita
Henry Masao Nitta
Hitoshi Nitta
Richard Kenji Noda
Takanori Nonaka
Nancy Amiko Nushida
James Shigeo Oda
Donald Mason O'Day
Edna Kikue Ogata
Richard Hisayoshi Oi
(with honors)
Helen Aiko Okamura
Helen Masae Okihiro
Mark Masao Okimoto
Sumiko Okuna
Clara Shigeko Oshiba
Doris Teruko Oshiro
Stuart Saburo Oyama
James Kwan Kee Park
Thomas Park
Abraham Piianaia
Richard Law Robinson
Herbert Marnorou
Sakamoto
Thomas Sakurada
Carol Shigeko Sakuragi
Aileen Sasaki Sato
Lorraine Hiroko Sato
Willas Aeoma Sayre
(with honors)
Sam Choi Seto, Jr.
Richard Masaru Settsu
Grace Tomoye Shigaki
Yoshio Shigezawa
(with honors)
Stanley Iwao Shima
Allen Y. Shimomura
Linda Kazuko Shinozawa
Dorothy Chiyono
Shitabata
William Wah Hee Siu
Helen Arlene Small
Gerald Tamotsu Soneda
Mary Julia Kaulani Stacey
Kikuyo Suematsu
Sumiko Sugiki
Kiyoko Sumimoto
Tadayoshi Suzuki
Carl Swanholm
Lawrence Masato
Takahashi
Gerald Hideo Takei
Lillian Yuri Takeuchi
Harvey Bung Hau Tam
Yoshie Lynne Tamaru
Asako Tamashiro
Satoru Tamura
Raymond Toshiyuki
Tanaka
Richard Masao Tanaka
Trixie Ann H. Tanaka
Betty Michiko Tanji
Richard Haruo Tatsuyama
Ellsworth Wilbur Taylor
(with honors)
Margery Williams Terpstra
Lillian Harumi Teruya
Beatrice Sue Yuen Thom
Virginia Carlyn Tibbetts
James Masaru Toda
(with honors)
Bert Shiro Tokairin
George Kenji Toki
Edward Seiya Tokuhama
Rokuro Tomita
Lester H. Tomokiyo
Richard Tadashi Tsutsumi
Helen Emiko Uchida
Grace Yukiko Uejio
Jose Mitsuo Urcia
Ruth Teiko Ushiroya
Edward Sadao Uyeno
James Melvin Vear
Mary Kazuko Watanabe
Helen Natsuko Wataoka
Harold Robert Weaver
Norman Torkel Westly
Peter T. Wilson
Walter Kwai Fun Won
Amy Gwendolyn Wong
Arthur Mun Sang Wong
Bertha Kam Chin Wong
Laura Kam Sung Wong
Donald Mitsuo
Yamaguchi
Robert Takaichi Yamamoto
(with honors)
Sueharu Yamamoto
Satoshi Yamamura
Muneto Paul Yamanaka
Herbert Mitsugi
Yamashiroya
Keiko Katherine
Yamashita
Nancy Teiko Yamashita
Masanobu Yamauchi
William Thomas
Yamazaki
Gilbert Yap
Thomas H. Yasuhara
Stanley Noboru
Yoshimoto
George Shigeru
Yoshishige
Nellie Yuk Ngo Young
Howard Hi Choon Yu
Alexander Ah Sun Yuen
BACHELOR OF SCIENCE
(Civil Engineering—Medical Technology—Nursing—Recreation)

