Short Report

of

Gregg M. Sinclair, President

University of Hawaii

1953–54
The University sponsored an Advanced Management Program conducted by a staff from the Harvard Graduate School of Business Administration and attended by fifty-eight business executives from Hawaii, the Mainland, Australia, Arabia, and the Philippines. Professor Miles Mace is shown above with his class in Business Policy.

The University of Hawaii, one of ten Orientation Centers in the United States, assists foreign students through a program of special classes and community field trips. Our Conference on Race Relations was financed with funds from local and mainland foundations. The forty experts in race relations who attended came from many countries.
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Board of Regents, 1953–54

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Report of President Sinclair

The people of the Territory are faced with a grave decision: Are their children and their children's children going to be offered the same college education that they themselves and their own parents were offered? The answer will be NO unless affirmative action is taken NOW.

The facts are these: 1) due to the high war-time birth rate, there is a nation-wide increase of young people of college age, and 2) the percentage of young people of college age who wish to go to college has increased.

This problem is so pressing throughout the nation that it will be made the principal topic of discussion at the 37th annual meeting of the American Council on Education in Chicago this fall. It heads the agenda as "Preparing to Meet the Rising Tide of Students." Let me present the problem. The decision rests with the community.

TIME FOR DECISION

Since 1854 our college population has increased thirty-five times as fast as our total population. In 1900 only 4 per cent of those eligible attended college. In 1954 25 per cent of those eligible attended college. By 1970 there will be an increase of 70 per cent in our population of college age. The college enrollment increase will be between 50 and 100 per cent.

These figures apply directly to Hawaii. High birth rates during World War II have filled grade-school classrooms to capacity. If these students are not to be denied the higher education to which they are entitled, it now becomes the University's obligation to provide for them.

It is conservatively estimated that this increase in our college-age population will increase the University's registration as follows. Our figures are minimal, not taking into account the tendency for more and more high school students to go on to college.

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WHAT STUDENTS WILL DEMAND

At present we manage to handle an enrollment which has doubled over a period of ten years only by using the sixty-two temporary, barracks-type buildings which crowd our campus. These buildings are not only unsightly but are disproportionately expensive to maintain. They must be replaced.

Moreover, by 1957, when the enrollment will begin its inevitable rise, the University will require not only a larger instructional staff but a building for general classroom instruction; a building for classroom work in engineering, mathematics, and physics; a health and physical education building; an agricultural building; a high school for Teachers College; and a residence hall for men. These are the increased facilities which the Board of Regents and the administration of the University are obligated to request of the Legislature on behalf of the increased number of high school students who will be knocking on the doors of the Territory's only accredited institution of higher learning. The Territory cannot afford to side-step this obligation to its youth.

HARVARD ADVANCED MANAGEMENT COURSE

During the year the University has sponsored many educational programs at no expense whatsoever to the Territory. One of these was the Advanced Management Program for business executives. Four courses were conducted by a staff from the Harvard Graduate School of Business Administration. The six-week session was held on Punahou School campus where fifty-eight businessmen from Hawaii, the Mainland, Australia, Arabia, and the Philippines spent a six-day week studying and discussing mutual problems. The objectives of the program were outlined by Professor Edmund P. Learned at the ceremony at which certificates were awarded for completion of the course. He stated in part:

The purpose of the Advanced Management Program is to contribute to the supply of broad-gauged executives who will assume the role of top executives and make an effective contribution to an expanding domestic and world economy by running successful and profitable businesses--men filled with the spirit of enterprise, able to analyze risks and willing to take risks, men possessed of drive to overcome obstacles, and aware of their public obligations and of the public impact of their private decisions, as well as the meaning of public policy decisions on business.

The enthusiasm with which the course was received has ensured its repetition next year.

ORIENTATION OF FOREIGN STUDENTS

A second activity during the busy summer of 1954 was the Orientation Center for Foreign Students conducted by the University under the auspices of the Department of State and the Institute of International Education. The University is one of ten centers established throughout our
country for foreign students about to undertake college study. The purpose of the centers is to acquaint the students with the American way of living through field trips in the community and formal classes in speech, English, government, social usages, and similar subjects.

The thirty-five students came from Thailand, Malaya, Indonesia, Viet Nam, Laos, Japan, Korea, and the Philippines. This nationally and internationally important program was offered with the co-operation of far-sighted citizens of the community with no expense to local taxpayers.

RACE RELATIONS CONFERENCE

Also during the summer of 1954 a Conference on Race Relations in World Perspective was held on our campus. This four-week session was conducted jointly by the University of Hawaii, the University of California, and the University of Chicago. It was financed by funds made available by the Ford Foundation and the McInerny Foundation.

Forty experts in race relations came from every corner of the world to review the state of scientific knowledge about race relations, to share such knowledge, and to formulate a framework for subsequent studies.

INTERNATIONAL COOPERATION CENTER

Early in 1954 the Governor of the Territory joined with the Foreign Operations Administration in the establishment of an International Cooperation Center to orient Asian officials coming to our country and our officials going to theirs. Much of this work was done previously by College of Agriculture personnel, and one of their officers was detailed to administer this important work. As part of the program a coffee school is to be held at Kona. Representatives of Cuba, Puerto Rico, and South and Central America will attend. This program is conducted without expense to the University.

SCHOLARSHIPS

There were 120 scholarships, twenty-two more than during the previous year—an increase chiefly accountable to the establishment of the Hung Wo Ching scholarship and the doubling of those provided by the Territory in view of the raise in tuition. New scholarships were: seven totaling $1,000 provided by Hung Wo Ching; three ASUH scholarships of $300 each; and two scholarships of $55 each provided by the University Music Club. The $5,000 Li Foundation scholarship was again awarded.

HUMAN RELATIONS AREA FILES

Several years ago the University was honored by being invited to become a member of the Human Relations Area File group consisting of fifteen other universities. The Files are in effect a research tool for professional research workers interested in cultural and cross-cultural
analyses. Eventually they will be valuable to individuals, businesses, and institutions concerned with cultural usages and human behavior.

PACIFIC ISLAND STUDIES

Research among the islands of the Pacific was stimulated by the Pacific Island Studies Committee, which offered an opportunity for the interchange of views between faculty members in different fields of study. As a result, the Committee has developed a list of research projects for which funds will be requested of the Carnegie Corporation grants.
FACULTIES

Dean Paul S. Bachman

It has been increasingly difficult for the Dean of Faculties to administer effectively the many and varied duties of the office. On July 1, 1954, an Administrative Dean is to assume primary responsibility for (1) fiscal matters, including the preparation and consolidation of annual and biennial budgets; (2) office and housing assignments; (3) auxiliary enterprises; (4) building and development programs; and (5) plant upkeep. At that time responsibilities of the Dean of Faculties will become primarily educational, including instructional research and extension programs.

Although the chairmen of the instructional departments have been appointed for one-year terms, it has been customary to reappoint the incumbent. A new system of three-year terms, followed by a period of eligibility for three years was inaugurated.

During the current year the Regents authorized the establishment of a 10-watt FM Station, for which funds were secured through public subscription. In order to integrate this station with our AM and other radio activities, a Radio Office was made responsible for this new activity with the Radio Coordinator as Director. A Radio-TV Committee representing the various divisions and departments of the University concerned with radio work will determine general policies of the station.

