LEEWARD COMMUNITY COLLEGE
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LEEWARD

COMMUNITY COLLEGE
1975/1976
GENERAL CATALOG

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of the
University
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Associate in Arts Degree (60 units)
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Certificate of Achievement (30 units)
Associate in Science Degree (60 units)

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Associate in Science Degree (60 units)

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Certificate of Completion (15-16 units)
Certificate of Achievement (30 units)
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Certificate of Achievement (31 units)
Associate in Science Degree (60 units)

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Certificate of Achievement (30 units)
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LEEWARD COMMUNITY COLLEGE 1975-1976 CALENDAR

1975 Fall Semester 75 days, September 2 through December 19
First Accelerated Session 38 days, September 2 through October 24
Second Accelerated Session 37 days, October 28 through December 19

March 3-April 11 Academic advising for continuing students
July 15 Tuesday Deadline for application for Fall Semester 1975
July 21-August 1 Monday through Friday Orientation for new, transfer and returning students
August 4-8 Monday through Friday Pre-College counseling and guidance for new, transfer and returning students
August 18-22 Monday through Friday Registration
August 28-29 Thursday and Friday Faculty Orientation
September 1 Monday Labor Day Holiday
September 2 Tuesday Fall Semester and First Accelerated Session begin

October 13 Monday Discoverers' Day Holiday
October 24 Friday First Accelerated Session ends
October 27 Monday Veterans' Day Holiday
October 28 Tuesday Second Accelerated Session begins
October 31 Friday Deadline for Fall graduation application

November 27 Thursday Thanksgiving Day Holiday
November 28-30 Friday to Sunday Thanksgiving Recess
December 1 Monday Deadline for application for Spring Semester 1976
December 19 Friday Fall Semester and Second Accelerated Session end
December 25 Thursday Christmas Day Holiday

1976 Spring Semester 75 days, January 19 through May 19
Third Accelerated Session 38 days, January 19 through March 11
Fourth Accelerated Session 37 days, March 15 through May 12

January 1 Thursday New Year's Day Holiday
January 5-9 Monday through Friday Registration
January 19 Monday Spring Semester and Third Accelerated Session begin
February 16 Monday Presidents' Day Holiday
February 17-April 30 Academic advising for continuing students
March 1 Monday Deadline for Spring graduation application
March 11 Thursday Third Accelerated Session ends

March 15 Monday Fourth Accelerated Session begins
March 26 Friday Kuhio Day Holiday
April 16 Friday Good Friday Holiday
April 12-17 Monday through Saturday Spring recess
May 12 Wednesday Spring Semester and Fourth Accelerated Session end
May 16 Sunday Commencement
May 21 Friday Deadline for Application for Summer Session 1976

1976 Summer Session (tentative) 30 days, June 7 through July 20

May 24-28 Monday through Friday Orientation
May 31 Monday Memorial Day Holiday
June 1-2 Tuesday and Wednesday Registration
June 7 Monday Instruction begins
June 11 Friday Kamehameha Day Holiday
July 3-5 Saturday through Monday Independence Day Recess
July 20 Tuesday Instruction ends

Administration

Board of Regents

Harriet Mizuguchi, Chairperson, Oahu
Anna Chung, Oahu
Sandra H. Ebesu, Oahu
Roger C. Evans, Oahu
Wallace S. Fujiyama, Oahu
John A. Hoag, Hawaii
Scott Leithead, Oahu
Ruth Oshiro, Oahu
Herbert M. Richards, Jr., Hawaii
Ambrose Rosehill, Oahu
Kiyoshi Sasaki, Kauai
Tom Shibano, Maui

Central Administration, University of Hawaii

Fujio Matsuda, B.S., Sc.D., President

William B. Chapman, Acting Vice President for Business Affairs

Shiro Amioka, Chancellor for Community Colleges

Leeward Community College Administration

Ralph M. Miwa, Chancellor for West Oahu College and Provost, Instructor, Political Science; B.A., M.A., University of Hawaii; Ph.D., Johns Hopkins University

Mary D. Naughton, Dean of Educational Services, (Instruction); B.S., Ursuline College for Women; M.S., Naval Post-graduate School, California

David Shida, Director of Administrative Services; B.A., Baldwin-Wallace College

John H. Baker, Associate Dean for Student Services; B.A., Davidson College; B. Divinity, San Francisco Theological Seminary; Ph.D., Boston College

Joyce S. Tsunoda, Associate Dean of Special Programs and Community Service; B.A., Ph.D., University of Hawaii

Kenichi K. Kamimura, Associate Dean of Technical-Vocational-Occupational Education; Certificate, University of Hawaii

William Broadbent, Director of Institutional Research; B.A., San Diego State University; M.A., University of Hawaii; Ed.D., UCLA

Joyce Shiraki, Administrative Officer

General Information

Leeward Community College was established by action of the University of Hawaii Board of Regents on May 6, 1965. It received full accreditation in 1971 by the Junior College Commission of the Western Association of Schools and Colleges. Leeward is one of seven community colleges which are part of the University of Hawaii system.

Philosophy

Leeward is a community junior college whose purpose is explained in its educational philosophy below:

Leeward Community College exists to help people learn. The philosophy of the College is founded upon the belief that people can and do learn throughout their lives and that the State of Hawaii has a responsibility to provide people with opportunity and assistance in learning what they wish to learn.

The objective of the College is to assist each individual, as far as possible within the resources of the institution, in the lifelong process of personal growth through learning. We believe that this process involves an assessment by the individual himself in terms of his past accomplishments, present needs, feelings, and desires, the setting of personal goals, and a continuing reassessment of himself and the world around him. The College assists the individual in this process by providing him with advisement, guidance and counseling services.

To assist students in the selection of courses and in meeting the objectives of the courses in which they enroll, instructors provide course outlines which inform students in advance of what is to be learned in the course and the achievement level expected for the final grade. Achievement is measured and grades given on the basis of these pre-established criteria.

Skills and accomplishments are considered more important than time alone in evaluating the learning process. Grades are intended to provide the student with a means of evaluating his progress toward his educational goals and to provide a record of his achievement for entry into other institutions or employment. The use of grades to foster competition among students or to punish for failing to complete a course is not compatible with the College philosophy.

The College attempts to meet the desires and needs of the individuals and the community it serves. To assist in determining these desires, a continuous program of solicitation of opinion from present students and the general public is carried on. It is continually trying to devise and evaluate innovative programs, activities, and opportunities for individualized learning. The educational philosophy of Leeward Community College is under continuous re-examination by all components of the College community.

Location and Access. The College is located at 96-045 Ala Ike, Pearl City, Hawaii 96782. Situated midway between Pearl City and Waipahu, somewhat west of the center of the island of Oahu on Waiawa Hill, the college overlooks the middle loch of Pearl Harbor and the Waipio Peninsula. Access to the campus is from Farrington Highway crossing the H-1 Freeway to Ala Ike.

Functions of the College

The activities of the college include:

General education, either for personal pleasure and improvement or for meeting the first two years equivalent of a bachelor's degree program. (The latter is often called the Transfer Program as it allows a student to prepare for transfer to a baccalaureate institution.)

Vocational-technical education which is primarily intended to prepare students for employment or allow them to upgrade their knowledge and skills for improved performance on the job.

Cultural and recreational activities for the College and community.

Special programs to meet identified needs or desires in the community, either organized as courses for credit or non-credit, lectures, seminars, and exhibits.

Admissions

Requirements. *Any citizen of the State of Hawaii who has completed high school or who is 18 years of age or older* may attend Leeward Community College and attempt the courses of his choice. Early admission of students of high school age can be arranged through Department of Education counselors. Non-residents of the State of Hawaii are accepted in limited numbers. (Also see sections on admission of foreign students and tuition.)

Certain procedures and payments are required of all applicants and registration is not official until these have been met. Attendance of class by persons not properly registered is prohibited except by expressed permission of the instructor or a proper official of the College. Any unofficial attendance does not provide a basis for later claim of registration or credit.

The University of Hawaii subscribes to and complies with all State and Federal statutes, rules, and regulations and any amendments thereto, promulgated from time to time, which prohibit discrimination in its policies and practices applicable to its campuses, programs, and activities.

Procedure. All persons desiring to attend the College must:

1. Fill out a University of Hawaii System Common Application Form and return it by mail or in person to the Office of Admissions and Records of Leeward Community College. (Application forms may be obtained from all high school counselors or from the counselors of the College.)

2. Supply official transcripts of high school and any college work taken previously. (Students enrolled in course work totaling 6 units of credit or less in any one semester need not submit transcripts in order to complete registration.) and

3. Take any advisement tests which may be recommended.

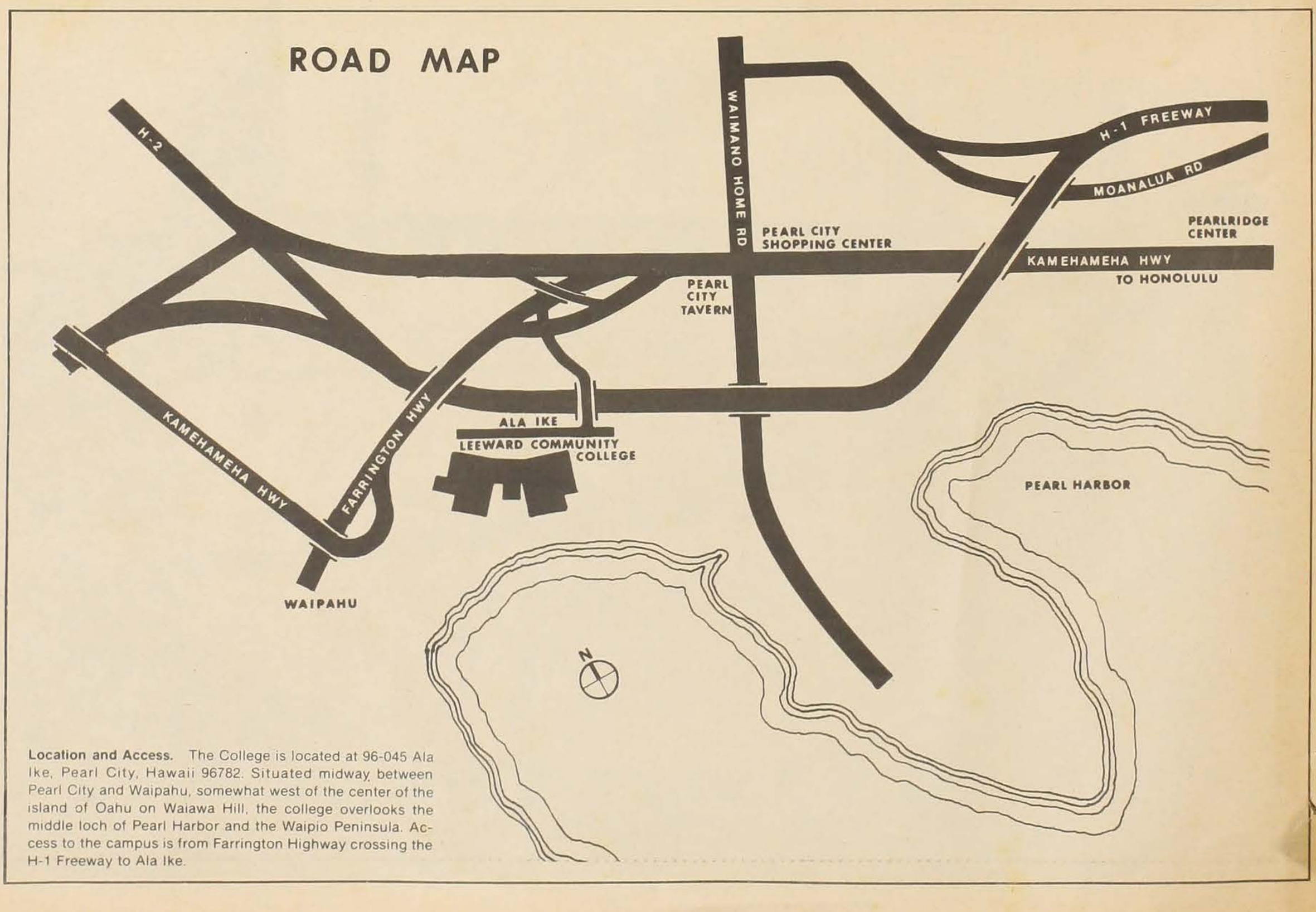
Applicants will be notified by mail of their admission and assigned a time to report for academic advising, registration, and orientation.

All students registering for the first time at Leeward (except those transferring from another college) will be given a reading test. Those who are deficient in rate of reading or comprehension for satisfactory work in their chosen program will be assigned to classes in Developmental Reading.

To help in planning the offerings of the College and to ensure adequate spaces for all who wish to attend, applications are to be returned to the College by *August 1* for the Fall semester, *January 2* for the Spring semester, and *June 1* for Summer Session. Persons applying for admission after these dates will be accommodated to the extent possible.

Tuberculosis Clearance Requirement. State of Hawaii Public Health Regulations require that persons over compulsory school attendance age (16) enrolling in any one of Hawaii's community colleges submit a certificate indicating that they are free of active tuberculosis. This requirement covers part-time and full-time students, as well as students enrolling in evening courses. The examination for tuberculosis must have been performed within three months prior to school enrollment. The certificate should be submitted to the Office of Admissions and Records as part of the College's admission requirements.

The examination to certify freedom from active tuberculosis includes the following:



Location and Access. The College is located at 96-045 Ala Ike, Pearl City, Hawaii 96782. Situated midway between Pearl City and Waipahu, somewhat west of the center of the island of Oahu on Waiawa Hill, the college overlooks the middle loch of Pearl Harbor and the Waipio Peninsula. Access to the campus is from Farrington Highway crossing the H-1 Freeway to Ala Ike.

For people below age 20, the examination will be a tuberculin skin test. If the skin test is positive, a chest x-ray will be required.

People age 20-39 may either have a chest x-ray or tuberculin skin test. Positive reactors to the skin test must have a chest x-ray.

Persons over 40 years of age and over must have a chest x-ray.

Written approval of the Department of Health must be obtained before any person found to have active tuberculosis is enrolled.

Medical Clearance for Physical Education. A medical clearance will be required in those HPE courses that require active participation. Students without medical clearance will be allowed to register in these courses but will not be allowed to participate or perform in class until the clearance is obtained.

1976-1977 Academic Year. Leeward Community College will begin accepting application for the 1976-1977 academic year after December 1, 1975. Applications for admission will continue to be processed by the Admissions Office through the last day for registering classes for the Fall 1976 or Spring 1977 semester. Qualified applicants should realize, however, that those applicants who apply late to certain programs may not be accepted for admission due to limitations on enrollments.

Foreign Students (Student Visa Applicants Only). A limited number of foreign students are accepted for admission but must meet special requirements in addition to the general requirements. These are:

1. A complete and certified English translation of the student's record of achievement must be submitted showing courses taken, a brief description of the course content, grades earned, passing and maximum grades, and student's standing in class.

2. The student must be able to read, write, speak, and understand the English language. Applicants from foreign countries where English is not the usual means of communication are required to take the Test of English as a Foreign Language (TOEFL). Applications for admission will not be processed until the Registrar has received the TOEFL results, which are necessary in order to evaluate the student's English proficiency in terms of his probable ability to carry out his studies effectively. TOEFL is administered only three times each year—in January, May and October. Applicants should plan to take TOEFL at the following times:

For admission in:
September take the test the preceding **February or May**.
January take the test the preceding **September or November.**

Completed registration forms to take TOEFL must be in the Office of the Educational Testing Service (ETS) at least one month prior to the date of the examination. Information regarding the exact dates, location, and fees is available from Educational Testing Service, Box 592, Princeton, New Jersey 08540. Please do not write to the College for information on TOEFL.

3. Confirmation of satisfactory financial support while in Hawaii.

4. A satisfactory physical examination report as specified by the College, including chest x-ray films. Students must carry complete health insurance for the period of their stay at the College.

5. The I-20 form required by the United States Department of Justice, Immigration and Naturalization Service for a student visa will be provided by the College after the special requirements are fulfilled.

6. Deadlines for application, including receipt of all documents listed above, are June 1 for Fall semester and October 1 for Spring semester.

LCC has established a program for English as a Second Language. Foreign students whose English language skills are determined to be inadequate to do the course work at LCC will be further tested and assigned to English Language Institute 5, 15, 20 and ISS 100 set aside for foreign students.

Schedule of Tuition and Fees (per semester)

The tuition and fee schedule set forth here is subject to change.

Resident	1-11 units	12 units & above
Tuition	$3.50 per unit	$46.00
Health Fee	$1.00	$ 1.00
Student Activities	optional	$ 5.00
Total	$4.50-$39.50	$52.00
Non Resident	1-11 units	12 units & above
Tuition	$38.00 per unit	$450.00
Health Fee	$ 1.00	$ 1.00
Student Activities	optional	$ 5.00
Total	$39.00-$419.00	$456.00

Special Fees

Health Fee: A health fee of $1.00 will be charged to each student per semester. This fee will be used for first aid that must be administered to students.

Student Activity Fee: Full-time students (those carrying 12 or more units) pay a Student Activity Fee. Part-time students may pay this fee if they wish to participate in student activities.

Late Registration Fee: A $2.00 fee for late registration is charged when a student registers after the announced days of registration.

Course Change Fee: A $1.00 fee is charged for each request for course change.

Transcript Fee: No fee is charged for a request of transcript to be sent to another college within the University of Hawaii System. A $1.00 fee is charged for a transcript that is to be sent outside of the University of Hawaii System.

Graduation Fee: A $5.00 fee is payable at the time of submitting an application for graduation.

Concurrent Registration

Leeward Community College students may register concurrently for courses at the Manoa campus when the courses are not available at the College. Similarly, Manoa campus students with their advisors' consent may register for those courses at the community college required in their programs and not available at Manoa campus. The maximum tuition in the case of such concurrent registration is from $225.00 for residents and $644.00 for non-residents per semester during 1975-76 academic year.

Concurrent registration between several community colleges is encouraged when courses desired by the student are not available at his home college. Total tuition and fee charges for such joint registration will not total more than $52.00 for residents and $456.00 for non-residents per semester during the 1975-76 academic year.

It is the responsibility of a student concurrently enrolled in a course at Leeward Community College to have his transcript of work accomplished at Leeward sent to his home campus. The student may have this done without charge upon request to the Registrar's Office.

Refund Policies

Regular Session. Eighty percent of tuition paid shall be refunded if a student withdraws from college within the first two weeks of a semester. Forty percent of tuition paid shall be refunded if a student withdraws from college during the third or fourth week of a semester.

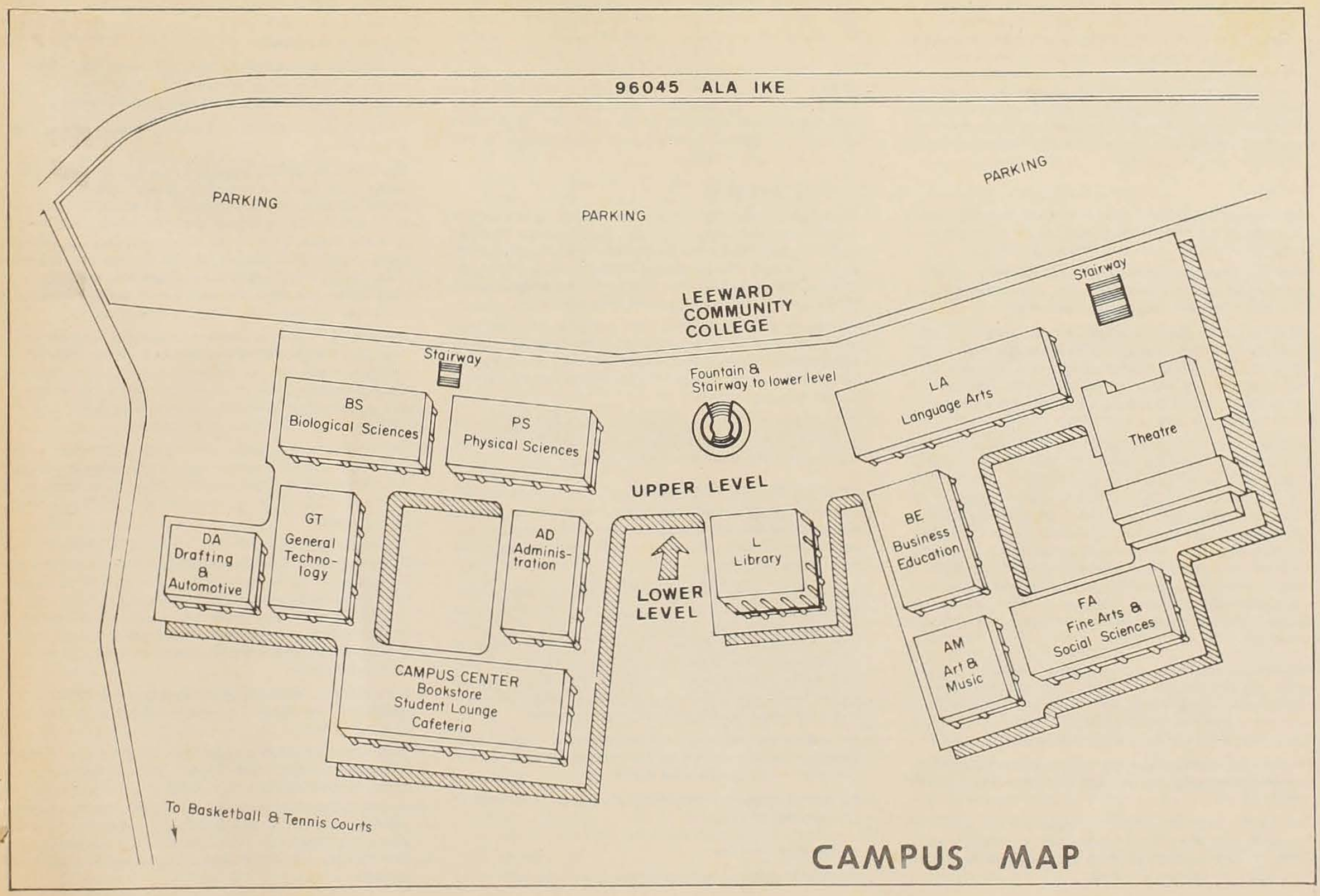
Accelerated Sessions and Summer Session. Eighty percent of the tuition paid shall be refunded if a student officially withdraws within the first week of the session. Forty percent of the tuition paid shall be refunded if a student officially withdraws within the second week of instruction. No refund thereafter.

Financial Obligations. Students who have not met their financial obligations at any college in the University of Hawaii system (such as nonpayment of tuition and fees, fines, or loans) may be denied graduation and further registration. Transcripts of courses taken at the college may also be withheld.

Cost of Books and Supplies. The cost of books and supplies usually ranges from $25 to $80 per semester for a full-time program.

Financial Aids

The objective of the Financial Aids Program is to provide assistance to students who demonstrate financial need. Various forms of financial assistance are available to Leeward Community College students. Among these are federally funded programs such as the Basic Educational Opportunity



CAMPUS MAP

Grant Program, Supplemental Educational Opportunity Grant Program, the National Direct Student Loan Program, the College Work-Study Program, and state-funded programs such as the State of Hawaii Scholarship Program, and State Higher Education Program. Students may apply for as many of these as they wish and, if qualified, may receive assistance through a combination of the above sources.

At present, the College has very limited funds for direct scholarship aid. Students interested in scholarships and other forms of financial aids should refer to *Department of Education Bulletin 15, Scholarship and Financial Aid for Advanced Training Available to Residents of the State of Hawaii.*

A no-interest short-term loan program to enable students to obtain small loans for short periods of time is available.

Students with financial problems should consult the Financial Aids Officer for assistance in obtaining needed funds. For further information call or write the Financial Aids Officer of the College.

Veterans Administration Benefits

The College is a Veterans Administration approved educational institution and eligible students may receive financial assistance as provided for by the Veterans' Readjustment Benefits Act and the War Orphan's Assistance Act.

Under V.A. regulations, benefits accruing to the student vary with the course load, the program in which he is enrolled, and the number of dependents supported by the student. Determination of the benefits a student is eligible for is made by the Veterans Administration.

Veterans or orphans of veterans registering at Leeward Community College for the first time under any of the various federal veterans' bills should present a proper Certificate of Education and Training or a Certificate of Eligibility and Entitlement.

Withdrawal From College

The student should complete the proper withdrawal forms at the Admissions and Records Office. Upon complete withdrawal during the first four weeks of a semester, partial refund of tuition and fees is made.

Attendance

Regular attendance is expected; therefore, notice to instructors of any anticipated absence is a courtesy which they will appreciate. Similarly, unexpected absences due to illness or other causes are of concern to them. Any absence which may require make-up of study, especially laboratory, should be brought to the attention of the instructor at the earliest possible moment to assist in planning for such make-up.

A student may withdraw from a course whenever he does not wish to learn what the course was designed to help him learn.

He should inform the instructor and his advisor or counselor of his withdrawal from a course.

Although attendance in class is urged throughout the semester, students must attend classes for the first two weeks of school. Two consecutive class hours missed during this period will result in the student being automatically dropped by the instructor. Students who are unable to attend a class for any reason should notify their instructor in advance. This procedure is designed to allow an opportunity for students who are interested in adding a course to enter at the earliest possible moment. Students who miss two consecutive class hours throughout the semester may also be dropped by the instructor.

Conduct

The Board of Regents of the University has approved a policy statement which established guidelines for behavior on all campuses. Pertinent sections of the statement are:

"The two categories of impermissible behavior, stated . . . apply equally to every member of the academic community . . . includes the staff, faculty and students . . .

Category 1 A member of the academic community may not behave toward another member, even in the name of his convictions or his rights to academic freedom, in a manner denying or interfering with another member's expression of convictions, right to academic freedom or the performance of his legitimate duties or functions.

Category 2 Behavior intended directly or indirectly to interfere with or disrupt the processes of teaching, learning or research or those processes or conditions furthering or facilitating these activities is impermissible behavior. An interference or disruption exists when any of these processes can no longer take place in the planned, normal, or customary form given to them by those legitimately responsible for them, or when any of these conditions has essentially ceased to exist. Processes or conditions furthering or facilitating teaching, learning or research as used in the first sequence of this paragraph include the administration of the University.

Sanctions In addition to restitution where restitution is appropriate, the sanctions for a member of the academic community who has engaged in impermissible behavior shall range from reprimand and censure, through suspension for a definite period of time, to expulsion or dismissal."

Procedure for investigation and adjudication of alleged impermissible behavior are specified for each campus individually.

The full statement of the Board of Regents' policy and of the Leeward Community College procedure are available in the offices of the Provost, Dean of Educational Services, and the Coordinator of Student Activities.

Academic Information

Definitions of Terms

Course: A designed sequence of educational units which must be achieved by the student if he is to acquire knowledge of a particular subject.

Program: A specific series of courses intended to lead the student toward a degree or certificate.

Curriculum: The whole body of courses offered at Leeward Community College. (See list of course offerings.)

Degrees and Certificates

In keeping with the philosophy of Leeward Community College, it is recognized that many students may wish to select their courses of study according to their own personal interests or occupational needs, rather than to follow the requirements of a specific program leading to a degree or certificate.

Any student, however, upon completion of registration and payment of fees, is eligible to become a candidate for any degree or certificate offered by the college. Candidates intending to receive such awards must see a counselor in the first month of the session in which the degree or certificate is to be awarded, and should make application for the degree or certificate through the Registrar's Office. Applications should be filed not later than *November 1* for Fall semester graduation and not later than *March 1* for Spring semester graduation.

The degrees of **Associate in Arts** and **Associate in Science** are awarded for satisfactory completion of a minimum of 60 semester hours of credit including at least 6 semester hours in each of the four divisions—Arts and Humanities, Language Arts, Mathematics and Natural Sciences, and Social Sciences. At least 12 of the 60 credits must be earned at Leeward Community College.

Certificates of Achievement are awarded for satisfactory completion of a prescribed series of courses leading to an occupational skill and usually include appropriate courses in related and general education.

A minimum grade-point average of 1.7 must be achieved for all degrees and certificates. Students should note that graduation with a grade-point average of less than 2.0 probably will prohibit transfer to another accredited institution.

Additional requirements of the various degree and certificate programs are specified under Instructional Programs in this catalog.

Basis of Credit

Because the University of Hawaii System is on a semester basis, the unit of credit used is the semester hour. One semester hour of credit normally is awarded for one 50-minute period of intensive study in class once a week for a full semester with the expectation that two additional hours will be spent in study outside of class. With this base in mind, equivalent credit values are established for laboratory, shop, studio and other types of learning which are of a different nature. Similar equivalencies are established for credit courses of less than a semester's duration.

Credit by Examination

Any officially registered student who presents evidence to the instructor involved and the appropriate divisional chairman that through experience or training he has had the equivalent of a course but has not received college credit for it may apply for credit by examination. If approval is granted, he shall follow college procedure and take the examination.

The test shall be administered and graded by the instructor at his convenience. In each case, the exam shall be prepared and administered by the instructor and shall be sufficiently comprehensive to establish the student's mastery of the course objective.

The college is presently considering alternate ways for the student to receive credit by examination. For further information, contact the Registrar's Office.

Independent Study 99, 199, 299

The purpose of the program is to offer the student an opportunity to participate in the creation of academic learning experiences geared to the individual needs, interests, aptitudes and desired outcomes.

Any student registering at LCC may design an independent study project and may be proposed at any of the three levels —Developmental (99), Introductory (199), and Enrichment (299). This must be managed by at least one student-selected advisor and must be approved by the advisor's Division Chairman, the appropriate Dean, and the Provost. While there are no prerequisites, an advisor may recommend particular preparation before a student may undertake a project.

An independent study project could take the form of self-directed reading, research, field work experience, public performance, or an occupational experience.

For further information see any faculty member, counselor or other college official.

Cooperative Education

To provide students with as many educational options as possible, the college offers work experience courses called Cooperative Education. These courses permit students to integrate classroom work with practical experience in actual employment situations. Students learn by working with persons already successful in the business-industrial community, and are compensated by the employer at a rate not less than, and often above the legal minimum wage. College credits also are awarded for successful course completion.

The Cooperative Education Coordinator will determine the number of credits and the section the student will be enrolled in:

Section 1 (1 unit)
62-121 hours of on-the-job experiences and seminars
Section 2 (2 units)
124-183 hours of on-the-job experiences and seminars
Section 3 (3 units)
186-249 hours of on-the-job experiences and seminars
Section 4 (4 units)
244 or more hours of on-the-job experiences and seminars

For further information about this option, contact any counselor, member of the Business or Vocational-Technical Division or the Liberal Arts Cooperative Education Coordinator.

Course Load

Any student carrying 12 units of credit or more is considered to be a full-time student.

The New Leeward Community College Student. The student entering Leeward Community College for the first time may carry up to a maximum of 15 units of credit his first semester. (See Exceptions).

The Re-entering Student. The student re-entering Leeward Community College may carry more than 15 units of credit during a semester if he previously had demonstrated successful achievement of at least 15 units of college study. (See Exceptions below).

Foreign Students. Foreign students on a student visa are required to carry a minimum of 12 units of credit.

Social Security Administration. Students receiving full benefits from the Social Security Administration are required to carry a minimum of 12 units of credit.

Exceptions. Any student who wishes to carry more than 15 units of credit must secure the approval of the Dean of Educational Services or his designated representative. Approval for excessive units will be based on the student's demonstrated ability to pass 15 units at Leeward Community College or another college.

Evaluation and Grades

Each course will be based upon objectives stated in the course outlined. The student's achievement in the course will be judged by his performance in meeting these objectives.

Various levels of achievement are signified by letter grades as follows:

The minimum level of achievement which has been determined as adequate to achieve the general goals of the course and as satisfactory for advancement is established as a grade of *C*. Achievement at higher levels will carry grades of *B* if markedly better, or *A* for an outstanding level of achievement. A grade of *D* will be given for achievement at a level below that of the *C* grade but at a demonstrated degree of understanding worthy of credit, but of doubtful adequacy for further learning in the subject matter area.

There is no *F* grade at Leeward Community College; a student who does not achieve a level of competence which is gradable or who has not reached a level of accomplishment within a specified time period which will allow for an evaluation will receive a *N* which is defined as no grade. The *N* is not computed in the grade point average.

The *I grade (incomplete)* is given to the student who has to complete a small but important part of the work of the course. The *I* will revert to another grade if the work is not made up by the final day of the semester following that in which the *I* was assigned.

Students who complete the course, who have attended regularly, and have made a conscientious attempt to meet the objectives but did not achieve the minimum level of competency designated for a grade of *D* receive a *Q*. The *Q* carries credit for meeting the requirements for general education in any occupational degree and certificate program at Leeward Community College. It is not accepted as credit in transfer to other institutions.

A student who wishes to learn more in any subject may reregister and will receive the grade indicating his final level of achievement.

Each letter grade has a point value for purposes of determining an average grade. Grade point averages are determined by dividing the total number of grade points earned by the total number of credits completed. A grade of *A* carries 4 points; *B-3, C-2, D-1.* Grades of *N (no grade), I (incomplete), W (withdrawal),* or *Q* (see above) will appear on the transcript but are not included in computing the grade point average.

All grades and grade points earned at any campus of the University of Hawaii are transferable to any other if the courses are acceptable in the program chosen at the new campus. The grade points earned at Leeward Community College will be utilized to determine admission to Manoa and Hilo Campuses of the University as well as to other institutions.

Individual grade reports will be mailed to the student at the end of each semester.

The Family Rights and Privacy Act of 1974

The University subscribes to and adheres to the Family Educational Rights and Privacy Act of 1974 and has developed policies and procedures for the implementation of the Act. The Act basically assures students of access to their educational records and protects the students' rights to privacy by limiting the transferability of their records without their consent. The Act further provides for hearing procedures so the student can challenge entries made to his/her educational records.

Repetition of Courses

A student may repeat any course taken at the college, no matter what grade he has received. In the award of a degree or certificate, credit will be allowed once for a course but the student will receive the higher grade and grade point. The lower grade, however, shall remain on the student's record.

Certain courses may be repeated for *additional* credit. Refer to the catalog course description for criteria for repetition.

Development and Revision of Curriculum

Any faculty member, student or member of the community may recommend an addition or revision to the College curriculum or to any of its programs. The procedures for such recommendations may be obtained from any divisional chairman or from a booklet entitled "How to Recommend a Curricular Change at Leeward Community College" obtained in the library.

There is a file in the library of all proposed changes and additions, accepted or rejected.

Occupational programs are developed with the assistance of advisory committees consisting of active professionals in the occupational field concerned.

