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1981-82
GENERAL CATALOG

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LEEWARD

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APR -6 1992

The College and The Community

TO HELP PEOPLE LEARN

ADMINISTRATION

LEEWARD COMMUNITY COLLEGE

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Philosophy

Leeward Community College's motto is "To Help People Learn" and its philosophy can be stated simply: **Our door is open.** Through that door comes a variety of students who have many kinds of needs. The College, through its policy and its people, responds to those needs in a wide diversity of ways by offering the opportunity to learn.

The door to the College is open. It has no lock but the people who are at LCC still need a set of keys to unlock certain situations. The keys are labelled awakening, motivation, perseverance, understanding and knowledge of each other, the offering of extra help, the receiving of help, caring. Many of the keys are the special programs on campus and off which reach out to the students and the community. Some of the keys have no labels yet. They are yours to seek and use.

History

"Leeward Community College will begin classes this semester, even if the sessions have to be held in a tent!" These words were spoken by the first Provost, Leonard T. Tuthill, in February, 1968. Over 1,640 students, twice the projected number, enrolled for the first classes, many of them in Pearl City Kai Elementary School. Enrollment for Fall, 1980 exceeded 5,600.

"After all, a college is people, not buildings and furniture." Those words of Tuthill, combined with a pioneering spirit of students, administration and faculty have meant that LCC has reached out to the community and has been responsive to the educational needs and interests of a diverse population.

The history of LCC can be said in three words: growth, involvement, achievement.

Environs

The campus is situated on approximately 49 acres of land nearly in the geographic center of the island of Oahu and is heavily used all year by both the students and larger community surrounding it. The primary geographic area serviced by the College is the Leeward and Central Oahu District. Situated midway between Pearl City and Waipahu, the College overlooks the middle loch of Pearl Harbor and the Waipio Peninsula. The Koolauloa range forms one natural boundary, as do the North Shore of Haleiwa-Waialua and the Waianae-Nanakuli coasts. Aiea and Pearl City are the heart of the district. Students come to LCC from all parts of the island because there are no official boundaries for any of the community colleges.

Public Transportation

The Mass Transit Lines (TheBus) 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 a frequent basis. Complete schedules may be obtained from the company.

The City and County of Honolulu also maintains a shuttle minibus service between the campus and Pearl City during school days. Check with the Kokua Center (AD-219, telephone 455-0220) for further information and timetable.

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 the rules and regulations. Copies of the Rules and Regulations for Campus Parking at Leeward Community College are available at the Security Office (LA-238).

Kokua Information Center

For information about LCC, day or night, contact the Kokua Information Center located on the upper level of the Administration Building, Room AD-219. Telephone 455-0220. Hours are Monday through Thursday 9 a.m. to 2:30 p.m., 4:30 p.m. to 8:00 p.m.; and, Fridays 9 a.m. to 2:30 p.m.

Educational Policy

This document is an attempt to summarize applicable policies of the University of Hawaii concerning various aspects of student admissions, enrollment and registration. Students should check with the applicable department, school or college concerning any other policies which could affect their specific enrollment, registration, schedule of courses or special fees.

The University reserves the right to make changes in certain fees, faculty assignments and time schedules; to cancel classes where necessary; and to set maximum limits for enrollment in certain classes. Notice of such changes will be given where possible.

Accreditation

The University of Hawaii, which administers Leeward Community College, is accredited by the Western Association of Schools and Colleges. Leeward Community College has been continuously and fully accredited since 1970 by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges.

Academic Calendar

1981 FALL SEMESTER

July/August:
Orientation for new students and academic advising for new, transferring and returning students.
July 15, Wednesday:
Deadline for applications for Fall Semester, 1981.
August 17, Monday:
Faculty report for duty.
August 18-26, Tuesday-Wednesday:
Registration.
August 21, Friday:
Admissions Day Holiday.
August 27, Thursday:
First day of Instruction—Fall Semester and First Accelerated Session.
September 7, Monday:
Labor Day Holiday.
October 12, Monday:
Discoverers' Day Holiday.
October 21, Wednesday:
First Accelerated Session ends.
October 22, Thursday:
First Day of Instruction—Second Accelerated Session.
November 2, Monday:
Fall Graduation application deadline.
November 11, Wednesday:
Veterans' Day Holiday.
November 26-27, Thursday-Friday:
Thanksgiving Day Holiday.
December 1, Tuesday:
Deadline for applications for Spring Semester, 1982.
December 16, Wednesday:
Last Day of Instruction—Fall Semester and Second Accelerated Session.
December 17-22, Thursday-Tuesday:
Evaluation/Final Examination Days.
December 25, Friday:
Christmas Day Holiday.

1982 SPRING SEMESTER

December 1, Tuesday:
Deadline for applications for Spring Semester, 1982.
January 1, Friday:
New Year's Day Holiday.
January 6-13, Wednesday-Wednesday:
Registration.
January 14, Thursday:
First Day of Instruction—Spring Semester and First Accelerated Session.
February 15, Monday:
Presidents' Day Holiday.
March 1, Monday:
Spring Graduation application deadline.
March 9, Tuesday:
First Accelerated Session ends.
March 10, Wednesday:
First Day of Instruction—Second Accelerated Session.
March 22-26, Monday-Friday:
Spring Recess.
March 26, Friday:
Prince Kuhio Day Holiday.
April 9, Friday:
Good Friday Holiday.
May 6, Thursday:
Last Day of Instruction—Second Accelerated Session.
May 7, Friday:
Last Day of Instruction—Spring Semester.
May 10-13, Monday-Thursday:
Evaluation/Final Examination Days.
May 14, Friday:
Commencement.

1982 SUMMER SESSION

May 21, Friday:
Deadline for application for Summer Session, 1982.
June 9-10, Wednesday-Thursday:
Registration.
June 11, Friday:
Kamehameha Holiday.
June 14, Monday:
First Day of Instruction.
July 5, Monday:
Independence Day Holiday.
July 26, Monday:
Last Day of Instruction.

Admissions Information

Admissions and Records Office

Location: Administration Building (AD-220)
Telephone: 455-0217 or 455-0218
Recorded Telephone Information: 455-0239

* Admissions and Registration of students
* Maintenance of student records and transcript requests
* Collection of data from students
* Distribution of catalogs
* Veterans' Administration (G.I. Bill) Certifications

The Admissions Office will accept applications for the 1982-1983 academic year after December 1, 1981.

Deadlines for returning your completed application to the LCC Admissions Office is July 15, 1981 for Fall semester and December 1, 1981 for Spring semester.
Foreign students note earlier deadline.

This section covers what you will need to know if you plan to enroll at Leeward Community College.

* The **requirements** for different kinds of students.
* **Steps to take for admission.**

REQUIREMENTS

IF YOU ARE A:

Resident: "Any citizen of the State of Hawaii who has completed high school or is 18 years of age or older may attend Leeward Community College and attempt the courses of his/her choice." Cf. "Statement on Residency/Non-Residency" in the Policies and Statements section of the catalog.

Non-Resident: Non-residents of the State of Hawaii are accepted in limited numbers and they are subject to the non-resident quota as mandated by the Controlled Growth Policy of the University of Hawaii System.

Immigrant: Foreign citizens on immigrant visas who have been allowed to live in the U.S.A. permanently but have not yet resided in Hawaii for twelve months are subject to the Controlled Growth Policy.

Foreign Student: See Foreign Students section below.

Member of the Military: Military personnel (servicemen and their dependents) who are stationed on active military duty in Hawaii are subject to the Controlled Growth Policy but are exempted from the non-resident tuition. A verification of United States Armed Forces Member's Assignment form signed by the commanding officer, personnel officer or education officer must be submitted with the application to enter the College. The Controlled Growth Quota could be filled before entrance deadline.

New Student: Attending LCC for the first time, you must complete steps for admission and (except those transferring from another college) will be given a reading and math test. Those students who are deficient in rate of reading or comprehension for satisfactory work in their chosen area of study will be recommended for classes in developmental reading.

Continuing Student: You registered for credit at LCC last semester (excluding summer session enrollment). You do not need to reapply for admission. Follow registration dates. (See Academic Calendar).

Returning Student: Applicant who is returning to LCC after an absence of one or more semesters and did not attend another institution of higher education during the absence. You must complete the steps for admission.

Transfer Student: Applicant who is presently or previously enrolled at a college or university other than LCC. Transfer students who are planning to take a mathematics course at this college will be required to take a math placement test or bring proof (grade reports or transcripts) of previous college math courses taken to register. You must complete the steps for admission.

Early Admit: High school seniors may register for classes at LCC on a space-available basis while completing high school requirements. Only those students who have received approval on a Request for Early Admission form from their high school counselor will be considered for admission. Students must also complete the steps for admission to the College.

Concurrent Registrant: Students enrolled at another Campus of the U.H. system during the same semester and also who wish to enroll at LCC must have permission from the academic advisor of the other U.H. Campus.

AND PLAN TO ATTEND FULL-TIME:

(taking at least 12 units of credit)
Complete all the "Steps To Take For Admission" as listed below.

AND PLAN TO ATTEND PART-TIME:

(taking less than 12 units of credit)
Complete all the "Steps To Take For Admission" as listed below.

AND HAVE NEVER COMPLETED HIGH SCHOOL:

You may enroll for part-time or full-time status.

AND HAVE A GENERAL EDUCATION DEVELOPMENT (G.E.D.) HIGH SCHOOL EQUIVALENCY:

G.E.D. holders may enroll for part-time or full-time status.

AND ARE A SENIOR CITIZEN:

Residents of the State of Hawaii 60 years of age or older are entitled to attend LCC without payment of tuition and fees on a space-available basis.

Eligible citizens may register for classes after the regular tuition-paying students have completed their registration.

AND ARE TRANSFERRING TO LCC FROM ANOTHER COLLEGE OF THE U.H. SYSTEM:

Transcripts of work taken at any campus of the U.H. System are accepted at LCC.

AND ARE TRANSFERRING TO LCC FROM COLLEGES OR UNIVERSITIES NOT PART OF THE U.H. SYSTEM:

For acceptance of credits, courses must be comparable in content and level to courses offered by LCC. Only credits completed in an accredited institution with a grade of C or better will be considered for transfer credit.

Students transferring from non-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.

AND PLAN TO TRANSFER TO MANOA OR WEST OAHU COLLEGE:

See Transfer Information section of catalog.

AND ARE A FOREIGN STUDENT: (student visa applicants only)

Complete "Steps To Take For Admission" and the special requirements as stated below.

1. Submit Written Record in English.
A complete and certified English translation of the student's record of achievement must be submitted. Applicant should request his or her high school to send transcripts directly to Leeward Community College.

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). Applicants must attain a minimum score of 500 on the TOEFL to be considered for admission.