THE FACULTY

Resignations and non-renewal of contracts of full-time faculty members numbered twenty-three, the lowest since the academic year 1939-40, when the faculty was less than half its present size. The principal reason for resignations was a desire to return to the Mainland for personal or professional reasons. In securing replacements, we were able to employ faculty members whose qualifications from the point of view of education and experience were superior in eight instances and equal in all others.

This Office, assisted by the Steering Committee of the University Senate, and a small faculty committee of technical advisers, made a study of salaries paid at state-supported institutions to instructional, research, and extension personnel. Excellent coverage was obtained, only one state university failing to respond. As a result, a recommend-
ation was made to the President that (1) salary adjustments be made between various types of services to bring us into line with mainland practices; and (2) that the minimum and maximum salaries for each grade in each category be adjusted so that our salaries would be at least $500 per year in excess of the average of state-supported institutions. Upon the recommendation of the President, the Regents adopted these proposals in principle, to be put into effect as rapidly as finances permit.

Results of student ratings of faculty members indicate general satisfaction on the part of students with teaching methods, and methods for the evaluation of student performance. However, there was some indication that faculty members relied unduly on the lecture method, especially in advanced classes, and stressed primarily the accumulation of information in objective examinations.

It is the purpose of the classroom, laboratory, and examining processes to encourage analytical and constructive thinking as well as develop the student's facility in self-expression, both oral and written. The Dean of Faculties was appointed chairman of a faculty committee to examine the whole problem of effective teaching and to make recommendations for improvement.

The faculty greatly appreciate the invitation of the Board of Regents to select a faculty committee to work with the Regents in the selection of a new president to take office when President Sinclair reaches retirement age. The high degree of correlation between the Regents and the faculty committee in the evaluation of prospects indicates the identity of aims of both Regents and faculty with respect to the future of the University.

SUMMER SESSIONS

The attendance of 3,753 at the 1954 summer sessions broke all previous records. In addition, there were 187 registered in evening or off-campus classes conducted by the University Extension Division, fifty-eight in the Advanced Management Program, and forty-one in the Orientation Center for Foreign Students.

GRADUATE SCHOOL

Dean Thayne M. Livesay

Enrollment in the Graduate School was 651, highest in the University's history. There were 177 candidates for degrees, forty-one of whom received the degree of Master of Arts, and one the degree of Doctor of Philosophy.

The number of candidates for degrees and the number of advanced degrees awarded have remained approximately the same for the past few years.
"Learning unimportant facts or failure to interpret significant ones is equally sterile," wrote Oliver C. Carmichael. He said further, "Pursuit of truth is undoubtedly the highest function of the university, but that is not synonymous with scientific research. It refers to search for reality, for meaning, for ultimate answers--Truth is not arrived at through fact-gathering or the acquisition of knowledge alone, but through the discovery of meaning and the interpretation of knowledge."

Because the major responsibility for implementing this philosophy falls traditionally on the liberal arts college, the home of the humanities, we are constantly concerned with curriculum. Not only how subjects are taught, but what is taught is of basic interest to us. The fetish of intellectual objectivity, which in some ways has been the strength of American scientific development, may also become the major weakness of our nation if it produces merely irresponsible technicians without convictions. Cicero once said, "Not to know what has happened before one was born is to remain always a child." It is our deep conviction that nuclear fissions and supersonic propulsion are dangerous toys in the hands of children.

The curriculum or course of study developed for students in the liberal arts college of the University is merely our best current answer to the problem of arriving at a well-rounded education for the greatest number of people.

**REQUIREMENTS OF THE COLLEGE**

A student in this College is required to take some work in each of the four great divisions of knowledge: the physical sciences, the biological sciences, the social sciences, and the humanities. Regardless of the major subject he has elected as a specialty, we try to make it impossible for him to go out into business, a profession, or another walk of life entirely ignorant of man's cultural as well as scientific background.

Although we continue to be deeply concerned with the education of the forgotten man of American education, the brilliant student, we are constantly attempting by improving our advising system to uncover the potentially strong student who is failing merely because of faulty preparation. This is in part an answer to those who criticize us for spending too much time on poor students.

Numerically the College remains about twice as large as its next largest colleague in the five colleges of the University and continues to turn out well-prepared candidates for graduate professional schools of business, law, medicine and dentistry, social work and theology.

A very important function has been that of supplying Teachers College with additional students for their program in the sophomore year. At the end of the past year, for instance, we were able to transfer fifty-two
highly qualified students in one batch to Teachers College—a fact that will enable them to increase their output substantially in the coming years.

LANGUAGE PROGRAM STRENGTHENED

Although in the past few years we have encouraged the introduction of new courses in the literatures of non-English countries, taught in translation, and at present offer such courses in Chinese literature, Japanese literature, the Russian novel, the Greek and Latin classics, we have no intention of forsaking a language requirement for the Bachelor of Arts degree. Contrary to general impressions, the foreign language program in American colleges and universities as a rule has been strengthened rather than weakened in the past decade. We regard this as appropriate at a time when the United States perforce is assuming strong partnership in affairs of the world. Although we follow the American pattern in language teaching in general, we feel it our particular duty and opportunity here to emphasize the Asian languages which are becoming increasingly important in our time. There is no doubt that our abysmal linguistic deficiencies in the last war cost the United States many men and millions of dollars. We can not afford the luxury of ignorance in the languages of Russia, Indonesia, and other Asian countries.

STATISTICS AND TRENDS

In the major fields of study, Psychology still is favored with 123 students in the junior or senior year, closely trailed by Sociology with 108. Some of the other favorite majors in order of preference are: Government, Chemistry, Zoology, History, English, Art, and Mathematics. We have at present about thirty-three students enrolled in Premedical and Predental curriculums.

The real quality of a school lies in its teachers, and it would be difficult to find in American universities a group of college teachers to surpass ours in youthful vigor of outlook, intellectual achievement, dedication to an ideal, and willingness to learn.

COLLEGE OF APPLIED SCIENCE
Dean Wilfred J. Holmes

Although the College is unable to meet the demands for professional training in all of the areas for which it is responsible, the enrollment remained at the same level as the year before. This static situation is due largely to the fact that the capacity of our physical facilities has been reached. There was an encouraging improvement in scholarship. Dismissal for academic failure was 11.8 per cent, compared with 4 per cent less than the year before.
ENGINEERING

We graduated thirty-five in Civil Engineering, which is a small class by recent standards. The demand for our engineering graduates, both locally and on the Mainland, continues to exceed the supply. The number who apply for engineering also continues to be greater than the number we can accommodate. With the completion of the Heat Power Laboratory we have utilized all available space for expansion. Our only recourse now is a new engineering building, designed to accommodate the expected increase in enrollment and the demand for additional engineering curriculums.

MEDICAL TECHNOLOGY AND NURSING

We graduate each year more medical technologists than the Territory can absorb. The national shortage of medical technologists, however, insures the fact that our graduates in Medical Technology have ample opportunity for mainland employment. The high standards of the program continue to be reflected by the gratifying reports of the uniform success of our students.

The School of Nursing continues to grow as the first entering class progresses through the curriculum. Last year we had a sophomore class and a freshman class, and next year we will have a junior class as well in the basic nursing curriculum.