Transfer of Credits:
Other Institutions to Leeward

Other Campuses of the University of Hawaii. A transcript of work taken at any unit of the University of Hawaii System is accepted as if the work had been done at Leeward Community College.

Colleges or Universities not Part of the University of Hawaii System. A student transferring to Leeward Community College from another college or university not part of the University of Hawaii System *may* be allowed credits for work taken from such institution. For acceptance, such credits must be in courses comparable in content and level to courses offered by Leeward. Only credits completed in an accredited institution with a grade of *C* or better will be considered for transfer credit.

Students transferring from other than accredited institutions must complete a minimum of 12 semester hours with an average grade of *C* or better before credit will be given for courses taken at the previous institution. (Also see Credit by Examination.)

All acceptable transfer credits and grade points shall apply toward graduation requirements.

It is the responsibility of the student to have the transcript of previous college work sent directly to the Registrar of Leeward.

Students desiring an Associate of Arts or Associate of Science degree from Leeward Community College must earn at least twelve (12) units of credit at the College.

Transfer:
Leeward Community College to the Manoa Campus

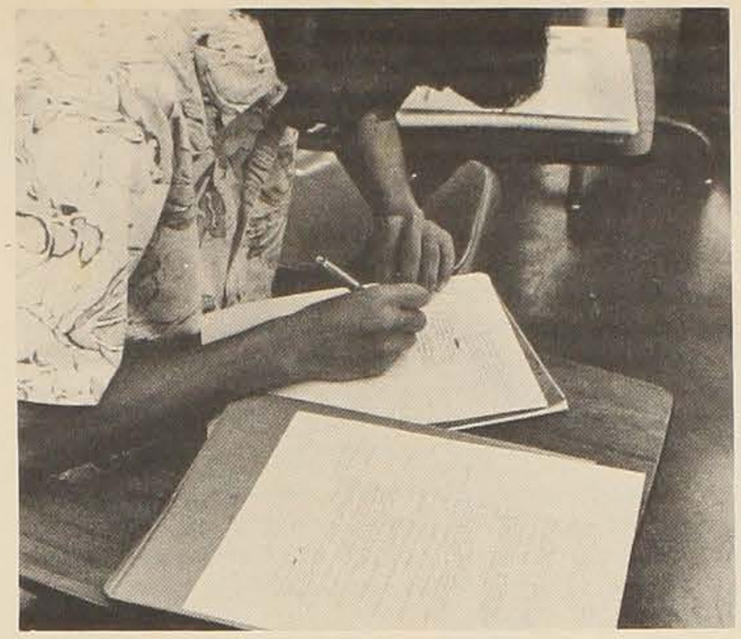
Because the majority of Leeward Community College students transferring to four-year institutions continue their education at the Manoa campus of the University of Hawaii, the following general information has been provided. Students intending to transfer to Manoa should consult the University of Hawaii Catalog for further information, and should work closely with Leeward counselors in planning their course of study.

General admission policy for students transferring from community colleges within the University of Hawaii system:

1. Any student who has not successfully completed 24 credit hours of "transfer" level courses at Leeward is subject to the same admission requirements as entering freshmen applying to Manoa. This includes the requirement to submit a transcript of satisfactory high school work and official scores on the Scholastic Aptitude Test of the College Entrance Examination Board.

2. Any Leeward student who was originally admitted to Manoa but elected instead to begin at Leeward Community College may transfer to Manoa at any time regardless of the number of credit hours he has completed at the Community College. Such a student must meet the grade point average required of Manoa students for continued registration.

3. Any Leeward student, whether or not he was able to meet Manoa's admission requirements as an entering freshman, is eligible to transfer to Manoa after his first academic year at Leeward if he has completed 24 credit hours in transferable courses within his first two semesters with a grade point average of 1.7 or higher.



4. Any Leeward student wishing to transfer to Manoa after completing 24 hours in transferable courses at Leeward, or after enrolling at Leeward for more than two semesters, is required to have a grade point average of 2.0 or higher. Studies of Leeward students who have transferred to Manoa show a significantly high level of achievement among those who transferred after successfully completing 60 units at Leeward.

5. Any Leeward student transferring to Manoa after attending another college or university must submit transcripts from these schools as well as from Leeward. The credits and grades earned will be evaluated by Manoa to determine eligibility for transfer.

Courses Acceptable for Transfer to the Manoa Campus. Courses acceptable for transfer to Manoa are generally those numbered 100 and above. Some Leeward courses numbered 1-99 (primarily skill and occupational courses) are accepted at Manoa for credit toward a certain degree, such as the Bachelor of Science in Industrial Arts Education. The fact that transfer credit is allowed for a course toward the number of units required for graduation, however, does not necessarily mean that the course will satisfy the curricular requirements of a particular college or degree program.

Manoa will allow credit toward graduation for a course in which a grade of *D* (1.0) was earned at Leeward, but the *D* grade may render the course unacceptable toward fulfilling the course requirements for a particular degree. Leeward courses in which a grade of *W*, *Q*, or *N* have been earned are not acceptable for credit at Manoa.

Number of Units of Transfer Credit Accepted at Manoa. Manoa does not specify a limit to the number of units acceptable in transfer from a community college within the University of Hawaii system. Any student intending to complete more than 60 hours at Leeward before transferring to Manoa, however, should work out his course of study very carefully with Leeward counselors, taking into consideration the specific curricular requirements of the college in which he wishes to enroll, and the courses required for his major field of study. To receive a baccalaureate degree from the Manoa campus of the University of Hawaii, a student must have completed at least 60 units in courses numbered 200 and above, and at least 30 units of course work must be completed on the Manoa campus.

Transfer of Grade Point Average to Manoa. Beginning Fall semester of 1972, Leeward students transferring to Manoa receive grade point credit for all courses completed at the community college which are accepted for transfer by Manoa. The Leeward grade point average will be included when computing the overall grade point average for all work toward the baccalaureate degree at the University of Hawaii. The grade point average which transfers, however, is computed according to Manoa's system, which differs from Leeward's in certain respects. For example, when a course at Leeward is repeated, only the highest grade is used in computing the grade point average; at Manoa, all grades including those for courses which have been repeated, are computed into the grade point average. Manoa includes only those courses accepted for transfer in computing the grade point average, while Leeward includes courses not transferable in computing the grade point average.

Admission Policies of the Various Colleges of the Manoa Campus. In addition to the policies outlined above for general admission to the Manoa campus, the student transferring from the community college is subject to the admission requirements of the particular college in which he wishes to enroll within the University. There are six colleges offering baccalaureate degrees at the University of Hawaii: Arts and Sciences, Business Administration, Education, Engineering, Health Sciences and Social Welfare, and Tropical Agriculture. Any student wishing to be a candidate for a degree from the University must specify the college in which he wishes to enroll when he applies for general admission to the University. Students intending to receive degrees from the Colleges of Education, and Health Sciences and Social Welfare are generally enrolled in the College of Arts and Sciences until they have completed the general education requirements for these colleges.

Each college determines its own admissions policy and deadlines for application. This information may be obtained from the current University of Hawaii Catalog and from Leeward counselors.

The curricular requirements vary considerably from college to college. The student considering transfer to Manoa should work closely with the counseling department at Leeward in planning a course of study to meet the requirements for the particular degree toward which he intends to work. Leeward counselors have available current information on the requirements of each of the colleges of the University.

All colleges, however, do require students to complete a specified number of credits in each of the following six broad areas: Communication, Quantitative and Logical Reasoning, World Civilizations, Humanities, Natural Sciences and Social Sciences. Leeward has sufficient course offerings in all of the above areas for the student to fulfill the general education requirements of any of the colleges of the University of Hawaii.

Transfer of Credits:
Leeward Community College to Institutions Other Than The Manoa Campus

In planning his course of study, a student intending to transfer from Leeward to another institution is advised to find out, as early as possible, the requirements of the school or schools under consideration. It is the student's responsibility to obtain the course catalog of the institution to which he may wish to transfer and to use it, with the assistance of his counselor at Leeward, as a guide in selecting courses which will be useful to him in continuing his education elsewhere. The Leeward library also maintains a collection of current catalogs from schools throughout the United States.

The student should take into consideration the following policies of the institution to which he is considering transfer.

General Admission Policies for Transfer Students. The transfer student should be aware of the admitting institution's requirements for residency, aptitude and placement test scores, transcripts, recommendations, and deadlines for application.

Courses Acceptable for Transfer. It is the admitting institution which determines whether it will accept credits earned in a particular course, and whether that course will fulfill its own curricular requirements. Many institutions will accept for transfer only those courses in which a grade of *C* (2.0) or better was earned.

Generally, only those courses at Leeward numbered 100 and above are considered for transfer at most baccalaureate (four-year) institutions; however, some institutions accept certain Leeward courses numbered 1-99 (primarily skill and occupational courses) to fulfill the requirements toward a particular degree.

Overall Grade Point Average Required for Transfer. Many institutions require a minimum grade point average of 2.0 or higher for general admission of transfer students. The admitting institution generally evaluates the transfer student's transcript and computes the grade point average according to its own system (not necessarily the same as Leeward's).

Number of Units of Credit Acceptable for Transfer. Many institutions limit the number of credit hours they will accept in transfer from another school.

Policy for Acceptance into a Particular School, College, or Degree Program Within the Institution. In addition to meeting the requirements for general admission to the institution, the transfer student may have to meet the specific requirements (grade point average, prerequisite courses) of the particular school or college (e.g., School of Nursing, College of Arts and Sciences, College of Engineering) in which he wishes to enroll within the institution. When the student has in mind a particular major field of study, it is also advisable to consider the course requirements for the degree in that field, as well.

Military Studies Program: ROTC

Army ROTC. The Army Reserve Officers Training Program (ROTC) qualifies successful participants for commissions as second lieutenants in the U.S. Army. Once commissioned, graduates enter active duty or if selected may pursue an advanced degree on educational delay status. Four-year and two-year program options are available to male and female students.

The four-year program is divided into basic and advanced courses. Students who have participated in Junior Division ROTC or who have had more than four months active military service may be exempt from part or all of the basic course. The advanced course, in the junior and senior years, includes a six-week summer camp between the junior and senior years at a mainland military installation. Pay for this period is $100 per month during the school year and approximately $320 per month at camp. To be eligible for the advanced course a student must (1) be a citizen of the U.S., (2) successfully complete the basic course or its equivalent.

The two-year advanced program can be taken without taking the two-year basic course by attending and completing a six-week summer camp at Fort Knox, Kentucky, before entering the advanced course. Students must have four semesters of college work remaining after finishing the summer camp and must apply for selection early in the spring semester of the year in which they plan to attend the basic summer camp. Summer camp pay is approximately $345 per month.

The Army Flight Instruction Program, offered to qualified seniors, can lead to a private pilot's rating.

There is no tuition charged for ROTC courses.

Financial assistance scholarships are available each year of the program. They provide for tuition, fees, books, laboratory expenses and $100 per month for the period of the scholarship.

Information and counseling on the ROTC Program are available at the offices of the Military Science Program of the Manoa Campus.

Support Services

Parking

Leeward Community College is isolated from all residential areas and many areas are not served by public transportation; therefore it is necessary that the great majority of faculty, staff and students drive to the campus. The College recognizes the problem of parking space and provides such space to the maximum extent possible. Currently there is no charge for parking on the campus. It is expected that all users of the campus will be concerned for the rights and privileges of others and cheerfully obey any necessary regulations.

Public Transportation

The Mass Transportation Services (The Bus) route from downtown Honolulu to Ewa and Barbers Point, from Schofield-Wahiawa area to downtown Honolulu, and from Makaha to downtown Honolulu provides service to the College on an hourly basis with more frequent service during portions of the day. Complete schedules may be obtained from the company.

Counseling and Guidance

In keeping with the philosophy of the College, psychometric tests, advisement and guidance, and counseling services are considered an integral part of the learning process. The objective of Counseling and Guidance is to facilitate the lifelong process of personal growth through learning of its students and the community. Specifically, its primary concern is to help each individual become more aware of himself and his potential and learn the skills of decisionmaking. The student should acquire a willingness to take responsibility for his choices and to develop attitudes and behaviors which allow him to achieve a personally satisfying life style.

To help the student with academic decisionmaking and problem-solving, the counselor discusses program, degree or certificate planning stages in the framework of an educational /vocational goal. He helps the students learn to use the catalog, understand requirements, schedule classes, and make changes as necessary.

A student who is unsure of what he wants to do, unsure of why he is in school, unsure of what he is capable of doing, worried about not knowing, has had more than two *W* grades on previous work, made numerous changes in his courses, dropped out of school after three weeks, or who has disappeared from classes should make an *individual appointment* to see a counselor. *Students may see a counselor at any time during the semester.*

Testing

Each student may elect to take a battery of interest and aptitude tests. The test results, together with a personal interview with a counselor or psychometrist will provide the student with an assessment of his present state of personal and academic development and aid him in the selection of learning objectives.

Placement examinations which have been validated on the Leeward Community College students are also offered as a means to assist in an assessment of a student's grasp of basic learning skills. Coursework that emphasizes development and fluency of reading, writing, and mathematics skills commensurate with the student's present level of ability is then recommended.

Student Activities and Services

The Campus Center houses the office of the Coordinator of Student Activities, Student Government offices, a student lounge, snack bar and dining facilities. The Center provides a central place for cultural, educational, and social activities for the community and campus.

The office of the Coordinator of Student Activities is located on the second floor of the Campus Center. The personnel in his office coordinate and develop programs and services of benefit and interest to students. Many activities and services are available on campus. Information and details may be secured from the Office of Student Activities and the Counseling Center. The Student Activities staff and the Student Government of the College cooperate to provide co-curricular activities of a cultural, social, recreational, and educational nature. Students pursue a variety of special interests through various student organizations.

The Student Senate and Executive Board are the official representatives of students on matters of direct concern to the Student Body. The Student Government is concerned with the development of Leeward Community College and its relation to the University and community.

Student Participation in Governance

Students are encouraged to participate in the planning and operation of the college through membership on Faculty Senate Committees and all-college committees appointed by the Provost. Interested students are urged to contact the chairmen of these committees. A list of existing committees and their chairmen may be obtained from the office of the Associate Dean of Community Service and Special Programs.

Health Accident Insurance

A student group insurance policy is available on a voluntary basis for each semester or the entire year. Foreign students and students in certain vocational programs are required to carry health and accident insurance. Please see the Coordinator of Student Activities for further information.

The Health Center is located in the Administration Building's lower level Room 122. It is open from 8:15 A.M. to 9:15 P.M. Monday thru Thursday and 8:00 A.M. to 4:30 P.M. on Fridays. Services available to Leeward College community include:

1. Emergency and non-emergency care on a nursing level.
2. Information and referral to medical or community agencies, according to need.
3. Routine health screening and diagnostic procedures.
4. Tuberculosis skin testing following State Department of Health guidelines.
5. Available applications and claim forms for *Students' Accident and Sickness Medical Expense Plan.*
6. Family planning peer education.
7. Special health screenings with the cooperation of medically-oriented community agencies.

Faculty Advisor is Dean Garrett, Physical Education Instructor. The Medical Advisor is Dr. Thomas Cahill of Aiea. Staff includes: Deborah Pannabecker, R.N., B.G.S.; and Michael Buxton, L.P.N., a Leeward College pre-nursing student.

Housing

Leeward Community College has no plans for dormitory facilities. The Office of Student Activities has a listing of apartments and rooms that are available to Leeward Community College students.

Job Placement Services

Consonant with a philosophy that the job placement process is an integral part of the educational system of the college, the Job Placement Office provides services relative to pre-employment preparation, job information, consultations, and job referrals to students seeking full-time or part-time employment off-campus. Job listings and occupational information from private industry and government agencies are publicly posted. Governmental applications and other forms are available at this office.

Individual student consultations are available with respect to employment opportunities, labor market information, civil service and private industry job openings, job referrals, job requirements, wage rates, employers' expectations, applications/abstracts/resumes/self-inventories, job interview techniques and preparations, and other aspects relative to employment.

Bookstore

The College operates a bookstore which handles necessary textbooks, supplies, additional paperback books, and sundries.

Library

The library is an integral part of the learning activities of the college. It serves both as a source of learning materials and as a place to study and enjoy these materials. In addition to books, other materials available are magazines, newspapers, pamphlets, college catalogs, phonograph records, cassette tapes, art prints, filmstrips and kits. Although intended primarily for students of the college, the library is available to other residents of the community also. It is operated on an open-stack honor system with a minimum of restrictive procedures in order to make it easy and pleasurable to use. Students are urged to ask the librarians for assistance on any problems concerning use of learning materials.

The College Library works closely with other libraries of the University of Hawaii System and their services are extended to the faculty and students of Leeward Community College. The resources of the Hawaii State Library and other libraries in Hawaii are also available to meet the needs of students and faculty.

Educational Media Center

The purpose of the Educational Media Center is to serve the students and faculty of Leeward Community College in utilizing audio-visual techniques in learning and teaching. The Center includes an instructional materials production facility, television production studio, and a dial access listening laboratory to help implement learning presentations and programs. The Center provides services in graphic productions, photography, audio tape-reproduction, and other related areas in audio-visual communication.

Computer Center

The Computer Center is located in BS-109. The facilities of the LCC Computer Center are available for use by all students. The LCC computer center is equipped with an IBM 1130 Computer, keypunches, a card sorter, and Time Sharing Terminals connected with an IBM 370/158 at the Manoa Campus.

Math Learning Center

The Math Learning Center is currently located in PS-101a. It is open to the entire community, and is open for an average of eight hours each day, Monday through Friday.

The Learning Center is equipped with calculators, and projectors and equipment for film loops and cassettes. Students come to the Learning Center for tutoring, independent study, group instruction in the use of calculators and computer terminal, and for testing. Informal seminars were offered in the past and, hopefully, will be offered in the near future.

Reading Center

Problem: "It takes me three hours to read one page."
Probelm: "I have a poor vocabulary."
Problem: "I don't always understand what I read."
Problem: "I don't really know where to begin when I study."

These are a few of the typical problems the LCC Reading Center helps students solve. The Reading Center helps students improve their reading skills and develop more efficient study skills. There are controlled readers, tapes, filmstrips, reading pacers, and materials designed to improve the various aspects of reading and study skills available. An instructor or student assistant is on duty for individual help. A student need not be enrolled in a reading class to make use of the facilities.

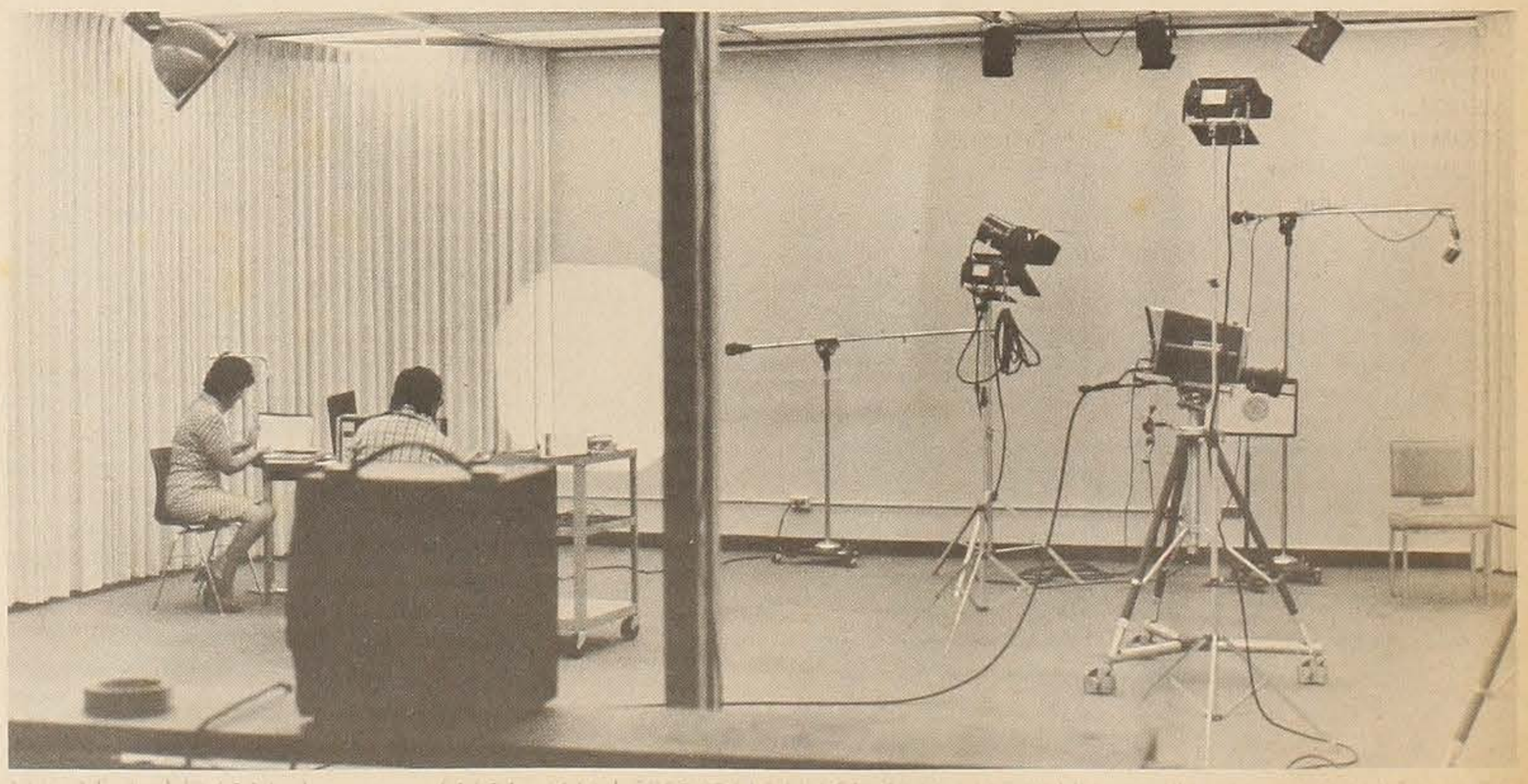
Community Studies Center

The Social Science Division maintains a Learning Center (primarily oriented towards Community Studies) which contains films, maps, games, books, and data on local communities. Its projectors and material are available to instructors who may wish to hold classes there and to students who wish to meet informally. When classes are not in session, the center is open to individuals or groups wishing to use the materials for research, discussion, group projects, or make-up work.

For location and hours of this facility, consult the Social Science Divisional Office. A specific listing of available material may be obtained from the Divisional Office (FA-220).

Writing Laboratory

Students who wish to improve their compositional skills or who have specific questions about writing assignments for any of their classes should feel free to drop in to LA -228 where writing instructors will be glad to help them.



Instructional Programs

DEGREE PROGRAMS

Associate in Arts (A.A.). There is no specified program for this degree. The only requirements are a minimum of 60 units of credit with at least 6 in each of the divisions of Art and Humanities, Language Arts, Mathematics and Natural Sciences, and Social Sciences. (See section on Degrees and Certificates.) A maximum of 12 units in courses numbered below 100 may be applied toward the Associate in Arts. Allowing such credits for the general A.A. degree does not mean that they will be accepted in transfer by another institution.

Associate in Science (A.S.). In order to insure both occupational proficiency and some degree of general education, course requirements have been established for each of the optional majors in the A.S. program. These required courses are of two kinds—those in which specific job-essential skills and knowledge are learned and those in which the student learns other types of skills and knowledge which are directly related to his occupational goals, e.g., oral and written communication or mathematics. The basic requirements of 6 units in each of the divisions of Arts and Humanities, Language Arts, Mathematics and Natural Sciences, and Social Sciences apply to all A.S. degrees. Changes are being proposed for the general education requirements and will be published in the catalog supplement.

Note: *Students who register in the 1975-76 school year for a certificate/degree as it is listed and decribed in this 1975-76 catalog are subject to the listed requirements and not bound by future changes in the certificate/degree requirements.*

ACCOUNTING

ACC

Certificate of Achievement (30 units). This program is designed to prepare the student for entry-level employment in a position such as a bookkeeper or account clerk.

Requirements

ACC 20	First Level Accounting	3
ACC 21	Second Level Accounting	3
BUS 21	Introduction to Business	3
BUS 22	Office Machines	3
ENG 45	Introduction to Expository Writing or	
ENG 100	Expository Writing	3
SPCOM 145	Interpersonal Communication	3
TYPW 17	Learning to Type	1
TYPW 18	Typing Application One	1
TYPW 19	Typing Application Two	1
Business Elective		3
Effective Listening		0
*General Education Electives		6
	Total units	30

*These courses may be chosen from the divisions of Arts and Humanities, Language Arts, Mathematics and Natural Sciences, and Social Sciences. The general education requirement may be met with a grade of Q in these courses.

Associate in Science Degree (60 units). This program is designed to prepare the student for entry-level employment as a bookkeeper and account clerk or as an assistant accountant in government or private industry.

Requirements

ACC 20	First Level Accounting or	
ACC 201	Principles of Accounting I	3
ACC 21	Second Level Accounting or	
ACC 202	Principles of Accounting II	3
ACC 22	Third Level Accounting	3
ACC 50	Cost Accounting	3
BUS 21	Introduction to Business	3
BUS 22	Office Machines	3
BUS 200	Legal Environment of Business	3
BUS 23	Business Mathematics or	
MATH 100	Survey of Mathematics	3
COMSC 100	The Computer and its Role in Society	3
TYPW 17	Learning to Type (1)	
TYPW 18	Typing Application I (1)	
TYPW 19	Typing Application II (1) or	
TYPW 21	Second Level (3) or	
TYPW 22	Third Level (3)	3
ECON 101	Consumer Economics or	
ECON 120	Introduction to Economics or	
ECON 150	Principles of Economics I	3
ENG 45	Introduction to Expository Writing or	
ENG 100	Expository Writing	3
ENG 105	Business Writing	3
SPCOM 145	Interpersonal Communications or	
SPCOM 151	Introduction to Speech	3
Arts and Humanities electives		6
Social Sciences electives		3
Effective Listening		0
**Business Electives		(6) (9)
	Total units	60

*ACC 201 and 202 may be substituted for ACC 20, 21, and 22.
**Business electives = 9 units if ACC 201 and 202 are elected. It is highly recommended that the student take BUS 58V or 59 as an elective.

A grade of Q in the general education electives will serve to meet the requirements for the degree.

AUTOMOTIVE TECHNOLOGY

AMT

Successful completion of appropriate courses in the automotive curriculum leads to a certificate of completion, a certificate of achievement, or an associate in science degree. The program is designed to:

Provide the technical knowledge and basic skill training for successful entry into the automotive field.

Provide the basic training necessary for advancement to managerial positions in the automotive industry.

Provide a base for qualified students to undertake advanced study as mechanical technicians in research and development industries.

The approximate cost of basic tools is $150 which the student must purchase.

Certificate of Completion (10 units)

Requirements

AMT 11	Introduction	1
Any other three Automotive courses		9
	Total units	10

Recommended Electives:

ENG 45	Introduction to Expository Writing or	
ENG 100	Expository Writing	3
SPCOM 145	Interpersonal Communication or	
SPCOM 151	Introduction to Speech	3

Certificate of Achievement (47 units)

Requirements

AMT 11	Introduction	1
AMT 12	Automotive Tune-Up	7
AMT 13	Automotive Electrical Equipment	4
AMT 15	Lubrication	1
AMT 21	Brake Systems	4
AMT 22	Suspension and Steering	4
AMT 23	Wheel Balancing	1
AMT 31	Standard Transmission and Clutches	5
AMT 33	Differential Rear Axle	4
AMT 34	Automatic Transmission	6
AMT 41	Engines	6
AMT 51	Air Conditioning	4
	Total units	47

Recommended Electives:

ENG 45	Introduction to Expository Writing or	
ENG 100	Expository Writing	3
MATH 25	Beginning Algebra or	
MATH 27	Intermediate Algebra	3
PSY 100	Survey of Psychology	3
SPCOM 151	Introduction to Speech	3
SCI 116	Physical Science for the Craftsman	4

It is highly recommended that the student take AMT 58V or 59 as an elective.

Associate in Science Degree (71 units)

Requirements and electives

The complete series of Automotive Technology courses	47
Arts and Humanities electives	6
Mathematics and Natural Sciences electives	6
Social Sciences electives	6
Language Arts electives	6
Total units	71

It is highly recommended that the student take AMT 58V or 59 as an elective.

A grade of Q in the general education electives will serve to meet the requirements for the degree.

COMMUNITY SERVICE

This is a series of courses suggested for students interested in working for human service agencies in the local community.

It consists of courses concerned with human interaction skills, the development and needs of human beings over the life cycle, the nature and problems of local communities, and experience in local human service agencies, and special skills.

Students intending to pursue this series should register with the special counselor for community service.

Completion of the sequence should qualify the student either for immediate employment as a community service technician (generalist) or for entry into upper division interdisciplinary programs in Human Development, Liberal Studies, or undergraduate Social Work (when approved). Bachelor's degree in these majors should, in turn, qualify students for graduate programs in social work, public health, planning or special education.

Special skill courses and workshops will be offered from time to time to meet hiring and upgrading needs.

Associate in Arts Degree (60 units)

Required/Related Courses (30 hours)		Units
Human Interaction Skills		
ISS 100	Self Development	3
ISS 101	Group Processes	3
ISS 102	Group Leadership	3
Studies of Local Communities		
ISS 210	Physical Problems of Local Communities	3
ISS 211	Social Problems of Local Communities	3
ISS	Cultural Studies (Hawaiian 221/ Pilipino 202/Samoan 204/ SOC 210	3
Human Development Studies		
HD 231	Introduction to Human Development I	3
HD 232	Introduction to Human Development II	3
ISS 121	Human Sexuality	3
Experience with Local Community Agencies		
ISS 103 B/C/D Survey of Community Activities		1-3
ISS 193/293 B/C/D/E/F Community Practicum (Cooperative Education)		1-6
Community Service Skills		
ISS 290	Special Topics in Community Services (proposed course)	3
Child Development: Care of the Infant and Preschool Child*		3
Child Development: Early Childhood Curriculum (to be proposed)		3
General Related Studies		
PSY 100	Survey of Psychology (Rec Prep for PSY 280, HD 232)	3
SOC 210	Contemporary Social Problems	3
Child Care Related Courses		
CA 141	Creative Drama	3
CA 142	Puppetry	3
CA 143	Storytelling	3
HPE 230	First Aid	3
	Children's Literature (to be proposed)	3
General Education Requirements (30 hours)		
READ 1	Reading Clinic (if needed)	3
ENG 45	Introduction to Expository Writing and/or	
ENG 100	Expository Writing	(3)
SPCOM 145	Interpersonal Communication or	
SPCOM 151	Introduction to Speech	(3)
PHIL 210	Formal Logic	(3)
Mathematics & Natural Sciences		3
HIST 151, 152	World Civilization I and II	6
**Electives		12-18

*Curricula associated with child care is tentative

**The following are recommended for consideration as General Education electives: Human Development Majors: Humanities—3 courses; natural sciences—3 courses; social science—2 courses; foreign language/culture—2 courses

COMPUTER SCIENCE

COMSC

The growing interdisciplinary use of information processing systems has increased the need for a comprehensive program in Computer Science. Such a program is offered by Leeward Community College through the Division of Mathematics and Natural Sciences. The course credits are transferable at the bachelor's degree level.

The curriculum leading to an associate degree in Computer Science is designed to prepare individuals for employment as technical assistants to professional and administrative personnel using computers. The program provides two options: A) an Information Sciences curriculum for students interested primarily in scientific and experimental programming, and B) an Information Management curriculum for students interested primarily in the application and control of computer software in an organizational environment.

Requirements for all Students Majoring in Computer Science

COMSC 100	The Computer and Its Role in Society	3
COMSC 101	Introduction to Computer Science	3
COMSC 122	Comparative Programming Systems	3
COMSC 201	Operating Systems	3
ENG 100	Expository Writing	3
ENG 103	Research Writing or	
ENG 105	Business Writing or	
ENG 106	Technical Writing	3
SPCOM 151	Introduction to Speech	3
PHIL 210	Formal Logic	3
		Total units 24

In addition to these required courses, the student must elect *Option (A)* or *Option (B)* as follows:

OPTION (A)—EMPHASIS IN INFORMATION SCIENCES

ASSOCIATE IN ARTS DEGREE (60 units)

COMSC 120	Scientific Computer Programming	3
COMSC 222	Compiler Anatomy	3
COMSC elective		3
MATH 205	Calculus I	3
MATH 206	Calculus II	3
Arts and Humanities elective		3
Social Sciences electives		6
Electives		12
		36
		Total units 60

The following electives are recommended for consideration in general education: Philosophy 100, Linguistics 102, Physics 170, Physics 272, Economics 150, Chemistry 113-114, and Psychology 100 or 112.

OPTION(B)—EMPHASIS IN INFORMATION MANAGEMENT

ASSOCIATE IN SCIENCE DEGREE (60 units)

COMSC 121	Information Storage and Retrieval	3
COMSC 200	Information Systems	3
COMSC 220	Management Decision Techniques	3
ACC 201	Principles of Accounting I	3
ACC 202	Principles of Accounting II	3
ECON 150	Principles of Economics I	3
ECON 151	Principles of Economics II	3
BAS 121	Mathematics for Decision Making I	3
Arts and Humanities elective		3
Electives		9
		36
		Total units 60

The following electives are recommended for consideration in general education: Philosophy 100, Psychology 100, Sociology 100, and Political Science 110. A grade of Q in the general education electives will serve to meet the requirements for A.S. degree.

DRAFTING TECHNOLOGY

DT

Certificate of Completion (21 units). The student will develop the skills and knowledge necessary to produce clear, complete, and accurate working plans and detailed drawings for engineering and constructional purposes. He will be able to perform these skills from rough or detailed sketches or from selected notes.

Requirements

DT 11	Basic skills, lettering, terminology	3
DT 12	Residential planning	3
DT 22	Floor Plan	3
DT 23	Door, window, finishing schedule	3
DT 25	Stairs and Fireplaces	2
DT 26	Exterior elevations	2
DT 27	Foundation plan	2
DT 28	Roof and floor framing plans	3
		Total units 21

In addition, completion of the following courses are desirable for job entry and advancement:

SPCOM 145	Interpersonal Communications	3
ENG 45	Introduction to Expository Writing	3
MATH 41	Basic applied mathematics	3

(Drafting Technology 1—Introduction to Drafting (3 credits) is offered to students without prior experience in mechanical drawing.)

For various drafting tools, add $50 approximate cost which the student must purchase.

Certificate of Achievement (39 units). An entry-level architectural draftsman possesses all of the essential skills and knowledge to draft the necessary plans for a simple structure. To perform these functions, he must be adept at research using brochures and catalogues to find materials, equipment, and fixtures. He must also be able to find pertinent regulations and standards in building codes. Essentially, he will be directed by a chief draftsman or an architect in the form of rough sketches, memoranda, and verbal communication.