Ronald Nobuo Amioka
Natsuo Anbe
Mark Makoto Anzai
Bruce Yoshiro Arakaki
Lee Harte Burke
Emilia Navarro Centeio
Walter Chew Yung Chang
Lorraine Yuk Sim Char
Albert Tai Moon Ching
Robert Y. D. Chun
Soo Myung Chung
Stanley Woon Hon Chung
Dorothy Ann Estrella
Hirosi Eta
Minoru Fujihara
Stanley Tamotsu Fujimoto
Stanley Iwao Fujiyama
James Saburo Harada
Robert Goro Hayashi
George Leal Henry
Donald Tetsuji Hirai
James Seiichiro Hirata
Yoshito Hironaka
Akiyo Hoshino
Paul Wing On In
Mabel Itsuko Iwata
Robert Tsutomu Kagamida
Eleanor Sanae Kagawa
Jin Fong Kam
Yuji Kasamoto
Hideo Kawada
Thomas Yoshiro Kawahara
David Seichi Kawasaki
Theodore Koo Wan Luke
George Iwao Mamiya
Setsuko Masuda
Robert Satoru Matsumoto
Miyuki Matsuno
Edwin Noboru Matsuoka
Carolyne Jean McCue
William Madsen
McMorrow
Calvin H. Mimaki
Masayuki Minamide
Clifford Terufumi
Miyamoto
Daisy I. Morita
William Earl Mossman
Kenneth Toshiwo
Mukaigawa
Azusa Muraoka
Mary Kalahikiai Nailau
Shirley Hanae Naito
John Masami Nakagawa
Tetsuo Nakamura
James Isamu Nakao
Michiwo Nakashima
Eloise Yachie Nekomoto
Henry Takashi Nobuchi
Hiromi Okuda
Robert Frederick Olsen, Jr.
Herbert Chung Wah Park
Harry M. Sato
Kenneth Toshinobu
Seikiguchi
(with honors)
Toshibi Hamashige Shishido
Robert Lee Sideroff
Wallace Yasoichi Suehiro
Masahiko Sugino
Lillian Yuriko Suyama
Lawrence Norio Takao
Alma Yaeo Higa Takata
Mitsu Takayama
Kimie Tamashiro
Kenneth Koichi Tanaka
Albert N. Tani
George Minoru Teramoto
Melvin Kalealoha
Thompson
Seikichi Tokuda
Ronald Tsugio Uchida
Seige Watanabe
Stanley Hung Sheong
Wong
Charles Shigeru Yamanaka
Seiko Yamashiro
James Rokuro Yano
(with honors)
Greta Ngit Sim Yim
Miyoko Yoshina
(with honors)
Seung Hee Yuen

BACHELOR OF EDUCATION

Gloriana Bartolome Adap
Alberta Kalauonaona Ahin
Myrtle Piilani Aki
Bernice Fuyuko Akimoto
Florence Toshiko Amaki
Flora Yoshiko Araki
Jane Emiko Araki
Thelma Kimie Asato
Mercedes Basa
Martha F. Beamer
Frank Paul Bigoski, Jr.
Charles Wesley Bown
Loretta Lei S. L. Chang
Bertha Bicenta Leinaala
Ching
Phyllis Rose Ching
Thelma Lai Keam Chock
Janet Kam How Chun
Rita Chun
Rose Ngit Heong Chun
(with honors)
Marilyn Mikesell Davis
Frederick Wayne Dodge
Grace Itsuko Doi
Encarnacion Menor
Domingo
Ruth Rose Emil
Nellie Fagaragan
Doris Chizuko Fujikami
Katherine Harue Furuya
Katsuko Hama
Tokio Harada
Jennie Asayo Hashimoto
Gladys Sayoko Hayashi
Helen Parker Hayselden
Ruth Yuen Heong Hee
Lodema Martin
Hendrickson
Miyoko Higa
Noboru Higa
Hazel Aiko Hiramoto
Miyuki Hirayama
Patricia Nyukjin Hiu
Madge Machiko Honda
(with honors)
June Hisayo Ibara
Lillian Shigeko Ikeda
(with honors)
Lily Yurie Imamoto
Akira Imamura
Jean Yuriko Ishimura