In addition to the basic nursing program, we also have thirty registered nurses taking part-time work at the University of Hawaii.

RECREATION LEADERSHIP

A curriculum committee made an extensive study of the curriculum in this field of study. General satisfaction with this course of study was almost universally expressed. As a result of the study, changes were made in the direction of requiring a broader foundation in general education, with additional work in art and music.

TEACHERS COLLEGE

Dean Bruce E. White

There is every indication that more births will be recorded for 1954 than for 1953. Thus it appears obvious that for some time the demand for teachers will continue to increase. On the basis of current birth rates, the Department of Public Instruction estimates a need for between 350 and 400 teachers each year. When an adequate high school building is available, the output of Teachers College can reach a maximum of 200. Thus an emergency program producing as many as 100 additional teachers a year would leave opportunity for from 50 to 100 teachers from the Mainland.
A low percentage of males continues, with little indication of change from the situation of a year ago. There appears to be some tendency for the percentage of males to increase between the freshman and the senior years, in spite of the fact that a number of men are lost to Selective Service. The explanation lies in the fact that relatively more men than women are admitted to Teachers College as transfers. Efforts are being made to encourage more male students to enter Teachers College.

The second section was added to the tenth grade. An additional section of the eleventh grade is planned for 1954-55. Inadequate facilities for the High School continues to be the most serious problem in the laboratory schools. Although prospects in this area are a little brighter, no real progress can be reported.

There is a great demand for admission of children to the laboratory schools, especially at the Preschool level, where applications outnumber vacancies about ten to one. In all levels there are twice as many applicants as vacancies.

Intern centers were increased from twelve to fifteen. There was a proportional increase in the number of teachers being prepared. At least three more additional centers will be required during the biennium 1955-57. This expansion is necessary to provide intern experience for the rapidly increasing undergraduate enrollment in Teachers College.

COLLEGE OF AGRICULTURE
Dean Harold A. Wadsworth

The three agricultural activities--teaching, experimental work, and agricultural extension--continue to operate smoothly and with increasing efficiency.

The trend toward reduced enrollment in Agriculture and Home Economics, seems to have halted. Students in Agriculture may prepare for careers in vocational teaching, for work in the sugar and pineapple industries, for graduate work in such technical fields as genetics, horticulture, and soil science, or they may prepare for diversified crop production work in Hawaii. Young women in Home Economics may major in Vocational Home Economics, Institutional Management, Foods and Nutrition, or General Home Economics.

Graduates in Technical Agriculture find ready acceptance in the Graduate School of the University as well as in mainland schools and colleges. Technical programs are offered in Animal Science, Poultry Science, Entomology, Soil Science, and Tropical Horticulture.

The Tropical Crop Production program supplies men to the sugar and pineapple industries, and other agricultural enterprises. Undergraduate subsidies for men in this field formerly given by the Hawaiian Sugar Planters' Association have been discontinued.
General Agriculture continues to attract students interested in animal and small crop production. Many graduates in this program find employment in the fertilizer and insecticide industries and in plant inspection services. The generous scholarships of the Sears Roebuck Foundation provide needed help for worthy students in this program.

**HOME ECONOMICS**

Graduates in this department of the College continue to find ready acceptance in territorial activities which require training and aptitude in foods, home management, and teaching techniques. Forty-four students graduated in June, 1954. Fourteen of them received appointments for one year of dietetic training in mainland hospitals. There are ten who will continue in the fifth year of teacher training and internship in preparation for service in Vocational Home Economics in the territorial Department of Public Instruction. Other graduates have planned to continue work in Teachers College, or have received appointments in Agricultural Extension Service, College of Agriculture.

**HAWAII AGRICULTURAL EXPERIMENT STATION**

**Associate Director Louis A. Henke**

Each year, from the day it was established, research at the Station brings in enough new income to the Territory to finance the Station's operation. These research programs are one of the special responsibilities of a Land-Grant College such as ours. They are part of an overall program approved by the federal authorities which help finance them. Adapted to the particular needs of the Territory and carried out in cooperation with local groups, these programs promote local productivity.

Experiments in feeding sugar cane by-products to livestock continued. Trials were conducted to determine how much cane molasses, a low-cost carbohydrate feed in Hawaii, could be economically fed to pigs. Tests on feeding final molasses to day-old chicks determined the optimum levels of growth rate and cost of feed per pound of gain.

The growth formula developed for sugar cane has been successfully used. Nutritional experiments on the macadamia showed significant growth responses to application of small amounts of magnesium. Good progress was made in securing the participation of local ranchers in a co-operative study concerning the cost and feasibility of range improvement and revegetation. New forage plant introductions which show promise are Pangola grass, Carib grass, and a number of robust trailing legumes of the Desmodium genus.

A number of coffee varieties from Brazil have been introduced for trial, and new disease-resistant types originating in South Africa and
India are now in quarantine. A number of promising macadamia types were selected in Australia and propagation wood transmitted to Hawaii in order that they may be tested under Hawaii conditions. Four were selected as outstanding. Four superior horticultural selections of the yellow passion fruit have been distributed to growers. A popular inbred strain of Solo papaya known as Line 8 Solo was released to growers during the year. Propagation material of two disease-resistant banana varieties, Lacatan and Monte Cristy, introduced into Hawaii from the Caribbean area in 1951 have been released to commercial growers for trial in areas in which Panama disease is forcing farmers to discontinue the growing of the Bluefield variety. A new lettuce variety, Anuenue, has been released to commercial vegetable growers. The sweet potato was studied for commercially important characteristics. The value of various materials as media for growing anthuriums was investigated. Coffee parchment gave best growth. In commercial orchid culture, CMU was shown to effectively control weeds.

**INSECTS, PARASITES, AND DISEASES**

Continued studies on the biological control of the oriental fruit fly provided further assurance of the soundness of the "border spraying" method.

The cabbage worm and diamond back moth were effectively controlled within two to three days after applying carefully selected bacterial spores as a spray. The macadamia borer was investigated. Approximately 370 specimens of plant diseases submitted by growers were diagnosed. The causal agents of papaya black spot and passion fruit brown spot were determined, and spray tests initiated. Work on the panax ring spot was concluded. Orchid studies emphasized the necessity of destroying obviously diseased plants and practicing strict field sanitation. Cercospora leaf spot of papaya responded well to the dithiocarbamate sprays, but Bordeaux sprays were found to be extremely toxic to both papaya and passion fruit seedlings.

Other major studies included soil minerology for titanium and kaolin clay content; control over flowering of the litchi; improvement of beef cattle through the application of breeding methods; use of koa haole as a roughage for cattle and sheep; napier feed as a starter ration for chickens; vitamin values of important foodstuffs; mango varieties for fruit quality before and after freezing; guava juice and puree processing and ascorbic acid content under freezing; meat preferences in the family and restaurant; marketing shrinkage and spoilage; Mainland markets for Island products. The work on the mechanized processing of lauhala was completed; a macadamia nut harvester utilizing vacuum pickup was found to be capable of greatly reducing hand labor; a passion fruit centrifuge extractor was built and a limited amount of passion fruit juice is now being commercially processed with the aid of this extractor. Mainland markets were investigated. From 1951 to 1953, exports of fresh pineapples increased from 562 to 2,419 tons; papayas from 156 to 388 tons. These quantities are relatively small but show growth.
AGRICULTURAL EXTENSION SERVICE
Acting Associate Director  Joseph H. Boyd

The Agricultural Economics program introduced new marketing techniques of value to Hawaii growers, wholesalers, and retailers. Handling methods were improved. New and cheaper types of containers for air and surface transportation of produce were introduced and adopted. Our production information exchange provides for planning in both production and marketing of Hawaii’s fruit and vegetable products, supplying information of expected demand, and creating mutual understanding among producers, trade groups, transportation agencies, and consumers.