For exact information, write:

Educational Testing Service, P.O. Box 899, Princeton, New Jersey 08540 regarding the exact dates, location and fees. Please do not write to the College for information on TOEFL.

3. Confirmation of Financial Support.
Submit a completed and certified University of Hawaii Supplementary Information Form for Foreign Applicants.

4. Submit Satisfactory Report of Physical Exam.
Submit satisfactory report of physical exam as specified on the Health Form, including chest x-ray results.

5. Health Insurance Required.
Foreign students who have been accepted for admission must show proof of adequate health insurance at registration.

6. I-20 Form Will Be Provided By College.
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 student is accepted.

7. Deadlines.
Because of the Controlled Growth Policy of the University of Hawaii System, applications will be accepted until the enrollment quota is reached.

STEPS TO TAKE FOR ADMISSION

1. A University of Hawaii System Common Application Form must be filled out and returned by mail or in person to the Office of Admissions and Records.

Application forms may be obtained from all high school counselors or from the Admissions and Records Office of any U.H. Campus of the U.H. System.

2. Transcript of high school or any college work taken previously must be supplied.

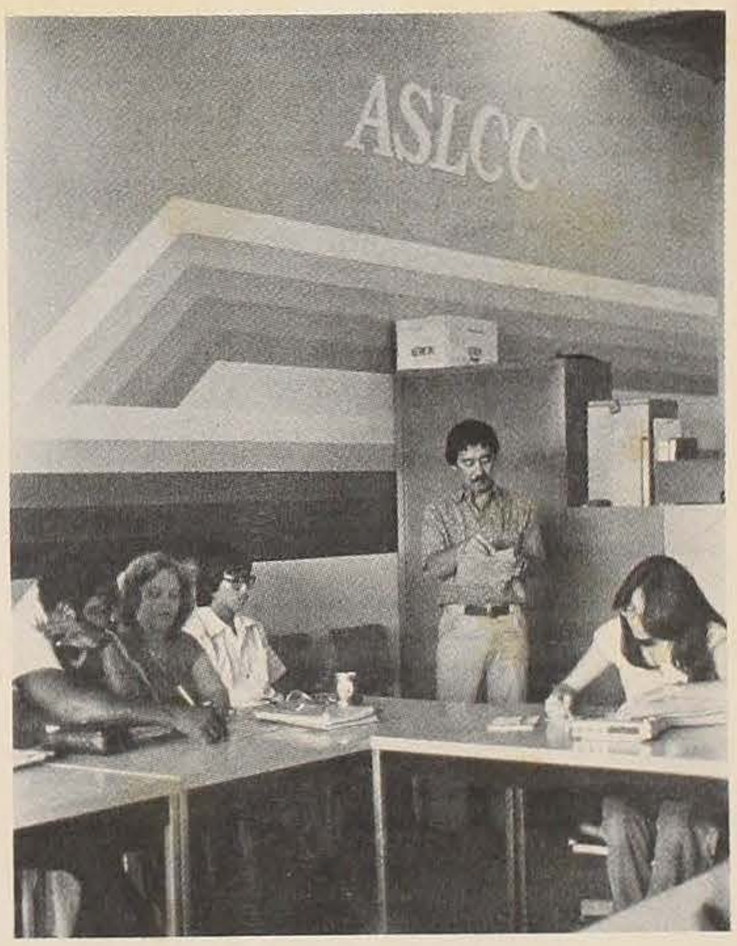
3. All new, transfer and returning students must attend an orientation session. All new applicants who have not already completed one semester of college work elsewhere will be required to take math and reading tests designed to assist them in the planning of their programs. The tests will be given during orientation.

4. Tuberculosis Clearance Requirement. The College requires that all students who are admitted for the first time into LCC demonstrate that they are free of active T.B. by submitting to the College Health Center either a State Department of Health Clearance card or a LCC Clearance Form. This must be done either prior to registration or within forty-five (45) days following. For more information and help, contact LCC Health Center, AD-122, telephone 455-0216. (Additional information in "To Serve You" section.)

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

6. Notification of Admission. You will be notified by mail of your acceptance to LCC.

7. Information on registration, orientation and academic advisement and counseling will be mailed to you following acceptance.



Registration

Registration for courses is usually held two (2) weeks prior to the first day of instruction. A Schedule of Courses is published each semester and is available to students prior to registration. The College Catalog is available at the Admissions and Records Office. Both should be used in planning the program of studies.

A student will be assigned a time to register for courses only after completing all admission requirements, orientation and advising.

The College reserves the right to make changes in certain fees, faculty assignments and time schedules; to cancel classes where necessary; and to set maximum limits for enrollment in certain classes. Notice of such changes will be given when possible.

Academic Information

Definition of terms used at Leeward Community College

Degree: The formal title conferred upon a student who successfully completes a program of study. Associate degrees are given by LCC.

Certificate: A credential awarded a student who has successfully completed a program of study. Fewer credit hours are required than for a degree. Certificates of Achievement and Certificates of Completion are available in some programs. (See Degree and Certificate Programs.)

Graduation: The granting of degrees or certificates to students who have completed their programs. Students must apply for graduation.

Commencement: A public ceremony-celebration held at the end of the academic year at which degrees and certificates are conferred. In addition, honors and awards are presented for individual excellence by various divisions and organizations.

Semester: A time span of sixteen weeks within a 4 1/2 month period during which courses are offered and completed. There are usually two semesters in one academic year: fall semester and spring semester. There may be two or more "accelerated sessions" within a semester. A summer session of six weeks duration may also be held.

Program of Study: A carefully planned series of courses which the student is required to successfully complete in order to receive a certificate or degree in that particular program.

Course: A unit of instruction consisting of recitations, lectures and laboratory sessions in a particular subject within the time span of a semester or session.

Semester Hours: The value assigned to each class of each course. One credit hour usually equals fifteen hours in class per semester. At LCC, credit hours are placed on each subject. The number of credit hours is determined by the number of lecture, laboratory or field experience hours determined necessary for each semester course. One semester hour of credit is awarded for one 50-minute period of intensive study in class once a week with the expectation that two additional hours per week will be spent in study outside of class.

Example 1. In a 3-credit course, a student may be in a class for three 50-minute periods a week for 16 weeks, such as Monday, Wednesday, and Friday: or

Two 75-minute periods a week, such as on Tuesday and Thursday.

Example 2. In another 3-credit course, a student may be in a course for three hours at a time (180 minutes) once a week for 16 weeks, such as from 6:30 to 9:30 p.m. on Monday evenings or 9 to 12 noon on Saturday mornings.

Equivalent credit values are established for laboratory, shop, studio, field work and other types of learning which are of a different nature. See course descriptions for further information. *(Also see College Credit Equivalency Program)*

Lecture-Lab.: Is a lecture course to which a lab experience is attached. For example: Computer Science.

Classified Students: Students following a prescribed program leading to a degree or certificate.

Unclassified Students: Students who are not pursuing a degree or certificate but are taking courses for upgrading or enrichment.

Special Students: Students who are taking courses but are not counted officially as LCC students. For example, Early Admits, concurrent registrants.

Full-time Students: Students who carry 12 or more credits.

Part-time Students: Students who carry less than 12 credits.

Registration

New Students will be notified of acceptance by mail. Information about the required orientation meeting will be included. A registration appointment will be assigned following academic advising.

Continuing, Returning and Transfer Students are notified by mail regarding advising and registration procedures for fall and spring semester and, for some students, placement testing. Students are responsible for notifying the Admissions Office of their current mailing address.

Certain procedures and payments are required of all applicants and registration is not official until these have been met. Class attendance 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.

Registration for off-campus sessions: See Special Programs and Community Services section.

Concurrent registration: See Admissions and Financial Information sections.

Changes in registration: A form is available at the Admissions and Records Office. A fee is charged.

Schedule of courses: Prior to registration each semester, a Schedule is printed supplementing the Catalog with time, place and instructor information. It is available at the Admissions Office and the Kokua Center. It is advisable for the student to plan courses and alternatives prior to registration. Course outlines describing each course are available in the College library.

Academic Advising: Counselors and faculty are available for helping the student prepare a program of study each semester. (See "To Serve You" section).

Course-Load Limitations

All students who want to carry more than 16 units of credit must secure the approval of the Coordinator of Student Services or designated representative. Approval for excess units will be based on the student's demonstrated ability to pass 16 units at LCC or another college. Students with low reading scores are limited to 12 hours until successful completion of Developmental Reading.

Foreign student: If on student (F-1) visa, the student is required to carry a minimum of 12 semester hours and must complete the program of study according to the period specified on I-20 form.

Social Security Administration: Students receiving full benefits are required to carry a minimum of 12 semester hours.

Attendance

Students are expected to be in attendance regularly and on time for all quizzes, examinations, laboratory and field work sessions of the courses for which they are registered.

Anticipated as well as unexpected absences should be discussed with the instructor. The instructor is concerned about the student, but it is the student's responsibility for arranging make-up work with the instructor.

Instructors' disenrolling students from classes: Faculty members may drop students from a class if the student misses two (2) consecutive unexcused hours of classes during the semester. Students who are dropped by instructors will receive the grade of "N" (no grade) for the courses. Students must withdraw formally to receive the "W" (formal withdrawal) grade. Being dropped by an instructor for missing classes is not considered to be formal withdrawal. No tuition refund will be made. See Admissions and Records Office for the form. For refund deadlines, see the Policies and Statements section of the catalog.

Withdrawal from a course: Students may withdraw from a course whenever they do not wish to learn what the course was designed to help them learn. Students should discuss their intention with the instructor and their advisor or counselor. To withdraw from a course, a student must complete an official form from the Registrar's Office and obtain the necessary signatures.

Erase Period: During the first three weeks of the semester a student may withdraw from a course without "W" being recorded on the student's permanent record.

Withdrawal from the College: Complete withdrawal from the college must be applied for on a form available at the Admissions and Records Office. For refund deadlines, see the Policies and Statements section of the catalog.

Grades

Letter grades are given in all courses. Grades signify the various levels of achievement in carrying out the performance objectives of the course. Students will be informed of these criteria by the instructor who may use such methods as written papers, participation in class discussion, performance on assigned projects, and mid-term and final examinations.

Grade	*Grade Point*	*Definition*
A	4	Excellent Achievement
B	3	Above Average Achievement
C	2	Average Achievement
D	1	Minimal Passing Achievement
CR		Credit by Assessment
W		Withdrawal from the course (No quality points assigned and no credits computed in GPR)
N		No grade assigned (No quality points assigned and no credits computed in GPR)
Q		Credit for meeting general education requirements in non-transfer programs.