97
Yooky Ito
Miyoko Iwamoto
Agnes Kikumi Iwatani
Jane Sadako Jo
Sadao Kakugawa
Frank Kamahle
Evelyn K. M. Kim
Margaret Kim
Florence Yaeko Kimura
Robert Susumu Kita
Young Yee Ko
Marjorie Fumiko KobaYashi
Mitsue Kohatsu
Nanao Kojima
Edith Chitose Kondo
( with honors)
Edna Lin Kook Kong
Gordon Masamitsu
Kushimaejo
Bertha Mew Kwo Lau
Kyung Ok Lee
Amy Jean Leong
Eleanor Jane Martinez
Marie Ann Masley
Dorothy Yoshie Masuda
Asano Masumoto
Robert Kau Kau Kau
Herbert Koji Mikami
James Waichiro Miller
Joan Lois Miller
Kimiko Miyasato
Fred Toshiyuki Miyashiro
Hiroshi Morimoto
Irene Kimiko Murakami
Mae Emiko Murakami
Mildred Kiyoko Murakami
Sadao Muramaru
Natsuko Nakama
Doris Hideko Nakamura
Richard Jitsuo Nakamura
Florence Natsuko Nakata
Violet Tokie Niimi
(with honors)
Michie Nishihara
Marlene Misayo Nitta
James Miromi Nozara
Mary Bryce Nooney
Yaeko Nozawa
Leilani Yoko Oga
Margaret Fumie Ojima
Gladys Satoko Okuda
Wallace Kaoru Onishi
Mavis Sachiko Oshiro
Michio Ensie Oyakawa
Benedicta Pladera
Beatrice May Platten
John Saclausa
(with honors)
Betty Kazuko Saito
Jenny Sumiko Sakaitani
Rose Wakie Sato
Alice Teruko Shimabuku
Florence Eiko Shimizu
Irene Tomi Shingaki
Kimiyo Shiraki
Doris Sachiko Shiroma
Sonja Laurene Shura
Alice Ruth Stiles
Elaine Emiko Sugai
Chieko Sugimoto
Alice Takeko Taise
Amy Yamauchi Takayama
Elizabeth Sumiko Takimoto
(with honors)
Gladys Namie Tanaka
Lillian Harue Tanaka
Mary Shimaye Tanaka
Steven Kazuo Tanigawa
Hazel Nakamae Taniguchi
Sabra Yayoi Taniguchi
Eishin Royden Tengan
Faith Hin Sheong Tsui
Elsie Chieko Uejo
Kikuko Ushio
Harry Hiroyoshi Uyeda
Tsukie Wada
(with honors)
Betsy Mineko Yamachika
Alice Miyoko Yamada
Thelma Kikue Yano
Fujiko Zekeran

BACHELOR OF SCIENCE
(Agriculture—Home Economics)

John Kaoru Akamine
Haruo Akiyama
Fumie Aoki
Doris Junko Aragaki
Ellen K. Y. Ching
Kwai Fong Choy
Amos Kwock Leong Chun
Alvin Chung
Virginia Tucker Darnell
Elizabeth Jane Flores
Hideto Fuchigami
Frederick Waichi
Fujimoto
Stanley Mamoru Fujimoto
Mae Kiyoko Fukumoto
Helen C. Gascon
Hisae Goshi
Wilfred Takashi Goto
John Comfort Hance
Edward Takeshi Hayashi
Keeji Hayashi
Herbert Etsuro Higaki
Akira Hino
Edward Young Tim Ho
Mavis Lishio Holt, Jr.
Howard Haruo Hoshide
Tamotsu Ikeda
Stanley Hisao Inada
Elsie Michiyo Ishida
Emelie Reiko Kakazu
Florence Junko Kashima
Fukuo Kato
Jennie Yuk Kyau Kau
Stanley Isao Kimura
Norman Yonezo Kitazaki
Amy Taeko Koijma
Sumie Kumano
Shiro Kunimitsu
Aksuke Kuwahara
Vivian Kon Nyun Lau
Bessie Siu Jun Lee
George Hen Noo Lee
Paul Kawaha Lee
Setsuko Matsubara
Susumu Nakamae
Kiyoihi Moria
Nelson Tokumori Moriwaki
Mildred Hanako Nagamine
Mitsuo Nakamae
Etsuko Nakashima
Evelyn Hideko Nitta
Ninnie Sadako Odo
Emily Momoye Okawaki
Yoshinobu Oshiro
Marjorie Gene Roberts
Clarence Masato Sakamoto
Jay Sasan
BACHELOR OF BUSINESS ADMINISTRATION

Bernard Hideo Shinbara
Virginia Misao Shintaku
Carl Hideo Shioi
Michio Shitanishi
Shuichi Tanaka
James Shichiro Toba
Janet Itsuko Tokairin

Kwan Karl Tomomitsu
Lilian Yayeko Tsushima
Gladys Fumi Ueno
Marion Kiyoumi Ushiroda
Frank Nobuto Watanabe
Raymond Shigeru Watanabe