Requirements

DT 11	Basic skills, lettering, terminology	3
DT 12	Residential planning	3
DT 22	Floor plans	3
DT 23	Door, window, finishing schedule	3
DT 24	Structural section	3
DT 25	Stairs and fireplaces	2
DT 26	Exterior elevations	2
DT 27	Foundation plan	2
DT 28	Roof and floor framing plans	3
DT 29	Interior elevations	2
DT 31	Building services	3
DT 41	Working Drawings I	5
DT 43	Building Specifications	2
DT 44	Presentation Drawings	3
		Total units 39

Elective: DT 42—Working Drawings II

Associate in Science Degree (63 units). The skills and knowledge acquired in the associate degree program are fundamentally the same as those in the certificate of achievement program. In addition, however, the degree student will have the general education background to enhance his chances of advancement in his occupational area.

Requirements

The complete series of Drafting Technology Courses	39
Arts and Humanities electives	6
Mathematics and Natural Sciences Electives	6
Social Sciences electives	6
Language Arts electives	6
	Total units 63

Certificate of Completion in Drafting Technology—Civil (21 units). The student will develop the skills and knowledge necessary to produce clear, complete, and accurate working plans and detailed drawings for engineering and constructional purposes. He will be able to perform these skills from rough or detailed sketches or from selected notes.

Requirements

DT 11	Basic Skills, Lettering, Terminology	3
DT 31	Building Services	3
DT 33	Introduction to Civil Engineering Drafting	3
DT 34	Topographic Drafting	4
DT 35	Project Plan Drafting	4
DT 43	Building Specifications	2
MATH 41	Basic Applied Mathematics	2

Total units 21

Certificate of Achievement in Drafting Technology—Civil (38 units). An entry-level civil engineering draftsman possess all of the essential skills and knowledge to draft the necessary plans for a civil project plan. To perform these functions, he must be adept in research using brochures and catalogs to find materials, equipment, and fixtures. He must also be able to find pertinent regulations and standards in codes. Essentially, he will be directed by a chief draftsman or an engineer in the form of rough sketches, memoranda and verbal communication.

Requirements

DT 11	Basic Skills, Lettering, Terminology	3
DT 22	Floor Plans	3
DT 24	Structural Section	3
DT 25	Stairs and Fireplaces	2
DT 26	Exterior Elevations	2
DT 27	Foundation Plan	2
DT 28	Roof and Floor Framing Plans	3
DT 29	Interior Elevations	2
DT 31	Building Services	3
DT 33	Introduction to Civil Engineering Drafting	3
DT 34	Topographic Drafting	4
DT 35	Project Plan Drafting	4
DT 43	Building Specifications	2
MATH 41	Basic Applied Mathematics	2

Total units 38

Associate of Science Degree in Drafting Technology—Civil (60 units). The skills and knowledge acquired in the associate degree program are fundamentally the same as those in the certificate of achievement program. In addition, however, the degree student will have the general education background to enhance his chances of advancement in his occupational area.

Requirements

DT 11	Basic Skills, Lettering, Terminology	3
DT 22	Floor Plans	3
DT 24	Structural Section	3
DT 25	Stairs and Fireplaces	2
DT 26	Exterior Elevations	2
DT 27	Foundation Plan	2
DT 28	Roof and Floor Framing Plans	3
DT 29	Interior Elevations	2
DT 31	Building Services	3
DT 33	Introduction to Civil Engineering Drafting	3
DT 34	Topographic Drafting	4
DT 35	Project Plan Drafting	4
DT 43	Building Specifications	2
MATH 41	Basic Applied Mathematics	2
		38
MATH 41	Basic Applied Mathematics	2
ENG 100	Expository Writing	3
ENG 106	Technical Writing	3
Mathematics & Natural Science Elective		4
Arts & Humanities Electives		6
Social Science Electives		6

Total units 60

HOSPITALITY EDUCATION

FSER

The student who successfully completes appropriate courses in the Food Service curriculum will be awarded a Certificate of Completion, Certificate of Achievement, or an Associate in Science Degree.

Program requirements are established to serve the following goals:

Provide the technical knowledge and basic skill training for successful entry into the Food Service industry.

Provide the basic training necessary for advancement as cooks, station chefs, or executive chefs in the Food Service industry.

Certificate of Completion (24 units)

Requirements

FSER 120	Career Opportunities and Job Description	2
FSER 131	Storeroom Operation	2
FSER 140	Cold Food Pantry	8
FSER 145	Fundamentals of Cooking	8
FSER 210	Intermediate Cooking	4

Total units 24

Recommended Electives. In addition to the competency level achieved by successful completion of the required courses, the following courses are desirable for job entry and advancement:

FSER 125	Fundamentals of Baking	3
FSER 230	Intermediate Baking	3
FSER 231	Advanced Baking	3
MATH 002	Fundamentals of Arithmetic I	1
MATH 003	Fundamentals of Arithmetic II	1
SPCOM 145	Interpersonal Communications or	
SPCOM 151	Introduction to Speech	3
ISS 100	Self Development	3

Certificate of Achievement (40 units)

Requirements

FSER 120	Career Opportunities and Job Description	2
FSER 131	Storeroom Operation	2
FSER 140	Cold Food Pantry	8
FSER 145	Fundamentals of Cooking	8
FSER 210	Intermediate Cooking	4
FSER 215	Coffee Shop Management and Operation	4
FSER 240	Advanced Cooking	8
BIOL 50	Nutrition	2
BIOL 60	Micro-organisms, Foods and Sanitation	2

Total units 40

Recommended Electives:	Mathematics (2)	Sp Com (3)	Baking (3)
	English (3)	ISS 100 (3)	

Associate of Science Degree (60 units)

Requirements

FSER 120	Career Opportunities and Job Description	2
FSER 131	Storeroom Operation	2
FSER 140	Cold Food Pantry	8
FSER 145	Fundamentals of Cooking	8
FSER 210	Intermediate Cooking	4
FSER 215	Coffee Shop Management and Operation	4
FSER 240	Advanced Cooking	8
BIOL 50	Nutrition	2
BIOL 60	Micro-organisms, Foods and Sanitation	2
Mathematics and Natural Sciences Electives		2
Social Sciences Electives		6
Arts & Humanities Electives		6
Language Arts Electives		6

Total units 60

It is highly recommended that the students take FSER 58V or 59 as an elective.

A grade of Q in the general education electives will serve to meet the requirements for the degree.

LIBRARY TECHNOLOGY

LT

How does one find his way around in libraries and make the best use of the materials?

Where and how do libraries get their materials?

How are books and non-books catalogued and prepared for use in large and small libraries?

Which course on the Leeward campus will teach me how to operate and maintain audiovisual equipment, produce displays and software for both educational and entertainment purposes?

These are the kinds of questions that the courses in the Library Technology program will answer. The program is designed to prepare a student for work as a paraprofessional under the supervision of a professional librarian. Selected courses can help the student not majoring in Library Technology to have a better chance of succeeding in college work as well as start him on the road to life-long education with the aid of library skills.

The certificate program prepares the student for entry-level employment in a position such as a Library Assistant.

The associate degree program covers a more advanced level of training for work as a library technician. The technician's duties are based on the same skills as the library assistant, but also requires proficiency in areas such as the development of catalog cards, maintenance of files on the library's holdings, assisting in the development of typical software materials found in a learning or media center, and operation of some basic kinds of hardware.

Students planning to seek employment in industrial or research libraries should choose elective courses related to the specialty of the library.

Any interested student may take the courses in Library Technology, but the certificate is awarded only upon completion of Library Technology 1, 2, 3, and 25, plus additional courses comprising a minimum of 30 units of credit. The A.S. degree is awarded only upon completion of all the Library Technology courses in the program plus additional courses totaling a minimum of 60 units of credit. If the student has not taken Library Technology 1, the approval of the instructor is suggested for Library Technology 3, 141-143 and 25.

Certificate of Achievement (30 units)

Requirements

LT 1	Introduction to Library Services	2
LT 2	Public Services	2
LT 3	Technical Services	3
LT 25	Library Technology Work Study	5
BUS 50	Office Procedures	3
ENG 100	Expository Writing	3
SPCOM 151	Introduction to Speech	3
*TYPW 19	Typing Application Two or	
or 21	Second Level	(1) (3)
**ELECTIVES		(8) (6)
	Total units	30

*If TYPW 19 is taken, the number of electives required is 8 units.
**A student may take Library Technology 141-143 and 5 as elective courses.

Associate in Science Degree (60 units)

Requirements

LT 1	Introduction to Library Services	2
LT 2	Public Services	2
LT 3	Technical Services	3
LT 141	Technical Services: Cataloguing Tech I	1
LT 142	Technical Services: Cataloguing Tech II	1
LT 143	Technical Services: Cataloguing Tech III	1
LT 5	Audio Visual Services	3
LT 25	Library Technology Work Study	5
BUS 50	Office Procedures	3
COMSC 100	The Computer and its Role in Society	3
ENG 100	Expository Writing	3
MGT 21	Introduction to Management	3
SPCOM 151	Introduction to Speech	3
*TYPW 19	Typing Application Two or	(1)
TYPW 21	Second Level	(3)
Arts & Humanities electives		6
Mathematics & Natural Sciences elective		3
Social Sciences electives		6
**Elective courses		(9) (11)
	Total units	60

*If TYPW 19 is taken, the number of electives required is 11 units.

**The following general education courses are suggested to complete the minimum requirement of 30 or 60 units for the respective programs: History 151-152, Psychology 100, Political Science 110, Linguistics 102, Literature 251-252, Science 121-122. A grade of Q in these general education electives may serve to satisfy the requirements for the degree.

MANAGEMENT

MGT

Associate in Science Degree (60 units). This program is designed to prepare the student for entry-level employment in mid-management and supervisory positions in government and in private industry.

Requirements

ACC 20 and 21 or 201 and 202	First and Second Level Accounting or Principles of Accounting I and II	6
ACC 50	Cost Accounting	3
BUS 30	Principles of Marketing	3
BUS 200	Legal Environment of Business	3
COMSC 100	The Computer and Its Role in Society	3
ECON 150	Principles of Economics I	3
ECON 151	Principles of Economics II	3
ENG 45	Introduction to Expository Writing or	
ENG 100	Expository Writing	3
ENG 105	Business Writing	3
MGT 21	Introduction to Management	3
MGT 22	Human Relations in Management	3
MGT 23	Financial Management	3
MATH 25 or higher	Beginning Algebra	3
PSY 110	Personal Adjustment or	
ISS 100	Self Development	3
TYPW 17	Learning to Type	(1)
TYPW 18	Typing Application I	(1)
TYPW 19	Typing Application II	(1)
or		
TYPW 21	Second Level	(3) or
TYPW 22	Third Level	(3)
Business Education electives		6
Arts & Humanities electives		6
Effective Listening		0
	Total units	60

BUS 24 (Salesmanship) and BUS 58V are highly recommended electives for students who wish to pursue a career in retailing.

MARINE TECHNOLOGY

MT

The Marine Technology Training Program is intended to prepare the student for employment in Hawaii's marine oriented community. The program consists of courses and experiences designed to provide basic skills, knowledge and orientation to marine occupations leading to a variety of options from which the student may choose to meet his or her vocational and educational needs. Although only requirements for an Associate in Science Degree in Marine Technology are listed for 1975-76 academic year, the student whose interests are not in the technician field is urged to consider the individualized certificate or degree.

Associate in Science Degree (63 units)

BIOL 288	Marine Biology	4
BIOL 291	Field Biology: Marine Ecology	4
ENG 100	Expository Writing	3
ENG 106	Technical Writing	3
*ET 27	Fundamentals of Electronics	3
*ET 27L	Fundamentals of Electronics Lab	1
MT 11	Scuba Diving	3
MT 12	Advanced Diving	3
MT 22	Basic Seamanship and Marine Orientation	3
MT 23	Piloting and Powerboat Handling	2
MT 24	Advanced Seamanship	2
MATH 132	College Algebra	3
OCEAN 201	Science of the Sea	3
OCEAN 210	Oceanographic Instrumentation I	4
OCEAN 211	Oceanographic Instrumentation II	4
**OCEAN 215V	Marine Ecology Field Work	2
	Physical Science (to be selected from Chem 101, 113, Phys 101, 151 or 171)	4
Arts and Humanities Electives		6
Social Sciences Electives		6
	Total units	63

*Electronics Technology offered at Honolulu Community College.
**MT 27V or 58V may be substituted if experience is marine-technician related. Although a minimum of 2 units is required, students are urged to complete 6 units of field experience.

Individualized Certificate or Degree. Students wishing to prepare for marine occupations not currently offered may pursue a specialized program of study leading to either a Certificate of Completion or Achievement or an Associate in Science Degree. All certificate or degree programs must include both Basic and Advanced Seamanship, a minimum of 2 units of either MT 27V, 58V, or Ocean 215V and additional course work related to the specific occupation. Certificates of Completion (15-16 units) are awarded in areas requiring a minimum level of skills for entry level employment and can usually be earned in one or two semesters. A Certificate of Achievement (30 units) is granted in areas requiring more extensive skills and knowledge and usually can be obtained in 1 to 1½ years. An Associate in Science degree requires a minimum of 60 units including both major and general education courses.

Special areas which may be pursued under the individualized certificate or degree program include such interests as seaman, small boat operator, commercial diving tender, commercial fishing, steward/stewardess, underwater photography, etc. Students interested in such a program should contact the counselor for the Marine Technology Program.

A grade of Q in the general education electives will serve to meet the requirements for the degree.

RECREATIONAL INSTRUCTOR PROGRAMS

RIP

This program is designed for students who wish to prepare for civil service employment as instructors in Parks and Recreation programs or in other similar agencies. The student who intends to transfer to a four-year college should plan his courses to meet the general requirements of the transfer institution.

CREATIVE ARTS

CA

Certificate of Achievement (30 units)

Requirements

HPE 230	First Aid	2
ISS 101	Group Processes (or any other psychology course)	3
CA 131	Two-Dimensional Art	3
CA 132	Three-Dimensional Art	3
CA 141	Creative Drama	3
CA 142	Puppetry	3
HPE 290	Field Work	4
General Education or electives in the creative arts and recreation areas		9
	Total units	30

Associate in Science Degree (60 units)

Requirements

HPE 208	Introduction to Recreation	3
HPE 230	First Aid	2
HPE 290	Field Work	4
ISS 101	Group Processes (or any other psychology course)	3
CA 131	Two-Dimensional Art	3
CA 132	Three-Dimensional Art	3
CA 141	Creative Drama	3
CA 142	Puppetry	3
CA 143	Storytelling	3
CA 235	Advanced Visual Art	3
CA 245	Recreational Drama	3
Language Arts electives		6
Mathematics & Natural Sciences electives		6
Social Sciences elective		3
Arts & Humanities electives		6
Electives in the creative arts and recreation areas including music, dance, outdoor recreation and Hawaiiana		6

Total units 60

GAMES & SPORTS

GS

Certificate of Achievement (32 units)

Requirements

*HPE 134	Baseball	(6)	
*HPE 134	Volleyball	(6)	12
*HPE 136	Football	(6)	
*HPE 137	Basketball	(6)	
HPE 170	Senior Lifesaving		2
HPE 171	Water Safety Instructor		3
**HPE 110	Beginning Golf	(1)	
**HPE 111	Intermediate Golf	(1)	
**HPE 112	Advanced Golf	(1)	
**HPE 107	Tennis: Beginning	(1)	
**HPE 108	Tennis: Advanced	(1)	
HPE 208	Introduction to Recreation		3
HPE 230	First Aid		2
ENG 45	Introduction to Expository Writing or		
ENG 100	Expository Writing		3
SPCOM 145	Interpersonal Communication or		
SPCOM 151	Introduction to Speech		3
***HPE 161	Aikido	(1)	
***HPE 162	Karate	(1)	1

Total units 32

*Two of the four courses listed are required (12 units).
**Three of the five courses listed are required (3 units).
***Two courses listed are electives in the program (1 unit).

Associate in Science Degree (68 units)

Requirements

*HPE 134	Baseball	(6)	
*HPE 135	Volleyball	(6)	18
*HPE 136	Football	(6)	
*HPE 137	Basketball	(6)	
HPE 170	Senior Lifesaving		2
HPE 171	Water Safety Instructor		3
HPE 179	Coaching Swimming		2
**HPE 107	Tennis: Beginning	(1)	
**HPE 108	Tennis: Advanced	(1)	
**HPE 110	Beginning Golf	(1)	3
**HPE 111	Intermediate Golf	(1)	
**HPE 112	Advanced Golf	(1)	
HPE 133	Track and Field		3
HPE 233	Elementary Physical Education		3
HPE 230	First Aid		2
HPE 208	Introduction to Recreation		3
ISS 101	Group Process		3
ENG 45	Introduction to Expository Writing or		
ENG 100	Expository Writing		3
SPCOM 145	Interpersonal Communication or		
SPCOM 151	Introduction to Speech		3
HPE 290	Field Work		4
Mathematics & Natural Sciences electives			6
Social Sciences elective			3
Arts and Humanities electives			6
***HPE 161	Aikido	(1)	
***HPE 162	Karate	(1)	1

Total units 68

*Three of the four courses listed are required (18 units).
**Three of the five courses listed are required (3 units).
***Two courses listed are electives in the program (1 unit).

OUTDOOR RECREATION

OR

Certificate of Achievement (31 units)

Requirements

OR 181	Outdoor Recreation I	3
OR 182	Outdoor Recreation II	3
OR 185	Camping	3
OR 186	Hawaiiana I	3
HPE 170	Senior Lifesaving	2
HPE 208	Introduction to Recreation	3
HPE 230	First Aid	2
MUS 180	Fundamentals of Western Music	3
ISS 101	Group Processes	3
Creative Arts elective		3
ART 105	Ceramics, Beginning Handbuilding or	
ART 106	Sculpture	3

Total units 31

Associate in Science Degree (60 units)

Requirements

OR 181	Outdoor Recreation I	3
OR 182	Outdoor Recreation II	3
OR 183	Outdoor Recreation III	3
OR 185	Camping	3
OR 186	Hawaiiana I	3
MUS 180	Fundamentals of Western Music	3
HPE 170	Senior Lifesaving	2
HPE 208	Introduction to Recreation	3
HPE 230	First Aid	2
CA 141	Creative Drama	3
ISS 101	Group Processes	2
HPE 290	Field Work	4
HPE elective		3
ART 105	Ceramics, Beginning Handbuilding or	
ART 106	Sculpture	3
Arts & Humanities elective		3
Language Arts electives		6
Mathematics & Natural Sciences electives		6
Social Sciences elective		3
Elective (any field)		1

Total units 60

SECRETARIAL SCIENCE

Certificate of Achievement (30 units). This program is designed to prepare the student for entry-level employment in a position such as a steno-typist or clerk-typist.

Requirements

BUS 21	Introduction to Business	3
BUS 22	Office Machines	3
BUS 50	Office Procedures	3
ENG 45	Introduction to Expository Writing or	
ENG 100	Expository Writing	3
*SHTHD 20	First Level Shorthand	3
*SHTHD 22	Second Level Shorthand	3
SPCOM 145	Interpersonal Communication or	
SPCOM 151	Introduction to Speech	3
TYPW 17	Learning to Type	1
TYPW 18	Typing Application One	1
TYPW 19	Typing Application Two	1
TYPW 21	Second Level Typewriting	3
Effective Listening		0
**General Education Elective		3

Total units 30

*For the clerk-typist certificate, substitute 6 units of Business electives. TYPW 22 is highly recommended.
**This elective may be chosen from the division of Arts and Humanities, Language Arts, Mathematics and Natural Sciences, and Social Sciences. The general education requirement may be met with a grade of Q in this course.

Associate in Science Degree (60 units). This program is designed for students seeking job entry skills or retraining and upgrading in office skills. In addition the program offers courses for personal use and general education.

Requirements

BUS 21	Introduction to Business	3
BUS 22	Office Machines	3
BUS 23	Business Mathematics	3
BUS 50	Office Procedures	3
BUS 51	Secretarial Procedures	3
SHTHD 20	First Level Shorthand	3
SHTHD 22	Second Level Shorthand	3
SHTHD 40	Third Level Shorthand	3
TYPW 17	Learning to Type	1
TYPW 18	Typing Application I	1
TYPW 19	Typing Application II	1
TYPW 21	Second Level Typewriting	3
TYPW 22	Third Level Typewriting	3
ECON 101	Consumer Economics or	
ECON 120	Introduction to Economics or	
ECON 150	Principles of Economics I	3
ENG 45	Introduction to Expository Writing or	
ENG 100	Expository Writing	3
ENG 105	Business Writing	3
SPCOM 145	Interpersonal Communication or	
SPCOM 151	Introduction to Speech	3
Arts & Humanities electives		6
Mathematics & Natural Sciences electives		6
Social Sciences elective		3
Effective Listening		0

Total units 60

It is highly recommended that the student take BUS 58V or 59 as an elective.

A grade of Q in the general education electives will serve to meet the requirements for the degree.

Course Offerings

ARTS AND HUMANITIES DIVISION

ART

101 Introduction to the Visual Arts **3 Units**
The nature of visual art and its expression in various forms. Small amounts of basic art supplies may be required of students. Fulfills core requirement at Manoa in humanities.

105 Elementary Studio: Ceramics, Beginning Handbuilding **3 Units**
Studio experience mainly for non-majors in ceramic handbuilding techniques. Lectures and projects. An approximate required cost of $5-10 in tools and $15-30 in clay for all projects are to be provided by students. Credit cannot count toward major requirements in art; Credit acceptable for elective in humanities. No recommended preparation.

106 Elementary Studio: Sculpture **3 Units**
Studio experience in elementary sculpture for non-majors through lectures and projects. Supplies (materials) for all projects are to be provided by students. Credit may be counted as a general elective, but not towards major requirement in Art.

107 Elementary Studio: Photography **3 Units**
Studio experience mainly for non-majors. Lectures and projects. Supplies (materials) for all projects are to be provided by students. Credit cannot count toward major requirements in Art. Students required to have own camera.

108 Elementary Studio: Drawing and Painting **3 Units**
Studio experience in elementary drawing and painting for non-majors through lectures and projects. Supplies (materials) for all projects are to be provided by students. Credit may be counted as a general elective, but not towards major requirements in Art. (Formerly Art 103, 104, 121, and 122). Core requirement course for B.A. in art program at Manoa.

110 Elementary Studio: Ceramics, Beginning Wheel Throwing **3 Units**
Introduction to the use of the potter's wheel to acquire basic throwing skills. An approximate required cost of $5-10 in tools and $15-30 in clay for all projects are to be provided by students. Recommended preparation: Art 105 (beginning handbuilding) or equivalent or instructor's permission.

113 Introductory Studio "A"—Perception **3 Units**
Emphasis on perception: Visual responses to nature, materials, techniques, modes of representation. Problems in two and three dimensions involving photography, drawing, painting, sculpture and construction. Supplies (materials) for all projects are to be provided by students. Recommended preparation: Art 101 (may be taken concurrently). (Core requirement course for B.A. in art program at Manoa; cross-listed as Arch. 113 at Manoa).

114 Introductory Studio "B"—Light **3 Units**
An introduction studio course with emphasis on light: environmental, general intensity, value range, sources, chiaroscuro, pattern, principles of color. Problems in two and three dimensions involving drawing, painting, sculptures, design. Supplies (materials) for all projects are to be provided by students. (Cross-listed as Arch. 114 and core requirement course for B.A. in Art at Manoa).

115 Introductory Studio "C"—Space **3 Units**
An introductory studio course with emphasis on space: environmental, actual and illusionary, changing spatial systems and space modifiers. Problems in two and three dimensions involving drawing, painting, sculpture and design. Supplies (materials) for all projects are to be provided by students. Recommended preparation: Art 101 (may be taken concurrently). (Core requirement course for B.A. in art program at Manoa; cross-listed as Arch. 115 at Manoa).

116 Introductory Studio "D"—Time, Motions and Systems **3 Units**
An introductory studio course with emphasis on time, motion and system: visual kinetics, sequence, rhythm, order and systems. Problems in two and three dimensions involving drawing, painting, sculpture and design. Supplies (materials) for all projects are to be provided by students. Recommended preparation: Art 101 (may be taken concurrently). (Core requirement course for B.A. in art program at Manoa; cross-listed as Arch. 116 at Manoa).

150 Intermediate Ceramics **3 Units**
Intermediate ceramics will cover more advanced techniques and projects in handbuilding and/or wheel throwing. A student will become more familiar with the operation and maintenance of equipment in the ceramics lab. An approximate required cost of $5-10 in tools and $15-30 in clay for all projects are to be provided by students. May be repeated for additional credit. Recommended preparation: Art 105 and/or Art 110.

215 Printmaking: Intaglio **3 Units**
Basic intaglio techniques of printmaking, including etching, engraving, drypoint, plus perceptual and conceptual exercises in composition and pictorial structure. Supplies (materials) for all projects are to be provided by students. Recommended preparation: Art 101 if taken for elective credit. (Core requirement course for B.A. in art program at Manoa.)

280 Asian Art **3 units**
A study of painting, sculpture and architecture of India, China and Japan. Fulfills general core requirement for humanities at Manoa.

CREATIVE ARTS

CA

131 Two-Deminsional Art **3 units**
A basic course in the two-dimensional realm to provide an individual with experiences in drawing, painting, printing, collage and mosaic work to prepare students with techniques in teaching these processes. Some supplies (materials) for projects are to be provided by students. Requirement for Certificate of Achievement and A.S. Degree in Creative Arts Emphasis subprogram of the Recreation Instructor Program.

132 Three-Dimensional Art **3 Units**
A basic course in the three-dimensional sphere to provide experiences with wood, paper, papier mache plaster, metal and theater arts and to prepare students with techniques in teaching these processes. Some supplies (materials) for projects are to be provided by students. Requirement for Certificate of Achievement and A.S. Degree in Creative Arts Emphasis subprogram of the Recreation Instructor Program.

141 Creative Drama **3 Units**
Examination and practice of informal drama activities and guidance methods through active participation and observation in drama exercises, story dramatizations, and created plays. Requirement for Certificate of Achievement and A.S. Degree in Creative Arts Emphasis and A.S. Degree in Outdoor Recreation subprograms of the Recreation Instructor Program. (May be repeated for additional credit.)

142 Puppetry **3 Units**
The scope of puppetry: a brief history, objectives and values in recreation, construction of simple puppets, manipulation skills, presentation methods. Students will select and provide their own puppet construction materials. (Formerly Recreational Drama 142). Requirement for Certificate of Achievement and A.S. Degree in Creative Arts Emphasis subprogram of the Recreation Instructor Program. (May be repeated for additional credit.)

235 Advanced Visual Art **3 Units**
An advanced course in the recreational arts to provide individual in-depth experience in any of the two- or three-dimensional activities covered in the basic courses. Supplies (materials) for all projects are to be provided by students. Recommended preparation: CA 131 and CA 132; may be taken concurrently with consent of instructor. Requirement for A.S. Degree in Creative Arts Emphasis subprogram of the Recreation Instructor Program. (May be repeated for additional credit.)

221 Beginning Acting **3 Units**
Introduction to acting; individual and group exercises in movement for the stage, improvisation, scene preparation and performance. Fulfills core requirement for Drama and Theatre at Manoa.

245 Recreational Drama **3 Units**
A study of planning and preparing dramatic presentations for recreation and practice in coordinating, implementing, and evaluating the activities. Recommended preparation: CA 141 and 142 or equivalent. Requirement for A.S. Degree in Creative Arts Emphasis subprogram of the Recreational Instructor Program. (May be repeated for additional credit.)

246 Basic Stagecraft **3 Units**
An introduction to stagecraft and the technical theatre—basic theory and fundamentals of lighting, set construction, sound, costuming, makeup, and stage management. Class time will be divided between lectures and laboratory work in the theatre. (Equivalent to UH Manoa Drama 240)

DRAMA

160 Introduction to Drama and Theatre **3 Units**
A study of great periods of the drama in the perspective of contemporary theatre, representative plays from the classical Greek to the modern. Fulfills general education core requirement at Manoa in humanities.

221 Beginning Acting I **3 Units**
Introduction to acting; individual and group exercises in movement for the stage, improvisation, scene preparation and performance. Fulfills core requirement for Drama and Theatre at Manoa.

222 Beginning Acting II **3 Units**
In the second semester, work on improvisation, vocal, and physical training is continued. More emphasis, however, is placed on scene work. Actors are expected to work together to present scenes to the class. Actors are also required to audition for at least one campus production during the course. Recommended preparation: Drama 221 or private interview.

281 Beginning Modern Dance I **3 Units**
Introduction to basic technical skills and creative processes. Students must provide dance clothes. Fulfills core requirement for Drama and Theatre at Manoa.

282 Beginning Modern Dance II **3 Units**
This course is designed to give those students interested additional opportunity to develop more control and rhythm in the disciplines found in the first semester course. Students must provide dance clothes. Fulfills core requirement for Drama and Theatre at Manoa. Recommended preparation: Drama 281.

HISTORY

HIST

151 World Civilization I **3 Units**
Survey of the development of world cultures, institutions, and thought from the earliest times to 1500 A.D. Emphasis is given to broad relationships and trends within the historical process and to political, religious, economic and social change. (Fulfills core requirement at Manoa for world civilization.)

152 World Civilization II **3 Units**
Survey of the development of world cultures, institutions, and thought from 1500 A.D. to the present. Emphasis is given to broad relationships and trends and to the political, religious, economic and social changes most relevant to contemporary society. (Fulfills core requirement at Manoa for world civilization.)

241-242 Civilization of Asia I, II **3, 3 Units**
Historical survey of major civilizations of Asia from earliest times to present, including East Asia, Southeast Asia, and South Asia. Recommended preparation for History 241: History 151 and 152. Recommended preparation for History 242: History 241. HIST 241 offered Fall Semester only. HIST 242 offered Spring Semester only. Fulfill core requirements for Humanities, World Civilization and Asian Studies at Manoa.

281-282 Introduction to American History I, II **3, 3 Units**
Study of the development of the United States from the beginning until the present. Fulfill core requirement for Humanities at Manoa.

INTER-DISCIPLINARY HUMANITIES

IDH

200 Man and the Arts **3 Units**
Introduction to art and music with an exploration of the role these arts have played in the history of western culture. No recommended preparation. Elective course for A.S. or A.A. Degree or certificate. Equivalent to Manoa IS 131. Small amount of basic art supplies to be provided by students.

LAW

140 Family Law **3 Units**
Examination of the American law of domestic relations concentrating on Hawaii family law and procedure. Topics discussed include varieties of marriage, annulments, illegitimate children, support obligations, legal position of married women and minors, divorce, alimony, child support and custody, separation, adoption, and the Hawaii Family Court System. Discussion shall center on an elementary level on the practical issues with which students may be faced in their domestic and family life.

LITERATURE

LIT

250 American Literature **3 Units**
Topics in American literature from beginning to present. Fulfills core requirement in Humanities at Manoa.

251 British Literature to 1800 **3 Units**
Survey of British literature. Fulfills core requirement in Humanities at Manoa.

252 British Literature 1800 to Present **3 Units**
Survey of British literature. Fulfills core requirement in Humanities at Manoa.

253-254 World Literature I, II **3, 3 Units**
Major works of American, European, and Oriental literature. Lit 253—Beginnings until 1600; 254—1600 until present. Recommended preparation: English 100. (Fulfills core requirement at Manoa in humanities.)

255-256 Types of Literature I, II **3, 3 Units**
Practical criticism in major genres of European and American literature: Lit 255—Short story, novel, introduction to poetry (narrative); 256—Drama, biography, poetry. Recommended preparation: English 100. (Fulfills core requirement at Manoa in humanities.)

MUSIC

MUS

102 College Chorus **1 Unit**
Performance of choral literature from the Renaissance to the present. Previous choral experience not required. May be repeated for additional credit.

115-116 First-Level Piano I, II **1, 1 Unit**
Study of piano as secondary performance field including application of music theory to problems in improvising, harmonizing, creating accompaniments, transposing and sight-reading at keyboard. Recommended preparation: None for Music 115; Music 115 or equivalent for Music 116.

123 Beginning Class Lessons **1 Unit**
Beginning class lessons: (B) Beginning Class Voice I; (C) Beginning Instrumental Guitar I; (D) Beginning Instrumental Class Wind I; (E) Beginning Instrumental Class String I. Class meets two hours per week; minimum practice, 4 hours per week.

124 Intermediate Class Lessons **1 Unit**
Intermediate class lessons: (B) Intermediate Class Voice II; (C) Intermediate Instrumental Guitar II; (D) Intermediate Instrumental Class Wind II; (E) Intermediate Instrumental Class String II. Class meets two hours per week; minimum practice, 4 hours per week. Recommended preparation: Music 123 or equivalent.

131 Applied Music **1 Unit**
Individual lessons in voice, keyboard, and orchestral instruments, available only after audition and consent of instructor; subject also to availability of qualified instructors. One unit of credit is allowed for one half-hour lessons per week during a semester—two units for a hour weekly lesson. Concurrent registration in basic theory course (180 or 181/183) and music organization (Music 102, 201, 202, 203). Minimum practice: 6 hours per week. Necessary preparation: Music 123-124 or equivalent. (B) Voice I; (C) Piano I; (D) Organ I; (E) Harpsichord I; (F) Harp I; (G) Classical Guitar I; (H) Violin I; (I) Viola I; (J) Cello I; (K) Double Bass I; (M) Flute I; (N) Oboe I; (O) Clarinet I; (P) Bassoon I; (Q) Saxophone I; (R) Trumpet I; (S) French Horn I; (T) Trombone I; (U) Tuba I; (W) Baritone Horn I; (Y) Percussion I; (Z) Other I.

160 Introduction to Music Literature **3 Units**
Elements, styles, and forms of music. Emphasis on Western music from the listener's point of view. (Fulfills core requirement at Manoa for humanities.)

180 Fundamentals of Western Music **3 Units**
Fundamental concepts in organization of music as expressive medium in western culture. Roles of composer, performer and listener. Notation as mode of communication. Discovery and verification of ideas through laboratory experience. Emphasis upon singing, music reading, dictation, ukulele or guitar and recorder-type instrumental playing, using folk and composed song material including repertoire applicable to recreational experiences. Requirement for Certificate of Achievement and A.S. degree in Outdoor Recreation sub-program of Recreational Instructor Program. (Fulfills core requirement at Manoa for humanities.)