County agents, specialists and research workers collaborated in the testing of soil samples for 1,200 farmers throughout the Territory. Water testing for salt content was a closely related activity.

Territorial figures show that there have been 500 persons assisted in proper land use, more than 150 in water supply, storage, and distribution, 575 in irrigation, 235 in soil amendments, 429 in use of fertilizers, and another 346 in crop rotation practices.

POULTRY PROJECTS

The Pulmonary Control and Eradication Project, was carried out with the Commissioners of the Board of Agriculture and Forestry. During the breeding season 1953-54, 9,975 birds were tested on seventeen poultry farms. Hawaii’s yearly import of baby chicks and hatching eggs from mainland breeders is valued at approximately $250,000. The Pul­lurum Control and Eradication Project was designed to help local breeders produce chicks free of this disease and thereby retain funds expended for mainland imports. A series of egg clinics held on Kauai, Oahu, Maui, and Hawaii, was carried on co-operatively with the Hawaii Agricultural Experiment Station and the territorial Board of Agriculture and Forestry. The purpose of the clinics was to inform local producers on management practices which affected the quality of market eggs.

FEED PRODUCTION

More than 275 ranchers and livestock men were assisted with production, 227 with improved varieties and strains, ninety-nine with the use of fertilizer, and others with insect and disease control, harvesting, storing and curing, and efficient work methods.

Extension work on the economical production of protein feed included thirty-one species adaptability plots, ten herbicide demonstration plots, and five pasture irrigation demonstrations. A total of four hog ranges and five irrigated alfalfa plots were developed, 7,000 acres of scrubland were cleared, 3,000 acres of pasture land renovated, thirty-four agent training meetings held, and eight fertilization plots installed. Approximately 10,000 acres of pasture land were renovated, thereby reducing the cost of production for both swine raisers and cattlemen.
CROP IMPROVEMENTS

Profitable growth of celery on a commercial scale in low elevation was successfully demonstrated by the vegetable crops department. Sixty-five varieties of thirteen different vegetables were demonstrated for producer observation and use. Among the most significant are the Yolo Wonder pepper and the wilt-resistant watermelon.

Approximately 3,000 farmers were assisted with various phases of production, 1,400 in improved varieties and strains, 2,000 in the use of fertilizers, 2,600 in the control of insects, 2,100 in disease control, 1,378 in harvesting, storing and curing, and 450 in efficient work methods.

Fifteen hundred packets of seed from the Experiment Station's improved strains of papayas were distributed to growers. Agents and specialists have disseminated information available from the Experiment Station and other sources on passion fruit and guava production.

With high coffee prices stimulating interest in the expansion of coffee acreage, the Service conducted a continuous program of instruction and demonstration in weed control, fertilization, pruning, planting methods, and harvesting.

Approximately 1,200 persons were helped with production problems, 400 were reached with improved varieties and strains, 400 with the use of fertilizers, 600 with insect control, and 500 with disease control.

THE 4-H PROGRAM

The 4-H club program continued with the assistance of 472 senior and 86 junior volunteer leaders. There were 269 clubs with a total membership of 3,810. Agents conducted 119 training meetings for leaders and their assistants, who in turn gave 1,454 method demonstrations before 20,565 persons.

In addition 2,633 members were given training in judging, 2,262 in demonstrations, 556 in recreation leadership, and 371 in music; 1,022 members received training in money management, 729 in safety, 1,467 in health, 1,203 in citizenship, 869 in personality improvement, and 98 in conservation.

The 4-H Beef-Steer Round-Up and Sale held October 24, 1953, in the Andrews Theatre, University campus, was the first such event in the twenty-five-year history of the Service. The twenty-one steers came from Oahu and North Hawaii. They weighed 18,273 pounds and brought $7,979.19.

The 225,000 coffee plants collected netted $1,200 to 4-H boys. They were used to plant 387 acres in new coffee orchards.

BETTER HOME AND FAMILY LIFE

"Family Living--Hawaiian Style" theme for the year's home demonstration work provided a fresh approach for the program. In home
planning, home furnishings, flower arrangement, landscaping, clothing and foods, and vegetable gardening, specialists and home and farm agents worked co-operatively in preparing circulars and leaders' guides, and presenting demonstrations for groups of both men and women.

**COLLEGE OF BUSINESS ADMINISTRATION**  
Dean Harold S. Roberts

The College has continued to make progress in meeting its primary objectives to train students for active participation in the business and industrial community and to provide a thorough understanding of the functions, structure, and objectives of the American business enterprise system.

We continued to review our course offerings and devoted substantial time and energy to preliminary review of proposed programs in Insurance and Real Estate. The Legislature approved our budget request during the last biennium to make exploratory efforts in these areas. We have also made some progress in the office management program by obtaining equipment, including typewriters and calculating machines, to permit more effective handling of our typing and business machines courses. We have received also a number of gifts and loans from business firms and individuals which have been of substantial assistance in carrying out this program. Community support has continued through interest in the program and placement of graduates.

The College graduated 111 men and women in June, the third class to graduate since the College was founded in 1949.

Total enrollment, exclusive of Summer Session and Extension, was 637. The freshmen class of 216 was largest; the sophomore class enrolled 168; the junior, 142; and the senior, 111. Male students predominated, accounting for 80 per cent of the total. The 20 per cent enrollment of women, however, indicates a substantial interest on their part for work opportunities in the business field.

Accounting specialization continued to be the most popular field. Forty-three per cent of the graduates were awarded degrees with majors in the Accounting curriculum. Merchandising accounted for 16 per cent, Finance 8 per cent, and Office Management 4 per cent.

A specialization in Insurance and Real Estate will be offered if the Legislature provides continued support for the program. The programs will meet the rather extensive insurance and real estate activities in the community.

Further development in the areas of International Trade, Air and Water Transportation, and Hotel Management is contemplated after the above programs are instituted and functioning well. With these additional programs the major community needs should be served.
Statistics show that more University students were reached by the services of the Bureau of Testing and Guidance than ever before. Activities in this area for the year included:

- Individual counseling contacts: 2,394
- Registration conferences: 563
- Withdrawal interviews: 163
- Psychological tests: 272

Total individual contacts: 3,392

- Attendance at group tests: 303
- Attendance at tests for mainland agencies: 223
- Attendance at group guidance sessions including foreign student orientation: 1,121

Total group contacts: 1,647

Total contacts: 5,039

Major responsibilities which the Bureau has begun and will continue are: Advisory assistance to students from foreign countries, physically handicapped students, and referrals from the College Deans, Committee on Scholastic Standing, and Office of Admissions; testing and guidance for freshmen in Home Economics, Nursing, and applicants for transfer to Teachers College; sponsorship of brief non-credit courses in study skills; administration of national professional tests, the Selective Service Qualification tests, and tests for mainland schools; and annual survey of postgraduate plans of seniors.