CR is used to award credit under the College Credit Equivalency Program, specifically for learning experiences which are assessed to be equivalent to college courses. For additional information, see the section on the College Credit Equivalency Program. This grade is not used for the course offerings of this college.

W is used to indicate formal withdrawal from a course after the first three weeks of the semester, but prior to the final examination.

N is used to indicate that the student has either not completed the requirements of the course or has not reached a level of accomplishment within a specified time period which will allow for an evaluation. It may continue on the student's record indefinitely. It may also be used if the student fails to earn credit after challenging a course through "Credit-By-Examination."

Q is used to indicate the minimum level of satisfactory accomplishment in a liberal arts course taken to fulfill the general education requirements in a terminal (non-transfer) community college program.

The grading system is under review and changes may be made.

Grade Reports: At the end of each semester, the student's individual grade reports will be mailed to the student.

Grade Point Ratio: Grade point ratio (GPR) is a system used to evaluate the overall scholastic performance of college students. The GPR is determined by first totaling the number of grade points a student has earned in each completed course and then by dividing the sum of all grade points by the number of credit hours for which a student received passing grades. The grade points for a course are found by multiplying the number of credits given for a course by the grade in the course. Courses for which the grades of W, N, and Q have been recorded are not included in the computation of ratios.

Transcripts: A transcript of the student's permanent record is issued only on written authorization of the student or through a lawful court order. Allow a minimum of seven working days for processing of requests. (See the Financial Information section regarding possible fee.)

Repetition of Courses: A student may repeat any course taken at the college no matter what grade he/she has received but not necessarily for additional credit. 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 description for criteria for repetition.

Academic Deficiency: A student will be considered academically deficient under the following circumstances:

1. Cumulative grade-point-average is below 2.0 or
2. Two or more non-punitive grades are received in each of two consecutive semesters.

An academically deficient student will be expected to meet with a counselor before registering.

Unsatisfactory Progress: A student will be considered to be making unsatisfactory progress and not in good standing academically if, in the semester following being declared academically deficient, the student's:

1. Cumulative grade-point-average is below 2.0 or
2. Two or more non-punitive grades are received.

A student determined to be making unsatisfactory progress must meet with a counselor before registering, and a reduction in study load may be imposed on the student by the counselor.

A student making unsatisfactory progress is not eligible for campus employment.

Deadline for applications for graduation:
November 2, 1981 for Fall semester graduation
March 1, 1982 for Spring semester graduation

Academic Grievance Procedures

The College has developed procedures by which students may seek remedy if they feel they have been treated arbitrarily and capriciously in academic matters. Students may examine the procedures in the following offices: Dean of Educational Services, Associate Dean of Student Services, Academic Divisions, Student Government and Student Activities. A copy is also in the Kokua Center.

College Credit Equivalency Program

Leeward Community College believes that there are many ways to become "educated" in addition to traditional course offerings. The College provides options which allow students to demonstrate competencies gained through non-classroom experiences and to earn college credits for them. This allows students to spend their time and money on new subjects they need and want to take. Methods for earning such credits include:

Independent Study: Students who wish to design and complete individual study projects geared to their particular interests, aptitudes and needs may register for this option. Plans must be approved by an appropriate faculty member who supervises and grades the project outcomes (usually completed within one semester's time).

This provides 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 at one of three levels—Developmental (99), Introductory (199) and Enrichment (299). This must be managed by at least one student-selected advisor and be approved by the advisor's Division Chairperson. While there are no prerequisites, an advisor may recommend particular preparation before a student may undertake a project.

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

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

Credit-by-Exam: Students take instructor-made examinations covering the material in a specific LCC course if they feel they have learned the concepts and skills elsewhere. An adequate score may allow a student to earn Leeward credit for the course without attending classes. Students may contact instructors teaching the specific course they wish to challenge. There is no charge for credit-by-examination; however, part-time students will be assessed additional tuition in accordance with the College's tuition schedule ($3.50 per credit for residents and $38.00 per credit for non-residents plus the appropriate student activities fee).

Foreign Credits: Credits earned in institutions of higher education in foreign countries may be transferred to LCC in some cases. Expert evaluators with specific knowledge of particular countries may assist in such evaluations.

College Transfer Credit: Courses completed at other accredited colleges and universities with a grade of "C" or better are usually transferable toward a LCC degree. (A grade of "D" may be transferred from campuses in the University of Hawaii System.) Students are responsible for requesting institutions attended to send official transcripts directly to the Admissions and Records Office at Leeward Community College.

Noncollegiate Courses: Courses, workshops and conferences completed in noncollegiate settings, such as business, industry and institutions, may be equivalent to college credit.

Equivalency Examinations: Students may receive credit for some standardized tests taken elsewhere if the scores are adequate. These include CLEP and Advanced Placement Examinations.

Correspondence Courses: Courses completed by correspondence from accredited institutions of higher education may earn LCC credits, particularly if testing was supervised.

Military Education Experiences: Some courses and training experiences completed during military service may be equivalent to college courses. National guidelines are used in this evaluation process.

Experiential Credits: Experiences students have had may earn LCC credits if such experiences are verified, documented and judged by a faculty committee to be deserving of college credit.

Two final notes:

1. A maximum of 21 nontraditional credits can be applied to a degree program at Leeward Community College. The 21 credits include course equivalents as well as elective credit. The maximum of 21 credits *does not* include credit earned through credit-by-examination or independent study.

2. Courses to be evaluated towards nontraditional credit need to be matched to an existing course alpha at Leeward Community College.

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 chairperson or the chairperson of the Courses and Program Committee. Inquiry may also be made at the Office of the Dean of Educational Services.

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.

Student Responsibility

Each student is viewed as an adult, responsible for following the instructions and regulations set forth in this catalog and other official publications.

The courses offered are subject to change depending on sufficient enrollment and budgetary resources.

Counselors and faculty are always available and willing to assist students in planning their courses and programs as well as providing assistance in personal problems.

Any question or doubt concerning catalog material should be referred to the Office of the Dean of Educational Services.

Specialized Instructional Programs

PASS (An 'Ohana for Learning)

Is this your first semester at LCC?
Have you been out of school for awhile?
Have you enrolled—but withdrawn—in past semesters?
Do you need review or development of the basic skills in reading, writing, and math?
Are you undecided about your goals?
Would you like to know more about yourself?

PASS is a program designed to help you build basic skills and self-confidence. A small group of students—an 'ohana—take all their classes together and help each other learn and succeed. PASS is an all-day commitment. Students are together from 9:00 AM till 3:00 PM, taking classes and studying. Four instructors teach classes, help build study skills, and give individual help to each student according to his needs. If you enroll in PASS, you will take the following courses:

ENG 21	Basic Reading
ENG 22	Introduction to Expository Writing
MATH 1G	Basic Mathematics I
MATH 1H	Basic Mathematics II
SSCI 101	Self Development

Life Skills Program

This program is especially designed for students who may be uncertain about their academic and career plans and wish to develop a stronger basis for life decisions. Greater self-awareness, increased personal growth and stronger academic skills are the goals of the program.

The program includes decision-making, goal-setting, and life/career planning; concentration/memory building exercises and study skills; relaxation/stress reduction and meditation methods; physical fitness, nutrition and preventive health care; creative expression; interpersonal communication and intimacy building skills.

The four courses which comprise the program must be taken together as scheduled. The courses are:

ENG 102	College Reading Skills
HPER 101	Physical Fitness
LSK 110	Relaxation, Concentration and Memory
SSCI 101	Self Development

English Language Institute

This is a program in English as a Second Language. Non-native speakers of English including permanent immigrants, foreign students and immigrants from Samoa and the trust territories whose English language skills have been determined to be inadequate to do the course work at LCC will be further tested and assigned to the English Language Institute courses: ELI 2 Basic Speech for Non-native Speakers, ELI 3 Basic Reading for Non-native Speakers, ELI 4 Basic Writing for Non-native Speakers and SSCI 101 Self Development for Non-native Speakers, or ELI 7 Intermediate Reading and ELI 8 Intermediate Writing for Non-native Speakers.

Included in the services are classroom instruction in English language skills, individualized instruction in the Learning Resource Center and personal conferences with an instructor in Language Arts on a semi-monthly basis.

Financial Information

Tuition and Fees Schedule

Resident	1-11 units	12 units & above
Tuition	$3.50 per unit	$40.00
Student Activities	$ .50 per unit (up to $5.00)	$ 5.00
Total		$45.00

Non-Resident	1-11 units	12 units & above
Tuition	$38.00 per unit	$450.00
Student Activities	$ .50 per unit (up to $5.00)	$ 5.00
Total		$455.00

The tuition and fee schedule listed here is subject to change.

Payments

For registration to be official, all fees must be paid in full before the close of the final day of registration. DEFERRED PAYMENT OF TUITION IS FORBIDDEN BY UNIVERSITY OF HAWAII POLICY.

Special Fees

Student Activity Fee: Full-time students (those carrying 12 or more units) pay a Student Activity Fee of $5.00. Part-time students (those carrying 1-11 units) pay a Student Activity Fee of $ .50 per unit, not to exceed $5.00.

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 an Associate in Arts degree, an Associate in Science degree or a Certificate of Achievement.

Fee for Dishonored Checks: For checks tendered to the College or any department therein and returned for any cause, the following fees will be charged:
Check drawn on a bank within the State of Hawaii, $5.00
Check drawn on a bank outside of the State of Hawaii, $10.00

Health Insurance: Is available on an optional basis for all students except foreign students. (See LCC Health Center for information.)

Books and Supplies: Usually range from $25 to $85 per semester for a full-time student.

Parking: No charge.

Catalog: No charge.

Non-credit Course Fees: Students registered in non-credit courses pay fees as indicated in the announcements published by the Office of Special Programs and Community Services (LCC) or the College of Continuing Education and Community Services (UH-Manoa campus).

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.

Concurrent Registration Tuition

Concurrent registrants are assessed tuition between *Community Colleges* as follows:

Residents: $3.50 per semester credit hour up to a total of $45.00 within the U.H. System.

Non-residents: $38.00 per semester credit hour up to a maximum of $455.00.

Concurrent registrants are assessed tuition on the *Manoa Campus* as follows:

Residents: $19.00 per semester credit hour, up to a maximum of $225.00 in addition to the Manoa Campus Center fee and Activity fee.

Non-residents: $48.00 per semester credit hour, up to a maximum of $562.00 per semester in addition to the Manoa Campus Center fee and Activity fee.

No charge is made for transcripts of work accomplished at Leeward Community College sent to the student's home campus. The student must make the request to the LCC Admissions and Records Office.

Refund Policy

Cf. "Refund Policy" in the Policies and Statements section of the catalog. Students applying for refunds should go first to the Registrar's Office (AD-220) to complete the necessary forms.