181/183 Elementary Theory I **3 Units**
Materials and organization of music. Basic rhythm and notational skills. Scale building. Building of intervals. Forms and functions of primary triads. Four-part harmonization of I, IV and V in root position. Writing of motives, phrases, and single melodies. Analyzation of melodic structures. Ear-training, sight-singing and keyboard exercises based on the above materials. An integrated approach to lecture and lab. Recommended preparation: Music 180.

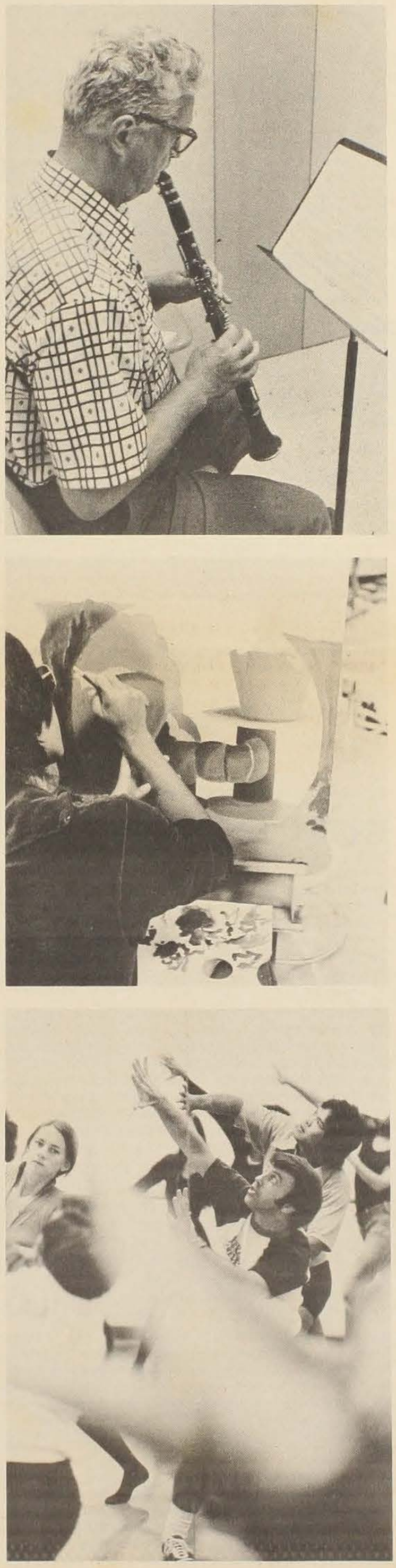
182/184 Elementary Theory II **3 Units**
Materials and organization of music. Building primary chords in all inversions. Figured bass symbols. Harmonization of a given bass; of a given soprano. Forms and functions of secondary triads. Non-chord tones. Dominant 7th chords, melodic writing for two parts. Analyzation of binary and ternary forms. Analyzation of harmonic progressions and cadences, ear-training, sight-singing and keyboard exercises using the above materials. An integrated approach to lecture and lab. Recommended preparation: Music 181 and Music 183.

201 Vocal Ensemble **1 Unit**
Performance of a cappella literature and choral-instrumental repertoire for mixed male, and female voices. May be repeated for additional credit. Recommended preparation: Previous choral experience or equivalent.

202B Introduction to Concert Band **1 Unit**
Performance of wind ensemble and band literature from easy to medium difficult. To learn fundamentals of concert band performance through performing, listening, and composing. May be repeated for additional credit. Recommended preparation: MUS 123.

202C Wind Ensemble **1 Unit**
Performance of wind ensemble and band literature from medium difficult to difficult. May be repeated for additional credit. Recommended preparation: MUS 202B and audition.

203 Instrumental Ensemble **1 Unit**
Performance of ensemble literature: (D) Keyboard; (G) String; (I) Wood Wind; (N) Mixed Instruments; (O) Percussion. May be repeated for additional credit.



204 Stage Band **1 Unit**
Performance of stage band music from the 1930's to the contemporary period. May be repeated for additional credit. Recommended preparation: Previous instrumental experience with the ability to read music.

215-216 Second-Level Piano I, II **1, 1 Unit**
A continuation of Class Piano instruction of the first year (MUS 115-116). Intended for music majors planning to qualify for Level 1 in applied music (MUS 131) at transfer time or before. Also intended for non-music majors who wish to develop skills and understanding beyond that of the first year for personal enjoyment. Recommended preparation: Music 116 or equivalent.

223 Advanced Class Lessons **1 Unit**
Extension of Music 123-124. Advanced class lessons; (B) Advanced Class Voice III; (C) Advanced Instrumental Guitar III; (D) Advanced Instrumental Class Wind III; (E) Advanced Instrumental Class String III. Class meets two hours per week; minimum practice, 4 hours per week. Recommended preparation: Music 124 or equivalent. May be repeated for additional credit.

225-226 Conducting I, II **2, 2 Units**
Problems in directing and organizing instrumental and choral ensembles and organizations. Score reading, rehearsal techniques and basic interpretive problems. Emphasis on choral work the first semester, instrumental the second semester. Offered only occasionally when student need arises.

231 Intermediate Applied Music **1 Unit**
Individual instruction in solo voice or instrument at the second performance level for music majors in performance fields. May be repeated for additional credit. Recommended preparation: Concurrent registration in basic theory course (180 or 181/183) and music organization (102, 201, 202, 203). Minimum practice: 6 hours per week. (B) Voice II; (C) Piano II; (D) Organ II; (E) Harpsichord II; (F) Harp II; (G) Classical Guitar II; (H) Violin II; (I) Viola II; (J) Cello II; (K) Double Bass II; (M) Flute II; (N) Oboe II; (O) Clarinet II; (P) Bassoon II; (Q) Saxophone II; (R) Trumpet II; (S) French Horn II; (T) Trombone II; (U) Tuba II; (W) Baritone Horn II; (Y) Percussion II; (Z) Other II.

265-266 History of Western Music I, II **3, 3 Units**
Development of music from origin to present. Styles, schools, composers. Recommended preparation: Music 160 or equivalent.

281/283 Basic Principles of Music Theory III **3 Units**
Materials and organization of music. Seventh chord building (other than dominant seventh). Non-chord tones, recognition and use. Melody writing for three voices. Modulation using simple devices and methods. Orchestration of music for various combinations of instruments. Analysis of fugue and variation forms. Ear-training, sight-singing and keyboard studies using the above materials. It is an integrated approach to lecture and laboratory. Recommended preparation: Music 180, 182/184.

282/284 Basic Principles of Music Theory IV **3 Units**
Materials and organization of music. The building and use of 9th, 11th and 13th chords. Use of advanced and chromatic modulations. Composition studies in planning and expanding forms to fit various styles and genres. Analysis of 12-tone and through-composed forms. Techniques of transposing and arranging. Ear-training, sight-singing and keyboard studies using the above materials. An integrated approach to lecture and laboratory. Recommended preparation: Music 180, 281/283.

PHILOSOPHY

PHIL

100 Introduction to Philosophy **3 Units**
A historical approach to the primary problems of human existence through the writings of great thinkers from Plato to Sartre. Such questions as the nature of man, the existence of God, the conditions of knowledge, and the status of reason and value in the good life and society will be considered with a view toward relating them to the contemporary world. (Fulfills core requirement at Manoa for humanities.)

200-201 History of Philosphy I, II **3 Units**
Phil 200—Western philosophy from era of great Greek thinkers to Renaissance; 201—Western philosophy from Renaissance to present. (Both fulfill core requirement at Manoa for humanities.) Phil 200 offered Fall Semester only. Phil 201 offered Spring Semester only.

210 Formal Logic **3 Units**
An examination of the principles involved in clear thinking using both traditional and symbolic techniques. The logical structure of language will be studied in order to develop analytic problem-solving skills in the student. Definitions, truth and validity, fallacious modes of argument, and the criteria of adequate evidence in science and ordinary life will be emphasized. Fulfills mathematics requirement. Requirement for A.A. and A.S. degree in computer science. (Fulfills core requirement at Manoa for quantitative reasoning.)

RELIGION

REL

150 Introduction to Religion **3 Units**
Study of the living religions. (Fulfills core requirement at Manoa for humanities.)

151 Religion and the Meaning of Existence **3 Units**
Emphasis on contemporary religious thought regarding man's consciousness of his existence. (Fulfills core requirement at Manoa for humanities.)

BUSINESS EDUCATION DIVISION

ACCOUNTING

ACC

20 First Level Accounting **3 Units**
The student will learn basic structure of accounting; debits and credits; classification of accounts and business transaction analysis. He will learn the accounting process for a service enterprise and a merchandising enterprise. (Requirement for Certificate of Achievement and A.S. Degree in Accounting; A.S. Degree in Management.)

21 Second Level Accounting **3 Units**
The student will learn accounting for a departmentalized partnership enterprise, inventory systems, long-lived assets, and a corporate form of enterprise. Recommended preparation: Accounting 20 or equivalent. (Requirement for Certificate of Achievement and A.S. Degree in Accounting; A.S. Degree in Management.)

22 Third Level Accounting **3 Units**
An advanced course in which the student will apply previously acquired accounting skills and knowledge through the completion of practice sets. Emphasis placed on payroll accounting and the total accounting process for a single proprietorship, and for a corporation. Specialized areas will be available on an individual basis. Recommended preparation: Accounting 21 or Accounting 201 or equivalent. (Requirement for A.S. Degree in Accounting.)

50 Cost Accounting **3 Units**
The student will learn the principles and procedures of cost accounting; development and application of job order, process, and standard cost systems; manufacturing cost controls and variance analysis. Recommended preparation: Accounting 21, Accounting 201 or equivalent. (Requirement for A.S. Degree in Accounting and Management.)

201 Principles of Accounting I **3 Units**
An introduction to accounting theory including the functions of financial and management account and the uses and limitations of accounting information. Areas covered are: the accounting cycle; accounting for merchandise; recording procedures for business accounting data; accounting for proprietorships; inventories, depreciation and accounting principles.

Equivalent to ACC 201 at the Manoa Campus and required for students transferring to Manoa Campus and majoring in Business Administration. Requirement for A.S. Degree in Computer Science Option B. ACC 201 and 202 may be taken in place of ACC 20, 21 and 22 for the A.S. Degree in Accounting. ACC 201 also may be taken in place of ACC 20 for the A.S. Degree in Management.

202 Principles of Accounting II **3 Units**
An introduction to accounting theory including the functions of financial and management accounting and the uses and limitations of accounting information. Areas covered are: partnerships, corporate accounting, analysis and interpretation of financial statements, departmental and cost accounting, budgeting and accounting for income taxes.

Equivalent to ACC 202 at the Manoa Campus and required for students transferring to Manoa Campus and majoring in Business Administration. Requirement for A.S. Degree in Computer Science Option B. ACC 201 and 202 may be taken in place of ACC 20, 21 and 22 for the A.S. Degree in Accounting. ACC 202 also may be taken in place of ACC 20 for the A.S. Degree in Management.

BUSINESS

BUS

21 Introduction to Business **3 Units**
A practical approach to understanding concepts related to types of business organizations, labor-management relations, economics, short-term and long-term financing, insurance, government regulations and taxation, with problem-solving being the basic method of study. Requirement for A.S. Degree in Accounting and Secretarial Science; also for Certificates of Achievement in Accounting, Stenography, and Clerk-Typist.

22 Office Machines **3 Units**
The student will learn the fundamental operation and application of the 10-key adding-listing machine, printing calculator, rotary calculator and/or the electronic calculator in business situations. Recommended preparation: BUS 23 or taken concurrently. (Requirement for Certificate of Achievement and A.S. Degree in Accounting and Secretarial Science.)

23 Business Mathematics **3 Units**
The student will develop skill and accuracy in mathematics. Includes the study of decimals, fractions, aliquot parts, percentages, discounts, inventory, payroll, interest. (Requirement for A.S. Degree in Accounting and Secretarial Science.)

24 Salesmanship **3 Units**
A course covering the principles and methods of selling: Characteristics of the customer; buying motives; approach, presentation, demonstration, overcoming objections, and closing the sale. (Elective for A.S. Degree in Management.)

30 Principles of Marketing **3 Units**
An introduction to marketing principles: Margins and costs; functions; channels of distribution; organizations for marketing; regulations for marketing. Competency in decisionmaking will be developed through case studies. Recommended preparation: Management 21, Accounting 201 or 20 and 21, and Economics 151. (Requirement for A.S. Degree in Management.)

50 Office Procedures **3 Units**
The student will continue to refine and further develop technical skills and learn to identify job performance requirements and traits of effective clerical and secretarial workers. The student will then apply these skills and knowledge to selected laboratory materials and experiences. The credits are not transferable. The secretarial degree candidate will enroll in this course as preparation for Business 51. Recommended preparation: Completion of at least one semester of typewriting at LCC with a minimum speed of 45 WPM. (Requirement for Stenography or Clerk-Typist Certificate of Achievement, A.S. Degree in Secretarial Science and Certificate of Achievement and A.S. Degree in Library Technology.)

51 Secretarial Procedures **3 Units**
An advanced course in a semi-simulated business setting designed for secretarial-science majors. It requires the integration of shorthand and typewriting skills and all other skills and knowledges necessary to solve the problems which the secretary may encounter on the job. Emphasis placed on problem-solving and decisionmaking. Recommended preparation: Business 50, Typing 22 and Shorthand 40. Shorthand 40 may be taken concurrently with Business 51. (Requirement for A.S. Degree in Secretarial Science.)

58V Cooperative Education **1-4 Units**
Provides practical work experiences in specific occupational areas to apply classroom knowledge and to develop job competency. Conditions are in actual employment situations in the private and public sectors of the business-industrial community. Student spends approximately half a day on the job daily. This course may be repeated for a total of 8 units. (Highly recommended elective for all business education students.) Recommended preparation: Normally taken after completion of two full-time semesters in the occupational major. Students register for a definite number of credits as approved by the instructor at the time of registration, and may earn no more or less than the stated number without the approval of the instructor.

59 Cooperative Education **8 Units**
Provides practical work experiences in specific occupational areas to apply classroom knowledge and to develop job competency. Conditions are in actual employment situations in the private and public sectors of the business-industrial community. Student spends a full semester in actual employment followed by a full semester of formal classroom work. Recommended preparation: Normally taken after completion of two full-time semesters in the occupational major.

60 Income Tax Computation for Individuals **3 Units**
An interpretive approach to federal and State of Hawaii individual income tax law, with emphasis on the following topics: Itemized deductions, sales and exchanges of property, sick pay, moving expenses, employee business expenses, declaration of estimated income tax, payroll forms, sale of personal residence, income averaging and tax planning. (No prior preparation is necessary for this course. Business 60 may be used as a business elective in all A.S. Degree Programs. Business 60 is not transferable to the Manoa Campus.)

101 Introduction to Real Estate **3 Units**
Survey of the theories and practices of the real estate industry including home ownership, contracts, deeds and conveyances, mortgages, leases, real estate insurance, brokerage services, property evaluation and city planning and zoning. This course is not designed to prepare the student to pass the real estate licensing exam. Hawaii's real estate practices will also be surveyed. (Business elective.)

200 Legal Environment of Business **3 Units**
An introductory business law course with particular attention to contracts, agency, partnerships, corporations, and government regulations of business. Requirement for A.S. Degree in Accounting and Management; an elective for other business education students and others desiring to know about their legal rights and obligations in the business world. Transferable to Manoa's College of Business Administration.

Equivalent to Business Law 200 at Manoa Campus. (Formerly BUS 40).

EFFECTIVE LISTENING

Effective Listening **No Credit**
A program of instruction designed to help the student develop listening skills which will enable him to capture the critical content in spoken statements. The three-hour course is offered in November and April. (Requirement for Certificate and A.S. Degree programs in Business.)

MANAGEMENT

MGT

21 Introduction to Management **3 Units**
The student will be introduced to the management functions of planning, organizing, directing and control. Emphasis is placed on contemporary studies that relate to communication, motivation and leadership styles. Reference is also made to the systems approach to management and to quantitative decisionmaking techniques. Not transferable to Manoa. (Requirement for A.S. Degrees in Library Technology and Management.)

22 Human Relations in Management **3 Units**
The student will understand how to deal more effectively with

supervisory problems in areas such as motivation, discipline, communications, facilitating change, leadership styles, morale, and informal group dynamics. Recommended preparation: MGT 21. (Requirement for A.S. Degree in Management.)

23 Financial Management **3 Units**
This course is designed to give the student working skills and understanding of business finance from the financial manager's vantage point. The following topics are emphasized: Ratio analysis, profit planning, the use of leverage, rates of return, and short- and long-term financing. Recommended preparation: Economics 150, Management 21, Accounting 20 and 21 or Accounting 201. (Requirement for A.S. Degree in Management.)

SHORTHAND
SHTHD

20 First Level Shorthand **3 Units**
The student will learn the basic principles of shorthand. Upon completion of this course, the student will have passed 3 official dictation tests at a minimum speed of 40 words per minute with 95% accuracy. The credits are not transferable. (Separate sections for beginning and refresher.) Recommended preparation: Knowledge of the English language and the mechanics of written English would be most beneficial in minimizing the learning difficulties. (Requirement for Stenography Certificate of Achievement and A.S. Degree in Secretarial Science Program.)

22 Second Level Shorthand **3 Units**
The students will concentrate on speed-building and typewritten transcription skills. Upon completion of this course, the student will have passed three official dictation tests at a minimum speed of 60 words per minute with 95% accuracy. Recommended preparation: Shorthand 20 or equivalent, Typewriting 21 or equivalent. (Requirement for A.S. Degree in Secretarial Science and Stenography Certificate of Achievement.)

40 Third Level Shorthand **3 Units**
The student will concentrate on transcription of shorthand notes, increased dictation speed, and quality production of mailable transcripts. Upon completion of this course, the student will have passed two official dictation tests at a minimum of 100 words per minute with 95% accuracy. Recommended preparation: Shorthand 22 or equivalent. (Requirement for A.S. Degree in Secretarial Science.)

TYPEWRITING
TYPW

17 Learning to Type (8 weeks) **1 Unit**
This basic course in typewriting includes learning what is called touch typing, where letter, number, punctuation, and symbol keys are memorized, and, through practice and drills, a firm foundation for building typewriting skill is established. (Requirement for Certificate and A.S. Degree in Accounting and Secretarial Science; A.S. Degree in Management.)

18 Typing Application One (4 weeks) **1 Unit**
This basic course is a continuation of Typewriting 17 with an introduction to business letters and problem typing. Emphasis will be placed on developing greater speed and accuracy. Students will be given the opportunity to advance at their own rate. Recommended preparation: Typing 17 or equivalent. (Requirement for Certificate and A.S. Degree in Accounting and Secretarial Science; A.S. Degree in Management.)

19 Typing Application Two (4 weeks) **1 Unit**
This basic course is a continuation of Typewriting 18 with continued practice in the mastery of the keyboard with emphasis on speed, accuracy, and office standards. Students will apply their knowledge and skill in producing tables, manuscripts and centering problems. Recommended preparation: Typing 18 or equivalent. (Requirement for Certificate of Achievement and A.S. Degree in Accounting and Secretarial Science; A.S. Degree in Management.) May be used to fulfill requirement for Certificate of Achievement and A.S. Degree in Library Technology.

21 Second Level Typewriting **3 Units**
The student will review the typewriting fundamentals and develop increased accuracy and speed. He will learn to type different styles of business letters, business reports, including manuscripts; tabulated data, plain and ruled; and job application communication. Upon completion of this course the student will have typed at least 45 words per minute on straight-copy material for 5 minutes with 5 errors or less. Recommended preparation: Typewriting 19 or equivalent. (Requirement for Stenography or Clerk-Typist Certificate of Achievement; A.S. Degree in Secretarial Science.) (This course may be used to fulfill the requirements for the A.S. Degree and the Certificate of Achievement Programs in Accounting, Library Technology and Management.)

22 Third Level Typewriting **3 Units**
The student will become more proficient in the correct usage and production of a variety of typewritten materials. These are correlated examples of work which is produced in specific types of businesses: Accounting, technical, governmental, legal, etc. Recommended preparation: Proven ability to type at least 45 WPM and knowledge of the basic letter forms, tabulation arrangements, and manuscript styles. (Requirement for A.S. Degree in Secretarial Science. This course may be used to fulfill the requirements for the A.S. Degree and Certificate of Achievement in Accounting; A.S. Degree in Management.)

LANGUAGE ARTS DIVISION

CHINESE
CHNSE

100 Conversational Chinese I **4 Units**
This course is designed to develop minimal oral fluency in standard spoken Mandarin Chinese. Although this course is not part of a sequential program, it does provide a solid foundation for further systematic study of both the spoken and the written language. Offered Spring Semester only and only if there is sufficient student demand.

CREATIVE ARTS
CA

143 Storytelling **3 Units**
A study of storytelling: survey of resources, analysis of materials, selection, techniques of preparation and practice in presentation. (Formerly Recreational Drama 143). Requirement for A.S. Degree in Creative Arts Emphasis subprogram of the Recreation Instructor Program. Recommended preparation: SPCOM 145 or 151.

ENGLISH
ENG

45 Introduction to Expository Writing **3 Units**
A program of intensive classroom composition designed to lead the student to produce acceptable expository writing for academic, business and community situations. Students who satisfactorily complete this course may enroll in regular freshman composition (English 100 or its equivalent). (Formerly Eng 30).

100 Expository Writing **3 Units**
(See also English 140, 170)
The course includes a review of fundamentals of grammar, use of the dictionary and the library, the writing of a number of expository essays and a somewhat longer research paper. The essays are written both in class and outside of class. All activities in the course are directed toward teaching the student how to write more lucidly, correctly, and effectively, choosing a style that is appropriate to the writer's audience and occasion for writing. Fulfills composition requirement at the Manoa Campus.

103 Research Writing **3 Units**
Research writing is designed to help the student learn to plan and write effective research papers, term papers, and reports on any subject. It includes instruction in correct and consistent footnote and bibliographic form and the efficient use of libraries, books, and reference sources. Recommended preparation: English 100 or equivalent.

104 Creative Writing **3 Units**
The emphasis in this course will be on descriptive rather than expository writing. Students will learn how to write poems, short stories and dramatic scenes. Individual interests of the students will be met by different areas of concentration in the final project. The course includes weekly creative writing assignments and discussion as well as criticism of each student's writing. The long-range goal is publication. No previous creative writing experience is necessary. May be repeated for additional credit. Recommended preparation: English 100 or consent of instructor.

105 Business Writing **3 Units**
This course is designed for students interested in a career in business. It will teach how to compose the various forms of letters found in the business field; how to evaluate business reports, letters and forms; also how to summarize reports, letters, forms, and appropriate events; how to analyze business meetings; how to prepare and evaluate curriculum vitae; and how to organize and evaluate effective communication in writing. Requirement for A.S. Degree in Accounting, Management and Secretarial Science. Business Administration majors (excluding TIM) who transfer to Manoa may take English 105 in lieu of English 309 or Management 209 at Manoa. Much course work must be typed. Recommended preparation: English 100 or equivalent.

106 Technical Writing **3 Units**
This course involves writing which deals with subject matter in science, industry, and vocational fields. Using conventional report forms, students learn how to prepare letters, process descriptions, memoranda, descriptions of mechanisms, summaries, job applications, instructions, definitions, and formal reports. All assignments are made to emphasize the writer's awareness of his audience and his commitment to objectivity and accuracy. Recommended preparation: English 100 or equivalent. Requirement for A.S. Degree in Marine Technology. Strongly recommended for Computer Science Majors.

140 Uses of Language (Persuasive Writing) **3 Units**
This course will require frequent written commentaries on language in action. Papers will be based on readings in prose writing (book-length works of non-fiction, essays, reports and editorials in newspapers; articles and advertisements in periodicals) and observation of oral discourse (public speeches, television reports, radio and television advertisements, etc.). The course will also include exercises in the creation of different rhetorical efforts through language. Fulfills composition requirement at the Manoa Campus.

170 Language and the Visual Media **3 Units**
Analysis of the use of language in television, film and advertising. Students are required to write reports about specific assignments that refer to television, film and advertising. Fulfills composition requirement at U.H. Manoa Campus.

ENGLISH LANGUAGE INSTITUTE
ELI

5 Speech for Non-native Speakers **3 Units**
A course in speaking improvement designed to give the foreign student ability to communicate in the Standard American Idiom. Includes improvement practice in enunciation, fluency, diction and pronunciation. Open only to foreign students.

15 Reading for Non-native Speakers **3 Units**
An individualized program in reading comprehension, vocabulary building, speedreading, phonics and word attack skills, study skills, memory and concentration. Open only to foreign students.

20 English for Non-native Speakers **3 Units**
ELI 20 is a writing program of intensive classroom instruction and activities designed for the non-native English-speaking student. Emphasizes sentence structure and paragraph organization.

FRENCH
FR

101-102 Elementary French I, II **4 Units Each**
Study of the basic structures of the French language through simple situations illustrating French life. Intensive practice in speaking, writing, and oral comprehension. Short readings to acquaint the student with aspects of French culture. Includes drills in the Language Laboratory during various hours each day and evening. Recommended preparation: None for French 101, French 101 or equivalent for French 102.

201-202 Intermediate French I, II **3 Units Each**
Study of selected literary works and/or articles. Review of the basic grammar structure using contextual drills. Practice in speaking, oral comprehension and reading. Writing is emphasized through short written reports in the forms of resumes, discussion of characters, themes, and ideas. Includes drills in the Language Laboratory during various hours each day and evening. Recommended preparation: French 102 or equivalent for French 201; French 201 or equivalent for French 202.

GERMAN
GER

101-102 Elementary German I, II **4 Units Each**
Basic structures of the German language emphasizing speaking, writing, and comprehension in listening and reading through individualized instruction. These German language structures are practiced in class and in the Language Laboratory until students can use them without hesitation in written and conversational exchanges. Includes drills in the Language Laboratory during various hours each day and evening. Recommended preparation: None for German 101; German 101 or equivalent for German 102.

201-202 Intermediate German I, II **3 Units Each**
Continuation of skills learned in Elementary German. Includes readings and comprehension exercises in authentic German prose representing facets of German life and culture and selections from the works of significant writers and thinkers through individualized instruction. Includes drills in the Language Laboratory during various hours each day and evening. Recommended preparation: German 102 or equivalent for German 201; German 201 or equivalent for German 202.

GRAMMAR
GRAM

115 Introduction to English Grammar **3 Units**
In this course the student will learn what grammar is and why he studies it. The student will learn grammatical terminology and will become familiar with some alternative grammatical descriptions which scholars have proposed. (Not acceptable toward fulfilling the English requirement at UH Manoa Campus.) Offered Spring Semester only and only if there is sufficient student demand.

HAWAIIAN
HAW

101-102 Elementary Hawaiian I, II **3 Units Each**
Basic structures of Hawaiian with an emphasis on listening comprehension, speaking, reading, and writing. Through directed drill and practice in class and in the Language Laboratory, the student learns to communicate in correct Hawaiian. Includes drills in the Language Laboratory during vari-

ous hours each day and evening. Recommended preparation: None for Hawaiian 101; Hawaiian 101 or equivalent for Hawaiian 102.

201-202 Intermediate Hawaiian I, II **3 Units Each**
Continuation of the skills learned in Hawaiian 101-102. Intended to make the student proficient in the usage of the major sentence patterns in Hawaiian. Includes drills in the Language Laboratory during various hours each day and evening. Recommended preparation: Hawaiian 102 or equivalent for Hawaiian 201; Hawaiian 201 or equivalent for Hawaiian 202.

ILOKANO

ILO

101-102 Elementary Ilokano I, II **3 Units Each**
Development of listening, speaking, reading and writing with major emphasis on listening and speaking. Introduction of new materials and drills to reinforce the structures learned in the presentation. Tapes are available in the Language Laboratory for more drills and practice in listening comprehension. Recommended preparation: None for Ilokano 101; Ilokano 101 or equivalent for Ilokano 102. ILO 101 offered Fall Semester only; ILO 102 offered Spring Semester only. Both require sufficient student demand.

JAPANESE

JPNSE

101-102 Elementary Japanese I, II **4 Units Each**
Basic structures of Japanese with an emphasis on listening comprehension, speaking, reading, and writing. Through directed drill and practice in class and in the Language Laboratory, the student learns to communicate in correct Japanese. Includes drills in the Language Laboratory during various hours each day and evening. Recommended preparation: None for Japanese 101; Japanese 101 or equivalent for Japanese 102.

201-202 Intermediate Japanese I, II **4 Units Each**
Continuation of the skills learned in Japanese 101-102. Intended to make the student proficient in the usage of the major sentence patterns in Japanese. Includes drills in the Language Laboratory during various hours each day and evening. Recommended preparation: Japanese 102 or equivalent for Japanese 201; Japanese 201 or equivalent for Japanese 202

JOURNALISM

JOURN

150 Transmitting Human Thoughts **3 Units**
An introduction to the media of mass communication covering the historical development of the press, the interaction of the press and society, and selected problems relating to newspapers, magazines, radio and television in contemporary culture.

205 Newswriting **3 Units**
Practice and instruction in reporting, interviewing, and newswriting techniques. Classwork will often be published in the college newspaper. Recommended preparation: English 100. (Formerly Journalism 207.)

206 News Editing **3 Units**
Consisting of participation on the staff of the Leeward College student newspaper. Students registered for Journalism 206 will learn and practice copyreading, proofreading, laying out pages and writing headlines. Recommended preparation: Journalism 205.

208 Editorial Analysis **3 Units**
Editorial Analysis, consisting of participation of the editorial staff of the Leeward College student newspaper. Students registered in Journalism 208 will learn and practice making assignments, coordinating photographic coverage, selecting and editing copy for publication, determining play, determining editorial policy on specific issues, writing editorials and commentary columns, and analyzing local news events. Recommended preparation: Journalism 205 and Journalism 206.

209 News Advertising **3 Units**
Newspaper Advertising, consisting of participation on the business staff of the Leeward College student newspaper. Students registered in Journalism 209 will learn and practice the principles of space sales, advertising rates, ad layouts, billing procedures, sales techniques, evaluating the role and appropriateness of various kinds of print advertising and analyzing results of advertising. Recommended preparation: None.

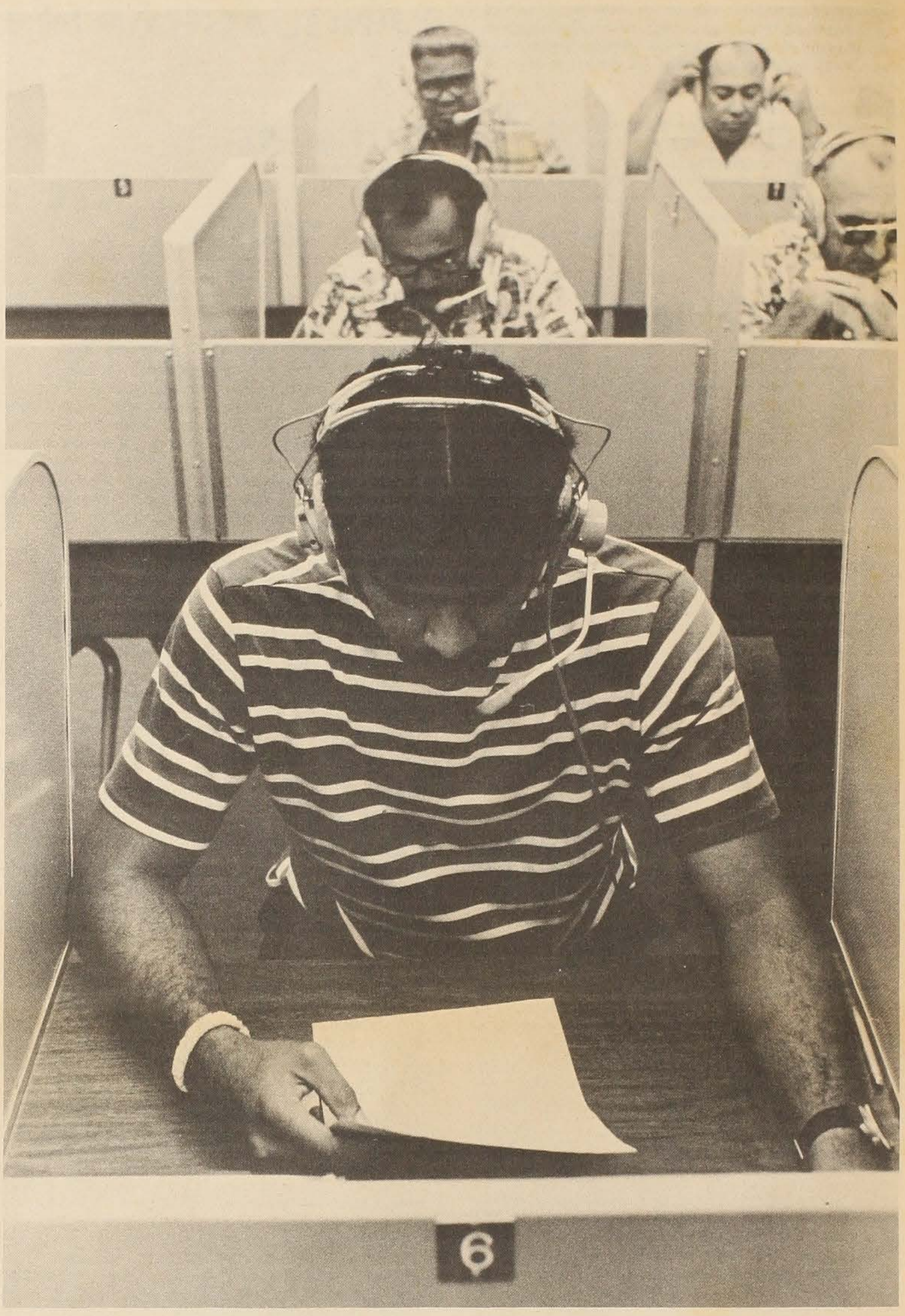
260 Mass Media **3 Units**
An introduction and analysis of the major mass communications media. This course is intended to give a better understanding of the development, responsibilities and characteristics of the major mass media. Equivalent to UH Manoa Communications 261.

LANGUAGE ARTS

LA

231 Hawaiian Culture **3 Units**
A study of Hawaiian culture prior to 1778, with emphasis on the socioeconomic system, origin of the Hawaiians, geography, religion, values, music and dance.

Meets second-year foreign language requirement of UH Arts & Sciences.



241 French Civilization I **3 Units**
A survey in English of the culture and institutions of modern France. Contemporary life styles of the French people will be studied regarding such aspects as national characteristics of the people, physical, economic, historical and political background of the country, the family at home, and at work and finally the result of current national social change. No recommended preparation.