Enrollment of students from foreign nations is important to the University's development as an educational center for the Pacific. During the past year fifty-eight foreign students representing thirteen foreign countries and the Trust Territory registered as full-time students. The foreign students' adviser arranged an orientation week for them and conducted orientation classes during the first semester.

The quality of University work depends largely upon the careful selection of entering students. Selection is the responsibility of the Office of Admissions. For the fall semester, 1953, and the spring semester, 1954, 2,910 admission applications were received, and the college aptitude examinations were given forty-four times throughout the Territory. Tests for seniors in the territorial high schools were given in early spring and notifications were sent out on May 3.

It is the responsibility of the Bureau of Student Housing and Part-time Employment to help secure off-campus housing, and to act as an employment agency for part-time work. Approximately 75 per cent of the regular student population does part-time work in the course of the year.
Inadequate dormitory facilities for men forces many students to live in off-campus housing.

Bureau of Student Housing arranged for visits of outside dormitory operators to University residence halls, planned visits to off-campus housing, and tried to establish closer relationships with dormitory operators. Room and board employment continued to be one of the most important services.

In an effort to help more students obtain part-time jobs, the Bureau worked on improving the employability of job seekers. The placement of graduates continues to be an exacting problem, and the need for a Placement Director more apparent than ever.

The Bureau of Student Activities supervises all student activities. The 484 programs approved for the year include social, religious, recreational, cultural, and fund-raising activities. It is estimated that Hemenway Hall, the Union Building, was used by 250 students daily for informal social and recreational purposes. Organized groups scheduled 910 meetings, 110 of which were faculty and alumni sponsored. Approximately 39,580 persons were accommodated. There were 327 student meetings and events scheduled in other campus buildings.

BUREAU OF STUDENT RESIDENCES

The new residence hall for women was dedicated and named Frear Hall in honor of Mary Dillingham Frear, one of the builders of the University and intimate friend of generations of its students. During the academic year an average of 115 students resided in Frear Hall. Hale Laulima, a co-operatively run dormitory, was fully occupied. These residence halls provide excellent living conditions and the opportunity for day-to-day associations with students of different racial, social, and economic backgrounds. The women residents have established an enviable reputation for high scholastic standing, self-government, and leadership in campus activities. The men's housing barracks were fully occupied and the need for campus housing for men students remains pressing. During Summer Session full residence facilities were in use, many being turned away.

The Scholastic Standing Committee ratified dropping 473 students for failure; 427 others were officially advised that their work was not meeting graduation standards. It was necessary to place thirty-four students on grade point rule, and to continue 169 under its provisions; thirty-four students were restored to good standing. There were 233 applicants for readmission, of whom 205 were readmitted under academic probation.
Reports of Administrative Officers

UNIVERSITY LIBRARY
Librarian Carl G. Stroven

Plans for a new library building were completed. Designed to provide space for about 600,000 volumes and 900 readers, it will have nearly twice the capacity of our present building. With the appropriation of $1,400,000 by the territorial legislature and the approval of architectural plans by the Department of Public Works, construction will be underway within a month. It is expected that the building will be in operation by the beginning of the fall semester, 1955. None of the money appropriated may be used for equipping and furnishing the new building. The old furniture will not be sufficient for our students or the functions planned for the new library. This presents a problem that must be solved before the building is opened for use.

Expenditures for books amounted to $39,264.00, with which the Library acquired 7,358 volumes. This is the smallest number reported since 1947 and indicates a continued imbalance between the rise in the cost of books and the increase in the appropriation for books.

The circulation department reports that the Library has 5,657 registered borrowers, who during the year drew out 166,966 books (including books on reserve) and 33,839 periodicals—making a total circulation of 200,795. This is a substantial increase over last year's circulation of 176,558. The collection of the reference department was increased by 382 volumes to a total of 8,101. The librarian of the Hawaiian collection accessioned and catalogued 807 volumes, making a total of 11,702. Circulation was 5,070. The Teachers College library added 186 new volumes and discarded 495 obsolete or worn out volumes, leaving a present total of 8,505 in the collection. The Teachers College librarian reports an unusually high circulation of 35,270. The Oriental collection added and catalogued 1,513 volumes and now has a total of 66,973. The Government Documents collection now contains 26,721 bound volumes and 218,000 unbound bulletins and pamphlets. The map collection now totals 31,909 maps. The collection of microfilm has 647 titles, on 1,669 reels, which range from short scientific articles to long runs of the New York Times, the London Times, and other serials. This year all available files of Portuguese newspapers, dating from 1885 to 1927, were filmed.

Many friends of the University Library continued their support by giving books or money for the purchase of books.
GROWTH IN NUMBER OF BOUND VOLUMES

Bound volumes added by purchase .................. 7,358
Bound volumes added by government deposit .... 296
Bound volumes added by gift ....................... 1,243
Bound volumes added by binding ................ ... 1,149

Total additions .................................... 10,046
Withdrawn ........................................... 1,190

Net Increase ....................................... 8,856

INVENTORY

Total number of bound volumes ................... 247,310
Total number of unbound parts .................... 641,029
Total number of microfilm titles (includes Orient­

tal Library) ....................................... 3,507
Total number of maps (duplicates included) .... 31,909
Number of current periodical titles received ... 3,906

CIRCULATION

General circulation ................................ 118,564
Reserve book circulation ......................... 82,231

200,795

LEGISLATIVE REFERENCE BUREAU

Director Norman Meller

Among the 175 major requests worked upon was a survey of all publicly owned automobiles of the Territory and City and County of Honolulu. University students, as part of their assignment in a course in Problems of Public Administration, participated in this project. Among printed reports were "Federal Limitations on the Territorial Taxing Power," "Konohiki Fishing Rights," and the seventh edition of the Directory of Agencies and Officers of the Territory of Hawaii.

The Bureau served as research staff or secretariat for several committees appointed by the governor to investigate governmental problems and recommend action. The large task of preparing for publication the Revised Laws of Hawaii, 1955, continued throughout the year.

The Bureau continued to serve as an information center on governmental questions for local and mainland inquirers. Members of the research staff taught courses in the Department of Government and the Department of Economics as part of their duties in this off-session year. It is our confirmed belief that this combination of instruction and applied research enriches both activities.
The Conference on Race Relations in World Perspective gave special impetus to the activities of the Laboratory. Members of the Laboratory, who originally conceived the Conference, comprised its Local Planning Board and were responsible for much of the preparatory work. The Conference stimulated communication among scholars and administrators and insured a continuation through the establishment of an International Society for the Scientific Study of Race Relations. Two full-sized volumes are expected to emerge from the Conference.

Considerable progress was made in analyzing population changes in Hawaii between 1850 and 1950. Titled "Hawaii's People," this study will be published by the University of Hawaii Press in the fall. It affords the general public a 1954 version of Romanzo Adams' Peoples of Hawaii, which was last issued in 1933.

The study of long-term social trends within the Islands continued. A major service to the nursing profession and the general public was provided when the Laboratory conducted a study of the adjustment of nurses to the requirements of their profession.