Financial Aids

Financial assistance is available to students who demonstrate financial need. Leeward Community College offers various forms of aid, such as the Basic Educational Opportunity Grant, Supplemental Educational Opportunity Grant, National Direct Student Loan, College Work-Study, State of Hawaii Scholarship, Hawaii Student Incentive Grant and State Higher Educational Loan.

To apply, students are required to submit the Financial Aid Form (FAF) to College Scholarship Service (CSS). Other forms may also be required for individual students. In addition, students must provide verification of income received, such as a copy of the 1980 federal tax return. All forms are available at the Financial Aids Office.

Complete processing of application forms requires approximately two months. Therefore, students are urged to apply early. Recommended deadline for Fall, 1981 is May 1, 1981. Applications received after the deadline will be considered for remaining funds.

Leeward Community College has very limited scholarship funds. Students should refer to "Department of Education Bulletin 15" for scholarships offered by private organizations. Copies are available for students' review at the Financial Aids Office.

A short-term emergency loan program has been established to enable students to borrow (with no interest) for unexpected expenses. Students must see the Financial Aids Officer to apply.

Any student with financial problems should call, consult or write to the Financial Aids Officer for more information.

Financial Aids Officer
Administration Building (AD-221)
455-0248

To Serve You . . .

Admissions and Records

Administration Building, AD-220
Telephone: 455-0217, 0218
Recorded Telephone Information: 455-0239
Hours: Monday-Thursday, 7:45 a.m.-8:30 p.m.
Friday, 7:45 a.m.-4:30 p.m.

- Admissions and registration of currently enrolled and new incoming students
- Maintenance of student records and transcript requests
- Collection of data from students
- Distribution of catalog and class schedule
- Veterans' Administration (G.I. Bill) Certifications

Bookstore

Student Center Building (Lower Level)
Telephone: 455-0205, 0207
Hours: Monday-Friday, 8:30 a.m.-4:00 p.m.*
*During first two weeks of Fall and Spring semester, store is open five evenings until 7:30 p.m. See schedule posted by the store.

- Textbooks and related reference materials
- Supplies
- Used books on a limited basis

Business Office

Administration Building, AD-113
Telephone: 455-0325
Hours: Monday-Friday, 7:45 a.m.-4:30 p.m.
(In evenings, payment by check or exact amount required —Admissions and Records Office, AD-220. Receipt can be picked up the following evening.)

- Payment of tuition, bills, refunds
- No change given for vending machines, etc. (cf. Student Activities Office SC-202, off Student Lounge)

Campus Security

Language Arts Building, LA-228
Telephone: 455-0295

- Around-the-clock assistance to students and faculty

Career Development Center

Administration Building, AD-221
Telephone: 455-0237
Hours: Monday-Thursday—8:00 a.m.-8:00 p.m.;
Friday—8:00 a.m.-11:30 a.m.

- Central location to which students may come for assistance with career/educational planning, job placement, financial problems and learning about their interests, abilities, goals and values
- Career-Life Planning: Counseling, workshops, etc. (455-0238)
- Financial Aids: Grants, scholarships, loans, workstudy (455-0248)
- Job Placement/Counseling: Pre-employment job information, job referrals, job searching skills, job listings, occupational information and resumes (455-0236)
- Testing: Career guidance tests and inventories (455-0420)

Career Resource Room

Administration Building, AD-222C
Telephone: 455-0420
Hours: Monday-Thursday—8:00 a.m.-8:00 p.m.;
Friday—8:00 a.m.-11:30 a.m.

- Central location to which students may come for audiovisual and written resources and information concerning jobs and career opportunities
- Home of Career Kokua, the new computerized Hawaii Career Information System

Computer Center

Biological Sciences Building, BS-109
Telephone: 455-0271
Hours: Monday-Thursday, 8:15 a.m.-9:30 p.m.
Friday, 8:15 a.m.-4:30 p.m.
Saturday, 9:00 a.m.-3:00 p.m.

- PDP-11/70 Computer, keypunches, time-sharing terminals
- Available for use by all students

Counseling and Guidance Center

Administration Building, AD-208
Telephone: 455-0233, 0234
Hours: Monday-Thursday, 8:00 a.m.-8:00 p.m.*
Friday, 8:30 a.m.-4:30 p.m.

- Assisting students in vocational selection/career choices
- Academic advising and helping to clarify/establish educational goals
- Improving study and/or survival skills
- Personal growth and development counseling

Food Service

Cafeteria (First Level of Student Center Building)
Hours: Snack Bar (Subject to availability of student help):
7:30 a.m.-11:00 a.m., Monday to Friday
4:30 p.m.-6:00 p.m., Monday to Thursday*
Cafeteria: 11:00-1:00 p.m., Monday to Friday
Campus Snack Canteens
A.M. Building (Makai)
B.S. Building (Ewa)
P.S. Building (Diamond Head)
Gourmet Dining Room, Student Center Building, SC-220
Hours: Wednesday, Thursday Gourmet Lunch, 11:30 a.m.-12:45 p.m.
Lunchwagons: normally in parking lot during daytime hours

Learning Resource Center

Library Building, Lib-102 (lower level)
Telephone: 455-
Hours: Variable (To be posted)
The Learning Resource Center provides services to students and community members in the areas of reading, writing, and foreign language, as well as other content areas.

- Support services include tutorial help in reading, writing, and foreign language; study skills, writing skills, and speech improvement workshops; and individual and small group counseling.
- Resources include independent study materials in reading and writing (rhetoric, grammar, vocabulary, and spelling); foreign language tapes; and other audio-visual materials. (Equipment is available to reproduce audio cassettes and videotapes.)

Handicapped: KOMO MAI Center

Administration Building, AD-224
Telephone: 455-0288
Hours: Monday-Friday, 8:30 a.m.-3:00 p.m.

- Assisting the handicapped individual in every way reasonably possible to achieve education goals in the manner he or she deserves
- Tutorial aid, note takers in class, writers, readers
- Mobility aid ("pushers"), special parking
- Academic advising, registration assistance, community agencies' referrals, faculty consultation
- Fellowship and social activities, personal help, peer counseling
- Local and national handicapped information
- Division of Vocational Rehabilitation liaison

Health Center

Administration Building, AD-122
Telephone: 455-0216 (for messages, 455-0201)
Hours: Monday-Friday, 9:00 a.m.-5:00 p.m.

- Emergency and non-emergency care
- Routine health screening procedures, including T.B. skin testing, PAP smears, blood pressure and pregnancy testing
- Sexual health education (Pono Mai Ka'i)
- Special screenings and education by nurse educator or with the cooperation of health-oriented community agencies
- Applications for Student Health Insurance Plan (available on a voluntary basis for each semester or the entire year)
- Arranges for Emergency Health Officers in each of the campus' buildings, the posting of first aid procedures and insuring that first aid kits are available for shops and labs

Human Services Learning Center

Fine Arts Building, FA-201
Telephone: 455-0360
Hours: Open on a space and instructor availability basis. Call above number for further information.

- Films, maps, games, books and data on local communities
- When classes not in session, open to individuals or groups wishing to use the materials for research, discussion, group projects or make-up work

Information: KOKUA Center

Administration Building, AD-219
Telephone: 455-0220
Hours: Monday-Thursday, 9:30 a.m.-2:30 p.m.; 4:00 p.m.-8:00 p.m.; Friday, 9:00 a.m.-2:30 p.m.

- The drop-in place on campus where students can find answers
- Information about the LCC campus and social services in the larger communities
- Maps, lost and found, social service directories
- A central location for students to post and distribute information
- Delivery of messages to academic departments and other offices which are not open at night (for evening students only)

Job Placement Services

Administration Building, AD-221
Telephone: 455-0236
Hours: Monday-Friday, 8:00 a.m.-4:30 p.m.
Evening hours by appointment

- Placement Officer provides pre-employment job information, consultations, job referrals and job-seeking advice
- Job listings and occupational information from private industries and government agencies
- Government applications and other forms

Library

Library Building (Second and Third Levels)
Telephone: 455-0377
Hours: Monday-Thursday, 7:45 a.m.-9:30 p.m.
Friday, 7:45 a.m.-4:30 p.m.
Hours between academic semesters, 7:45 a.m.-4:30 p.m.

- A source of learning materials and a place to study
- Books, magazines, newspapers, pamphlets, college catalogs, phonograph records, cassette tapes, art prints, filmstrips and kits
- Self-conducted "mini-course" in the use of a library through cassettes and pamphlets
- Microfilm reader/printers, photocopying machine, typing room
- Learning stations equipped with phonorecord players and cassette players (stereo and mono)
- Film preview for 16mm movies
- Borrowing and exchange agreement with other libraries of the University and State

Media Center

Library Building (Lower Level, 1st Floor)
Telephone: 455-0201
Hours: Monday-Friday, 8:00 a.m.-4:30 p.m.

- Services in planning production of instructional material: graphics, photography, audio tape, television programs, and related areas in audio-visual communication
- Instructional material production center and television production studio

Student Activities

Student Center Building, SC-202
Telephone: 455-0208
Hours: Monday, Friday, 8:00 a.m.-4:30 p.m.
Tuesday-Thursday 8:00 a.m.-8:00 p.m.

- Sponsorship of co-curricular activities of a cultural, social, recreational and educational nature—lectures, concerts, dances, movies, blood drives, beer busts, coffee and doughnut distributions
- Membership on Student Activities Committee open to all interested students

Student Athletics

Student Center Building, SC-202
Telephone: 455-0208
Hours: Monday-Friday, 8:00 a.m.-4:30 p.m.

- Intercollegiate sports, Fall semester, men and women: Volleyball, Bowling.
- Intercollegiate sports, Spring semester, men and women: Golf, Basketball, Tennis.
- Intramural sports: Volleyball, Bowling, Basketball, Flag Football.
- Check with the Student Activities Office, SC-202 for schedules and sign-ups.

Student Government

Student Center Building, SC-203
Telephone: 455-0287
Hours: Monday-Friday, 8:00 a.m.-4:30 p.m.

- Associated Students of Leeward Community College is governed by an Executive Branch (President, Vice-President, Treasurer and Secretary) and Legislative Branch (14 Senators). Major responsibilities include the budgeting and management of the student activities fee, the coordination of various campus committees and the establishment of policies and programs for students.
- Terms of all offices are for one year. Any student is eligible (within ASLCC Constitution guidelines) to run for any office. Elections are held in April. (If needed, another special election is held in October to fill any vacated positions.) All students are eligible and encouraged to vote.
- Students are especially encouraged to participate in the operation of the College not only through Student Government and Activities but by membership on student, faculty and College committees as well. (A listing of existing committees may be obtained from either the Student Activities or Student Government Offices.)