251 Spanish Civilization **3 Units**
A study in English of the culture and civilization of Spain. The geography, history, art, architecture, music, philosophy, literature, and customs of the Spanish people will be discussed with major emphasis centered upon how they exist or influenced the Spain of today. Students may choose to do research on Spanish influence on the history or culture of other countries of the world. (Latin American Civilization and Culture may be studied separately in LA-252.)(This course, together with LA-252 may be substituted for Spanish language 201-202 to fulfill the University of Hawaii Arts and Science foreign language requirement.)

252 Latin American Civilization **3 Units**
A study in English of contemporary life styles of Ibero-American peoples, touching upon the influences of history, geography, and tradition, and the reflection of these life styles in the arts, customs, and folklore of the Spanish and Portuguese speaking peoples of the Americas, including Spanish speaking ethnic minorities in the United States. In addition to a basic core of knowledge, the student will pursue his study more deeply in his selected area of interest. No necessary preparations. (This course, together with LA 251, may be substituted for Spanish 201-202 to fulfill the University of Hawaii Arts and Science foreign language requirement.)

261 Introduction to Philippine Language and Culture **3 Units**
An introductory course (to be conducted in English) of Philippine languages and culture, tracing the development and changes brought about by contacts with the Malays, the Chinese, the Spaniards, the Americans and the Japanese. It will not be a study of the languages themselves, but about the language situation in the Philippines. It will require reading, making observations and discussing geography, history, values, customs, institutions, languages, literature, arts, folk music, dances and ways. Offered Spring Semester only and only if there is sufficient student demand.

LINGUISTICS

LING

102 Introduction to the Study of Language I **3 Units**
An investigation of the nature and workings of language: its composition (sound system, grammatical structure and lexicon); representation (oral and written); and divergence (relationships between languages of the world). General linguistic principles applicable to all languages will be covered. Terms will be introduced making it possible to discuss language and to understand what linguists say and write about it. Offered Fall Semester only and only if there is sufficient student demand.

READING

READ

001 Developmental Reading **3 Units**
The Reading Clinic offers individualized programs in reading comprehension, vocabulary building, speed reading, phonics,

and word attack skills, study skills, memory and concentration. Specific course objectives are designed for each student based on standardized test scores and expressed needs. The student works intensively in the reading lab, utilizing a variety of programmed materials and reading machines. The course is open to all students. On their own or upon the referral of any instructor, students may enroll in this course informally for purposes of improving reading or related areas.

002 Study Skills I: Vocabulary Building **1 Unit**
Reading 002 is designed as an intensive program in techniques of rapid vocabulary building, both in specific subject areas of concern to the individual student and general vocabulary words needed for effective reading on the college level. Work in root words and derivatives, words as concepts in communication, and learning techniques will be included. Offered Spring Semester only and only if there is sufficient student demand.

003 Study Skills II: Concentration, Memory and Relaxation **1 Unit**
Reading 003 is designed as an intensive program in developing techniques of concentration, memory and relaxation. Concentration and memory techniques will be applied to general material and specific subjects of the student. Relaxation methods will be related to better test performance, increasing learning potential, and contributing to the physical and mental well-being of the student. Offered Spring Semester only and only if there is sufficient student demand.

004 Study Skills III: Mastering Textbook Reading **1 Unit**
Reading 004 is designed as an intensive program in the reading of college-level textbooks. The course includes (1) group work through which the student begins to develop the skills of study reading, and (2) individualized instruction through which the student receives guided practice in applying the skills to a textbook which he is studying in some other course. Offered Spring Semester only and only if there is sufficient student demand.

005 Study Skills IV: Critical Reading **1 Unit**
Reading 005 is designed as an intensive program in the reading of fiction. This course, which emphasizes reading for enjoyment, provides instruction in rapid reading and understanding of both the short story and the novel. Both individualized and group work are provided. Offered Spring Semester only and only if there is sufficient student demand.

006 Study Skills V: Critical Listening & Notemaking **1 Unit**
Reading 006 is designed as an intensive program in techniques of effective listening and notemaking. The course includes group work through which the student begins to develop these skills, the individualized work, through which he receives guided practice in applying these skills. Offered Spring Semester only and only if there is sufficient student demand.

101 Speed Reading **3 Units**
This course is designed for students scoring above average on college-level reading tests. Emphasis is placed on the development of reading rate, vocabulary building, increased comprehension, critical reading, and advanced study skills. Students are expected to develop a flexible reading rate from 500 words per minute for study-type college-level material to 1,500 words per minute in skim-type reading. Recommended preparation: Raw score of 58 or better on the Nelson-Denny Reading Test.

110 Relaxation, Concentration and Memory **3 Units**
This course will teach techniques to help students increase their efficiency in concentration, relaxation, self-control and overall learning capacity. It will increase their ability to use visualization as an enhancement for learning. It will advance their ability to recall written and spoken material, and it will provide them with mental systems for retrieving the needed information. It will teach the student how to effectively control fears and anxieties in stress situations, such as taking tests. Techniques covered in the course can bring positive changes in personality, enhancing the self-image and creating movement to greater self-guidance. Dormant creative talent can be activated and may be increased.

SPANISH

SPAN

50 Survival Spanish **2 Units**
Basic Spanish for travelers. Through pronunciation exercises, memorization of useful phrases and dialogues, and classroom re-creation of situations commonly encountered by travelers, the student prepares himself for experience in the Spanish-speaking country. This course is not intended for transfer, nor does it apply toward fulfillment of the UH foreign language requirement in Arts and Sciences.

101-102 Elementary Spanish I, II **4 Units Each**
Basic structures of the Spanish language emphasizing speaking, writing and comprehension in listening and reading. Through practice in class and in the Language Laboratory, the student learns to use the basic structures of Spanish without hesitation. Includes drills in the Language Laboratory during various hours each day and evening. Recommended preparation: None for Spanish 101; Spanish 101 or equivalent for Spanish 102.

201-202 Intermediate Spanish I, II **3 Units Each**
Continuation of skills learned in Spanish 101-102. Through a variety of readings and exercises, the student learns to communicate with greater facility in the Spanish language. Includes drills in the Language Laboratory during various hours each day and evening. Recommended preparation: Spanish 102 or equivalent for Spanish 201; Spanish 201 or equivalent for Spanish 202.

SPEECH COMMUNICATIONS

SPCOM

Equivalent to **Speech** courses at Manoa

151 Introduction to Speech **3 Units**
This course introduces students to the basic theory and practice of speech in a variety of informal and formal situations with emphasis on developing self-confidence and appropriate techniques of informative and persuasive speaking. Equivalent to UH Manoa Speech 151.

231 Interpretative Reading **3 Units**
The principles and techniques of communicative reading from the printed pages which include: careful analysis of the text, understanding of the audience, and effective use of visible and audible techniques by the reader to communicate important elements of the chosen literature, performance, and evolution. Recommended preparation: SpCom 151 or equivalent. Equivalent to UH Manoa Speech 231.

233 Storytelling (See CA 143 also) **3 Units**
Aesthetic communication through storytelling for entertainment and education: oral tradition, analysis of story types, cuttings of novels and other available literature for this interpretative art, techniques of preparation and presentation. Recommended preparation: SpCom 151 or equivalent.

251 Principles of Effective Speaking **3 Units**
Extensive practice in planning and delivery of speeches. The student will be involved in three basic types of activity. One will be brief informal talks, the second will be longer, formal talks, and the third will be spontaneous classroom discussion. Recommended preparation: SpCom 151 or equivalent. Equivalent to UH Manoa Speech 251.

Equivalent to **Communications** courses at Manoa.

145 Interpersonal Communication **3 Units**
Introduction to communication theory through active participation in a variety of interpersonal communication activities. Equivalent to UH Manoa Communications 145.

221 Group Discussion **3 Units**
Students are introduced to the practice and theory of group communication and explore the variables that operate in such situations. Included are studies in group decision-making, group leadership, and the variety of group communication patterns.

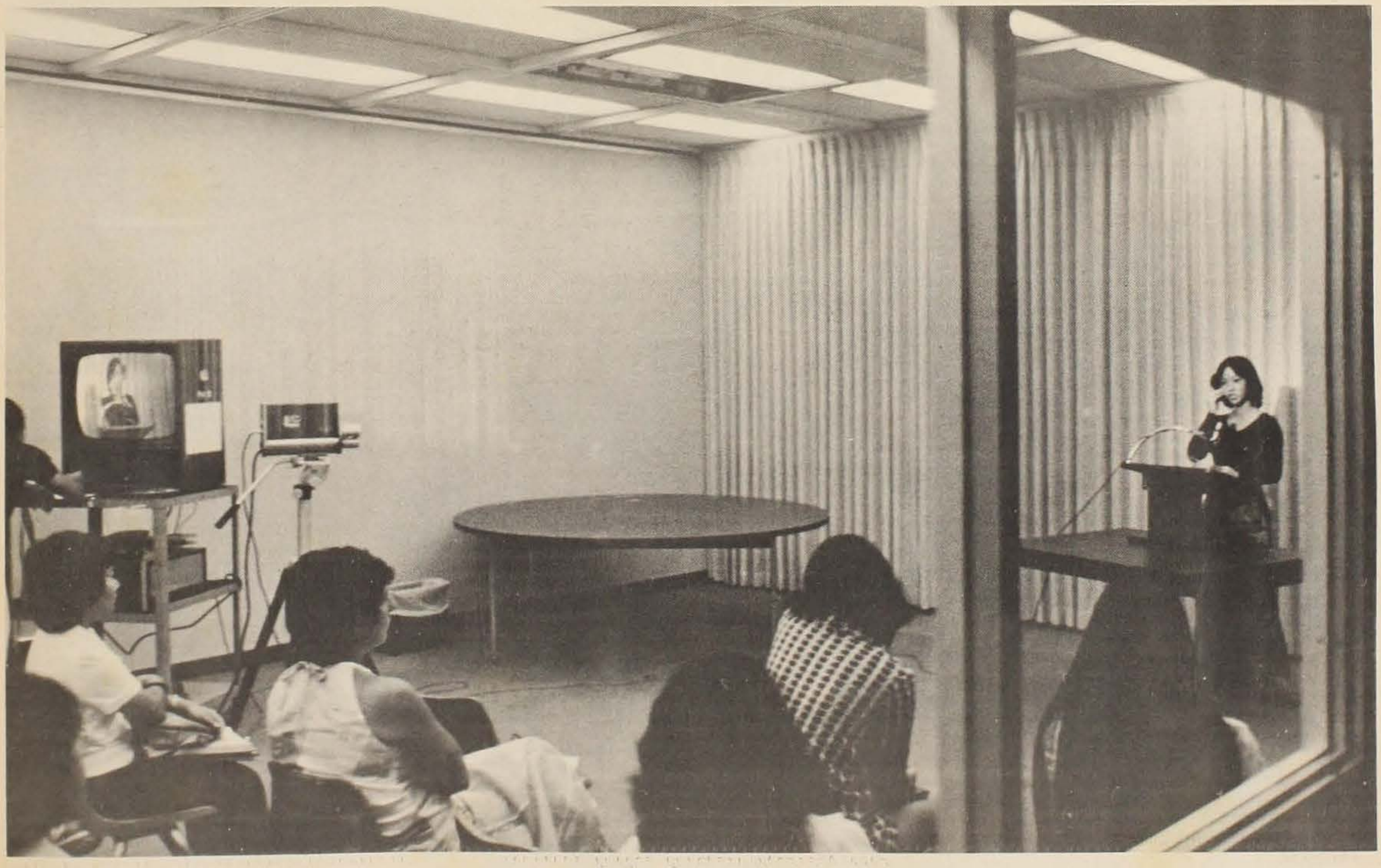
261 Broadcasting I **3 Units**
Analysis and survey of radio and television as communications media. Attention to the interrelations of press, radio-TV, and film.

263 Broadcast Laboratory I, II **3 Units Each**
Introduction to equipment and operation of radio and television studios, and roles of members of the production team. Basic production techniques. "R" radio production; "T" television production. (May be taken twice—one semester for Radio and one semester for Television.

TAGALOG

TAG

101-102 Elementary I, II **3 Units Each**
Basic structures of Tagalog with an emphasis on listening comprehension, speaking, reading, and writing. Through directed drill and practice in class and in the Language Laboratory, the student learns to communicate in correct Tagalog. Includes drills in the Language Laboratory during various hours each day and evening. Recommended preparation: None for Tagalog 101; Tagalog 101 or equivalent for Tagalog 102.



MATHEMATICS AND NATURAL SCIENCES DIVISION

BIOLOGY

BIOL

50 Nutrition **2 Units**
The selection of nourishing foods for promoting growth, and maintaining normal health and body weight. The role of carbohydrates, fats, proteins, vitamins, and minerals in health. Acceptable dietary practices. The significance of calories in weight-control. Food fads and diets. The course is designed primarily to meet the needs of the students in the food technology program for a science course relating to human nutrition. The course will be open to other students in the college who are interested in nutrition. Requirement for Certificate of Achievement and Associate in Science Degree in Hospitality Education Program (Food Service).

60 Microorganisms, Foods, and Sanitation **2 Units**
The nature of microorganisms including viruses, bacteria, yeasts, molds, and worms. Fermentation and the preparation of beer, wine, shoyu, yeast leavened breads and cheeses. The relationship of temperature to the growth of microorganisms in foods. The prevention of contamination of foods by harmful microorganisms. Pasteurization of beverages. Sterilization and canning of foods. Use of disinfectants in control of microorganisms in food preparation. This course is designed primarily to meet the needs of students in the food technology program for a science course relating to the biology of microorganisms in foods and beverages. The course will be open to other students in the college who are interested in microorganisms. Requirement for Certificate of Achievement and Associate in Science Degree in Hospitality Education Program (Food Service).

100 Human Biology **3 Units**
The life activities of cells and organ systems of the body. Mechanisms of body control and regulation. Drugs and their actions. Human sexuality. Physiology of sex. Birth and birth control. Heredity. Nutrition and physical fitness. Infections and immunity. Systemic illnesses. Cancer and heart diseases. Recommended elective for "core" curriculum requirements in Natural Sciences. Not applicable toward a major in biological science.

288 Marine Biology **4 Units**
An introduction to the marine inshore fauna and flora of Hawaii. Various shallow water habitats on Oahu will be explored including tidepools, mud flats, and coral reefs. Ecological relationships, structure, systematics, and the scientific method of investigation are stressed. Recommended preparation: Consent of instructor. Requirement for certificate of achievement and A.S. Degree for Marine Technology.

291 B/C Field Biology **4 Units Each**
Biology 291B Fall Semester:
Techniques in environmental science data collection and evaluation is stressed. Learning ecological relationships in the terrestrial, freshwater, and marine environment. Open to all students with Zool 101, Biol 288, or Ocean 201 background.

Biology 291C Spring Semester:
Techniques in environmental science data collection and evaluation in the marine environment. First priority given to Marine Tech students with SCUBA certification. Same recommended preparation as Biol 291B.

BOTANY

BOT

101 General Botany **4 Units**
Botany 101 will look upon plants as complex biological entities which are essential for the survival of all other forms of life. General topics discussed will be plants as the beginning of life, organization in living plants, plant physiology, plant development and form, plant functions, evolution, and ecology.

130 Plants in the Hawaiian Environment **4 Units**
Identification of plants of Hawaii both native and introduced. Effects of rainfall, altitude, temperature, salt exposure on plants. Competition of introduced plants with native species. Plants of economic value, plants which are detrimental and plants of significance to the botanist are studied. (Formerly Biology 144.)

133 Introduction to Horticulture **4 Units**
Practical aspects of growing horticultural crops. Methods of propagation. Biological and chemical control of diseases and pests. Soil testing and correction of deficiencies. Recommended preparations: Any of the following courses would be helpful: Chem 101, Math 25 (or equivalents). Facility with basic arithmetic including manipulation of whole numbers and fractions is important.

135 Plant Propagation **2 Units**
Plant propagation will give the student practical experience in propagating plants by seeds, cuttings, layers, air-layers, grafting and division—the major methods used by both commercial growers and hobbyists.

BUSINESS ANALYSIS & STATISTICS

BAS

121 Mathematics for Decisionmaking I **3 Units**
Mathematic operations related to business and economics; laws of algebra, laws of exponents, algebraic operations, theory of sets, relations and functions, linear equations, inequalities, algebraic equations, vectors, matrix operations and linear programming. (This course replaces Mathematics 175, Applied Mathematics.) Recommended preparation: C or better in 2 years of high school algebra taken within the past 5 years; C or better in Math 27 or equivalent. Requirement for A.S. Degree in Computer Science.

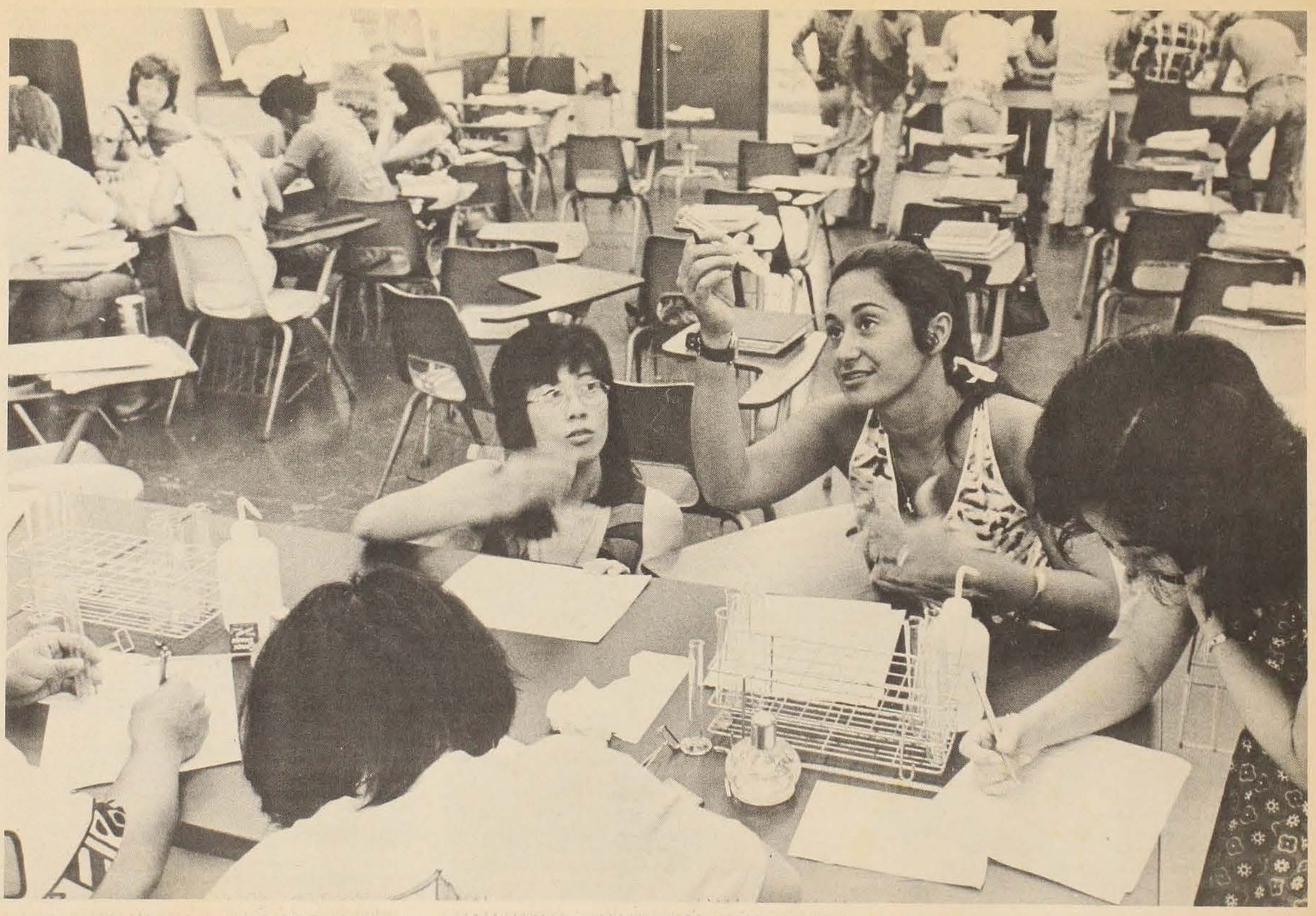
122 Mathematics for Decisionmaking II **3 Units**
Applications of mathematical operations to business and economics; equations and their graphs; limits, continuity, derivatives and their use in minimax problems; Lagrangian multipliers in optimizing functions subject to linear and higher-order constraints; partial, indefinite, and definite integrals; improper and numerical integrations; distribution functions and multiple integrals; techniques and applications. Recommended preparation: BAS 121 and Econ 150 or Econ 151; UH College of Business Administration Requirement: Students may not earn credit for this and Math 205 or BAS 125

CHEMISTRY

CHEM

101 Chemistry and Man **4 Units**
A survey of the basic principles of chemistry intended for nonscience majors. Topics include the interrelationships of atoms, molecules, man and his effect on the environment. Special emphasis will be placed on air and water pollution, energy resources (fossil and nuclear) and consumption, and the problems brought on by man's rapid technological advancements. This course is a lab-oriented one in which students will be encouraged to learn by doing. Fulfills natural science requirement at Manoa.

113 General Chemistry I **4 Units**
Introductory course on fundamental theories and experimental methods of chemistry; intended for science majors.



The course material includes basic language of chemistry, atom structure, bonding, structure-property relationships, and the beginnings of reaction and solution chemistry. The course structure emphasizes the uses and relationships of chemistry to the student's major interest area. No previous chemistry experience required. Recommended preparation: Math 27 or equivalent; concurrent registration in Math 132 (College Algebra).

114 General Chemistry II **4 Units**
A continuation of Chemistry 113. Emphasis is made on the structure and shapes of molecules, experimental methods for determining molecular shapes and chemical dynamics—why and how various reactions occur (kinetics), the changes in energy involved (thermodynamics), and the extent to which they occur (equilibrium). Lab work is emphasized. Each student will complete a short independent laboratory project. Recommended preparation: Chem 113 or equivalent; Math 132 or equivalent.

214 Elementary Quantitative Analysis **4 Units**
A laboratory course emphasizing various techniques of analytical chemistry. Course content includes separation procedures, volumetric, and electrochemical determinations. The course includes both theoretical concepts and laboratory experience, and is designed to develop in the student the beginning of self-sufficiency in the laboratory. Recommended preparation: Chem 114 or equivalent.

243-244 Organic Chemistry I, II **4 Units Each**
The chemistry of carbon compounds. Topics include molecular structure, nomenclature and properties; stereochemistry; infrared, ultraviolet, and nuclear magnetic reasonance spectroscopy; reaction mechanisms, and methods of preparation of major classes of organic compounds. The chemistry of the principal classes of biochemical compounds will also be covered. Recommended preparation: Chem 113-114 or equivalent.

COMPUTER SCIENCE

COMSC

100 The Computer and Its Role in Society **3 Units**
A non-technical introduction to digital computers and their use in the modern world. Social benefits and problems created by the computer revolution and implications for the future. This course may be taken by the non-specialist who is interested in the use of computers in our society. The course is required of each student majoring in computer science. (Requirement for A.S. Degrees in Management, Accounting, Computer Science and Library Technology.)

101 Introduction to Computer Science **3 Units**
A practical introduction to the theory of stored program digital computers. The emphasis is on logical problem analysis, on the internal functional characteristics of a digital computer and on FORTRAN language programming. Recommended preparation: COMSC 100 and Math 27. Concurrent registration is acceptable for both COMSC 100 and Math 27. (Requirement for A.A. and A.S. Degrees in Computer Science.)

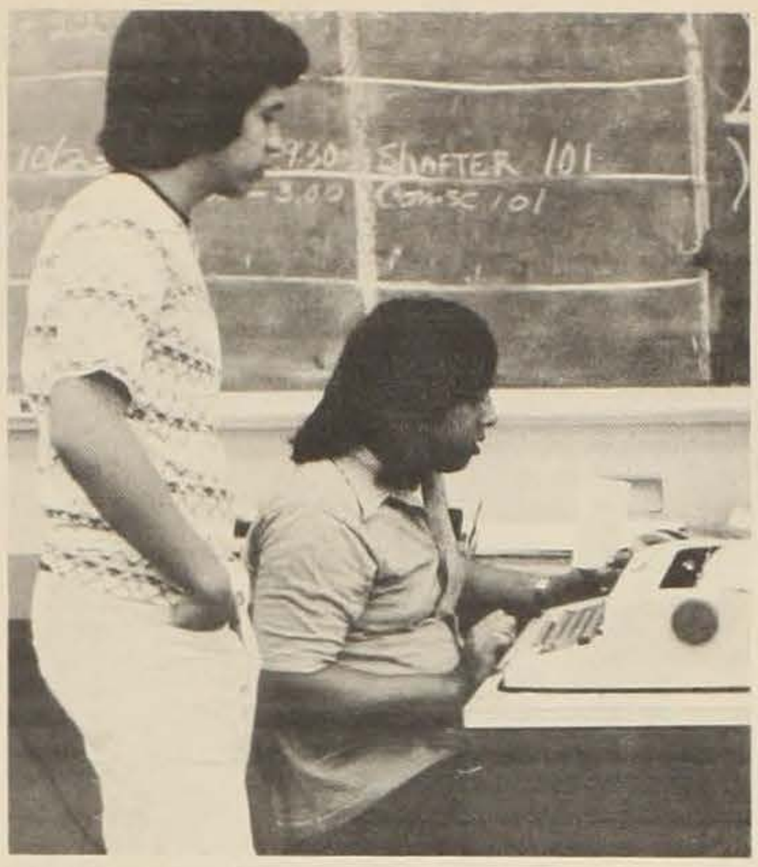
120 Scientific Computer Programming **3 Units**
Preparation for use of computers in solving mathematical and scientific problems. Introduction to numerical analysis, information structures and research methodology. Emphasis on the development of algorithmic processes, as well as iterative methods and matrix techniques for solving simultaneous linear equations. Application using the FORTRAN language. Recommended preparation: Computer Science 101 and Mathematics 132. Concurrent registration is acceptable for Math 132 only. (Requirement for A.A. Degree in Computer Science.)

121 Information Storage and Retrieval **3 Units**
Emphasis on data storage and retrieval and the basic structure of information systems. Non-numerical applications using the COBOL and RPG languages. Recommended preparation: COMSC 101. (Requirement for A.S. Degree in Computer Science; may be used to fulfill elective requirement for A.A. Degree in Computer Science.) NOTE: It is **not** necessary to take **COMSC 120** in preparation for this course.

122 Comparative Programming Systems **3 Units**
Survey of machine-oriented, procedure-oriented, and problem-oriented languages, and their relationship to digital computer systems. Syntactic descriptions, and semantics of several classes of programming languages (such as FORTRAN, ALGOL, COBOL, PL/1, APL and BASIC). Applications using several of the major languages discussed. Recommended preparation: COMSC 120 or COMSC 121. (Requirement for A.A. and A.S. Degree in Computer Science.) Offered Spring Semester only.

200 Information Systems **3 Units**
Introduction to the total systems concept in the design of integrated information and control systems. Central Data Base organization, maintenance and retrieval planning. Feasibility of batch processing real time and time shared systems. Applications using the remote communication capabilities of the computer science laboratory. Recommended preparation: COMSC 101 and 121. (Requirement for A.S. Degree in Computer Science; may be used to fulfill elective requirement for A.A. Degree in Computer Science.) Offered Spring Semester only.

201 Operating Systems **3 Units**
Introduction to systems programming. Emphasis on assemblers, Input/Output Control Systems, service systems, supervisors, and loaders. Programs will be written using IBM 1130 assembly language. Recommended preparation: COMSC 101. (Requirement for A.A. and A.S. Degree in Computer Science.) Offered Fall Semester only.



220 Management Decision Techniques **3 Units**
Introduction to mathematical and statistical programming techniques for modern management decisions. Linear programming, simulation, Monte Carlo techniques. Recommended preparation: COMSC 101, 122 (or 121 with consent of the instructor), and BAS 121. (Requirement for A.S. Degree in Computer Science; may be used to fulfill requirement for A.A. Degree.) Offered Fall Semester only.

222 Compiler Anatomy **3 Units**
Theory and operation of a compiler system. Detailed analysis of a FORTRAN compiler. Student will be expected to write and debug an original compiler system. Recommended preparation: COMSC 101 and 122; 201 (concurrent registration permitted). (Requirement for A.A. Degree in Computer Science.) Offered Spring Semester only.

GEOGRAPHY

GEOG

101 Elements of Physical Geography **3 Units**
A survey of the basic elements of man's environment, especially climate, soils, landforms, water and natural vegetation. Laboratory problems in map interpretation. (Acceptable for credit in natural science.)

GEOLOGY

GEOL

101 General Geology **4 Units**
A beginning course in geology with three lectures and one three-hour laboratory or field trip per week. Includes the study of rocks and minerals, geologic processes, and landforms. Field trips will include making topographic maps and a visit to Kolekole Pass to study local volcanism. Formerly GEOSC 102. Offered Spring Semester only.

GEOSCIENCE

GEOSC

101 Introduction to Geosciences I **4 Units**
Presents a broad perspective of the earth sciences with studies ranging from the center of Earth to outer space. Topics include astronomy, meteorology and physical oceanography. Weekly laboratory sessions and occasional field trips. (Geoscience 102 may be taken first.) Recommended preparation: High school algebra, Mathematics 25, or equivalent. Offered Fall Semester only.

MATHEMATICS

MATH

2 Fundamentals of Arithmetic I **1 Unit**
Instruction in the four basic operations on whole numbers and fractions with emphasis on the development of computational skills and in the application of mathematical understandings to problem solving situations.

3 Fundamentals of Arithmetic II **1 Unit**
Instruction in the four basic operations on decimals with emphasis on the development of computational skills and in the application of mathematical understandings in problem solving situations. Development of skills to deal with percents in computational and application situations involving percent of change, discounts, commission, finding some percent of a number, etc. Recommended preparation: Math 2 or skill with whole numbers and fractions.

23 Pre-Algebra Mathematics **2 Units**
Introduction to algebra and to the uses of mathematics concepts in problem solving. Arithmetic, geometry, and the basic concepts of algebra are integrated. Topics include fractions, prime factorizations, exponents, scientific notation, signed numbers, order of operations, polynomials, and solving equations. This course is intended to provide the basic concepts appropriate to develop the mathematical maturity for the study of beginning algebra. Recommended preparation: Math 002 and 003, or skill in whole numbers, fractions, decimals and percents. (Formerly Mathematics 005.)

25 Beginning Algebra **3 Units**
The fundamentals of elementary algebra; stressing sets and the properties of the natural numbers and integers; simplification of algebraic expressions; first degree equations and inequalities of one variable; special products and factoring; fractions, and fractional equations; graphs and systems of linear equations; radicals; and quadratic equations. The course is designed for the student who has had no formal algebra, one who did not do well in his first year algebra in high school, or one who had algebra before the new nomenclature came into common use. Recommended preparation: Facility in the basic arithmetic operations with whole numbers and fractions would be most helpful.

27 Intermediate Algebra **3 Units**
A continuation of Mathematics 25, with emphasis on the functional approach to algebraic operations as well as the solution of equations. The course is roughly equivalent to the second year of high school algebra, so is beneficial as a review for students who have been out of school for a few years or for those who barely passed the high school second year course. It is recommended as preparation for Math 132 & 133 for those who feel their algebra background is shaky. Recommended preparation: One year of high school algebra or C or better in Math 25 (or equivalent). Facility in arithmetic will be helpful.

41 Basic Applied Mathematics **2 Units**
A course to develop mathematical skills useful in industry and especially for draftsmen. Topics include basic decimal conversions, algebra, geometry, and numerical trigonometry all introduced with applications. This is not intended to be preparation for advanced courses in mathematics. Recommended preparation: Facility in arithmetic. (Requirement for Certificate of Completion, Certificate of Achievement, and A.S. Degree for Drafting Technology Program—Civil).

100 Survey of Mathematics **3 Units**
An elementary treatment of mathematics for the non-specialist emphasizing its value in our culture. The historical development of basic mathematical concepts is discussed. Topics include: algebraic methods, probability and statistics, geometry, mathematical structures, logic, proofs, functions and relations. Not intended to be a preparation for advanced courses nor a course to develop specific skills. Recommended preparation: One year of high school algebra or Math 25 (or equivalent). Facility in arithmetic will be helpful.

111 Introduction to Modern Mathematics **3 Units**
A study of the structure and basic concepts of the number systems used in arithmetic. Includes the nature, structure, proofs, and operations of sets, relations, functions, systems of numeration and the systems making up the real number system. This course is primarily for pre-Elementary Education majors; however, it is not meant to provide a review of arithmetic operations or methods of teaching. Recommended preparation: One year of high school algebra or Math 25 (or equivalent).

115 Statistics **3 Units**
Methods of making decisions or predictions in the face of uncertainty; rules of probability as measures of uncertainty; gathering data by measurement or counting; analyses of data; drawing inferences and making generalizations from samples; and testing hypotheses. This course is of value to students of psychology, biology, computer science, business, economics, management, sociology, and others. Recommended preparation: One year of high school algebra or C or better in Math 25 (or equivalent).

132 Pre-Calculus Mathematics I (College Algebra) **3 Units**
A functional approach to algebra which includes polynomial, exponential, and logarithmic functions; solutions of higher degree equations; systems of equations; determinants; progressions and sequences; binomial theorem; partial fractions. This course is recommended for students majoring in mathematics, sciences, or engineering. Recommended preparation: One of the following: a. two years of high school algebra and one year of plane geometry; b. three years of UICSM or SMSG high school mathematics; and C or better in Math 27 (or equivalent). (Formerly Math 118).

133 Pre-Calculus Mathematics II (Trigonometry) **2 Units**
A functional approach to trigonometry, including trigonometric functions, angles, triangles, inverse trigonometric functions, and trigonometric equations. Recommended preparation: Math 132 (or equivalent). (Formerly Math 119).

134 Pre-Calculus Mathematics III (Analytic Geometry) **3 Units**
A study of functions and their graphs, equations and their loci, lines, conic sections, parametric equations, polar coordinates, translations and rotations in the plane. This course is necessary for students intending to continue to the study of the calculus. Recommended preparation: Advanced UICSM or SMSG high school math or Math 132 and Math 133 (or equivalent). (Formerly Math 121).

173 Introduction to Linear Algebra **3 Units**
Operations on matrices, determinants, solvability and solution methods of systems of linear equations, vectors and linear transformations in two and three-dimensional Euclidean space. Recommended preparation: C or better in Math 132 and 133 and C or better in Math 134 or concurrently with Math 134, or equivalent. (Formerly Math 211).

205 Calculus I **3 Units**
Basic concepts; differentiation with applications; log and exponential functions. Recommended preparation: C in Math 134 or in equivalent courses covering trigonometry and analytic geometry. (Requirement for A.A. Degree in Computer Science, Option A.)