Sharon Yukiko Yafuso
George Yahata
Edward Takeshi Yamada
Leonard Hung Leong Young
Lawrence F. H. Zane

Roy Eichi Akaki
Theodore T. Akamine
Rudolph Susumu
Akiyoshi
Stanley Toru Ambo
Satoshi Asato
Gilbert Kwock On Au
David Asuncion Bumanglag
Ellsworth Macfarlane Bush

Ethel Kyau Chee
Howard M. O. Ching
Stephen B. D. Ching
Teiji Chinna
Charles Kam Wo Choy
Albert Sey Cheong Chun
Charles Kui Kong Chung Wai Mun Chung
Richard Lono Clissold
Paul Coxloff, Jr.

Harry Hiroto Dantsuka
Dewey Halford Eberly
Michiro Endow
Leon S. Fiske, Jr.
Katherine K. Fujiyama
Torusaki Fusihiku
Albert Tomochi Furuya
Andrew Gerakas (with honors)
Mieko Gushiken
Kenneth Yooji Hakoda
Howard Hiromi Hamamoto
Myrtle Fusako Hanzawa
Kenneth Iwao Hasegawa
Teruo Hasegawa
Helen Haruko Hayashi
Robert Hong Chow Hee
Annette Yuke Chin Hiu
Roy Matetsu Honda

Henry Sai Hin In

John Y. Inagaki
Robert Kazuo Inouye
Hubert Kaname Ishimoto
Gilbert Koichi Iwanaga
Minobu Kamisato
Clifford Junichi Kaneshiro
Joseph Hiroshi Kato
Katsuo Kato
Richard Asao Kawakami
George Yoshinobu Kawatachi
Daniel Martin Kennedy
Carl Koichi Kinoshita
Harold M. Kiyohiro
Hideo Kon
Harry Kuan Lun Lai
Edward Lau
Iris Kam Hing Leong
Wallace T. U. Leong
Stanley Hampton Lanihuli Lum
Yoshiyuki Maeda
Shoichi Maedonochi
Herbert Katsuyuki Marutani
Clifford Noboru Masui
Virginia Clare McIntyre
Anthony Gaul Merritt
Marjorie Emiko Mori
Raymond Jitsumi Moriguchi

Ronald Asao Morikawa
Thomas Sadato Moriwaki
Leonard Masao Moriyama
Hisao Nagahisa
George Yasushi Naito
Henry Takayuki Nakai
Walter H. Nakamine
Harry Satoshi Nakamura
Yoshito Nakamura
Stanward Shinji Nakasone

Takashi Okemura
Ernest Kumao Okimoto
Robert Satoshi Okimoto
James Takashi Okuda
Barbara Kiyoko Okumura
Kiku Okumura
Philip Tsuyoshi Oshita
Rudolph Pacarro
Jo Ann Renfro
Donald Tamotsu Sakai
Edward Minoru Sakai
Hester Hideko Sakai
George Hideo Sakamoto
George Masaharu Sato
Charles Bryant Schrader
Arthur Yoji Shida
Motomi Shindo
Harold Yoshimichi Shintaku
William Ross Stockstill
Kenji Sumida
Stanley Young Chul Sur
Ellen Yooko Taki
Sadaharu Tashima
Harold Keiji Toda
Wilfred C. L. Tom
Kazuto Tomoyasu

Henry Tai Chong Tong
Richard Sik Kwong Tsui
Sueo Tsukano
Barbara Uchida
George Tadahisa Wada
James Tszio Wada
Kikue Wada
Katsunari Wakatsuki
Akira Watanabe
Harold P. K. Wong
Bert Yuichi Yano
George Hisao Yokota
Masao Yonemori
Magoichi Yoshida
Ernest Hung Wai Young