Student Lounge

Student Center Building (Second Level)
Telephone: 455-0208
Hours: Monday and Friday, 8:00 a.m.-4:30 p.m.
Tuesday-Thursday, 8:00 a.m.-8:00 p.m.

- Tables and chairs in a relaxing atmosphere
- Pool and ping pong, cigarette machine, telephone
- Housing listings
- Lost and found (SC-202)
- Dollar change (SC-202)

Student Publications

Student Center Building, SC-201
Telephone: 455-0297

- NUHOU O KE KULANUI is a tabloid newspaper funded and operated by the students of Leeward Community College. Translated literally to mean "news of the college," the paper provides a means of expression for students and the college community. The newspaper is staffed by students with an interest in journalism. Members of the newspaper staff need not be journalism majors.
- GOOD THINGS is a student magazine designed to display the literary talents of students at LCC. GOOD THINGS is created by a staff of students and faculty members.
- NUHOU O KE KULANUI and GOOD THINGS are published by the Associated Students of Leeward Community College through its Board of Publications.

Testing/Psychometry

Administration Building, AD-221
Telephone: 455-0237
Hours: Monday-Friday, 7:45 a.m.-4:30 p.m.
(Evening hours by appointment)

- Placement examinations to assess a student's grasp of basic learning skills in reading, writing and mathematics

Veterans

Office of Veterans' Affairs (OVA)
General Technology Building, GT-211
Telephone: 455-0278
Hours: Monday-Friday, 8:00 a.m.-4:30 p.m.
Evening hours by appointment

- Assists those qualifying for the G.I. Bill education benefits
- Assists the veteran in applying for school, planning the class schedule, academic advising and procuring tutorial assistance
- The veteran's advocate in securing the full range of veterans' benefits

Special Programs and Community Services

Office: Administration Building, AD-121
Telephone: 455-0230
Secretary: Ms. Marge Yokooji

Introduction

As its part in implementing the total mission of Leeward Community College, the Office of Special Programs and Community Services acts as the arm of the college that serves those whose needs are not met by the formal, on-campus credit programs. This it does through:

1) off-campus credit programs implemented in conjunction with the instructional divisions.
2) providing non-credit courses and training programs.
3) providing cultural events, workshops and public forums.
4) encouraging community use of the college resources and college use of community resources.

In carrying out these programs, the Office of Special Programs and Community Services is guided by the following principles:

1) that its programs grow from community needs and ascertaining those needs requires a continuing program of assessment.
2) that the college is part of its community and must take its place, along with other institutions, in working together to identify and solve problems and enhance the quality of life in Central/Leeward Oahu.
3) that the college must engage in a program of active cooperation with these other institutions so that its limited resources, and those of others, will be maximized in serving the community.

Off-Campus Credit Programs

The offering of the college's credit program in off-campus settings is intended to serve those for whom the on-campus site is inappropriate. This may be students in geographically remote areas such as Waianae-Nanakuli or Waialua or students whose work schedule or transportation difficulties prevent on-campus attendance. There are also instances where an off-campus site offers a better learning environment or accessibility to equipment or people not readily available on campus. Special mention should be made of the college's programs at Waianae-Nanakuli and for the military community.

Waianae-Nanakuli Education Center

The college operates the Waianae-Nanakuli Education Center located in Waianae at 85-670 Farrington Highway. The Center offers a variety of credit courses and academic support services through requests made by the residents in the area. Data on resident interest in specific courses or programs are collected through regularly distributed surveys. Included among the staff are community educational assistants who spread the word about the Center throughout the community, assist residents with college applications and scholarship forms and help students with the transition to academic work. Learning laboratories offer students an individualized approach to learning. Students work with an instructor who develops an educational package designed for each particular student. All students work at their own pace. Hours are 8:00 a.m. to 9:00 p.m., Monday through Thursday; Fridays 8:00 a.m. to 4:30 p.m. For more information, call the Waianae Center at 696-6378.

Military Education

Through both the College of Continuing Education and Community Services and the Manpower Training Office, LCC offers credit courses on several military bases. While directed at the needs of the military students, the courses are available to both military and civilian students.

All but one of the major military bases in Hawaii are in the Leeward area. The Office of Special Programs and Community Services works closely with the Base Education Officers and Counselors to help match the needs of the military people with the resources of the college and the University system.

Non-Credit Program

The college's developing non-credit program serves the educational needs of those students who do not require formal credit. Non-credit offerings include a variety of courses, workshops and short term training programs offered on-campus, at the Waianae-Nanakuli Education Center, and other selected off-campus sites.

The college encourages people to share their skills, talents or ideas and to suggest non-credit courses or workshops. The college will try to serve these expressed needs through direct offerings or referral to other more appropriate agencies. For suggestions or further information contact the Office of Special Programs and Community Services at 455-0230.

Senior Citizen Education Program

Of special importance is the college's *Senior Citizen Education Program,* designed to increase educational opportunities for persons 60 and over in the Leeward area.

The tuition-free credit or non-credit program seeks to encourage seniors throughout the community to participate in meaningful activities as well as to develop and share their talents with others. Courses, workshops and seminars are also developed in response to academic needs expressed by seniors. The majority of courses are held during the day and in community facilities easily accessible to the students.

Theatre and Cultural Events

The LCC Theatre has gained the reputation as one of Hawaii's finest theatre for the performing arts. The past seasons have included LCC student productions, national touring shows, dance concerts, symphonies, films, workshops, community events, high school plays and variety shows, youth theatre programs, beauty pageants, jazz concerts, choral festivals, seminars and society meetings. The Theatre usage is geared to serve the educational needs of the college, the community and professional theatre companies. It houses classes for acting, dance, creative dramatics, puppetry, and stage craft. Our 600 seat capacity Theatre is the cultural center for the college community and State and is available to community groups. For more information call the LCC Theatre Manager (455-0389) or the Office of Special Programs and Community Services (455-0230).

Community Involvement

1. Liaison with Community Organizations. The staff of the Office of Special Programs and Community Services keeps in close touch with members of civic, business, community and other local organizations. This close two-way communication helps to assure that the communities' needs are being met; second, that the college is taking full advantage of the talents of the community; and third, that Leeward Community College's resources are known and used throughout the community. An area-wide Advisory Board including "grassroots" people is being established to participate in formulating policies and program direction for LCC's Office of Special Programs and Community Services.

2. Coordination of Community Services. The Office of Special Programs and Community Services works closely with other governmental and private non-profit agencies that provide social services to the community. The education services of the college are carefully coordinated with the health, social and other services being provided by other agencies.

3. Training and Consultation. The staff of the Office of Special Programs and Community Services and the faculty and staff of the college are available to groups and organizations to conduct training and provide consultation in a variety of specialized subject areas.

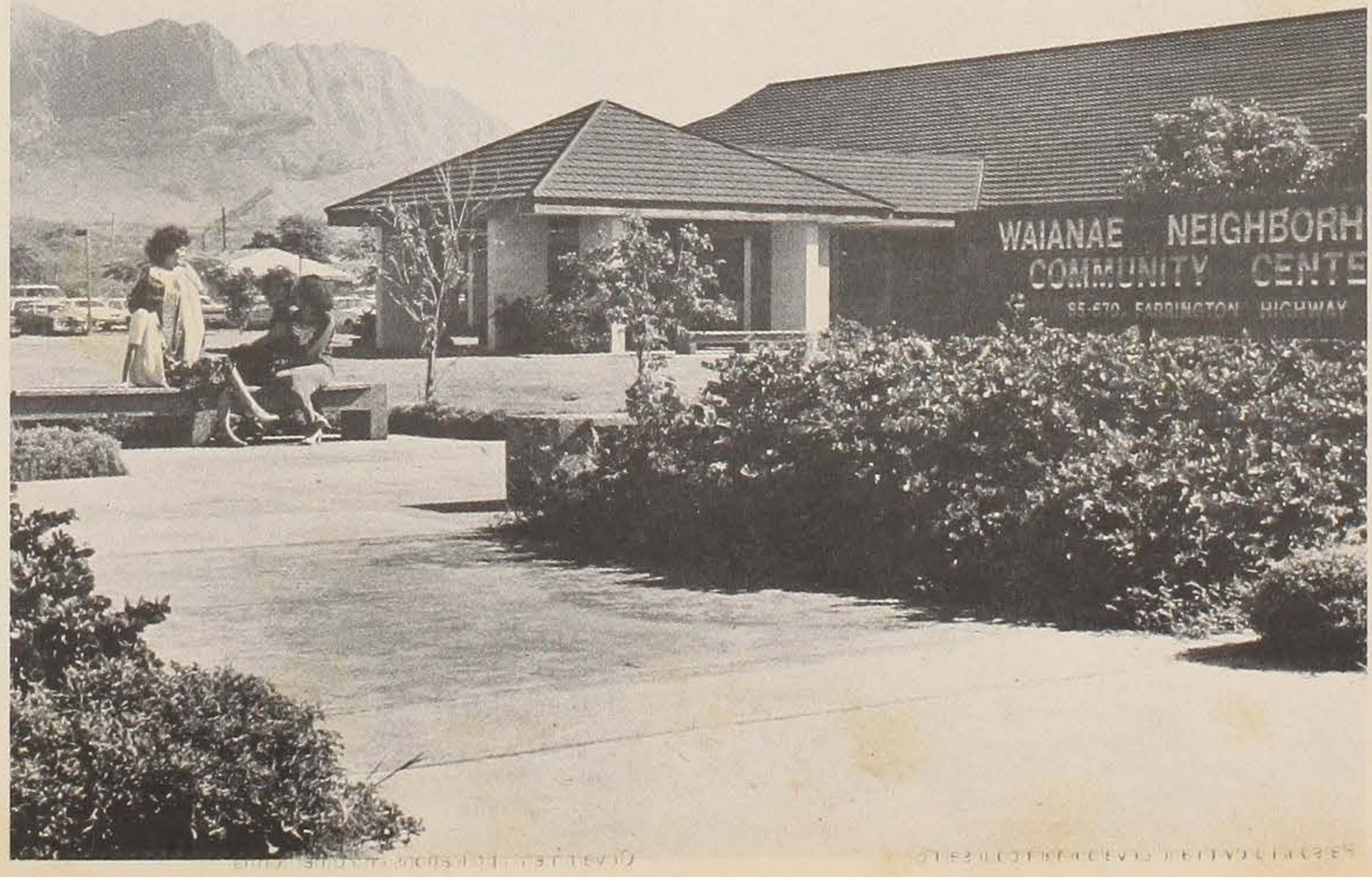
The Office of Special Programs and Community Services works with local professional or special interest groups in order to offer quality workshops and conferences to the community on a wide variety of topics.

For more information or a request, contact the Office of Special Programs and Community Services (AD 121), 455-0230.