206 Calculus II **3 Units**
Integrals of trigonometric, exponential, and logarithmic functions; techniques of integration; Taylor approximations. Recommended preparation: C in Math 205 or equivalent. (Requirement for A.A. Degree in Computer Science, Option A.)

231 Calculus III **3 Units**
Vector-oriented study of functions of several variables; partial differentiation and line integrals; multiple integrals. Recommended preparation: C in Math 206 or equivalent.

MICROBIOLOGY

MICRO

130 General Microbiology **3 Units**
Fundamentals of microbiology. The role of microorganisms and how they affect man and the environment. Topics will include: a survey of general microbiology including its biochemistry, genetics, physiology; medical and public health aspects, bacterial and viral diseases, epidemiology; ecology with emphasis on the microbiology of soils and water; environment and pollution; food and industrial microbiology. Requirement for preprofessional programs of nursing and dental hygiene at U.H. Manoa Campus.

132 Microbiology Laboratory **2 Units**
Fundamentals of microbiology with emphasis on health aspects and microbial laboratory skills. The content of this course is intended primarily for students intending to transfer to pre-professional programs at the Manoa Campus including nursing, dental hygiene, etc. Recommended preparation: Credit or registration in MICRO 130 and CHEM 113-114. Preference will be given to health science majors.

OCEANOGRAPHY

OCEAN

201 Science of the Sea **3 Units**
An overview of the science of oceanography. Physical and chemical properties of sea water. Life in the ocean. Waves, tides, and currents. Exploration of the sea floor. Occasional field trips. (Requirement for A.S. Degree in Marine Technology.)

210 Oceanographic Instrumentation I **4 Units**
An intensive study of the instruments and techniques used in the study of the oceans. Requirement for A.S. Degree in Marine Technology. Recommended preparation: OCEAN 201 and MATH 132 or its equivalent.

211 Oceanographic Instrumentation II **4 Units**
A continuation of OCEAN 210 with emphasis on geophysical instruments and techniques including operation, construction, and maintenance of instruments aboard ship. Requirement for A.S. Degree in Marine Technology. Recommended Preparation: OCEAN 210 and ET 27.

215V Marine Ecology Field Work **2-6 Units**
Ecological data collection of offshore waters; environmental impact statement studies. SCUBA certificate required. Marine biology background recommended. Elective for A.S. Degree in Marine Technology. Work is performed from a ship at sea. The number of credits is determined by the length of the cruise. The cruise is normally scheduled for summer usually after the Spring Semester and before the start of the Summer Session.

PHILOSOPHY

PHIL

210 Formal Logic **3 Units**
An examination of the principles involved in clear thinking using both traditional and symbolic techniques. The logical structure of language will be studied in order to develop analytic problem-solving skills in the student. Definitions, truth and validity, fallacious modes of argument, and the criteria of adequate evidence in science and ordinary life will be emphasized. Fulfills mathematics requirement. Requirement for A.A. and A.S. Degree in Computer Science. (Fulfills core requirement at Manoa for quantitative reasoning.)

PHYSICS & ASTRONOMY

PHYS ASTR

100 Survey of Physics I **4 Units**
An introduction to the science of physics with emphasis on heat and mechanics. Physical principles and their historical background. The student will use the scientific method to discover principles for himself. Recommended preparation: High school algebra or Mathematics 27 (or equivalent).

101 Survey of Physics II **4 Units**
A continuation of Physics 100 with emphasis on electricity and magnetism, wave motion, relativity and quantum theory, atomic theory. Recommended preparation: Physics 100, Mathematics 27 (or equivalent). (May be used to fulfill the requirement of the Certificate of Achievement and A.S. Degree for Marine Technology.

110 Survey of Astronomy I **3 Units**
A descriptive treatment of planets, the solar system, stars and galaxies as well as concepts of size, distance and time in the observable universe. Several evenings will be made available for viewing stars and constellations and a telescope will be available for viewing some of the planets.

111 Survey of Astronomy II **3 Units**
Various topics will be covered in more detail than in Physics 110. These may include stellar evolution, extraterrestrial life, stellar structure, or other topics the class would like to investigate. Physics 110 is not a prerequisite for this course.

151 College Physics I **3 Units**
The first course in a two-semester sequence in introductory physics intended for non-science majors. Emphasis is split between concepts and mathematical applications. Algebra, trigonometry and geometry are used; calculus is not. It includes mechanics, kinetic theory, and thermodynamics. Offered Fall Semester only. Registration in the parallel laboratory course, Physics 151L, is recommended. Recommended preparation: Credit in Math 132 and 133, credit or registration in Math 134.

151L College Physics Laboratory I **1 Unit**
An experimental analysis (laboratory) course paralleling Physics 151 in content and mathematical level, intended for nonscience majors. Offered Fall Semester only. Recommended preparation: credit or registration in Physics 151.

152 College Physics II **3 Units**
The second course in a two-semester sequence in introductory physics intended for non-science majors. Emphasis is split between concepts and mathematical applications. Algebra, trigonometry and geometry are used; calculus is not. It includes electricity and magnetism, wave motion, optics, and atomic and nuclear physics. Offered Spring Semester only. Registration in the parallel laboratory course, Physics 152L, is recommended. Recommended preparation: Credit in Physics 151 or 170 and Math 134.

152L College Physics Laboratory II **1 Unit**
An experimental analysis (laboratory course paralleling Physics 152 in content and mathematical level, intended for nonscience majors. Offered Spring Semester only. Recommended preparation: credit or registration in Physics 152.

170 General Physics I **4 Units**
An introductory course in elementary physics emphasizing the mathematical techniques used in the explanation of physical phenomena. It is designed to give students majoring in any of the professional scientific fields a thorough foundation in the fundamentals of physics. It includes classical mechanics, kinetic theory, and thermodynamics. Calculus is used in its mathematical presentation. Requires student to have trig-type slide rule or pocket calculator. Offered Fall Semester only. Recommended preparation: credit or registration in Math 206.

171 Experimental Analysis in Mechanics and Thermodynamics **1 Unit**
A laboratory course designed to accompany Physics 170. NOT GIVEN ON THIS CAMPUS. Students intending to major in physics or engineering may register for this concurrently at the Manoa Campus, or take it in the following semester. Prerequisites: credit or registration in Physics 170.

272 General Physics II **3 Units**
The second semester of an introductory sequence in elementary physics emphasizing the mathematical techniques used in the exploration of physical phenomena. It is designed to give professional scientific majors a thorough foundation in the fundamentals of electricity and magnetism, wave motion, and geometrical optics. Calculus is freely used in its mathematical presentation. Recommended preparation: Physics 170 and Math 206. Math 231 is suggested. Offered Spring Semester only.

273 Experimental Analysis in Electricity, Magnetism and Optics **1 Unit**
A laboratory course designed to accompany PHYS 272. NOT GIVEN ON THIS CAMPUS. Students intending to major in physics or engineering may register for this concurrently at the Manoa Campus or take it in the following semester. Prerequisite: credit or registration in PHYS 272.

SCIENCE

SCI

Note: Science 107, 108 and 109 are taught in sequence through the semester. All these fulfill the Natural Science general education requirements at the Manoa Campus. Each lasts approximately six weeks. A student may register for one, two or all three courses in a given semester. Please see course schedule during registration period for exact dates.

107 Contemporary Life Science I **1 Unit**
Physical and chemical principles underlying life processes. Atoms and elements. Chemical bonds. The direction of chemical change. Ionic substances. Organic compounds. Carbohydrates, lipids, and proteins.

108 Contemporary Life Science II **1 Unit**
Classical and molecular genetics. The structure and location of the genetic code. Transmission of genetic material. Variation of individuals.

109 Contemporary Life Science III **1 Unit**
Topics in biology. Enzymes. Digestion. Metabolic pathways. Photosynthesis. Evolution.

116 Physical Science for the Craftsman **3 Units**
This course deals with the principles of chemistry and physics which can be applied to the automotive trades. Topics such as principles of physics applied to hydraulic brake systems and diesel engines will be covered. (May be used to fulfill the requirement of the Certificate of Achievement and A.S. Degree for Marine Technology.)

121 Introduction to Science—Biological **4 Units**
An introduction to the philosophy and history of science from the viewpoint and perspective of the biologist. The conceptual framework of science. Science as a human activity. The interrelationships of science and society. Introduction to and background for the study of ecology. Laboratory attendance is required. Offered Fall Semester only.

122 Introduction to Science—Physical **4 Units**
The conceptual framework of science from the viewpoint of the physical scientist. Topics in astronomy, physics, chemistry, and environmental science illustrating selected scientific principles. Laboratory attendance is required. Offered Spring Semester only. Recommended preparation: Mathematics 25 or one year of high school algebra. It is recommended that Sci 121 be taken before 122.

124 Technology, Ecology and Man **4 Units**
Working from a general background in biology, the course examines the many interrelationships among organisms and their environments with emphasis on the impact which man has had (and may yet have) on the total planet. Problems of pollution, overpopulation, depletion of resources, etc., are considered. Causes of ecological problems and alternatives to current human actions are suggested and evaluated, stressing the individual ecological action of the student. Course includes laboratory and field trip experience. (Equivalent to Science 124 at Manoa.)

ZOOLOGY

ZOOL

101 Principles of Zoology **4 Units**
Zoology 101 is a course designed for students interested in an introductory zoology course. No prior knowledge of chemistry, math or physics is required. General principles of biology which explain the mechanisms of maintenance, control, reproduction, genetic continuity, and evolution of animals are emphasized. Plants as primary producers and sources of chemical energy are discussed. The laboratory allows the opportunity to observe and examine the principals and mechanisms using living organisms wherever possible. Experiments involving collection and analysis of data to illustrate processes are employed whenever appropriate. Laboratory attendance is required.

SOCIAL SCIENCES DIVISION

AMERICAN STUDIES

AMST

201 Introduction to American Civilization I **3 Units**

By the examination of certain American cultural characteristics which have been developed through tradition and lifestyle, as well as by conceptual scheme, we hope to create a greater understanding about why Americans act and respond as they do. In this first semester of a one-year course, we shall examine some aspects of our early American culture and trace them into our modern society. We will analyze the philosophical importance of those concepts as they relate to early America with the intent of judging their philosophical impractical import today. We will compare such cultural concepts as they exist on the mainland with ideals in Hawaii. It satisfies a core requirement in American Studies and also in the Humanities. Offered Fall Semester only.

202 Introduction to American Civilization II **3 Units**

By the examination of certain American cultural characteristics which have been developed through tradition and lifestyle, as well as by conceptual scheme, we hope to create a greater understanding about why Americans act and respond as they do. In this second part of a one-year course, we will attempt to analyze much of our modern culture with the intent of tracing its roots. We will analyze today's philosophy, its beginnings, and attempt to predict its future. We will compare such cultural concepts as they exist on the mainland with ideals in Hawaii. It satisfies a core requirement in American Studies and also in the Humanities. Offered Spring Semester only.

211 Introduction to Contemporary American Issues I **3 Units**

By the examination of specific contemporary American issues, the course will attempt to establish continuity of problems, protests, and the general social concern for each, with some time spent on Hawaii. It will scan selected social problems of the last 15 years of American history as well as traditional problems with an attempt to get at the causes of problems as well as consideration of the prevailing mood that allowed general concern for them to develop. Consciousness of the problem and the ways in which the problems have been dealt with as well as future possibilities for minimizing them will be covered. It satisfies a core requirement in American Studies and also in Social Science. Offered Fall Semester only.

212 Introduction to Contemporary American Issues II **3 Units**

By the examination of specific contemporary American issues, the course will attempt through a multidisciplinary approach to deal with important contemporary issues. It will scan selected American issues of modern problem vintage as well as traditional issues with an attempt to provide further understanding. Consciousness of the problem and the ways in which the problem have been dealt with as well as future possibilities for minimizing them will be covered. It satisfies a core requirement in American Studies and also in Social Science. Offered Spring Semester only.

295 Culture of the American Indian **3 Units**

Survey of the prehistory and cultures of the North American Indian from an anthropological and historical perspective. Topics covered include: origin of the American Indians; physical and linguistic diversities; cultures of selected tribes, U.S. government dealings with the Indians, and present problems of the American Indians. (Spring Semester only.)

ANTHROPOLOGY

ANTH

150 Introduction to Anthropology **3 Units**

A survey course of physican and cultural anthropology. Major topics include human evolution, prehistoric development of culture, recent and contemporary man, common features and principal variations in cultural behavior.

200 Cultural Anthropology **3 Units**

A survey course of cultural anthropology designed to provide the student with an understanding of the concept of culture, the principles of field methodology, cultural diversity, some of the factors underlying this diversity, and the universal aspects of culture. Aims at assisting the student to view objectively his own as well as other cultures. Additional topics include: history and theory of cultural anthropology, culture and personality, processes of cultural change, applied anthropology.

215 Physical Anthropology **3 Units**

An introduction to the methodology and principles of physical anthropology. Topics covered include heredity, evolution, human variation, primatology, fossil man, modern man, eugenics.

ECONOMICS

ECON

20 Consumer Education **3 Units**

Intended for those who need immediate, direct, practical assistance with their budgets and purchasing practices. Student concerns will, to a large extent, determine the direction and content of the course. (Offered off campus)

101 Consumer Economics **3 Units**

The purpose of this course is to implement the theory that rational decisions to buy on the part of the consumer will influence the production of goods and services in a market economy. To assist in implementing this theory, students will learn basic skills and information needed to make rational consumer decisions, e.g., money management, consumer credit, food purchasing and nutrition, savings programs, home purchasing, consumer protection. Students will also learn how to maximize their scarce and limited resources, i.e., money, time, and energy. (Satisfies general education requirements for non-economic majors at U. of H., Manoa.) May be used to fulfill requirement for A.S. Degree in Accounting and Secretarial Science

120 Introduction to Economics **3 Units**

A one-semester introduction to economics which combines the macro and micro perspectives and concentrates on application of basic economic principles to analysis of public policy questions. May be used to fulfill requirement for A.S. Degree in Accounting and Secretarial Science.

150 Principles of Economics I **3 Units**

Stresses macroeconomics with emphasis on modern theory of income determination which indicates how and why incomes, production, employment, and price levels fluctuate; the structure of the banking system and its role in the economy, and public policy questions arising from changes in these aggregates. Requirement for A.S. Degree in Accounting and Computer Science Option B.

151 Principles of Economics II **3 Units**

Stresses microeconomics, i.e., analysis of the price system through which a country allocates its resources among alternative uses and distributes the national income among its people. Requirement for A.S. degree in accounting and computer science Option B.

GEOGRAPHY

GEOG

120-125 World Regional Geography **1-6 Units**

Introduction to the study of geographic regions. Each region will be examined in terms of its underlying physical, cultural, economic and political backgrounds. It is recommended that Geography 120 be taken first. (Previously Geography 102) Each mini-course listed below runs for 5 weeks or 1/3 of a semester; at least three mini-courses are offered each semester. Geography 120 plus any two mini-courses 121-125 will be equivalent to Geography 102 at Manoa. (Applies to Social Science requirement at Manoa.)

120	**Introductory Concepts (5 weeks)**	**1 Unit**
121	**Geography of Europe and the USSR (5 weeks)**	**1 Unit**
122	**Geography of Asia (5 weeks)**	**1 Unit**
123	**Geography of Oceania (5 weeks)**	**1 Unit**
124	**Geography of the Middle East and Africa (5 weeks)**	**1 Unit**
125	**Geography of the Americas (5 weeks)**	**1 Unit**

151 Economic Geography **3 Units**

Man's use of the earth; systematic study of world patterns of population, natural resources, economic activities; agriculture, mining and manufacturing, services and consumption. Elements of location theory, resource management and regional economic development and planning. (Applies to social science requirement at Manoa.)

HUMAN DEVELOPMENT

HD

231 Introduction to Human Development I **3 Units**

Principles of development from conception to puberty. Focus on the interrelation of physical, cognitive, and social-emotional aspects of the individual during this period. Cross listed as PSY 280.

232 Introduction to Human Development II **3 Units**

Principles of development from puberty to death. Focus on interrelation of physical, cognitive, social-emotional aspects of the individual during this period.

INTER-DISCIPLINARY SOCIAL SCIENCE

ISS

100 Self Development **3 Units**

Exploration and communication of student goals, and feelings about themselves and others which is designed to assist students in beginning to develop an understanding of themselves through the group process. The course provides an opportunity for the individual to begin to recognize, accept, develop, and use his various potentials as he encounters himself in a group at this point in his life as a student. (Previously PSY 190). May be repeated up to 6 credits.

101 Group Processes **3 Units**

A study of applied group dynamics directed toward an understanding of group behavior that are applicable to groups in various situations. The student will review group work principles, practices, and methodologies as they apply to group-type programs and activities in the community. The student will study the interaction of individuals through the group process, the types of group leaders and workers, the techniques of group discussion as a social process for the development of ideas, values and directions. Elective for Certificate of Achievement and A.S. Degree in Creative Arts emphasis subprogram and requirement for A.S. Degree in Games and Sports subprogram and Certificate of Achievement and A.S. Degree in Outdoor Recreation subprogram of the Recreation Instructor Program. For RIP majors, no recommended preparation. For Community Services majors, recommended preparation: ISS 100.

Equivalent to HD 345 at Manoa when taken in combination with ISS 102.

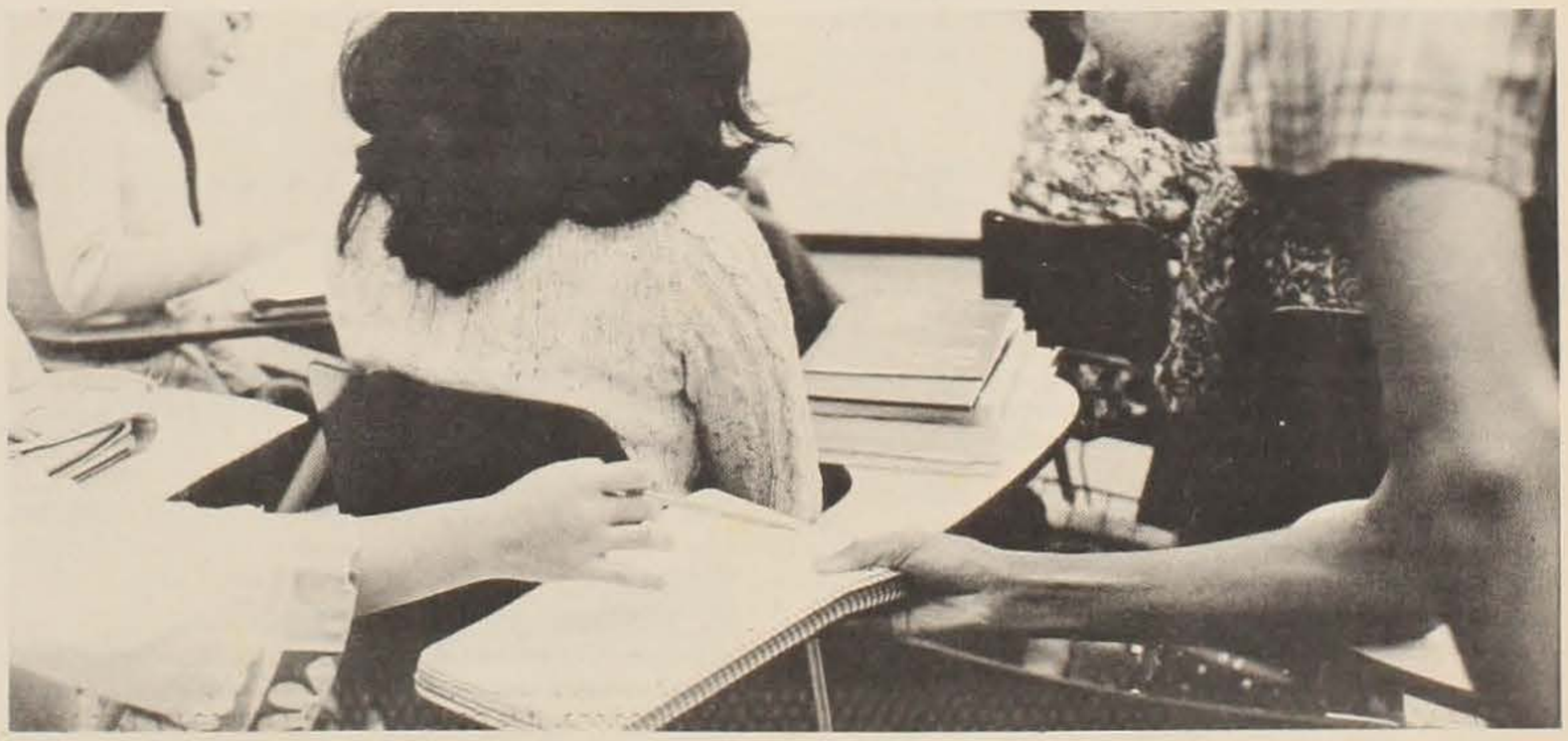
102 Group Leadership **3 Units**

A study of leadership and administrative principles and practices in which a student gains a knowledge of human dynamics, leadership abilities, and the identification of the different types of leadership especially as they apply to our democratic society. Leadership applications deal with the student obtaining a practical knowledge of group situations and the principles necessary for effective leadership. Laboratory experiences are afforded the student through observations and visitations.

Equivalent to HD 345 at Manoa when taken in combination with ISS 101. Required preparation: ISS 100.

103 B/C/D Survey of Community Activities **1-3 Units**

Speakers, film, game simulations and field trips to observe agencies or projects providing active community services on Oahu. "B" indicates that the student will put in at least 15-19 contact hours during the semester and receive 1 credit; "C" indicates 30-44 hours for 2 credits; "D" indicates 45 hours and above for 3 credits. Students register for a definite number of units at the beginning of the semester and a change requires the consent of the instructor.



120 Introduction to Law **3 Units**
A course designed to acquaint the student with the basic legal reasoning that lies behind both statute and common law. The course will stress areas that are not covered in traditional business law courses. In particular, the student will become aware of the legal issues involved in such areas as trespass, negligence, liability, slander and libel, labor law, family law, criminal law and procedure, wills and estates, constitutional laws, the philosophy of law and other legal areas of everyday concern.

121 Human Sexuality **3 Units**
A survey of various aspects of human sexuality, academic and personal. Resource persons, films and reading will be used to examine human sexual functions, behavior and attitudes with emphasis on contemporary research and thought in the fields of anthropology, economics, philosophy, physiology, sociology, philosophy, ethics and religion.

189 Special Topics **1-4 Units**
A community agency or group wishing to put on a course to train staff or community residents in skills of knowledge which will improve their service or community will present a course outline to the Community Studies Committee. The outline shall indicate course objectives, instructors to be used and how they shall be paid and the time, length, and place of instruction.

A member of the Community Studies Committee may assist them with the preparation of this course outline if requested.

193 B/C/D/E/F Community Practicum/ Cooperative Education **1-6 Units**
Provides practical work experiences in specific areas to investigate various types of community service jobs in the expectation that may point the way to a career. Conditions are in actual employment situations in the private and public community service agencies. Intended for students who have never worked in community agencies before. "B" indicates that the student will put in 25 hours of supervised work and receives 1 credit; "C" indicates 50 hours of work and receives 2 credits; "D" indicates 75 hours of work and receives 3 credits; "E" indicates 100 hours of work and receives 4 credits; "F" indicates full-time employment and receives 6 credits.

202 Pilipino Studies **3 Units**
Application of the social sciences and historical perspective to an in-depth analysis of the social behavior of the Pilipino people. Examination of the relevant and important aspects of the political, economic, social and cultural life of Pilipinos as they relate to the Pilipino in Hawaii. Special emphasis on an awareness and understanding of Pilipino ethnic identity and contemporary Pilipino problems.

204 Samoan Studies **3 Units**
An examination of traditional Samoan customs, social organization, ethno-history and migration patterns to draw out basic cultural concepts which may affect the adjustment of Samoans to life in modern Hawaii.

210 Physical Problems of Local Communities **3 Units**
The student is encouraged to define community and examine his own local geographic community, asking such questions as what services communities perform, how they develop, how they are related to each other, what problems they have, and how they can improve themselves. (Fulfills social science requirement in College of Arts & Humanities at Manoa.)

211 Social Problems of Local Communities **3 Units**
The student is encouraged to develop a concept of human needs and examine how social institutions on Oahu provide for such needs. After looking at various local sub-communities (ethnic, age, sex, occupation), he will identify some of their social problems and select one of these for special study. He will write a concrete fundable proposal for some type of social action in his problem area. The course is given in the form of a series of group and individual projects. Fulfills social science requirement in College of Arts and Humanities and counts towards related area requirement in Human Development.

221 Hawaiian Studies: Culture and Society of the Hawaiian People **3 Units**
Application of the perspectives of the social sciences, the process of scientific observation and analysis, to the Hawaiian Ethnic Community. Study of the social behavior of the Hawaiian people in a historical perspective through an examination of basic social relationships, the socialization process, religion, and other aspects of culture. Special emphasis on an awareness and understanding of Hawaiian ethnic identity and contemporary Hawaiian problems. Fall semester only. (Equivalent to Ethnic Studies 221 at Manoa).

289 Special Topics **1-4 Units**
A community agency or group wishing to put on a course to train staff or community residents in skills or knowledge which will improve their service or community will present a course outline to the Community Studies Committee. The outline shall indicate course objectives, instructors to be used and how they shall be paid and the time, length, and place of instruction.

A member of the Community Studies Committee may assist them with the preparation of this course outline if requested.

293 C/D/E/F Community Practicum/ Cooperative Education **2-6 Units**
Students with previous experience work under supervision in a community action or service agency of their own choice. They keep a log of their activities and meet periodically to discuss experiences. This course may be repeated up to a maximum of 12 credits by selecting different agencies or working at increasing levels of responsibility. Students register for a definite number of units at the beginning of the semester and a change requires the consent of the instructor. "C" indicates that volunteer student will put in 50 hours of contact work during the semester and receive 2 credits; "D" indicates 75 hours of work and receives 3 credits; "E" indicates 100 hours of work and receives 4 credits. More contact hours are expected from paid interns and full employment can give up to "F" (6 credits) on an alternate semester plan.

Practicum credits are equivalent to IS 291 (Special Programs) at Manoa and can also be used to meet the related course requirements in Human Development.

POLITICAL SCIENCE

POLSC

110 Introduction to Political Science **3 Units**
An introduction to the study of the theory, structure, functions, and techniques of modern government, with special attention given to contemporary problems and controversies. Course designed to provide knowledge of government and to encourage creative and critical thinking about political concepts, institutions, practices.

110D Introduction to International Relations and Organization **3 Units**
A study of the mechanics of international organization through a systematic exposure and analysis of the relations among nations, history and origin of the state systems and causes behind state policies.

215 Modern China **3 Units**
The course offers a brief survey of traditional China's political heritage and explores with some depth China's development into both a modern communist nation and a great world power.

PSYCHOLOGY

PSY

100 Survey of Psychology **3 Units**
The basic principles of human behavior, motivation, learning, perception, emotion, etc., as they relate to the individual.

110 Psychology of Personal Adjustment **3 Units**
A study in the patterns of adjustment from the standpoint of the individual: needs, frustrations, conflicts, anxiety, etc. Stress on the aspects of good mental health. May be used to fulfill requirement for A.S. Degree in Management.

112 Introduction to Experimental Method **3 Units**
Introduction to the experimental method in psychology. Basic experiments in animal and human learning with emphasis upon laboratory techniques, data compilation and communication.

280 Developmental Psychology **3 Units**
Study of the physical, mental, social, and personality development of the child, with emphasis on the factors affecting such development: heredity and the effects of such environmental factors as the family, school, peers, and culture. (Equivalent to UH Manoa Campus Psychology 320. Crosslisted as HD 231.) Recommended preparation: Psychology 100 or some introduction to psychology.

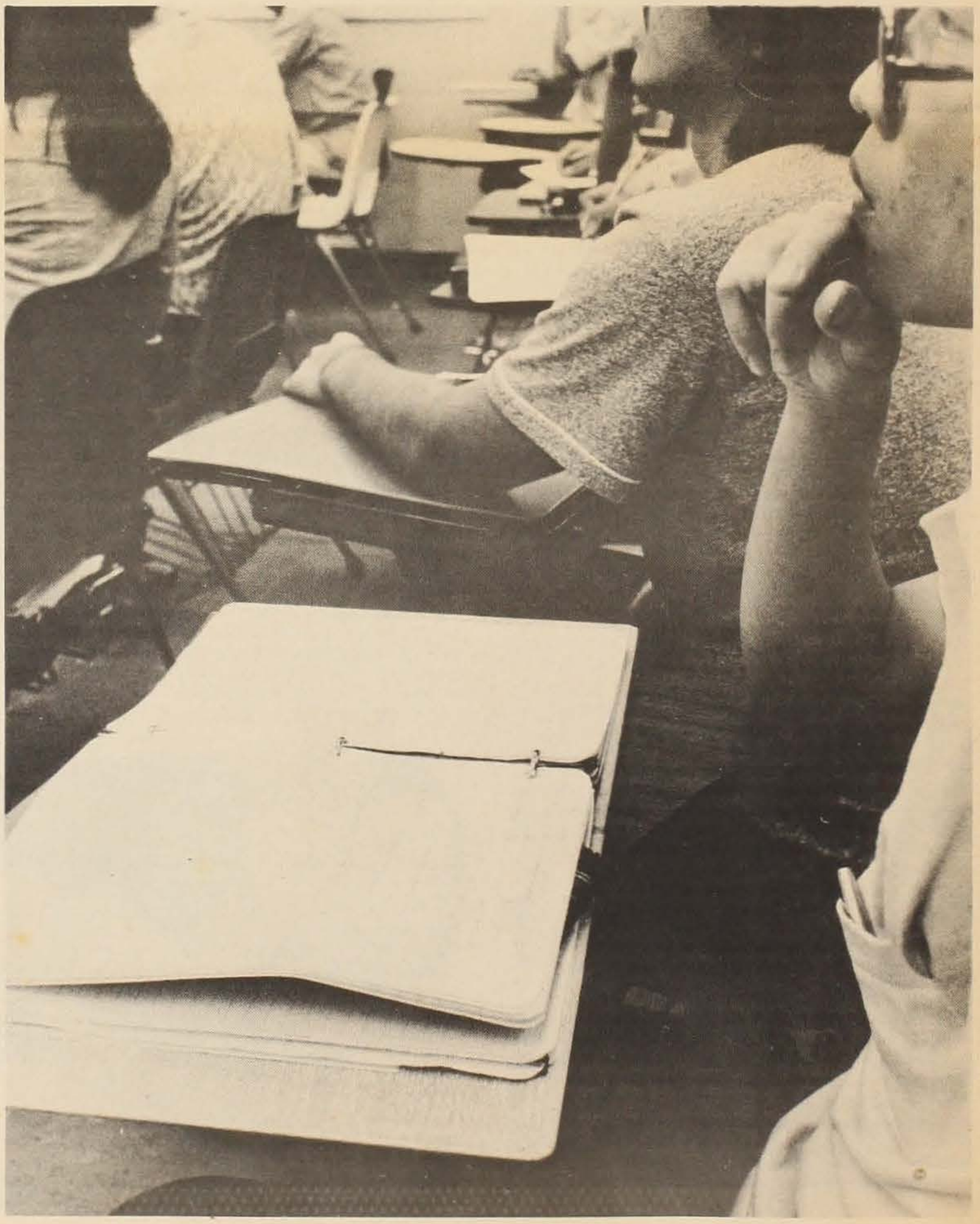
SOCIOLOGY

SOC

100 Survey of General Sociology **3 Units**
Introduction to basic sociological concepts, theories, and findings with emphasis on the sociological perspective to gain insight into basic social relationships, social structures and processes. (Previously Sociology 151.)

200 Introduction to the Principles of Sociology **4 Units**
Introduction to basic theory, methods, and analytical techniques used in sociology. A wide range of subject areas within sociology are covered to illustrate the principles of analysis. Emphasis is on learning by doing and providing basic skills in doing sociology. (Required of all sociology majors in the Manoa program and is a prerequisite for all 400 level sociology courses.) Recommended Preparation: Sociology 100.

210 Contemporary Social Problems **3 Units**
Application of a social problem's perspective to current problems afflicting modern industrial societies. Emphasis on understanding social problems in relationship to social processes and social structures. Different research data and theoretical approaches are examined.



TECHNICAL VOCATIONAL EDUCATION DIVISION

AUTOMOTIVE TECHNOLOGY

AMT
(Modular courses)

11 Introduction **1 Unit**
The student will be introduced to the tools and special equipment of the automotive industry. The use of flat rate manuals, parts manuals and maintenance manuals will be covered. Requirement for Certificate of Completion or Achievement and A.S. in Automotive Technology.

12 Automotive Tune-Up **7 Units**
The course is designed to give the student basic electrical and carburation theory. The practical skill of automotive tune-up will be stressed. Recommended preparation: AMT 11 or equivalent. Requirement for Certificate of Achievement and A.S. Degree for Automotive Technology and may be used to fulfill the requirements of the Certificate of Completion for Automotive Technology.

13 Automotive Electrical Equipment **4 Units**
Terminology, fundamentals and principles of electrical circuits as applied to the electrical systems of gasoline-powered units used in the automotive technologies. The laboratory work will cover electric circuits, principle of operation, adjustment, service and testing procedures normally associated with electrical components. Recommended preparation: AMT 11 or equivalent. Requirement for Certificate of Achievement and A.S. Degree and may be used to fulfill the requirements of the Certificate of Completion for Automotive Technology.

15 Lubrication **1 Unit**
This course covers the various types of oils and greases and their specific uses. Recommended preparation: AMT 11 or equivalent. Requirement for Certificate of Achievement and A.S. Degree and may be used to fulfill the requirements of the Certificate of Completion in Automotive Technology.

21 Brake Systems **4 Units**
The theory, operation and repairs of various types of brake systems. Recommended preparation: AMT 11 or equivalent. Requirement for Certificate of Achievement and A.S. Degree and may be used to fulfill the requirements of the Certificate of Completion in Automotive Technology.

22 Suspension and Steering **4 Units**
The course is to develop skill in the automotive suspension and steering systems. Complete front-end alignment will be covered. Recommended preparation: AMT 11 or equivalent. Requirement for Certificate of Achievement and A.S. Degree and may be used to fulfill the requirements of the Certificate of Completion in Automotive Technology.

23 Wheel Balancing **1 Unit**
The student is introduced to the aspects and application of wheel balancing. Recommended preparation: AMT 11 or equivalent. Requirement for Certificate of Achievement and A.S. Degree and may be used to fulfill the requirements of the Certificate of Completion in Automotive Technology.