A preliminary analysis of war-time interracial marriages in Hawaii was completed, and a report based upon case studies of the marital experience of fifty-five Caucasian and fifty-five Japanese war-brides is now being prepared for publication.

The Clinic made 2,084 contacts with individuals and served correctional, legal, social, health, and welfare agencies and institutions. Consultation service was provided an additional 440 individuals—an increase of 37 per cent. Our service is primarily a service to children. In mainland graduate training programs in clinical psychology the overwhelming emphasis is on work with adults. This Clinic offers graduate students more numerous and more varied contacts with children than most universities are able to provide.

During the first semester it was possible to accept only three of the twelve graduate students applying for one of the clinical courses. The problem here is one of space rather than of personnel. Our teaching functions will remain limited so long as we remain in the present physical plant. Lack of adequate work space has also interfered with research. University courses were offered by Clinic staff on Maui, through the Extension Division and on Hawaii in the Hilo Branch.
INDUSTRIAL RELATIONS CENTER
Director Harold S. Roberts

The Center is continuing to carry out its basic objectives: "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."

The curriculum in Personnel and Industrial Relations contains thirteen required courses covering the legal, economic, and practical aspects of labor-management relations. At least eight other courses are recommended for majors in Personnel and Industrial Relations.

In 1954, seventeen seniors who majored in Personnel and Industrial Relations graduated from the College. In the past year, labor organizations, as well as management, have asked for students trained in industrial relations. The library has continued to add current materials of industrial relations. The semi-monthly Industrial Relations Newsletter has been continued. The Center completed their research studies and has two long-time research project under way: (1) The history of labor in Hawaii, and (2) A comprehensive bibliography on the labor movement in Hawaii.

PUBLICATIONS AND INFORMATION
Director Thomas Nickerson

The Office edited and produced the University's official publications, conducted its news bureau and information center, and performed other functions in the University relations program. The following tabulation indicates the extent of these activities.

Edited
5 books
321 progress reports, circulars, papers, notes, leaflets, and course descriptions.

Edited and Produced
1 moving picture film
4 books
4 issues each of Pacific Science, Philosophy East and West, Farm Science, Volcano Letter, the "University Bulletin"
2 issues of house organ, "Mynah-gram"
71 booklets, bulletins, handbooks, directories, invitations, programs

News
736 stories, 1,213 versions, 7,608 copies
18 Extension, 16 student groups helped in communications
1 summer session news sheet
UNIVERSITY PRESS

An increasing number of manuscripts of high quality was submitted to the Press. This resulted in publications of increased value and popular appeal and a doubling of receipts from sales. The Press issued its first catalogue, had a publication selected for inclusion by the Western Books Exhibit, and was represented for the first time at the annual meeting of the Association of American University Presses held this year at Ithaca, New York. Marjorie Sinclair's and Lily Chang's translation of the Poems of T'ao Ch'ien was our first book to go into a second printing. Thomas D. Murphy's Ambassadors in Arms, amassed an impressive total of 1,700 prepublication orders.

PACIFIC SCIENCE
Editor Leonard D. Tuthill

Pacific Science published thirty-four articles dealing with many phases of science covering varied sections of the Pacific area. The authors of these papers were located in Hawaii, mainland United States, Alaska, Australia, Japan, and Trinidad, British West Indies.

The total distribution stood at 546, of which 315 were exchanges and 231 paid subscriptions.

Beginning with the first number of volume 8 (January, 1954) the journal has appeared in a new cover. Our first colored illustration appeared in the April issue.

PHILOSOPHY EAST AND WEST
Editor Charles A. Moore

Philosophy East and West continues to maintain its position as an international scholarly journal in the field of East-West philosophy.
Contributions of real merit have been received from representatives of all the great Oriental philosophical traditions, as well as from leading Westerners in the field. Scholarly standards have been rigidly maintained and also our unique policy of publishing articles only in Oriental and comparative East-West philosophy, despite the receipt of many articles of merit in Western philosophy and in religion.

There has been a remarkable increase in subscriptions and sales. The journal now handles 450 regular subscriptions. There were many individual sales; thirty-six exchanges and forty-nine complimentary copies were given. We use the journal in Philosophy 100 as a means of introducing our students to this important special field in which the University makes its unique and most important contribution in the general area of philosophy. Total copies published per issue at the present time are 700.

The journal has faced two difficulties in connection with subscriptions. In the first place, very few Orientals, even those who should obviously have the journal, have been able to subscribe because of the cost. An effort is being made to obtain sponsorship of a rather large number of subscriptions for Indian individuals and libraries which cannot afford the journal from their own funds. The second difficulty relates to the fact that relatively few libraries--119--subscribe to the journal.

EXTENSION DIVISION

Director Albert J. McKinney

The Division's total registration was 5,402, as follows:

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Courses</td>
<td>1,193</td>
</tr>
<tr>
<td>Special Credit Courses</td>
<td>418</td>
</tr>
<tr>
<td>Non-Credit Courses</td>
<td>3,482</td>
</tr>
<tr>
<td>Correspondence Courses</td>
<td>309</td>
</tr>
<tr>
<td>Total</td>
<td>5,402</td>
</tr>
</tbody>
</table>

This was an increase of 416 over the previous year.

Students have indicated that they prefer to take credit courses on campus rather than downtown. Accordingly, the downtown center was discontinued. This resulted in a 9 per cent increase of on-campus credit courses--1,193 this year as against 1,091 last. However, the Fort Shafter and Schofield courses were continued.

Special credit courses given in rural areas enrolled 418, an increase of seventy-one over the previous year. Special credit courses were offered on each of the major islands. These included Fire Insurance on Kauai and Auto Insurance on Maui and Hawaii. On Oahu the Public Administration course continued to be popular. Six Elementary Certificates were awarded and one Advanced Certificate, our first. Enrollment
in a television course in Shakespeare in co-operation with the University of California was disappointing.

Non-credit course offerings were carefully attuned to public demand. This tended to be in favor of vocational and avocational subjects rather than purely informational ones. Outstanding among these offerings were a course in Sewage and Water Pumping Stations which attracted sixty-five students, one in Purchasing, which enrolled fifty-three, and another, Insurance Credit, in which sixty-five registered. Reading for Speed and Understanding proved to be the most popular course of all, with an enrollment of 261.

Student response to a completely revised Correspondence Course program has been enthusiastic. Enrollment totaled 309.

The Division offered photographic, printing, and audio-visual equipment services as follows:

- Pictures taken: 3,302
- Plates made: 507
- Contact prints made: 5,893
- Envelopes printed: 26,832
- Enlargements made: 1,326
- Press runs: 623,566
- Slides made: 640
- Times visual aids used: 219

**HILO BRANCH**

**Director Frank T. Inouye**

Student enrollment for the fall semester was 129, an increase of forty-eight, or 59 per cent, over the previous year. Arts and Sciences students composed more than half of the student body; there was an increase of from nine to twelve students in Business Administration; Teachers College numbered twenty-four, Applied Science, fifteen. There was a corresponding increase in the summer session, 153 registering for nine courses in the six-week session alone—an increase of forty-nine over 1953—and forty for the postsession, against twenty-eight for 1953.

The pressure of enrollment increases forced the University to lease an additional 40 per cent of floor space from the trustees of the Hilo Boarding School.