Facilities Use

Beyond the normal class scheduling, Leeward makes available to both the college community and the community-at-large nearly all of its facilities—its theatre, classroom facilities, the cafeteria, the grounds and tennis courts. Groups must ordinarily be either college-sponsored or non-profit organizations. Nominal rental fees are charged to outside groups.

To reserve facilities an organization completes a facilities request form at the Office of Special Programs and Community Services (AD 121), 455-0230. All facilities are reserved on a first-come, first-served basis.



Degree and Certificate Programs

The College offers the Associate in Arts degree (A.A.), the Associate in Science degree (A.S.), Certificate of Achievement and Certificate of Completion. For students planning to transfer to a four-year institution, see the information in the Transfer section.

The Programs of Study outlined in the Degree and Certificate section have been written to show a suggested schedule of courses for a student planning to attend a community college program full-time.

This is not practical for many people and each year a high percentage of the students planning to complete a degree or certificate program at LCC attend part-time. These people plan to complete a program over a much longer period of time than the one or two years as outlined in the various programs. This allows many men and women employed full-time or working at home with families time to reach their educational goals at a pace that is complementary to their other responsibilities.

Some students may not wish to pursue a certificate or a degree at all, but select their courses of study according to their own personal interests or occupational needs. (See Course Offerings section and Special Programs & Community Services section.) Any student, upon completion of registration and payment of fees, is eligible to become a candidate for any degree or certificate offered at LCC. See a counselor for academic advising. (Candidates must see a counselor in the first month of the session in which the degree or certificate is to be awarded and make application through the Registrar's Office.)

Deadline for applications for graduation:
November 2, 1981 for Fall semester graduation
March 1, 1982 for Spring semester graduation

Degree and Certificate Program Summary

Requirements

Associate in Arts Degree
60 credit hours

12 must be earned at LCC
Grade point average: 2.0
12 units may be below 100 level
6 units in each of 4 divisions: Arts & Humanities, Language Arts, Math & Natural Sciences, Social Sciences

Associate in Science Degree
60 to 63 credit hours depending on the field

12 must be earned at LCC
Grade point average: 2.0
36 to 49 hours in field of study depending on which field
12 to 24 hours of general education depending on which field

Certificate of Achievement
30 to 45 credit hours depending on field

Certificate of Completion
The required number of credit hours shall not exceed 23

Programs

Associate in Arts Degree

Liberal Arts (see above) with 36 credit hours of electives

Associate in Science Degree

Field	Total Credit Hours
Accounting	60
Automotive Technology	63
Information and Computer Science	60
Drafting Technology	62
Food Service	61
Graphic Arts	60
Information and Computer Science	60
Library Technology	60
Management	
Supervisory Management (Option A)	63
Retailing (Option B)	63
Marine Technology	63
Recreational Instructor	
Games and Sports (Option A)	60
Outdoor Recreation (Option B)	60
Creative Arts (Option C)	60
Secretarial Science	60

Certificate of Achievement

Field	Total Credit Hours
Accounting	30
Automotive Technology	45
Drafting Technology	43
Food Service	41
Graphic Arts	36
Library Technology	30
Management	
Banking (Option A)	36
Credit Union (Option B)	30
Secretarial Science	30

Certificate of Completion

Field	Total Credit Hours
Automotive Technology	10-23
Drafting Technology	22
Food Service	23
Management (Banking)	15
Marine Technology	
Seamanship (Option A)	12
Fishing (Option B)	13-16
Outboard Engines Service & Maintenance (Option C)	12
Navigation (Option D)	16
Diving (Option E)	11

Degree and Certificate Program Requirements

ASSOCIATE IN ARTS (A.A.) DEGREE PROGRAM

The Associate in Arts Degree is awarded to students who complete a minimum of 60 units of credit with at least 6 in each of the divisions of: (a) Arts and Humanities, (b) Language Arts, (c) Mathematics and Natural Sciences and (d) Social Sciences. A maximum of 12 units of credit in courses numbered below 100 may be applied toward the Associate in Arts. Allowing such credits for the A.A. Degree does not mean that they will be accepted in transfer by another college or university. The Associate in Arts Degree Program is also referred to as the Liberal Arts Program and is designed to prepare students who plan to continue their education at four-year colleges and universities.

The requirements for the Associate in Arts Degree are:

1. Required credit hours: 60
2. Minimum grade-point average: 2.0
3. Course Selection: as described above
4. Residency: at least 12 credit hours toward the degree must be earned at Leeward Community College

ASSOCIATE IN SCIENCE (A.S.) DEGREE PROGRAM

The Associate in Science Degree is awarded to students who complete a prescribed program of studies in one of the occupational programs. In order to insure both occupational proficiency and some degree of general education, course requirements have been established for each of the majors in the A.S. Program. The course requirements are of two kinds: (a) those in which specific job-essential skills and knowledge are learned and (b) those in which the student learns other types of skills and knowledge related to his/her occupational goals, e.g. oral and written communication or mathematics.

The requirements for the Associate in Science Degree are:

1. Required credit hours: 60 to 63
2. Minimum grade-point average: 2.0
3. Minimum General Education requirements:
   a. A demonstrated proficiency in communications and mathematics met by an acceptable score on a proficiency examination or by successful completion of courses identified by the program.
   b. Courses required by major program.
   c. Nine (9) credits in liberal arts, applied liberal arts or interdisciplinary courses as determined by the college or program.
   d. Electives as needed to meet the total credit hour requirements.
4. Residency: final 12 credit hours in major subject area (such as Automotive, Drafting, etc.) must be earned at Leeward Community College. The residency requirement may be waived for cause at the option of the Dean of Educational Services and Provost. The Dean and Provost may also approve use of credit-by-examination to meet residency requirements at their discretion.

CERTIFICATE OF ACHIEVEMENT

A Certificate of Achievement is awarded to students who complete a prescribed series of courses leading to an occupational skill and usually include appropriate courses in related and general education. Depending on the program, the total number of units of credit required may vary from 30 to 45.

The requirements for Certificate of Achievement are:

1. Required credit hours: 30 to 45
2. Minimum grade-point average: 2.0
3. General Education: no minimum requirements. Students must, however, meet proficiency requirements in communications and mathematics. Requirements may be met by an acceptable score on a proficiency examination or by successful completion of courses identified by the college program.
4. Residency: *final* 12 credit hours must be earned at Leeward Community College. The residency requirement may be waived for cause at the option of the Dean of Educational Services and Provost. The Dean and Provost may also approve use of credit-by-examination to meet residency requirements at their discretion.

CERTIFICATE OF COMPLETION

A Certificate of Completion is a credential awarded to students who successfully complete certain occupational courses or course sequences specified by the college. Programs are designed primarily for students who need short-term training or job upgrading. The required number of credit hours shall not exceed 23.

Programs

ACCOUNTING
ACC

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

Requirements		Units
ACC 24	Principles of Accounting I	3
ACC 25	Principles of Accounting II	3
BUS 20	Introduction to Business	3
BMACH 20	Business and Office Machines	3
BUS 55	Computational Problems in Business	3
ENG 22	Introduction to Expository Writing OR	
ENG 100	Expository Writing	3
ENG 209	Business Writing	3
SP 151	Personal and Public Speech	3
TYPW 20B	Beginning Typing I	1
TYPW 20C	Beginning Typing II	1
TYPW 20D	Beginning Typing III	1
Business Elective		3
	Total Units	30

Associate in Science Degree (60 Units)

This program is designed to prepare the student for entry-level positions in the public accounting field—both in government and in private business establishments.

Requirements		Units
ACC 24	Principles of Accounting I OR	
ACC 201	Elementary Accounting I	3
ACC 25	Principles of Accounting II OR	
ACC 202	Elementary Accounting II	3
ACC 26	Principles of Accounting III	3
ACC 36	Cost Accounting	3
BUS 20	Introduction to Business	3
BMACH 20	Business and Office Machines	3
BUS 55	Computational Problems in Business	3
LAW 200	Legal Environment of Business	3
ICS 100	Computer and Its Role in Society	3
ENG 100	Expository Writing	3
ENG 209	Business Writing	3
SP 151	Personal and Public Speech	3
*TYPW 20B, C, D	Beginning Typing I, II, III OR	
*TYPW 30	Intermediate Typing OR	
*TYPW 40	Advanced Typing	3
ECON 120	Introduction to Economics OR	
ECON 150	Principles of Economics I OR	
ECON 151	Principles of Economics II	3
Arts and Humanities Electives		6
**Business Electives		9
Social Sciences Elective		3
	Total Units	60

*The student should refer to the course descriptions for the appropriate level.
**It is highly recommended that the student take BUS 93B/C/D/E as an elective.

AUTOMOTIVE TECHNOLOGY
AMT

Successful completion of appropriate courses in the AMT curriculum leads to a Certificate of Completion, a Certificate of Achievement or an Associate in Science Degree.

The program is designed to provide technical knowledge and manipulative skills training for entry into the automotive and/or small engine occupational areas and to provide the basic training necessary for career advancement in these same areas.

The approximate cost of basic tools is $250.00 which the student must purchase.

Certificate of Completion (10-23 Units)

Requirements for automotive occupational area		Units
AMT 20	Introduction to Automotive Mechanics.	1
Any other automotive courses		9-22
	Total Units	10-23

Requirements for small engine occupational area (10 or 18 Units)		Units
AMT 80	Small Engine Repairs	2
AMT 81	Motorcycle and Small Engine Repair - 2 Stroke	4
AMT 82	Motorcycle and Small Engine Repair - 4 Stroke	4
	Total Units	10

OR

AMT 80	Small Engine Repairs	2
AMT 86	Outboard Engine I	4
AMT 87	Outboard Engine II	4
	Total Units	10

OR

AMT 80	Small Engine Repairs	2
AMT 81	Motorcycle and Small Engine Repair - 2 Stroke	4
AMT 82	Motorcycle and Small Engine Repair - 4 Stroke	4
AMT 86	Outboard Engine I	4
AMT 87	Outboard Engine II	4
	Total Units	18

In addition, certificates of completion are available for a variety of sequences of automotive courses which will lead directly to employment or job upgrading in the automotive field.

Certificate of Achievement (45 Units)

Requirements (listed by suggested course sequence)		Units	
AMT 20	Introduction to Automotive Mechanics.	1	
ENG 22	Introduction to Expository Writing	3	
MATH 50C	Technical Mathematics I: Automotive and Diesel Mechanics	3	
(A minimum of 38 units from the following AMT courses)			
AMT 23	Automotive Lubrication and Service	1	
AMT 46B	Standard Transmissions and Clutch	4	
AMT 46C	Differential Rear Axle	4	
AMT 55C	Wheel Balancing	1	
AMT 55	Suspension and Steering	4	
AMT 50	Automatic Transmission	7	38
AMT 53	Brake Systems	4	
AMT 30	Engines	7	
AMT 40C	Electrical Systems	4	
AMT 40D	Tune Up	7	
AMT 43	Automotive Air Conditioning	4	
	Total Units		45

It is highly recommended that students take AMT 93D/E as an additional course.