31 Standard Transmissions and Clutches **5 Units**
The disassembly, inspection, and assembly of the standard transmission will be covered. Clutch repairs and adjustment will also be taken into consideration. Recommended preparation: AMT 11 or equivalent. Requirement for Certificate of Achievement and A.S. Degree and may be used to fulfill the requirements of the Certificate of Completion in Automotive Technology.

33 Differential Rear Axle **4 Units**
The skills of troubleshooting, parts replacement and maintenance of final drive units. Recommended preparation: AMT 11 or equivalent. Requirement for Certificate of Achievement and A.S. Degree and may be used to fulfill the requirements of the Certificate of Completion in Automotive Technology.

34 Automatic Transmission **6 Units**
This course is designed to familiarize the student with the maintenance and repair procedure of the automatic transmission. Recommended preparation: AMT 11 or equivalent. Requirement for Certificate of Achievement and A.S. Degree and may be used to fulfill the requirement of the Certificate of Completion in Automotive Technology.

41 Engines **6 Units**
The maintenance and repair of the modern internal combustion engine. Emphasis is on precision measurement and the inspection of parts. Recommended preparation: AMT 11 or equivalent. Requirement for Certificate of Achievement and A.S. Degree and may be used to fulfill the requirements of the Certificate of Completion in Automotive Technology.

45 Introduction to Small Engines **2 Units**
Introduction to the field of small engine repair including an overview of job opportunities and skills required for small engine repairman, safety procedures, tool use and identification, and small engine construction will be covered.

46 Two-Stroke Cycle Engine **4 Units**
Theory and operation of two-stroke cycle engines and practical experience in all aspects of their repair. Operating principles, carburetor and fuel systems, lubrication, ignition system, cooling system, mechanical construction, reconstruction and trouble shooting will be covered.

Recommended preparation: AMT 45

48 Four-Stroke Cycle Engine **4 Units**
Theory and operation of four-stroke cycle engines and practical experience in all aspects of their repair. Operating principles, carburetor and fuel systems, lubrication, ignition system, cooling system, mechanical construction, reconstruction and trouble shooting will be covered.

Recommended preparation: AMT 45 and 46.

51 Air Conditioning **4 Units**
The construction, operation, maintenance and testing of air conditioning equipment for automobiles will be covered. Recommended preparation: AMT 11 or equivalent. Requirement for Certificate of Achievement and A.S. Degree and may be used to fulfill the requirements of the Certificate of Completion in Automotive Technology.

58V Cooperative Education **1, 2, 3 or 4 Units**
Provides practical work experiences in specific occupational areas to apply classroom knowledge and to develop job competency. Conditions are in actual employment situations in the private and public sectors of the business-industrial community. Student spends approximately half a day on the job daily. Normally taken after completion of two full semesters in the occupational major. Students register for a definite number of credits, as approved by the instructor at the time of registration, and may earn no more or less than the stated number without approval of the instructor. May be repeated for a total of 8 units. Highly recommended elective for the Certificate of Achievement and A.S. Degree in Automotive Technology.

59 Cooperative Education **8 Units**
Provides practical work experiences in specific occupational areas to apply classroom knowledge and to develop job competency. Conditions are in actual employment situations in the private and public sectors of the business-industrial community. Students spend a full semester in actual employment followed by a full semester of formal classroom work. Normally taken after completion of two full semesters in the occupational major. Highly recommended elective for the Certificate of Achievement and A.S. Degree in Automotive Technology.

CREATIVE ARTS

CA

131 Two-Dimensional Art **3 Units**
A basic course in the two-dimensional realm to provide an individual with experiences in drawing, painting, printing, collage and mosaic work to prepare students with techniques in teaching these processes. Some supplies (materials) for projects are to be provided by students. Requirement for Certificate of Achievement and A.S. Degree in Creative Arts Emphasis subprogram of the Recreation Instructor Program.

132 Three-Dimensional Art **3 Units**
A basic course in the three-dimensional sphere to provide experiences with wood, paper, papier mache, plaster, metal and theatre arts and to prepare students with techniques in teaching processes. Some supplies (materials) for projects are to be provided by students. Requirement for Certificate of Achievement and A.S. Degree in Creative Arts Emphasis subprogram of the Recreation Instructor Program.

141 Creative Drama **3 Units**
Examination and practice of informal drama activities and guidance methods through active participation and observation in drama exercises, story dramatizations, and created plays. Requirement for Certificate of Achievement and A.S. Degree in Creative Arts Emphasis and A.S. Degree in Outdoor Recreation subprograms of the Recreation Instructor program. (May be repeated for additional credit.)

142 Puppetry **3 Units**
The scope of puppetry: a brief history, objectives and values in recreation, construction of simple puppets, manipulation skills, presentation methods. Students will select and provide their own puppet construction materials. (Formerly Recreational Drama 142) Requirement for Certificate of Achievement and A.S. Degree in Creative Arts Emphasis subprogram of the Recreation Instructor Program. (May be repeated for additional credit.)

143 Storytelling **3 Units**
A study of storytelling: survey of resources, analysis of materials, selection, techniques of preparation and practice in presentation. Recommended preparation: SPCOM 145 or 151. (Formerly Recreational Drama 143.) Requirement for A.S. Degree in Creative Arts Emphasis subprogram of the Recreation Instructor Program.

235 Advanced Visual Art **3 Units**
An advanced course in the recreational arts to provide individual in-depth experience in any of the two- or three-dimensional activities covered in the basic courses. Supplies (materials) for all projects are to be provided by students. Recommended preparation: CA 131 and CA 132; may be taken concurrently with consent of instructor. Requirement for A.S. Degree in Creative Arts Emphasis subprogram of the Recreation Instructor Program. (May be repeated for additional credit.)

245 Recreational Drama **3 Units**
A study of planning and preparing dramatic presentations for recreation and practice in coordinating, implementing, and evaluating the activities. Recommended preparation: CA 141 and 142 or equivalent. Requirement for A.S. Degree in Creative Arts Emphasis subprogram of the Recreation Instructor Program. May be repeated for additional credit.

246 Basic Stagecraft **3 Units**
An introduction to stagecraft and the technical theatre—basic theory and fundamentals of lighting, set construction, sound, costuming, makeup, and stage management. Class time will be divided between lectures and laboratory work in the theatre. (Equivalent to UH Manoa Drama 240)

DRAFTING TECHNOLOGY

DT
(Modular courses)

1 Introduction to Drafting **3 Units**
A comprehensive study of basic drafting techniques, materials, tools, and processes, including projections, sectioning, pictorial drawings, perspective, lettering, dimensioning, and research procedures. Offered to students without prior experience in mechanical drawing.

5 Blueprint Reading **3 Units**
A basic course designed for students in the construction trades. Principles of graphic presentation used in architectural drafting; interpretation of working drawings and general mathematics will be stressed. Recommended preparation: Mechanical drawing desirable but not necessary.

11 Basic Skills, Lettering, Terminology **3 Units**
A comprehensive study of basic techniques in architectural drafting, including lettering, free-hand sketching, symbols and conventions, and tracing practices. Recommended preparation: DT 1 or high school mechanical drawing. Requirement for Certificate of Completion or Achievement and A.S. Degree in Drafting Technology.

12 Residential Planning **3 Units**
An investigative study of regional differences, orientation, and different uses of structures as they apply to planning. Plot and landscaping plans are also included. (Normally follows DT 11.) Requirement for Certificate of Completion or Achievement and A.S. Degree in Drafting Technology.

22 Floor Plans **3 Units**
A working drawing is any drawing used to give information for purposes of manufacture, construction or erection of a structure. Complete knowledge for the production of a structure is given by a set of working drawings conveying all the facts fully and explicitly, so that further instruction is not required. The most important drawing of a set is the floor plan, since all other drawings are derived from it in some way. (Normally follows DT 12.) Requirement for Certificate of Completion or Achievement and A.S. Degree in Drafting Technology.

23 Door, Window, Finishing Schedule **3 Units**
Depending on the type and size of the structure, methods of indicating schedules and details differ. Some floor plans contain such a small amount of other details that the information can be placed on the drawing as notes. In others, the information is organized logically and found in one place. The draftsman must decide which will work best for each set of drawings. (Normally follows DT 22.) Requirement for Certificate of Completion or Achievement and A.S. Degree in Drafting Technology.

24 Structural Section **3 Units**
Views are taken through the building at points which will best show the relationships of all structural and architectural parts. Dimensions, points of connection between various structural parts, sizes, and materials of all members are noted. (Normally follows DT 23; may be taken concurrently with DT 22.) Requirement for Certificate of Achievement and A.S. Degree in Drafting Technology.

25 Stairs and Fireplaces **2 Units**
Staircases and fireplaces must be carefully planned before working drawings are started. Stair details show the structure, stair size, posts, rails and balusters, materials, the method of attachment to the structure. Fireplace drawings include longitudinal and transverse sections to show the construction of foundation, cleanout, hearth, firebox, smoke shelf, damper, flue, cap, and surrounding masonry. (Normally follows DT 23.) Requirement for Certificate of Completion or Achievement and A.S. Degree in Drafting Technology.

26 Exterior Elevations **2 Units**
The orthographic projections of the exteriors of the building showing all of the outside finished appearances. Surface materials and locations of important structural features are indicated. (Normally follows DT 23.) Requirement for Certificate of Completion or Achievement and A.S. Degree in Drafting Technology.

27 Foundation Plan **2 Units**
The extent and location of all concrete footings, flatwork and underpinning to distribute the weight of the building over the soil are shown on the plan. Types and sizes must be determined by considering several factors. (Normally follows DT 23.) Requirement for Certificate of Completion or Achievement and A.S. Degree in Drafting Technology.

28 Roof and Floor Framing Plans **3 Units**
Structural members for roof and floor construction are shown in their proper relationships based on the floor plan, structural sections, and elevations. All types of construction including wood, concrete and metal require framing drawings to complete a set. (Normally follows DT 23.) Requirement for Certificate of Completion or Achievement and A.S. Degree in Drafting Technology.

29 Interior Elevations **2 Units**
Orthographic projections of the interior construction of the building such as partitions, cabinets and their structural sections are included. On a minimum set of drawings, only the important elevations are shown. (Normally follows DT 23.) Requirement for Certificate of Achievement and A.S. Degree in Drafting Technology.

31 Building Services **3 Units**
Study of materials and equipment used in the mechanical and electrical systems of the building and, also the methods of designing the various parts of the systems. Course is not intended to be a comprehensive design course. (Normally follows DT 23.) Requirement for Certificate of Achievement and A.S. Degree in Drafting Technology.

33 Introduction to Civil Engineering Drafting **3 Units**
A comprehensive introduction to Civil Engineering Drafting that will cover lettering, the selection of instruments, the study of applied geometry, algebra and trigonometry, and the review of dimensions and notes. Recommended preparation: High school drafting or DT 1.

34 Topographic Drafting **4 Units**
A comprehensive study of the basic principles of surveying (no field work) so as to familiarize the student with the principles of surveying field work and data recording, thereby enabling the student to plot (reduce) surveying field data onto work sheets. Includes basic engineering principles that will be applicable (e.g., methods of finding areas and volumes) and use of symbols and abbreviations. Also covers methods and techniques in drafting of topographic maps (e.g., contour lines, planning of plats, alignment, etc.) Recommended preparation: DT 33.

35 Project Plan Drafting **4 Units**
A comprehensive study of the drafting of individual sheets that make up a project plans, be it a subdivision or highway project. Covers the knowledge necessary for draftsmen to work from topographic plans then on to plan, profile, and X-section sheets, etc. Student will learn the process of drafting a final from work sheets. The importance of planning one's drafting. Explanation of recommended drafting techniques utilized in industry in the laying out of the plan, profile, details, X-sections, etc. Drafting symbols and abbreviations. Recommended preparation: DT 33 and 34.

41 Working Drawings I **5 Units**
Development of a complete set of working drawings for a substantial residential structure conforming to national and local code regulations and current construction procedures and methods. The plans shall meet all requirements of architectural drafting practices. Techniques, standards and details to complete the required drawings will be studied and discussed in conjunction with the actual drafting project. Recommended preparation: DT 11 through 31. Requirement for Certificate of Completion or Achievement and A.S. Degree in Drafting Technology.

42 Working Drawings II **5 Units**
A complete set of working drawings for a commercial structure or a multi-family dwelling or a combination or the two will be developed and drafted. All drawings will conform to national and local building codes as well as the Comprehensive Zoning Code (CZC). All code requirements will be studied as they relate to the drafting project. Plans will meet industry standards and current architectural drafting practices. Elective course of Certificate of Completion or Achievement and A.S. Degree in Drafting Technology.

43 Building Specifications **2 Units**
A study of the written building specification document, naming and describing materials, equipment and processes relating to a particular structure which cannot reasonably be placed on the drawings. A typical specification document will be researched, compiled and prepared in accordance with the standardized format. Recommended preparation: DT 11 through 31. Requirement for Certificate of Completion or Achievement and A.S. Degree in Drafting Technology.

44 Presentation Drawings **3 Units**
From a preliminary drawing a presentation drawing is prepared including floor plan, exterior perspective, plot plan and building cross section. The perspective drawing is rendered. Requirement for Certificate of Achievement and A.S. Degree in Drafting Technology.

58V Cooperative Education **1, 2, 3 or 4 Units**
Provides practical work experiences in specific occupational areas to apply classroom knowledge and to develop job competency. Conditions are in actual employment situations in the private and public sectors of the business-industrial community. Student spends approximately half a day on the job daily. (Normally taken after completion of two full semesters in the occupational major.) Students register for a definite number of units, as approved by the instructor at the time of registration, and may earn no more or less than the stated number without approval of the instructor. May be repeated for a total of 8 units. Highly recommended elective for the Certificate of Achievement and A.S. Degree in Drafting-Technology.

59 Cooperative Education **8 Units**
Provides practical work experiences in specific occupational areas to apply classroom knowledge and to develop job competency. Conditions are in actual employment situations in the private and public sectors of the business-industrial community. Student spends a full semester in actual employment followed by a full semester of formal classroom work. (Normally taken after completion of two full semesters in the occupational major.) Highly recommended elective for the Certificate of Achievement and A.S. Degree in Drafting Technology.

ELECTRONICS TECHNOLOGY

ET
—Offered at Honolulu Community College

27 Fundamentals of Electronics **3 Units**
Study of fundamentals of electronics with emphasis on understanding basic theory of operation of vacuum tubes and transistor electronic equipment. Must be taken concurrently with ET 27L. Requirement for B.A. Degree in Marine Technology.

27L Fundamentals of Electronics Laboratory **1 Unit**
Laboratory assignments covering practical applications of the basic theories studied in ET 27. The laboratory experiments stress minor servicing of electronic equipment using voltage measuring, resistance readings and signal tracing techniques. Requirement for A.S. Degree in Marine Technology.

FOOD SERVICE

FSER
(Modular courses)

58V Cooperative Education **1-4 Units**
Provides practical work experiences in the food service occupational areas to test and apply what has been learned in the classroom-laboratory. Conditions are in actual employment situations in the private and public sectors of the business community. (Normally, after completion of two full semesters in the occupation major. May be repeated for a total of 8 credits.) Highly recommended elective for Certificate of Achievement and Associate in Science Degree in Hospitality Education (Food Service).

59 Cooperative Education **8 Units**
Provides practical work experiences in food service occupational areas to apply classroom knowledge and to develop job competency. Conditions are in actual employment situations in the private and public sectors of the business-industrial community. Student spends a full semester in actual employment and may be followed by a full semester of formal classroom work. Normally after completion of two full semesters in the occupational major. Highly recommended elective for Certificate of Achievement and Associate in Science Degree in Hospitality Education (Food Service).

120 Career Opportunities and Job Description **2 Units**
An introduction course to the food industry in our present days in skills, knowledge and practice of food safety, proper use of tools and equipment. Discussion of career opportunities and information about food, work habits and terminology. Requirement for Certificate of Completion, Certificate of Achievement and A.S. Degree in Food Service Program. (Formerly HED 121.)

125 Fundamentals of Baking **3 Units**
The study and development of basic skills in baking as practiced and required in the food service industry today.

131 Storeroom Operation **2 Units**
The study of the organization and operations of a central storeroom. Experiences provided in receiving, pricing, storing, distributing, and controlling the flow of foods, supplies and equipment. Includes the organization and operation of a stewarding department. Requirement for Certificate of Completion, Certificate of Achievement and A.S. Degree in Food Service Program. (Formerly HED 131.)

140 Cold Food Pantry **8 Units**
A course to develop basic skills in food and beverage preparation that require only a short time to prepare and/or cook and serve in snack shops and drive-ins. Recommended preparation: FSER 120. (Formerly 140-C.) Requirement for Certificate of Completion, Certificate of Achievement and A.S. Degree in Food Service Program.

145 Fundamentals of Cooking **8 Units**
Principles and skills to work at a drive-in, cafeteria or coffee shop operation as a frycook or cook's helper. He will be able to perform with correct procedures in preparing according to acceptable standards for finished products. Recommended preparation: FSER 120, 121 and 123. Requirement for Certificate of Completion, Certificate of Achievement and A.S. Degree in Food Service Program. (Formerly FSER 140-D.)

210 Intermediate Cooking **4 Units**
The students will increase their skills and techniques and prepare the various entree required by industry which is variable and necessary. They will also prepare the various soups and sauces for the day. They will also supervise the preparation of the main entree of the day in the pantry area. Recommended preparation: FSER 140 and 145.

215 Coffee Shop Management and Operation **4 Units**
Student must be able to manage and operate the coffee shop with the minimum of supervision. The coffee shop will simulate as close as possible a coffee shop in industry. Recommended preparation: FSER 120, FSER 121, FSER 123, FSER 131, FSER 140, FSER 145 and FSER 240.

230 Intermediate Baking **3 Units**
Development of knowledge and skill to properly select equipments and ingredients for specific production. Safety and sanitary practices for proper handling and display.

231 Advanced Baking **3 Units**
Preparation and technical knowledge of baked products usually served in fine restaurants, hotels and airlines. Experience encompasses various areas in the art of icing, decorating, and display to maximize retailing potential.

240 Advanced Cooking **8 Units**
Preparation of food as typified in fine dining rooms and specialty restaurants constitutes the content of the course. Experiences encompass the various stations in the kitchen of these types of establishments. Foods are produced in quality as well as in quantity. (Formerly 240-A.) Recommended preparation: FSER 120, 121, 123, 131, 140 and 145. Requirement for Certificate of Achievement and A.S. Degree in Food Service Program.

HEALTH & PHYSICAL EDUCATION

HPE
A medical clearance will be required in those courses that require active participation. Students without medical clearance will be allowed to register in these courses but will not be allowed to participate or perform in class until the clearance is obtained.

101 Physical Fitness (Coed) **1 Unit**
Course is designed to improve physical fitness levels by providing health information and an intensive program of physical activity. (Formerly HPE 150, Women's Figure Control and HPE 152, Men's Weightlifting.) Recommended preparation: Be in good health and a recent physical examination advisable.

103 Beginning Swimming **1 Unit**
Instruction in the basic swimming strokes: breaststroke, backstroke, and crawl. Efficient breath control accomplished by bobbing, underwater swimming, feet-first entries and cross-pool pushing and gliding.

104 Intermediate Swimming **1 Unit**
To introduce students to the basic arm and leg strokes. To teach the students to coordinate the arms and legs in two styles of swimming, one on the back and the other on the front or side. To teach the students to turn in a closed course so as to enable them to swim continuously for the purpose of developing strength and endurance. To teach the students to perform one or more methods of artificial respiration. To provide the students with additional survival skills. To improve the ability of the students to enter the water surely and effectively. Recommended preparation: HPE 103.

107 Tennis: Beginning **1 Unit**
Course is designed to acquaint students with basic tennis skills, knowledge, attitudes and appreciations. Rules, etiquette, grip, forehand and backhand strokes, serving, volleying, singles and doubles play. (Formerly GS 156.) May be used to fulfill requirement for Certificate of Achievement and A.S. Degree in Games & Sports subprogram of Recreation Instructor Program.

108 Tennis: Advanced **1 Unit**
Course offers instruction in advanced tennis skills and knowledge for students with a background in basic fundamentals of the game. Improving the serve, forehand and backhand strokes, volleying, chop shot, competitive strategy, problems in rules. (Formerly GS 156.) Recommended preparation: Beginning and Intermediate Tennis or its equivalent, or by arrangement with the instructor. May be used to fulfill requirement for Certificate of Achievement and A.S. Degree in Games & Sports subprogram of Recreation Instructor Program.

110 Beginning Golf **1 Unit**
Orientation to the basic golf skills, etiquette, rules and a general understanding of playing the game. May be used to fulfill requirement for Certificate of Achievement and A.S. Degree in Games & Sports subprogram of Recreation Instructor Program.

111 Intermediate Golf **1 Unit**
Improving the basic skills of golf: the drive, fairway wood shots, long iron shots, putting and the problems of rules. Recommended preparation: HPE 110 or having a USGA handicap of 15. May be used to fulfill requirement for Certificate of Achievement and A.S. Degree for Games & Sports subprogram of Recreation Instructor Program.

112 Advanced Golf **1 Unit**
Orientation to golf with its rules, and objectives and fundamentals. Instruction will be in grip: stance, posture and swing. These basic skills of golf will be improved: the drive, fairway wood shots, long iron shots, and putting. Basic course play, control shots, trouble shots, competitive strategy and course management are included. Recommended preparation: HPE 111 or having a USGA handicap of 12 or less. May be used to fulfill requirement for Certificate of Achievement and A.S. Degree for Games & Sports subprogram of Recreation Instructor Program.

115 Bowling I **1 Unit**
Orientation to game, rules, fundamentals and etiquette. Foundations in the technique of approaching and delivering—individual style analysis. Class participation at commercial lanes requires payments of fees for each lane bowled during class time.

116 Bowling II **1 Unit**
For students who have had some previous background in bowling. The emphasis is on improving the approach, delivery, arm swing and spare pickup. The video tape will be used extensively in this course.

124 Dances of Hawaii **1 Unit**
History, evolution and basic fundamentals of the hula. The emphasis is on learning dances which can be used in social situations, personal enjoyment, and can be developed creatively. The puili (split bamboo) is used in the course.

133 Track & Field **3 Units**
A course in track and field to provide the student with practical training suggestions on every major track and field event, from sprinting and hurdling to discus and pole vaulting. (Formerly HPE 177.) Requirement for A.S. Degree for Games & Sports subprogram of the Recreation Instructor Program.

Only one of the following courses (HPE 134, 135, 136 or 137) may be taken per semester.

134 Baseball **6 Units**
A basic course in baseball to provide the individual with the knowledge and skills of the game. Additional 5 lab hours a week arranged with instructor. Three units for field work experiences in coaching and officiating are additional requirements but not transferable to UH Manoa Campus. (Formerly GS 53.) May be used to fulfill requirement for Certificate of Achievement and A.S. Degree for Games & Sports subprogram of the Recreation Instructor Program.

135 Volleyball **6 Units**
A basic course in volleyball designed to acquire knowledge and fundamental skills. Additional 6 lab hours a week arranged with instructor. Three units for field work experiences in coaching and officiating are additional requirements but not transferable to UH Manoa Campus. (Formerly GS 54.) May be used to fulfill requirement for Certificate of Achievement and A.S. Degree for Games & Sports subprogram of the Recreation Instructor Program.

136 Football **6 Units**
A basic course in football to provide the individual with theoretical as well as practical knowledge and skills of the game. Additional 5 lab hours a week arranged with instructor. Three units for field work experiences in coaching and officiating are additional requirements but not transferable to UH Manoa Campus. (Formerly GS 51 and HPE 171.) May be used to fulfill requirement for Certificate of Achievement and A.S. Degree for Games & Sports subprogram of the Recreation Instructor Program.

137 Basketball **6 Units**
A basic course in basketball to provide the individual with the theory, knowledge and skills of the game. Additional 5 lab hours a week arranged with instructor. Three units for field work experiences in coaching and officiating are additional requirements but not transferable to UH Manoa Campus. (Formerly GS 52 and HPE 172.) May be used to fulfill requirement for Certificate of Achievement and A.S. Degree for Games & Sports subprogram of the Recreation Instructor Program.

161 Aikido **1 Unit**
Introduction into Aikido customs, traditions, philosophies and principles. Students will develop general competencies in 1) mental development, 2) physical growth and development, 3) emotional development and social development.

162 Beginning Karate **1 Unit**
Introduction into ancient karate customs, traditions, philosophy and principles governing karate application. Introduction and familiarization of basic karate techniques: kicking, blocking, striking, footwork, stances and basic breathing.

163 Intermediate Karate **1 Unit**
Emphasis on improving the karate techniques: strikes, kicks, and stances; karate discipline (katas) and self-defense techniques.

170 Senior Lifesaving **2 Units**
A basic course in lifesaving to provide the individual with the knowledge and skills designed to save his own life or the life of another in the event of an emergency. This course meets the requirements of the American Red Cross program. (Formerly HPE 112 and AQ 121.) Recommended preparation: HPE 104. Requirement for Certificate of Achievement and A.S. Degree for Games & Sports and Outdoor Recreation subprograms of the Recreation Instructor Program.

171 Water Safety Instructor **3 Units**
Methods of teaching swimming, theory and techniques of lifesaving and water safety leading to American Red Cross certification (WSI). Preparation in swimming pool maintenance and management will also be included. Students must have senior lifesaving certification. American Red Cross First Aid training is recommended. (Formerly HPE 171/177.) Equivalent to Manoa's HPE 436. Requirement for Certificate of Achievement and A.S. Degree in Games & Sports subprogram of Recreational Instructor Program.

179 Coaching Swimming **2 Units**
Techniques, rules, competitive swimming in free-style breaststroke, backstroke, butterfly, relay racing, starting, turns, diving; conduct of participation in swimming meets; specific conditioning and training problems. (Formerly HPE 114 and AQ 128.) Recommended preparation: HPE 170. Requirement for A.S. Degree for Games & Sports subprogram of the Recreation Instructor Program.

208 Introduction to Recreation **3 Units**
A comprehensive study of the nature and significance of the recreation program in the community. An introductory course dealing with the background, modern trends, role of a professional recreation instructor, and methods and principles of organizing and conducting a recreation program. Requirement for Certificate of Achievement for Games & Sports and Outdoor Recreation subprograms and A.S. Degree for Creative Arts Emphasis, Games & Sports and Outdoor Recreation subprograms of Recreation Instructor Program.

230 First Aid **2 Units**
Practicum in training persons to become qualified instructors of emergency care, knowledge and first aid skills, American Red Cross and Medical Self Help certificate may be earned. (Formerly HPE 150 and HPE 105; equivalent to UH Manoa Campus HPE 332.) Requirement for Certificate of Achievement and A.S. Degree for Creative Arts Emphasis, Games & Sports, Outdoor Recreation subprograms of the Recreation Instructor Program.

233 Physical Education (Elementary) **3 Units**
Content and methods for physical education in the elementary school with emphasis on selection, planning, teaching and evaluation of movement exploration and physical activities. Requirement for A.S. Degree for Games & Sports subprogram of the Recreation Instructor Program.

290 Field Work **4 Units**
To provide the students with actual work experience with the parks and recreation concentrating on his major. (Formerly RIP 290.) Recommended preparation: 24 units in the Recreation Instructor Program. Requirement for Certificate of Achievement for Creative Arts and A.S. Degree in Creative Arts, Games & Sports and Outdoor Recreation subprograms of Recreation Instructor Program.

LIBRARY TECHNOLOGY

LT

1 Introduction to Library Services **2 Units**
Libraries—what's in them for me and you? Libraries, their organization, basic philosophy, procedures, tools and techniques for library routines. Designed for students interested in eventual employment in a special, school, public or college library; and for those interested in more effective use of libraries. Requirement for Certificate of Achievement and A.S. Degree in Library Technology.

2 Public Services **2 Units**
How to find information in libraries through catalogs, indexes and selected basic reference books. A study of circulation control systems, techniques in public relations in libraries and location of information. Requirement for Certificate of Achievement and A.S. Degree in Library Technology.

3 Technical Services **3 Units**
Behind-the-scenes work in acquisition and preparation of library materials. Where and how a library gets all the materials for its collection. Practical work in filling book orders and visit book preparation centers. (One lecture, plus lab hours available as arranged.) Recommended preparation: LT 1 or instructor's approval. Requirement for Certificate of Achievement and A.S. Degree in Library Technology.

5 Audiovisual Services **3 Units**
An introduction to the operation and usage of audiovisual equipment, production of specialized displays, multi-media shows, and employment of non-book materials for educational and entertainment purposes. Included are practical experience in the acquisition, distribution, and organization of audiovisual materials, media workshops, and visits to local media production centers. (One lecture plus lab hours as arranged). Requirement for A.S. Degree in Library Technology.

25 Library Technology Work Study **5 Units**
On-the-job experience in an assigned library on or off campus under the supervision of a full-time library staff member and weekly conferences with instructor. Duties consist of work in public service and/or technical service functions of a library. Students who have satisfactorily passed LT 1, 2 and 3 will be considered for assignment in a library. 160 hours of work experience to the satisfaction of student and participating library, with the approval of instructor; plus 1 class meeting a week on campus. Requirement for Certificate of Achievement and A.S. Degree in Library Technology.

141 Technical Services: Cataloging Techniques I (5 wks.) **1 Unit**
Function of the catalog, kinds of library catalogs, how libraries acquire catalog cards, and the development of basic skills in descriptive cataloging. (Formerly LT 4) 1 hr. lecture plus 4 hrs. lab per week. Recommended preparation: LT 1, 2 and 3. Requirement for A.S. Degree in Library Technology.

142 Technical Services: Cataloging Techniques II **1 Unit**
Basic skills needed in assisting the librarian in the cataloging and classifying of books. Practical experience in making tentative decisions in these aspects of materials organization. (Formerly LT 4.) 1 hr. lecture plus 4 hrs. lab per week. Recommended preparation: LT 141. Requirement for A.S. Degree in Library Technology.

143 Technical Services: Cataloging Techniques III **1 Unit**
A study of cataloging files, records and their maintenance; the organization of non-book materials; and how to get cataloging work done without really trying using shortcuts. (Formerly LT 4.) 1 hr. lecture plus 4 hrs. lab per week. Recommended preparation: LT 142. Requirement for A.S. Degree in Library Technology.

MARINE TECHNOLOGY

MT

11 Scuba Diving **3 Units**
The student learns styles of swimming for the purpose of developing strength and endurance in scuba and skin diving. Certification can be achieved. Requirement for Certificate of Achievement and A.S. Degree for Marine Technology. Approximately $20 for scuba rental.

12 Advanced Diving **3 Units**
The student will be given the knowledge and skills necessary to safely perform basic underwater work: diving physics, diving equipment, medical aspects of diving, salvage techniques and underwater work performance. (Formerly Marine Technology 12, Underwater Mechanics, 3 units.) Recommended preparation: MT 11 or basic scuba diving certification. Requirement for Certificate of Achievement and A.S. Degree for Marine Technology. Approximately $50 for diving gear rental.

14 Underwater Mechanics **4 Units**
Introduction to the use and maintenance of light weight and deep-sea diving equipment and the mechanics of underwater work. Course covers basic commercial diving techniques and leads to entry-level employment as a commercial diving tender. Recommended preparation: HPE 170 and MT 12. Requirement for Certificate of Achievement for Commercial Diving Tender.

22 Basic Seamanship & Marine Orientation **3 Units**
Development of the basic skills required of a seaman such as steering, tying knots, handling mooring lines, performing simple maintenance tasks and familiarity with technical terms common to seamen. Some of the skills will be developed aboard ship under actual seagoing conditions. The conditions, requirements and employment potential for a variety of marine occupations and an examination of student interests and aptitudes as they relate to those occupations. Recommended first course for Marine Technology students. Requirement for Certificate of Achievement and A.S. Degree for Marine Technology. Approximate cost of $20 for charts, parallel rules, etc.

23 Piloting and Powerboat Handling **2 Units**
Shipboard first aid; small boat construction and principles of damage control; lights required for all classes of vessel; rendering artificial respiration, drymarks shown by vessels in special circumstances; tonnage measurement and documentation; Rules of the Road; Rules and Regulations; uninspected vessels, lighthouses and lightships; government publications; rendering assistance at sea; and requirements for obtaining a Third-Class Radiotelephone Operator's License. May be used to fulfill requirement for Certificate of Achievement and A.S. Degree for Marine Technology. Approximate cost of $20 for charts, parallel rules, etc.

24 Advanced Seamanship **2 Units**
Marlinespike seamanship; rigging; advanced piloting; weather observation and record keeping, use and adjustment of sextant, cordage. Requirement for Certificate of Achievement and A.S. Degree for Marine Technology. Approximate cost of $20 for charts, parallel rules, etc.

25 Celestial Navigation **3 Units**
Introduction to nautical astronomy, the sextant, its corrections and use; time as used in celestial navigation; use of the Nautical and Air Almanacs; latitude by meridian altitude, latitude by reduction to the meridian, sun lines of position by H.O. 214 and H.O. 211; latitude by Polaris; star sights, moon sights; deviation by sun; star identification by visual means; the navigator's day's work. May be used to fulfill requirement for Certificate of Achievement and A.S. Degree for Marine Technology.

26 Advanced Piloting **2 Units**
Development and knowledge of skills and techniques required for coastal and offshore piloting under normal and extreme weather conditions. May be used to fulfill requirement for Certificate of Achievement and A.S. Degree for Marine Technology.

27V Practical Shipboard Operation **2-6 Units**
Advanced skills in navigation, seamanship, diving and offshore instrumentation, while on an extended cruise aboard a vessel. Recommended preparation: MT 22. Elective for Individualized Certificate or A.S. Degree in Marine Technology.

30 Marine Engines and Auxiliary Equipment **3 Units**
Development of a basic understanding of the theory and practical operation of marine engines and auxiliary equipment. Introductory repair and maintenance of marine engines, refrigeration, electrical and firefighting systems are included.

58V Cooperative Education **1-4 Units**
Provides practical work experiences in specific occupational areas to apply to classroom knowledge and develops improved job competency. Conditions are in actual employment situations in the private and public sectors of the business-industrial community. Students register for a definite number of units, as approved by the instructor at the time of registration, and may earn no more or less than the stated number without approval of the instructor. May be repeated for a total of 8 units. Recommended preparation: MT 22; normally taken after completion of two full-time semesters in the occupational major. Highly recommended elective for Individualized Certificate of A.S. Degree in Marine Technology.