Despite the pressure of enrollment increases, academic standards at the Hilo Branch remained high. Fourteen students made the Dean's List, five freshmen were initiated into Phi Kappa Phi, and the overall grade-point-ratio for the student body was 2.25.

**COMMUNITY AND STUDENT ACTIVITIES**

A YMCA and a veterans' group were added to the growing list of student organizations. These groups established their own programs, while co-operating with the ASUH and AWS in the annual Ka Palapala Beauty Pageant, the Little Rainbow Christmas Dance, the Semester-Break Camp, and many other social and recreational programs.
An orientation camp for freshmen was held at the Volcano; the Hilo Branch chorus made a trip to the Maui high schools; the Christmas programs were presented before various island institutions and organizations; and the Hilo Branch basketball team went to Honolulu. A meeting between the local ASUH officers and a delegation of Manoa student officers resulted in closer relationships.

ARMY ROTC
Colonel Giles R. Carpenter

Eighty-two seniors were graduated and commissioned—the largest number of cadets in the history of the University.

Reviews were held for President Sinclair and the Deans, Honorable Farrent L. Turner, Acting Governor of Hawaii, and Major General F. W. McKinney, Adjutant General of Hawaii.

The reviewing officer and guest speaker at the Graduation Parade was General Clark L. Ruffner, Commanding General, United States Army Forces in the Pacific.

Awards were presented to the outstanding cadets in each of the four classes. Two new awards were established, a medal presented by the National Society of the Sons of the American Revolution and the Adna G. Clarke Trophy, donated by the Military Order of the Warrior of the Pacific and the ROTC seniors of the classes of 1954 and 1955.

In June, seventy-five cadets of the junior class departed by military transport to attend summer camp on the Mainland. At the close of camp the cadets had an opportunity to travel on the Mainland before returning by government transportation to the Islands.

AIR FORCE ROTC
Colonel William W. Jones

Forty-nine graduates were commissioned as Reserve Officers and were called to active duty. Six received commissions in the National Guard, and eleven have received certificates of completion.

ACTIVITIES

The Cadet Wing participated in parades and ceremonies which included the Annual Inspection Review on April 14; a review for President Sinclair and the Deans on April 28th; a review for General Maddux, the Commander of United States Air Forces, Pacific, on May 12; the joint
Armed Forces Day Parade on May 15; and the Joint Graduation Parade on May 18.

Awards given at reviews throughout the year included the H. Gaylord Dillingham Award, the Air Force Association Award, and the Wah Kau Kong Award. Other awards were the Reserve Officers Association Award and the Star-Bulletin Award. This Department awarded a medal to Kay S. Kimura, the outstanding Air Science II cadet.

Cadets were sent to two summer camps on the Mainland for a four-week training period. Both encampments conducted a successful program and returning cadets have stated that they enjoyed both the encampment and their stay on the Mainland.

VETERANS' ADVISER

Edmund F. Spellacy

The Veterans' Adviser is charged with responsibility for two groups: the veteran student who has already served a tour of duty with the Armed Forces, and the student whose tour is yet to come and who is consequently subject to the Selective Service Law.

The steady decline in veteran registration reversed itself, registrations increasing somewhat in the first semester and appreciably so in the second. This was due to Public Law 550, better known as the Korean Bill. Whereas in the year 1952-53 some 500 veterans attended the University each semester, last year 600 were enrolled in the first semester and nearly 700 in the second. An increase in the second semester is contrary to our usual experience.

While the number of veterans under World War II legislation is steadily decreasing, registration under Public Law 550 has increased five-fold since the program was first inaugurated.

A newly formed Veterans Club on campus has shown energy and initiative in sponsoring both social events of interest to the veterans' group and projects of community worth.

Official forms were prepared on some 1,500 men students for use by the local boards.

THE AQUARIUM

Director Spencer W. Tinker

The Aquarium has completed its fiftieth year of service to the people of the Territory and its thirty-fifth year as a part of the University.
It was visited by a total of 57,799 persons who paid $14,449.75 in admission fees. The attendance at the Aquarium was the thirteenth largest in the Aquarium's history and the second most lucrative of those years during which an admission fee was charged.

OLD BUILDING

The old Aquarium building and its equipment, although old and worn out, operated in a satisfactory manner until the transition to the new building was completed. The exhibits in the old Aquarium building remained about as in previous years. The most interesting fish to be added to the exhibit was an electric eel from South America.

The Aquarium continued its program of illustrated lectures and movies in the community. The Director gave a total of thirty-one talks on marine life to schools, tourist groups, civic organizations, and youth groups, and continued to assist the local teachers in the collection, preservation, and identification of local fishes.

NEW BUILDING

Exactly fifty years after Honolulu's first Aquarium was opened (March, 1904) the people of Hawaii completed the construction of a second and larger Aquarium.

This new Aquarium building was made possible by the work of many individuals and groups in the community and by the 1949 Territorial Legislature which authorized the issuance of bonds in the amount of $400,000.00 for this project. (Act 401. S.L., 1949)

Approximately thirty of the five-foot tanks will be devoted to the display of the Hawaiian marine reef and shore fauna. Another ten will be devoted to the larger fresh water fishes which have been introduced and are now established in the ponds and streams of the Islands.

An exhibit of fresh water tropicals will be presented in eighteen tanks which are arranged in two series of nine tanks each.

The large outdoor pool will exhibit marine animals which cannot be accommodated in the wall tanks within the building, including the sharks and rays, turtles, and possibly porpoises.

The new Aquarium building contains a small lecture room which will seat somewhat less than 100 persons. Already this lecture room has become the regular monthly meeting place of three adult educational or recreational groups.

A small library will provide a public reading room. It is at present without books or magazines. The Aquarium plans eventually to call upon the community to help us in supplying the books which this reading room should have.

A small museum-type room, measuring seventeen by twenty-five feet, will feature those marine exhibits which are preserved or static.
The new Aquarium will be a spectacular attraction and a potent force in our tourist advertising program.

HAWAII MARINE LABORATORY
Director Robert W. Hiatt

A Ph.D. thesis was completed and eleven were prepared. Nineteen scientific papers were sent to press and twenty additional ones published.

Active research grants totaled $38,697. Two special grants were received: $10,000 from the Rockefeller Foundation for equipment and supplied over a two-year period, and $5,000 from Edwin W. Pauley to assist with the construction of apartments for visiting associates. Four new apartments were completed. They will permit us to accept the applications of six visiting researchers.

The new Waikiki Branch at the new Aquarium was completed. This provides us with a storeroom, three research rooms, and two much-needed laboratories for teaching.