Associate in Science Degree (63 Units)

Requirements (listed by suggested course sequence)		Units
AMT 20	Introduction to Automotive Mechanics.	1
ENG 22	Introduction to Expository Writing	3
MATH 50C	Technical Mathematics I: Automotive and Diesel Mechanics	3
AMT 23	Automotive Lubrication and Service	1
AMT 46B	Standard Transmissions and Clutch	4
AMT 46C	Differential Rear Axle	4
AMT 55C	Wheel Balancing	1
AMT 55	Suspension and Steering	4
AMT 50	Automatic Transmission	7
AMT 53	Brake Systems	4
AMT 30	Engines	7
AMT 40C	Electrical Systems	4
AMT 40D	Tune Up	7
AMT 43	Automotive Air Conditioning	4
*General Education Electives		9
	Total Units	63

*General Education Electives: Students may fulfill requirements by passing one semester course from each of the following groups:

GROUP I	COMUN 145, SP 151 or ENG 100	3
GROUP II	PHYS 66, BUS 55 or BLPRT 23	3
GROUP III	SSCI 101, SOC 100 or ECON 101	3

It is highly recommended that students take AMT 93D/E as an additional course.

DRAFTING TECHNOLOGY
DRAFT

Students are required to provide various drafting tools, at approximately $50.00 cost per student.

Certificate of Completion (22 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. The student will be able to perform these skills from rough or detailed sketches or from selected notes.

Requirements (listed by suggested course sequence)		Units
DRAFT 20	Introduction to Drafting	4
DRAFT 26	Construction Materials I	3
DRAFT 27	Construction Materials II	3
DRAFT 36C	Architectural Drafting I	2
DRAFT 30B	Architectural Construction I	2
DRAFT 30C	Architectural Construction II	3
DRAFT 34B	Residential Planning	3
DRAFT 36B	Architectural Drafting I	2
	Total Units	22

In addition to the above required courses, the following courses are highly recommended: DRAFT 19 (for students without prior experience in mechanical drawing), ENG 22 and MATH 50K.

Certificate of Achievement (43 Units)

An entry-level architectural draftsperson possesses all of the essential skills and knowledge to draft the necessary plans for a simple structure. To perform these functions, the individual must be adept at research using brochures and catalogs to find materials, equipment and fixtures, as well as to find pertinent regulations and standards in building codes. Essentially, the draftsperson will be directed by a chief draftsperson or an architect in the form of rough sketches, memoranda and verbal communication.

Requirements (listed by suggested course sequence)		Units
DRAFT 20	Introduction to Drafting	4
DRAFT 26	Construction Materials I	3
DRAFT 27	Construction Materials II	3
DRAFT 36C	Architectural Drafting I	2
DRAFT 30B	Architectural Construction I	2
DRAFT 30C	Architectural Construction II	3
DRAFT 34B	Residential Planning	3
DRAFT 36B	Architectural Drafting I	2
DRAFT 32	Structural Drafting	3
*ENG 22	Introduction to Expository Writing	3
DRAFT 36D	Architectural Drafting I	2
DRAFT 38	Architectural Drafting II	5
DRAFT 42	Codes and Specifications	2
DRAFT 44	Building Services	3
**MATH 50K	Technical Mathematics I: Drafting and Graphic Arts	3
	Total Units	43

*ENG 100 or ENG 106 may be substituted for ENG 22.
**MATH 123 may be substituted for MATH 50K.

In addition to the above required courses, the following courses are highly recommended: DRAFT 19 (for students without prior experience in mechanical drawing), DRAFT 40 and DRAFT 93D/E.

Associate in Science Degree (62 Units)

The skills and knowledge acquired in the Associate in Science Degree program are fundamentally the same as those in the Certificate of Achievement program. In addition, however, students will have the general education and added drafting background to enhance their chances of advancement in the occupational area.

Requirements (listed by suggested course sequence)		Units
DRAFT 20	Introduction to Drafting	4
DRAFT 26	Construction Materials I	3
DRAFT 27	Construction Materials II	3
DRAFT 36C	Architectural Drafting I	2
DRAFT 30B	Architectural Construction I	2
DRAFT 30C	Architectural Construction II	3
DRAFT 34B	Residential Planning	3
DRAFT 36B	Architectural Drafting I	2
DRAFT 32	Structural Drafting	3
DRAFT 34C	Presentation Drawings	3
DRAFT 42	Codes and Specifications	2
DRAFT 36D	Architectural Drafting I	2
DRAFT 44	Building Services	3
*MATH 50K	Technical Mathematics I: Drafting and Graphic Arts	3
DRAFT 38	Architectural Drafting II	5
DRAFT 40	Architectural Drafting III (Spring only)	4
ENG 106	Technical Writing	3
COMUN 145	Interpersonal Communications	3
**General Education Electives (100 level and above)		9
	Total Units	62

*MATH 123 may be substituted for MATH 50K.
**Recommended courses for General Education Electives: ART 101, ART 106, ART 107, ART 108B, ART 108C, ART 113, ART 114, ART 115, ART 116, HIST 152, and ECON 120.

In addition to the above required courses, the following courses are highly recommended: DRAFT 19 (for students without prior experience in mechanical drawing), DRAFT 24 and DRAFT 93D/E. ENG 100 is also a highly recommended preparation for ENG 106.

FOOD SERVICE
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.

The program is designed to provide the technical knowledge and basic skill training for successful entry into the Food Service industry and to provide the basic training necessary for advancement as cooks, station chefs or executive chefs in the industry.

Certificate of Completion (23 Units)

Requirements (listed by suggested course sequence)		Units
FSER 20	Introduction to Food Service	2
FSER 50B	Fundamentals of Cookery: Theory	2
FSER 50C	Fundamentals of Cookery: Station Set-Up and Initial Preparation	2
FSER 50D	Fundamentals of Cookery: Serving, Storage and Pre-Preparation	3
FSER 54B	Cold Food Pantry: Theory	2
FSER 54C	Cold Food Pantry: Initial Preparation	2
FSER 54D	Cold Food Pantry: Preparation, Service and Storage	3
BAKE 20	Fundamentals of Baking (Fall only)	4
FSER 30	Storeroom Operation	3
	Total Units	23

Certificate of Achievement (41 Units)

Requirements (listed by suggested course sequence)		Units
FSER 20	Introduction to Food Service	2
FSER 50B	Fundamentals of Cookery: Theory	2

FSER 50C	Fundamentals of Cookery: Station Set-Up and Initial Preparation	2
FSER 50D	Fundamentals of Cookery: Serving, Storage and Pre-Preparation	3
FSER 54B	Cold Food Pantry: Theory	2
FSER 54C	Cold Food Pantry: Initial Preparation	2
FSER 54D	Cold Food Pantry: Preparation, Service and Storage	3
FSER 30	Storeroom Operation	3
FSER 52	Short Order Cookery	4
FSER 60	Intermediate Cookery	4
FNS 19	Basic Nutrition (Spring only)	2
ENG 22	Introduction to Expository Writing	3
BIOL 60	Microorganisms, Foods and Sanitation (Fall only)	2
MATH 50H	Technical Mathematics I: Food Service	3
BAKE 20	Fundamentals of Baking (Fall only)	4
	Total Units	41

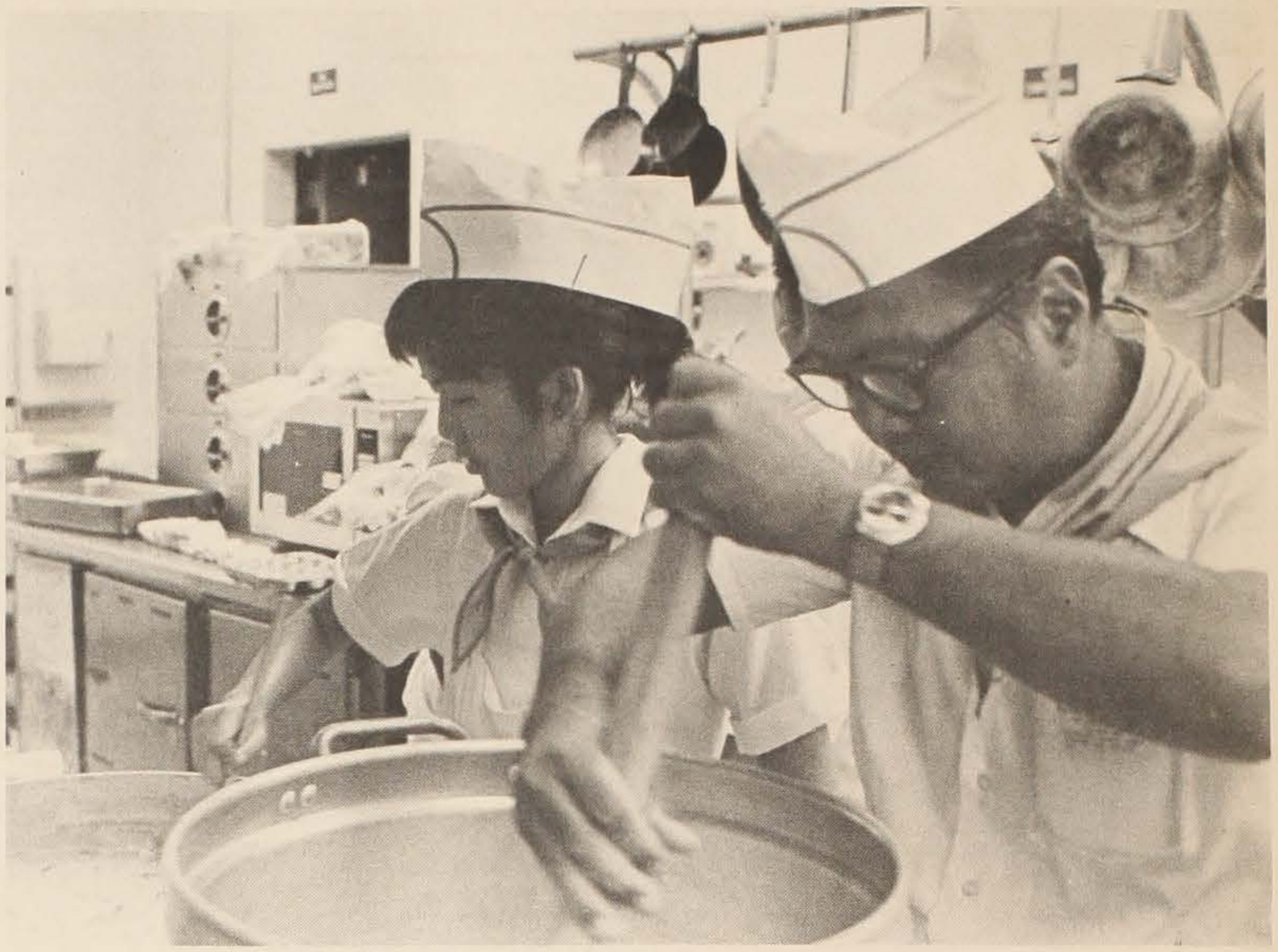
Associate in Science Degree (61 Units)