OUTDOOR RECREATION

OR

181 Outdoor Recreation I **3 Units**
To provide basic orientation in preparation in outdoor recreation skills, special emphasis is placed in the application of the knowledge to outdoor, informal and formal educational programming, leadership and practical experience in small group living, counseling and group process analysis. Methods of program design for resident, laboratory experiences in outdoor education. Development and adaptation of the total curriculum implementation from the environmental education approach. Includes outdoor teacher experience in a resident laboratory setting with an elementary school class. Requirement for Certificate of Achievement and A.S. Degree in Outdoor Recreation Subprogram of Recreation Instructor Program.

182 Outdoor Recreation II **3 Units**
A laboratory course designed to provide the recreator with the fundamentals for effective participation as player and as a leader in selected major areas of social recreation common to organized recreation programs, especially as related to operation principles and method for supervision, organization and administration. Requirement for Certificate of Achievement and A.S. Degree in Outdoor Recreation Subprogram of Recreation Instructor Program.

183 Outdoor Recreation III **3 Units**
This course will cover the area of determining and planning programs in neighborhoods where recreational needs are evident. It will also introduce (by lectures and visitation) the student to various public and private recreational programs implemented on Oahu in contracting socio-economic neighborhoods. Requirement for A.S. Degree in Outdoor Recreation Subprogram of Recreation Instructor Program.

185 Camping **3 Units**
Introduction to the field of camping and outdoor-education. This course is designed to provide: 1) an introductory experience in various types of camping, 2) instruction in outdoor living skills, and 3) an introduction to basic planning and organization of camp programming and activity instruction. Requirement for Certificate of Achievement and Associate in Science Degree for Outdoor Recreation Subprogram of Recreation Instructor Program.

186 Hawaiiana I **3 Units**
An introductory study of the Polynesian people of the Pacific. The environmental background and development of Hawaii before Captain Cook's discovery. It prepares the individual with objectives, techniques, knowledge and processes to instruct in the culture of Hawaii and its survival values. There will be laboratory experiences, observations and field trips. Requirement for Certificate of Achievement and A.S. Degree in Outdoor Recreation; may be used to fulfill requirement for A.S. Degree for the Creative Arts Subprogram in Recreation Instructor Program.

188 Hawaiiana II **3 Units**
Study of Hawaiian history and culture from monarchial Hawaii, to influences and changes and survival practices of the culture in modern Hawaii. May be used to fulfill requirement for A.S. Degree for the Creative Arts Subprogram in Recreation Instructor Program.

RECREATIONAL MUSIC & DANCE

RMD

175 Folk Dance **3 Units**
A course covering the dances of the various countries. It provides the individual with knowledge and skills in the activity. It also prepares the individual for instructing. May be used to fulfill requirement for A.S. Degree for Creative Arts Emphasis Subprogram in Recreation Instructor Program.

MISCELLANEOUS

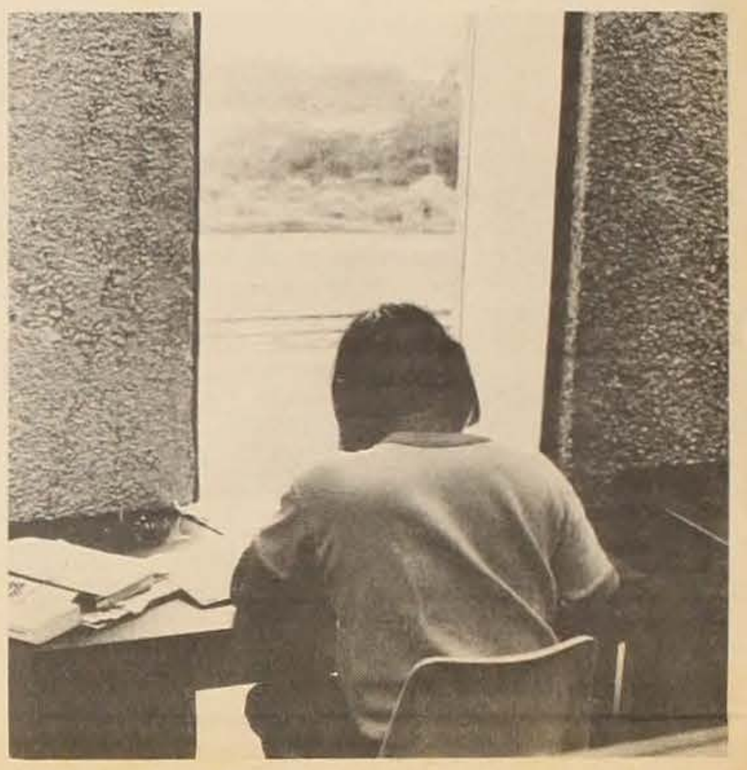
INDEPENDENT STUDY

(99, 199, 299)
The purpose of the program is to offer the student an opportunity to participate in the creation of academic learning experiences geared to the individual needs, interests, aptitudes and desired outcomes.

Any student registering at LCC may design an independent study project which may be proposed at any of the three levels—Developmental (99), Introductory (199), and Enrichment (299). This must be managed by at least one student-selected advisor and must be approved by the advisor's Division Chairman, the appropriate Dean, and the Provost. While there are no prerequisites, an advisor may recommend particular preparation before a student may undertake a project.

An independent study project could take the form of self-directed reading, research, field work experience, public performance, or an occupational experience.

For further information see any faculty member, counselor or other college official.



INTERDISCIPLINARY STUDIES

IS

Interdisciplinary Studies (IS) may be described as courses which 1) would be offered by non-instructional components of the college, for example, Counseling and Guidance, Placement, Psychometry, or Library; or 2) which would be so broad in their scope as to cross several instructional divisions.

IS courses may only be used for elective credit.

105 Career Planning **1 Unit**
Exploration of vocational planning with students. The student will be helped to evaluate his aptitudes, interests, personal qualities and academic achievement as they relate to career choice. Attention also will be given to vocational opportunities, present and future, decision making, and work relationships. Students will be helped to plan possible vocational futures rather than a single future.

200 Job Search Preparation **1 Unit**
Preparation for job placement: A survey of general labor market conditions and trends, job sources, employers, students' abilities and potentials, human relations, importance of job interviews and approaches, applications/abstracts/resumes/ self-inventories, persistency, and factors which create barriers to employment. Comparable to PIR 200 at Manoa.

MILITARY SCIENCE

MS

Leadership Laboratory required 1 hour per week

101 Fundamentals of Leadership and Management I **2 Units**
Introduction to basic principles and concept of leadership to include individual behavior and motivation, group interaction, effect of the situation and theories of effective leadership. Leadership Laboratory: Significance of military courtesy, discipline, customs and traditions of the service. Development of leadership abilities through practical exercises.

102 Applied Leadership and Management II **2 Units**
Application of fundamentals and principles of leadership in the management of a small group. Leadership Laboratory: development of leadership abilities through practical exercise. Prerequisite: MS 101 or consent of instructor.

Faculty

Arts and Humanities

Aiona, Darrow L., Instructor, Sociology, Religion, Hawaiian Studies; B.A., M.A., University of Hawaii; M. Div., Church Divinity School of the Pacific.

Brennan, Charles W., Instructor, Music; B.M., University of Alabama.

Bromley, Allyn, Instructor, Art; B.F.A., University of Hawaii; M.F.A. University of Colorado.

Casey, Edward, Instructor, History; B.A., Arizona State University; M.A., University of the Americas, (Mexico City).

Conner, John, Instructor, Literature; B.A., University of Notre Dame, M.A., Indiana University.

Davidson, Sayoko Kay, Instructor, Art; B.A., Pomona College; M.A., Claremont Graduate School; M.F.A., University of Hawaii

Hayashida, Richard, Instructor, Art; B.F.A., M.F.A., University of Hawaii.

Hilbe, Joseph M., Instructor, Philosophy, Law; B.A., Chico State College; LL.B., LaSalle Law School; LL.B., M.A., University of Hawaii.

Johnson, David, Instructor, B.A., Valparaiso University; M.F.A., University of Hawaii.

Kaya, Douglas, Instructor, Recreational Instructor Program; B.A., M.F.A., University of Hawaii.

McGugan, Kirk, Instructor, History; B.A., Baylor University; M.A., University of the Americas.

Odom, Ralph W., Instructor, Religion, B.A., University of Redlands; Th.M., Th.D., University of Denver.

Paul, Ouida Fay, Instructor, Music; B.A., B.S., Huntington College; M.A., Ed.D., Columbia University.

Perz, Joseph, Instructor, Philosophy; B.A., Providence College; S.T.L., S.T. Lr. (Ph.D.) Pontifical College of Immaculate Conception.

Rian, Norman D., Instructor, Music; B.A., St. Olaf College; M.A., Eastman School of Music; Ed.D., Columbia University.

Richardson, William R., Instructor, History; B.A., San Diego State University; M.A., University of Hawaii.

Ritchie, Kenneth, Instructor, History; B.A., University of Colorado.

Saromines, Barbara, Instructor, Art; B.A., University of Buffalo; M.A., University of Hawaii.

Schlieman, Dorothy S., Instructor, Literature; A.B., Mount Holyoke College; A.M., Smith College; C.A.S., Wesleyan University; Ph.D., University of Connecticut.

Thompson, Bethany, Instructor, History; B.A., M.A., University of Hawaii.

Uyeda, James Y., Instructor, Music; B.M., Lawrence University Conservatory of Music; M.Ed., University of Hawaii.

Wunsch, Marie, Instructor, Literature; B.A., College Misericordia; M.A., University of Chicago.

Business Education

Aadland, Richard O., Instructor, Accounting; B.S., Northern State College; M.B.A., University of Hawaii.

Bumanglag, Elena, Instructor, Secretarial Science; B.Ed., M.Ed., University of Hawaii; 5th Year Diploma, University of Hawaii.

Clark, Genevieve F., Instructor, Secretarial Science; B.Ed., M.Ed., University of Hawaii.

Fukushige, Stuart M., Instructor, Accounting and Business Machines; B.Ed., M.Ed., University of Hawaii.

Inowe, Amy K., Instructor, Secretarial Science; A.A., Washington State College; B.A., University of Washington; M.S., University of Southern California.

Ng, Paul L., Instructor, Business Law, Consumer Economics; B.S., Brigham Young University; LL.B., M.Ed., Wayne State University.

Okimoto, Norman H., Instructor, Business; B.Ed., M.Ed., 5th Year Diploma, University of Hawaii.

Palma, Ronald L., Instructor, Accounting; B.A., Montclair State College; M.B.A., University of Hawaii.

Ramsey, Earl F., Instructor, Secretarial Science; B.Ed., Arizona State University; M.Ed., Boston University; Certified Professional Secretary.

Shirae, Keiko, Instructor, Business; B.Ed., University of Hawaii; M.Ed., University of California at Los Angeles.

Language Arts

Baltis, Paul P., Language Lab Supervisor; B.A., Marianapolis College; M.S.I.R., Loyola University; M.Ed., University of Illinois.

Bass, Carol K., Instructor, English; B.A., M.A., Marquette University.

Beresiwsky, Carol Ann, Instructor, Spanish, Spanish Civilization, French; B.A., Syracuse University; M.A., Pennsylvania State University; Certificate, Alliance Francaise, Paris; University of Poiters, France; Academia De Segovia, Spain.

Bushman, Charles H., Instructor, Speech; B.A., M.A., Long Beach State College.

Cohen, Diane S., Instructor, Reading; B.A., Colby College; M.Ed., University of North Carolina.

Corcoran, Maureen E., Instructor, English; B.A., M.A., University of Iowa.

Cramer, Harry Lee, Instructor, Reading, English; B.A., University of Illinois; M.A., University of Houston.

D'Arcy, Jack D., Instructor, Speech; B.A., M.A., University of Denver; Certificate of Clinical Competence, American Speech and Hearing Association.

d'Argy, Elizabeth W., Instructor, Reading; B.A., Oakland University; M.Ed., University of Hawaii.

Dunn-Rankin, Patricia Ann, Instructor, Reading; B.M.E., Florida State University; Certificate, Louisiana State University; M.Ed., University of Hawaii.

Fochtman, Jacqueline S., Instructor, French Civilization, B.A., M.A., University of Hawaii; Certificate, University of Paris.

Fujioka, Mikio, Instructor, Japanese; B.A., Ohtani University.

Harpstrite, Patricia J., Instructor, Spanish, Latin American Civilization; B.A., University of Colorado; M.A., University of Hawaii.

Hayasaka, R. Sinikka, Instructor, Japanese; B.A., University of Helsinki; M.A., University of Hawaii; ABD, University of Hawaii.

Higa, Nancy A., Instructor, Reading; B.A., M.A., University of Southern California; M.Ed., University of Hawaii.

Hirano, Judy, Instructor, English; B.A., M.A., University of Hawaii.

Hirose, Steven, Instructor, English, ELI (English Language Institute), Reading, Japanese; B.A., M.A., University of Hawaii.

Kamei, Marlene A., Instructor, English, Speech-Communication; B.A., M.A., San Francisco State College.

Kilpinen, Greta, Instructor, Speech-Communications, English; B.A., M.A., Colorado State College; Ph.D., University of Oregon.

Kneubuhl, John, Instructor, English; B.A., Yale University.

Losch, Naomi C., Instructor, Hawaiian; B.A., University of Hawaii.

Madewell, Viola D'Ann, Instructor, English; B.A., Kansas State College of Pittsburg; M.A., North Texas State University.

MacDonald, Kathleen J., Instructor, English; B.A., M.A., Stanford University; M.A., University of Hawaii.

Michael, Mary W., Instructor, English; B.A., Idaho State University; M.Ed., University of Hawaii.

Michalski, John, Instructor, English, German, Speech-Communications; B.A., University of Toledo; M.A., Northwestern University; Certificate, Institute of World Affairs; Certificate, University of Madrid; Certificate, University of Aix-Marseille; Certificate, Goethe Institute, University of Munich.

Munro, Leslie, Instructor, English; B.Ed., M.Ed., University of Hawaii.

Ostlund, Joan M., Instructor, English; B.A., M.A., Chico State College.

Pond, Jack, Instructor, Reading, Spanish, English, ELI (English Language Institute); A.B., University of Redlands; M.A., University of Hawaii.

Roberts, Norman F., Instructor, English Grammar, Linguistics; B.A., M.A., University of Hawaii.

Schaafsma, Henry M., Instructor, English, Japanese; B.A., University of Michigan; M.A., University of Leeds.

Sipos, Ferenc, Instructor, Reading; B.A., Kosuth University; M.A., E'rsek University.

Watson, Arleda, Instructor, English, Journalism; B.S., University of Illinois; Professional Diploma; M.Ed., University of Hawaii.

Wilson, James C., Instructor, ELI (English Language Institute) B.A., Vanderbilt University; M.A., Ed.S., George Peabody College for Teachers.

Xigogianis, Louis P., Instructor, English, Reading; B.A., University of Illinois; M.A., University of Hawaii.

Yamada, Kay M., Instructor, Speech-Communication; B.Ed., M.A., University of Hawaii.

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Mathematics and Natural Sciences

Akana, Mazie S., Instructor, Mathematics; B.A., M.A., Columbia University.

Asato, Robert N., Instructor, Chemistry; B.S., Lewis & Clark College; Ph.D., University of Hawaii.

Battle, Charles B., Instructor, Geoscience, Physical Science; B.A., University of Oklahoma; M.Ed., M.A.D., North Texas State University.

Bowers, Ralph, Instructor, Biology, General Science; B.A., Western State College of Colorado; M.S., Ph.D., University of Hawaii.

Buynitzky, Richard S., Instructor, Physics; B.S., North Carolina State College; M.S., Michigan State; M.S., University of Hawaii.

Clay, Horace F., Instructor of Biology and Botany; B.S., University of Hawaii; M.S., University of Massachussetts; Ph.D., University of Chicago.

Crow, Clem, Instructor, Mathematics; B.S., Suny at Albany; M.Ed., University of Hawaii.

Dempsey, Cynthia, Instructor, Mathematics; B.A., University of Massachusetts.

Hamada, Jennie, Instructor, Mathematics; B.Ed., M.Ed., University of Hawaii; M.S., University of Illinois.

Holz, Robert, Instructor, Computer Science; B.A., M.A., University of Hawaii.

Ikeda, Yasuhiko, Instructor, Mathematics; B.A., M.A., University of Hawaii.

John, Norma, Instructor, Mathematics, Computer Science; B.S., M.S.T., Portland State University.

Kapur, Balram K., Instructor, Computer Science; B.A., Mohindra College; M.P.A., Golden Gate University.

Kimura, Bert, Instructor, Chemistry; B.A., University of Hawaii; M.S., Ph.D., University of Illinois.

Klim, Donald G., Instructor, Oceanography; B.S., Central Connecticut State College; M.S., University of New Hampshire; M.S., University of Hawaii.

Lyons, Robin S., Instructor, Geography; B.A., University of British Columbia; M.S., Brigham Young University.

Moore, Phillip, Instructor, Physics, Mathematics; B.S., University of San Francisco; M.A., University of Hawaii.

Osell, Frederick S., Instructor, Physics, Oceanography, Geoscience, General Science; B.S., University of Washington.

Russo, Anthony, Instructor, Biology, Oceanography, General Science; B.S., U.S. Naval Academy; M.S., University of Wisconsin.

Saito, George N., Instructor, Mathematics; B.S., Illinois Institute of Technology; M.S., University of Washington.

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Trefz, Shirley M., Instructor, Biology; B.S., Ed.M., Temple University; Ph.D., University of Hawaii.

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Wilson, Karen, Instructor, General Science; B.Ed., University of Hawaii.

Social Sciences

Ahern, Elsie H., Instructor, Psychology; B.A., M.A., Ph.D., University of Hawaii.

Aiona, Darrow L., Instructor, Sociology, Religion, Hawaiian Studies; B.A., M.A., University of Hawaii; M.Div., Church of Divinity School of the Pacific.

Alailima, Fay, Instructor, Community Studies; B.A., Oberline College; M.A., Haverford College; Ph.D., University of Chicago; Diploma, Education, University of Auckland.

Beck, Merrill, Instructor, Interdisciplinary Social Sciences—Counselor; B.S., Brigham Young University; M.Ed., University of Hawaii.

Biggins, Catherine, Instructor, Psychology; B.A., College of St. Francis; M.S., Illinois State University.

Creamer, James T., Instructor, Economics; A.B., M.A., Boston College; M.S., St. Louis University; S.T.M., Weston College.

Dobson, Mary Jane, Instructor, Sociology; B.A., University of Oregon; M.Ed., University of Hawaii.

Gay, Lucy, Instructor, Interdisciplinary Social Sciences—Counselor; B.A., M.Ed., University of Hawaii.

Griffith, Zenaida E., Instructor, Psychology; B.S.Ed., Philippine Women's University; M.Ed., University of Hawaii.

Harris, Holly, Instructor, Interdisciplinary Social Sciences—Counselor; B.A., Connecticut College; M.A., Arizona State University.

Johnson, Alan, Instructor, Psychology; B.A., Central Washington State College; M.A., University of Hawaii.

Kaibara, Dennis W., Instructor, Economics and Business; B.A., M.B.A., University of Hawaii.

Kappenberg, Judith, Instructor, Interdisciplinary Social Sciences—Counselor; B.Ed., University of Hawaii; M.A., Columbia University.

Lau, Edward T. Jr., Instructor, Interdisciplinary Social Sciences—Counselor; B.A., University of Hawaii.

Libarios, Ernest, Instructor, Interdisciplinary Social Sciences—Counselor; B.A., Chaminade College; M.Ed., University of Hawaii.

Lynn, Patricia, Instructor, Anthropology; B.A., University of Illinois.

Lyons, Robin R., Instructor, Geography; B.A., University of British Columbia; M.S., Brigham Young University.

Miller, Grace, Instructor, Anthropology, American Studies; B.A., Beloit College; M.A., University of Wisconsin.

Ng, Paul L., Instructor, Business Law, Consumer Economics; B.S. Brigham Young University; LL.B., M.Ed., Wayne State University.

Tamanaha, Katsugi, Instructor, Interdisciplinary Social Sciences—Counselor; B.A., M.Ed., University of Hawaii.

Thomson, Donald L., Instructor, Sociology, American Studies; B.A., M.A., M.A., University of Hawaii.

Vaughn, Ralph E., Instructor, Economics; B.S., Fordham University; M.B.A., St. John's University.

Veregge, Marvin L., Instructor, Interdisciplinary Social Sciences—Counselor; A.B., M.A., University of California at Berkeley.

White, Elaine, Instructor, Interdisciplinary Social Sciences—Counselor; B.A., M.A., M.Ed., University of Hawaii.

Wiggers, Stewart E., Instructor, Interdisciplinary Social Sciences—Counselor; B.A., San Jose State College; B.S., M.S., San Diego State College.

Williams, Ilima, Instructor, Interdisciplinary Social Sciences—Counselor; A.A., Stockton Junior College; B.A., College of the Pacific; M.A., California State Polytechnical College.

Yap, Richard C.L., Instructor, Political Science; B.A., M.Ed., University of Hawaii.

Technical-Vocational Education

Dang, Charlotte L., Instructor, Library Technology; B.A., University of Hawaii; M.S.L.S., Western Reserve University.

Darakjian, Jacob Jr., Instructor, Automotive Technology.

DeSilva, Edward, Instructor, Drafting Technology.

Furutani, Francis, Instructor, Drafting Technology.

Garrett, E. Dean, Instructor, Recreational Instructor Program; B.S., M.A., University of Maryland.

Kamikawa, Raymond, Instructor, Culinary Institute of America (National Meat Cutting School); Sous Chef, Anna Miller; Chef, International In-Flight Catering Company.

Kawawaki, Edward T., Instructor, Recreational Instructor Program; B.Ed., 5th Year Certificate, M.A., University of Hawaii.

Kuroda, Cary, Instructor, Drafting Technology.

Morishige, Catherine, Instructor, Food Service.

Nall, Roger, Instructor, Pacific Maritime Academy; California State Polytechnical College; Hawaii Research Corporation; American Divers.

Omine, Thomas Y., Instructor, Automotive Technology; A.S., Honolulu Community College; Vocational Teacher License, Hawaii, FAA Airframe and Powerplant, Union Oil of California-Certificate, Mechanics License.

Sueyoshi, James T., Instructor, Food Service; former Executive Chef of several Waikiki restaurants.

Tagami, Hisashi, Instructor, Automotive Technology; 34 years experience in Automotive Industry.

Tamanaha, Edward, Instructor, Automotive Technology; Certificates: Smokey Hill Army Air Force; General Motors Corporation; Clayton Manufacturing Company; Johnson and Reynold Company.

Wakui, Lawrence, Instructor, Drafting Technology; B.A., San Francisco State; M.A., San Jose State College; Certificate, Honolulu Vocational School.

Wong, Dick, Coordinator, Cooperative Education; B.Ed., University of Hawaii.

Support Services

Admissions & Records

Harold Hayashi, Registrar; B.B.A., University of Hawaii.

Bookstore

Clifford Fedalizo, Bookstore Manager; B.S., Drake University.

Counseling & Guidance

Michael Ane, Educational Talent Search Counselor (Federal Fund), B.S., University of Hawaii.

Merrill Beck, Instructor, Interdisciplinary Social Sciences—Counselor; B.S., Brigham Young University; M.Ed., University of Hawaii.

Lucy Gay, Instructor, Interdisciplinary Social Sciences—Counselor; B.A., M.Ed., University of Hawaii.

Fred Guild, Assistant Coordinator of Veteran Affairs, Outreach Counselor, B.S., University of Hawaii.

Holly Harris, Instructor, Interdisciplinary Social Sciences—Counselor; B.A., Connecticut College; M.A., Arizona State University.

Charles Heaukulani, Veteran Affairs Coordinator; B.A., Chaminade College.

Judith Kappenberg, Instructor, Interdisciplinary Social Sciences—Counselor; B.Ed., University of Hawaii; M.A., Columbia University.

Edward T. Lau, Jr., Instructor, Interdisciplinary Social Sciences—Counselor; B.A., University of Hawaii.

Linda Luat, Educational Talent Search Counselor (Federal Fund); B.A., B.Ed., University of Hawaii.

Ernest Libarios, Instructor, Interdisciplinary Social Sciences—Counselor; B.A., Chaminade College; M.Ed., University of Hawaii.

Katsugi, Tamanaha, Instructor, Interdisciplinary Social Sciences—Counselor; B.A., M.Ed., University of Hawaii.

Marvin L. Veregge, Instructor, Interdisciplinary Social Sciences—Counselor; A.B., M.A., University of California at Berkeley.

Elaine White, Instructor, Interdisciplinary Social Sciences—Counselor; B.A., M.A., M.Ed., University of Hawaii.

Stewart E. Wiggers, Instructor, Interdisciplinary Social Sciences—Counselor; B.S., San Jose State College; B.A., M.S., San Diego State College.

Ilima Williams, Instructor, Interdisciplinary Social Sciences—Counselor; A.A., Stockton Junior College; B.A., College of the Pacific; M.A., California State Polytechnical College.

Library

Don W. McNeil, Head Librarian; B.A., Buena Vista College; M.S.L.S., University of Kentucky; M.Ed., University of Hawaii.

Marri L. DeCosin, Librarian; B.S., West Chester State College; M.S.L.S., University of Illinois.

Laurence B. Goldstein, Librarian; B.A., M.S.L.S., University of Hawaii.

Media Center

George Yoshishige, Coordinator of Educational Media Center; B.A., M.Ed., University of Hawaii.

Blanche Nishimura, Graphic Artist; B.F.A., California Institute of Arts.

Jackson Tsujimura, Audio Visual Technician; San Francisco Technical College.

Placement

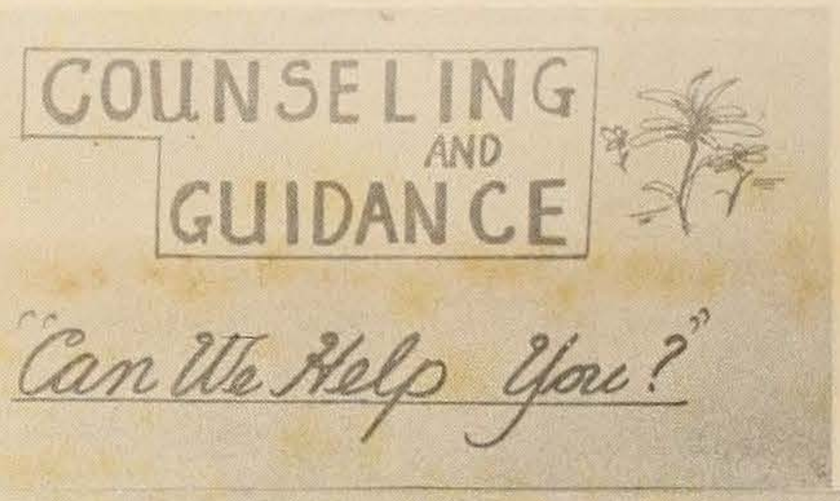
Adam Lim, Placement Officer; B.A., M.A., University of Hawaii.

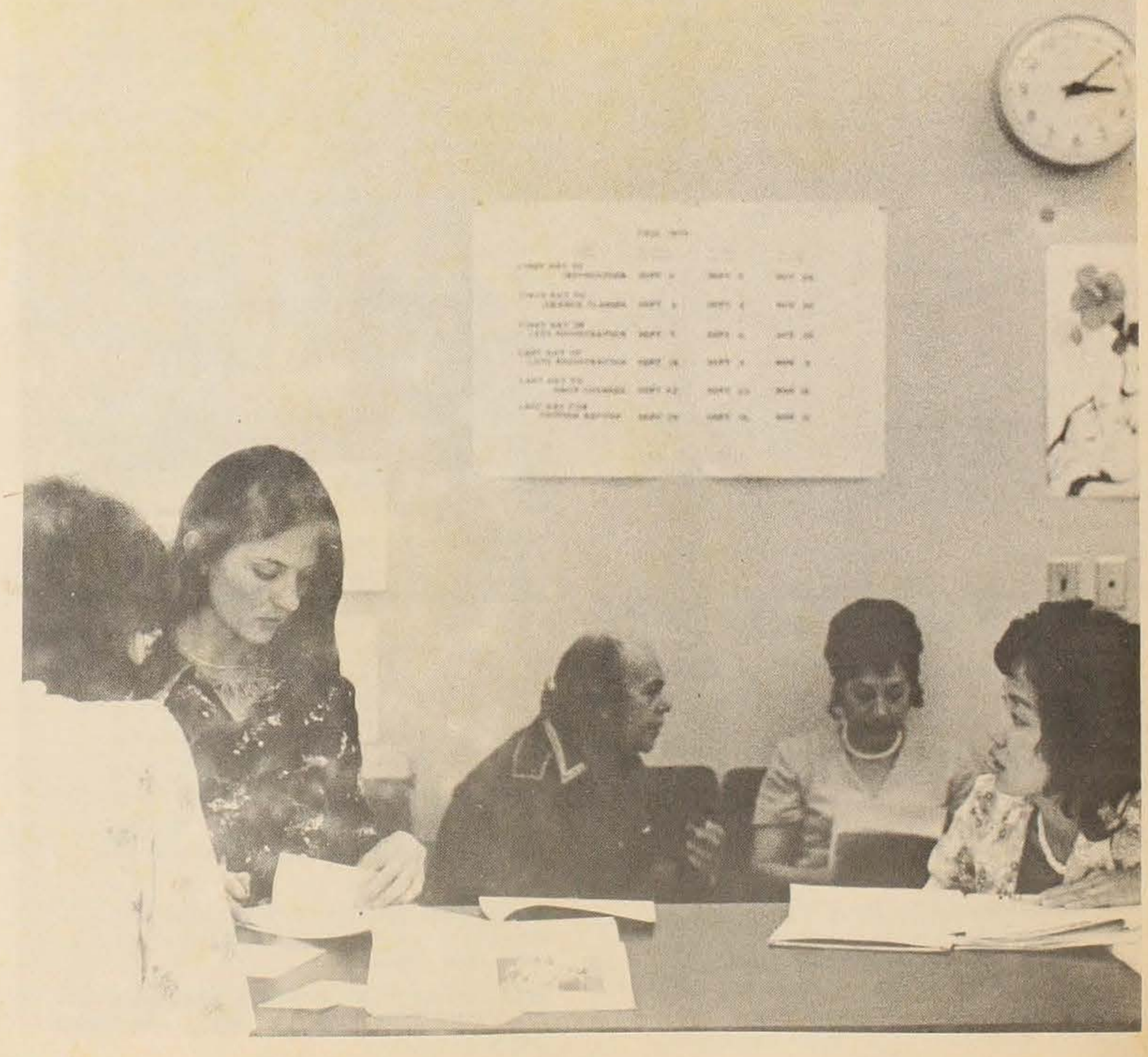
Psychometrist

Jean A. Pezzoli, Psychometrist; B.A., M.S., Ph.D., University of Massachusetts.

Student Activities

Stuart Y. Uesato, Coordinator of Student Activities; B.A., University of Hawaii; M.A., New York University.





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[illegible]rata, Snack Shop
[illegible]by Ogata, Pearl City Tavern
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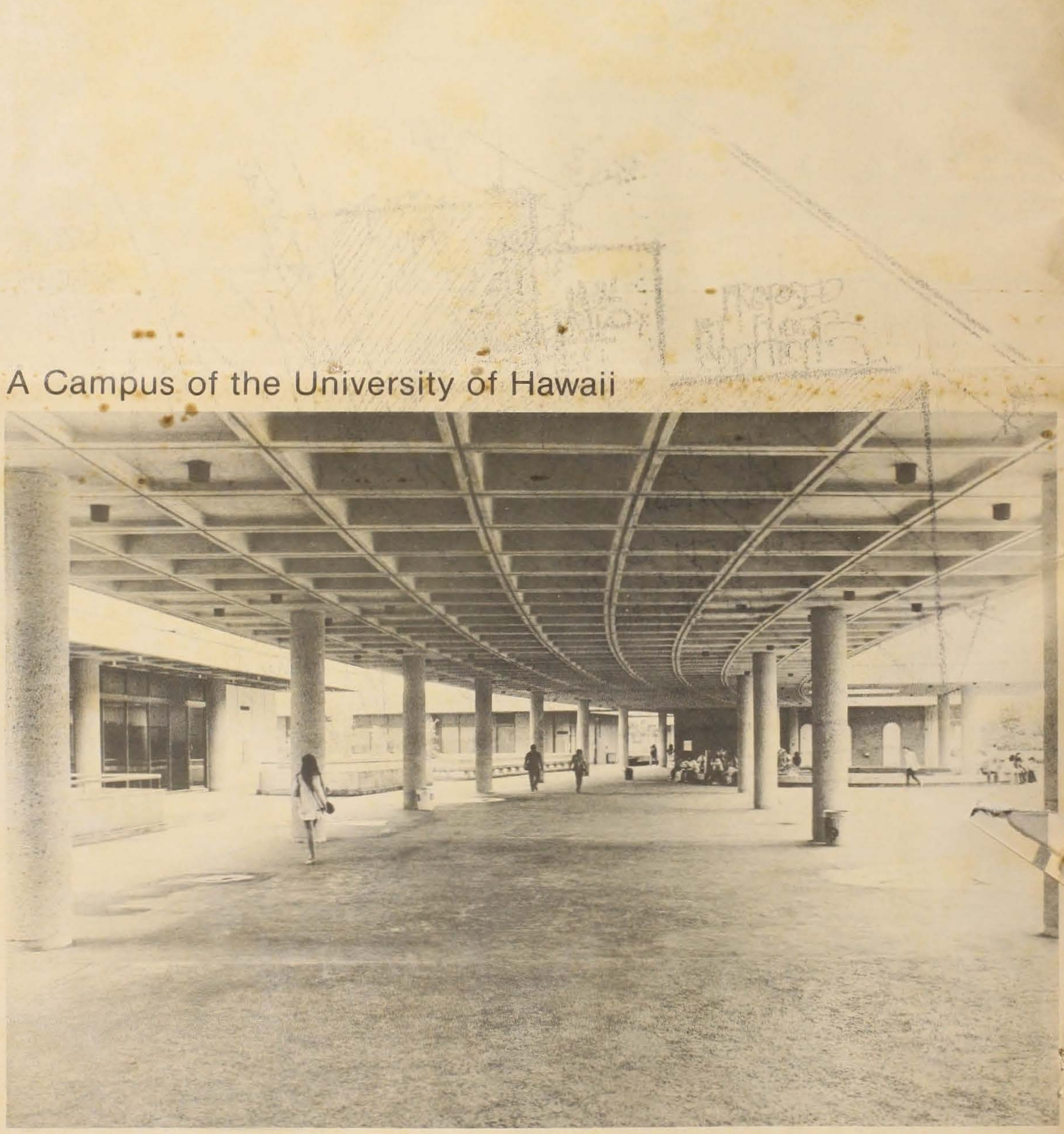
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