SUMMARY OF ENROLLMENT 1953-1954
University Day and Evening Credit Courses
Honolulu Campus, Hilo Branch, and Extension Centers

<table>
<thead>
<tr>
<th>Candidates for Degrees and Diplomas</th>
<th>1st Semester</th>
<th>2nd Semester</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Degree</td>
<td>193</td>
<td>181</td>
<td></td>
</tr>
<tr>
<td>5-Year Diploma</td>
<td>117</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td></td>
<td>310</td>
<td>259</td>
<td></td>
</tr>
<tr>
<td>College of Arts and Sciences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seniors</td>
<td>287</td>
<td>216</td>
<td></td>
</tr>
<tr>
<td>Juniors</td>
<td>220</td>
<td>275</td>
<td></td>
</tr>
<tr>
<td>Sophomores</td>
<td>396</td>
<td>372</td>
<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>639</td>
<td>588</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,542</td>
<td>1,451</td>
<td></td>
</tr>
<tr>
<td>College of Applied Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Seniors</td>
<td>106</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>Juniors</td>
<td>125</td>
<td>141</td>
<td></td>
</tr>
<tr>
<td>Sophomores</td>
<td>162</td>
<td>154</td>
<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>237</td>
<td>203</td>
<td></td>
</tr>
<tr>
<td></td>
<td>630</td>
<td>567</td>
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<table>
<thead>
<tr>
<th>Teachers College</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Seniors</td>
<td>158</td>
<td>136</td>
</tr>
<tr>
<td>Juniors</td>
<td>183</td>
<td>187</td>
</tr>
<tr>
<td>Sophomores</td>
<td>156</td>
<td>156</td>
</tr>
<tr>
<td>Freshmen</td>
<td>137</td>
<td>142</td>
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<tr>
<td></td>
<td>634</td>
<td>621</td>
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<table>
<thead>
<tr>
<th>College of Agriculture</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Seniors</td>
<td>80</td>
<td>64</td>
</tr>
<tr>
<td>Juniors</td>
<td>73</td>
<td>72</td>
</tr>
<tr>
<td>Sophomores</td>
<td>67</td>
<td>68</td>
</tr>
<tr>
<td>Freshmen</td>
<td>87</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>307</td>
<td>294</td>
</tr>
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<table>
<thead>
<tr>
<th>College of Business Administration</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniors</td>
<td>129</td>
<td>93</td>
</tr>
<tr>
<td>Juniors</td>
<td>120</td>
<td>133</td>
</tr>
<tr>
<td>Sophomores</td>
<td>145</td>
<td>151</td>
</tr>
<tr>
<td>Freshmen</td>
<td>169</td>
<td>173</td>
</tr>
<tr>
<td></td>
<td>563</td>
<td>550</td>
</tr>
</tbody>
</table>

| Total Degree Candidates | 3,869 | 3,664 |
| Total Diploma Candidates | 117 | 78 |
| Total Classified Students    | 3,986 | 3,742 |

<table>
<thead>
<tr>
<th>Not Candidates for University Degrees or Diplomas</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates</td>
<td>216</td>
<td>231</td>
</tr>
<tr>
<td>Professional Teaching Certificate</td>
<td>160</td>
<td>179</td>
</tr>
<tr>
<td>Undergraduates</td>
<td>225</td>
<td>226</td>
</tr>
<tr>
<td>Auditors</td>
<td>28</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>629</td>
<td>669</td>
</tr>
</tbody>
</table>

| Total Students, Honolulu Campus | 4,615 | 4,411 | 5,159 |
| Total Students, Extension Centers | 564  | 518  | 783  |
| Total Students, Hilo Branch       | 129  | 132  | 146  |
| Duplicates                         |      |      | -121 |
|                                     |      |      | 5,967 |
|                                     |      |      |     | 31 |
FINANCIAL STATEMENT FOR THE FISCAL YEAR 1953-54

Income — Excluding Plant Funds

<table>
<thead>
<tr>
<th>Sources</th>
<th>Total</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>For educational purposes</td>
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<tr>
<td>Federal funds</td>
<td>$488,358.44</td>
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<tr>
<td>Territorial appropriations</td>
<td>$2,531,795.12</td>
<td>56.09</td>
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<tr>
<td>University sources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student fees</td>
<td>$1,144,096.86</td>
<td>25.34</td>
</tr>
<tr>
<td>Sale of services of departments</td>
<td>$282,623.54</td>
<td>6.26</td>
</tr>
<tr>
<td>Gifts and grants</td>
<td>$44,932.22</td>
<td>.99</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>$23,020.30</td>
<td>.51</td>
</tr>
<tr>
<td><strong>Total educational and general income</strong></td>
<td>$4,514,826.48</td>
<td>100.00</td>
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<tr>
<td>For non-educational purposes</td>
<td></td>
<td></td>
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<tr>
<td>Auxiliary enterprises</td>
<td>$501,329.81</td>
<td></td>
</tr>
<tr>
<td>Projects</td>
<td>$215,220.16</td>
<td></td>
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<tr>
<td>Others</td>
<td>$176,663.52</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>$5,408,039.97</td>
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</table>

Expenditures — Excluding Plant Improvements

<table>
<thead>
<tr>
<th></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>
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<td></td>
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<tr>
<td>Instruction and related activities</td>
<td>$109,732.48</td>
<td>$923,277.86</td>
<td>$990,640.04</td>
<td>$2,024,100.48</td>
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<td>Organized research</td>
<td>$240,343.53</td>
<td>$519,920.25</td>
<td>$122,180.15</td>
<td>$881,561.53</td>
<td>19.97</td>
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<tr>
<td>Agricultural Extension Service</td>
<td>$259,708.86</td>
<td>$288,520.38</td>
<td>$715.16</td>
<td>$528,039.48</td>
<td>11.79</td>
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<tr>
<td>Library</td>
<td>$106,427.46</td>
<td>$66,865.41</td>
<td>$175,920.87</td>
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<tr>
<td><strong>Total for instruction and research</strong></td>
<td>$608,875.27</td>
<td>$1,817,710.05</td>
<td>$1,182,409.75</td>
<td>$3,608,994.08</td>
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<tr>
<td>Administration and general expenses</td>
<td>$211,082.49</td>
<td>$127,028.28</td>
<td>$396,010.77</td>
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<tr>
<td>Operation and maintenance of physical plant</td>
<td>$251,050.04</td>
<td>$133,444.81</td>
<td>$385,045.85</td>
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<td>Public services</td>
<td>$73,252.71</td>
<td>$15,221.80</td>
<td>$88,474.61</td>
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<tr>
<td><strong>Total current University expenditures</strong></td>
<td>$608,875.27</td>
<td>$2,413,869.29</td>
<td>$1,458,069.75</td>
<td>$4,480,844.31</td>
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<tr>
<td>Percentage</td>
<td>13.59</td>
<td>53.87</td>
<td>32.54</td>
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<td>100.00</td>
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</tbody>
</table>

For non-educational purposes

|                      |             |             |             |             |            |
| Auxiliary enterprises | $495,703.06 | $495,703.06 |             |             |            |
| Projects              | $220,601.29 | $220,601.29 |             |             |            |
| Others                | $5,040.00   | $104,377.77 | $109,417.77 |             |            |
| **Total current expenditures** | $608,875.27 | $2,418,909.29 | $2,278,781.87 | $5,308,566.43 |            |
Fifty-eight students from thirteen foreign countries and the Trust Territory registered in full-time courses. An introductory orientation week, orientation classes, a special speech course, and various social programs helped integrate them into the regular University program.

The non-credit courses offered by the University Extension Division are based on public demand. James B. Lawson is shown instructing Tuck Lee in the Leather Carving class.

Experiments show chickens can be bred economically in Hawaii. Dr. M. M. Rosenberg holds a cockerel from selected stock bred for improved body size and egg production.