99
FIVE-YEAR DIPLOMAS

Janet Kazuko Abe
Glortiana Bartolome Adap
Shoyei Ajifu
Tomiko Akamine
Mazie Suma Akana
Rene Shizue Aminne
Itsuko Ando
Rene Yukie Aotaki
Eliee Kii Atakak
Betty Yaeko Awamura
Elaine Toshie Beppu
Frank Paul Bigoski, Jr.
Grethana Hauoli Botelho
Marie Craveira Brown
Deborah Mahelani Ching
Doris Camvone Ching
Juliette Yen Ngnit Chun
Reginald Vernon Coelho
Gladys Hortenstine
Coulter
Kakuichi Ensei
Mary Helen Williams
Freitas
Emiko Fujii
Susan Yeaco Fujii
Jeanette Etsuko Fujimoto
Nobu Fujioka
Katsue Fujitani
Chieko Furutani
Bernice Ching Goo
Yoko Hayashi
Douglas Yukichi Higa
Stanley Takashi Himeno
Masaru Hirota
Thelma Yuen Nyet Ho
Eula May Hodges
Bessle Yoneko Ibrao
Yoshie Higuchi Ikinaga
Yoshie Isemoto
Judith Emiko Ito
Takao Ito
Janice Shinobu Iwatake
Carolyn Kigiku Izuno
Nellie Stewart Johnson
Elaine Kazue Kajihara
May Junko Kakazu
Janet Keiko Kamei
Frank Naoyuki Kaneda
Kikuyo Karimoto
Katherine Miyoko Kawai
Barbara Sung Boon Kim
Ruth Park Kim
Lucille Kiyomi Kimura
Lenora Jay Kong
Emiko Kubota
Evelyn Hisayo Kurasaki
Joseph Toshiyuki Kuroda
Evelyn Lau
Anna Yue Wun Leong
Kimie Maeda
Jane Yoshie Maruoka
Helen Yukiko Matsui
Clara Michie Matsumoto
Samiko Miyamoto
Lily Yoshiko Miyasato
Nancy Ann Sakko
Miyoishiro
Grace Akiko Morikawa
Gladys Mieko Morikawa
Teruko Morikawa
Takako Martha Murakami
Sadao Muramaru
Tomie Muraoka
Nora Natsume Nabeta
Sumiko Nagami
Jane Shimako Nagatori
Lawrence Takeshi
Nakagawa
Florence Setsuko
Nakasone
Henry I sa Nakasone
Suno Nakasone
Ruth Kazuko Nako
June Marilyn Nichols
Hirosi Nishida
Dorothy Chiyoko
Nishimura
Carol Sumie Nunotani
Dorothy Chizuko Ochiai
June Kulamanu Oda
Yoshie Odo
Hazel Kiiyio Oi
Taketo Okamitsu
Alice Sachiko Okamura
Ruth Chiyoiko Okazaki
Shirley Yaeko Okimoto
Leilani Virginia Warinner
Oliveira
Alfredo Padilla
Elise F. Ryusaki
Kiyomi Sakaide
Lily Miyoko Sasaki
Nobuo Sato
Masuko Shimazu
Aiko Shimotsu
Lawrence Masayuki Shoda
Grace Emiko Sueda
Kiyono Suga
Chiyoko Taira
June Takahashi
Yaeko Thelma Takayama
Beatrice Florence Tam
Helen Tsuneko Tanaka
Myra Sumako Tanaka
Yukio Toguchi
Aileen Hung Jun Tom
Sumiko Tottori
Dorothea Mitsuko Tsuchiya
Betty Yoshiko Uchima
Mitsuki Nohara Uda
Jean S. Uehara
Bernice Emiko Wakumo
Jacqueline Carol Wiegman
Julia Stewart Williams
Masaichi Yafuso
Florence Sawai Yama
d
Ruth Yoriko Yamaguchi
Stanley Isamu Yamamoto
Alicia H. K. Yee
George Yoshimura
Margaret Tamiko Yoshinaga
Myra Dai Tai Zane

SOCIAL WORK CERTIFICATES

Vernon C. H. Chang
Clarence Kenji Fukumae
Tsutayo Hamashige
Robert H. Higashino
Richard S. Imahiro
Helen Mary Madden
Edward H. Misaki
Dollie K. Nagai
Dick Usuo Nagata
Alice Tomiko Naito
Dorothy E. Nakabayashi
Clara Yoshiko Niimoto
Edith E. Ono
Masaru Oshiro
David S. Shimomura
Alfred Katsumi Suga
June J. Uenooyama
Robert Hideyuki Yamamoto