Requirements (listed by suggested course sequence)		Units
FSER 20	Introduction to Food Service	2
FSER 50B	Fundamentals of Cookery: Theory	2
FSER 50C	Fundamentals of Cookery: Station Set-Up and Initial Preparation	2
FSER 50D	Fundamentals of Cookery: Serving, Storage and Pre-Preparation	3
FSER 54B	Cold Food Pantry: Theory	2
FSER 54C	Cold Food Pantry: Initial Preparation	2
FSER 54D	Cold Food Pantry: Preparation, Service and Storage	3
FSER 30	Storeroom Operation	3
FSER 52	Short Order Cookery	4
FSER 60	Intermediate Cookery	4
FNS 19	Basic Nutrition (Spring only)	2
ENG 22	Introduction to Expository Writing	3
BIOL 60	Microorganisms, Foods and Sanitation (Fall only)	2
BAKE 20	Fundamentals of Baking (Fall only)	4
FSER 70	Advanced Cookery	7
MATH 50H	Technical Mathematics I: Food Service	3
BAKE 22	Advanced Baking (Spring only)	4
*General Education Electives		9
	Total Units	61

*General Education Electives: Students may fulfill requirements by passing one semester course from each of the following groups:

GROUP I	ART 105 or some other Arts and Humanities Elective	3
GROUP II	SSCI 101 or some other Social Sciences Elective	3
GROUP III	COMUN 145, SP 151 or ENG 100	3

It is highly recommended that students take FSER 93D/E as an additional course.



GRAPHIC ARTS
GRAPH

The Graphic Arts Program is intended to prepare students for employment in the graphic arts and related industries.

Emphasis is placed on learning experiences focusing on basic skills, knowledge and orientation for entry-level jobs. The approximate cost of basic tools is $50 which the student must purchase.

Certificate of Achievement (36 Units)

This program is meant to prepare students for entry-level positions in the *duplicating* areas of printing. Additional specialized skills and knowledge to maintain and advance in the industry will be learned once the student enters the industry.

Requirements (listed by suggested course sequence)		Units
GRAPH 20	Graphic Communications	1
GRAPH 21	Art/Copy Preparation I	2
GRAPH 25	Process Camera	3
GRAPH 30	Stripping and Platemaking I	3
GRAPH 33	Press Operator I	4
GRAPH 36	Bindery	2
TYPW 20B, C, D	Beginning Typing I, II, III (3) OR	
TYPW 30	Intermediate Typing (3) OR	
TYPW 40	Advanced Typing (3)	3
GRAPH 22	Art/Copy Preparation II	2
GRAPH 31	Stripping and Platemaking II	3
GRAPH 34	Press Operator II	3
ENG 22	Introduction to Expository Writing	3
*MATH 1G	Basic Mathematics I	2
*MATH 1H	Basic Mathematics II	2
GRAPH 27	The Process Camera—Halftone Screening	3
	Total Units	36

*A higher Math course will fulfill program requirement.

Associate in Science Degree (60 Units)

This program is designed for students seeking job entry skills or retraining and upgrading in *print shops* and related occupational areas.

Requirements (listed by suggested course sequence)		Units
GRAPH 20	Graphic Communications	1
GRAPH 21	Art/Copy Preparation I	2
GRAPH 25	Process Camera	3
GRAPH 30	Stripping and Platemaking I	3
GRAPH 33	Press Operator I	4
GRAPH 36	Bindery	2
TYPW 20B, C, D	Beginning Typing I, II, III (3) OR	
TYPW 30	Intermediate Typing (3) OR	
TYPW 40	Advanced Typing (3)	3
GRAPH 22	Art/Copy Preparation II	2
GRAPH 31	Stripping and Platemaking II	3
GRAPH 34	Press Operator II	3
ENG 22	Introduction to Expository Writing	3
*MATH 1G	Basic Mathematics I	2
*MATH 1H	Basic Mathematics II	2
GRAPH 27	The Process Camera—Halftone Screening	3
GRAPH 40	Estimating (Spring only)	3
GRAPH 44	Job Planning and Production	6
ART 101	Introduction to the Visual Arts	3
SSCI 101	Self Development	3
**General Education Electives		9
	Total Units	60

*A higher Math course will fulfill program requirement.

**General Education Electives: Students may fulfill requirements by passing one semester course from each of the following groups:

GROUP I	COMUN 145 or SP 151	3
GROUP II	Math and Natural Sciences Elective	3
GROUP III	Social Sciences Elective	3

It is highly recommended that students take GRAPH 93D/E as an additional course.

HUMAN SERVICES
HSERV

The human services program is designed to provide pre-service and in-service training for human service paraprofessionals. By a careful selection of program courses, students may specialize to meet specific occupational objectives or in-service training needs in areas such as: drug and alcohol abuse, mental health, special education, and human disabilities. A Certificate of Completion, a Certificate of Achievement, and an Associate of Science Degree are offered by the program. Students pursuing an Associate in Arts Degree may also concentrate in the human services area.

Certificate of Completion (8-21 credits)

A Certificate of Completion in this program will consist of from 8-21 credit hours of courses selected from the human development, community studies, or interpersonal relation area (see A.S. requirements) and/or identified skill courses (see below). The students will select a series of courses relevant to their employment needs or goals. Specific courses may be required by particular agencies for employment.

Certificate of Achievement (31-36 credits)

Requirements:	Units
HD 231 *or* HD 232 *or* SSCI 130	3
HSERV 101	3
*HSERV 110 *or* HSERV 240	3
HSERV 193 *or* HSERV 293	4
Specialty courses (see list below)	18
MATH 1G (or equivalent skill)	2
ENG 22 (or equivalent skill)	3
Total Units	31-36

HSERV 211, SOC 218 or HSERV 245/248 may be substituted.

Associate in Science (60 credits)

Requirements:	Units
Group I Human Development Area:	
HD 230, HD 231, SSCI 130 (2 courses)	6
Group 2 Community Studies Area:	
HSERV 110, HSERV 211 or SOC 218 (2 courses)	6
Group 3 Interpersonal Relations Area:	
HSERV 101, HSERV 240, HSERV 245, HSERV 248 (3 courses)	9
HSERV 193 and 293 (each may be repeated for credit)	8
Specialty courses (see list below)	11-16
BUS 55 or any 100-level math course or PHIL 210	3
ENG 22 or ENG 100 (or equivalent skill)	3
General Education electives	9
Other electives	5-0
Total Units	60

Human Service Specialty Courses

Specialty courses are of two kinds. Many are skill courses designed in cooperation with local human service agencies and may be taught by agency personnel. Others provide specialized information and theory. Students select courses relevant to their specific employment goals or inservice training needs. The partial list below is arranged into the specialty areas of human disabilities, substance abuse, and mental health. The student may take courses in one, two, or all three areas to fulfill Program requirements. For a complete and current list of specialty courses, consult the Social Science Division.

Human Disabilities		Units
Comun 101	American Sign Language I	3
Comun 102	American Sign Language II	3
ED 100	Introduction to Education	3
ED 200	Tutorial Training for Assisting Disadvantaged and Disabled Students	3
HD 185	Basic Principles of Working with Special Children and Their Families I	3
HD 186	Basic Principles of Working with Special Children and Their Families II	3
HD 285	Advanced Principles of Working with Special Children and Their Families I	3
HD 286	Advanced Principles of Working with Special Children and Their Families II	3
HPER 230	First Aid	2
HSERV 250	Revitalization Strategies for Human Service Workers	3
SSCI 190E	Behavior Modification	1
SSCI 290F	Effective Parenting	1
SSCI 290J	Assertiveness Training	1
SSCI 290X	Vocational Rehabilitation	3
SSCI 290T	Advocacy Training for the Disabled	3

Substance Abuse/Mental Health

HSERV 248	Assessment Interviewing and Treatment Planning	3
	OR	
SSCI 290G	Assessment Interviewing for Treatment Planning	2
SSCI 190E	Behavior Modification	1
SSCI 190F	Facts About Substance Abuse	2
SSCI 290F	Effective Parenting	1
SSCI 290H	Adolescent Counseling	2
SSCI 290J	Assertiveness Training	1
SSCI 290I	Women in Treatment	2
SSCI 290S	Death and Dying	1
SSCI 290X	Vocational Rehabilitation	3
HPER 230	First Aid	2
HSERV 250	Revitalization Strategies for Human Service Workers	3
HSERV 199/299	Independent Study. Can be taken only with permission of Human Service faculty. A maximum of six credits can be counted toward Program requirements.	

INFORMATION AND COMPUTER SCIENCE
ICS

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 in Science Degree in Computer Science is designed to prepare individuals for employment as technical assistants to professional and administrative personnel using computers. Students pursuing an Associate in Arts Degree may also concentrate in Information and Computer Science. See a counselor for the appropriate sequence of courses. The first 24 units listed (down to and including PHIL 210) give emphasis to information management:

Associate in Science Degree (60 Units)

Requirements		Units
ICS 100	The Computer and Its Role In Society	3
ICS 101	Introduction to Computer Science I	3
ICS 267	Comparative Programming Language (Spring only)	3
ICS 260	Introduction to Computer Science II (Fall only)	3
ENG 100	Expository Writing	3
ENG 209	Business Writing OR	
ENG 106	Technical Writing	3
SP 151	Personal and Public Speech	3
PHIL 210	Introduction to Logic (Formal Logic)	3
ICS 155	Introductory Computer Methods in COBOL	3
ICS 200	Information Systems (Spring only)	3
ICS 220	Management Decision Techniques (Fall only)	3
ACC 201	Elementary Accounting I	3
ACC 202	Elementary Accounting II	3
ECON 150	Principles of Economics I	3
ECON 151	Principles of Economics II	3
QM 121	Mathematics for Decisionmaking I	3
Arts and Humanities Elective		3
*Other Electives		9
	Total Units	60

*The following are recommended electives: ICS 153, EE 120, other ICS courses.

LIBRARY TECHNOLOGY
LIB

This program will not be available during 1981-82

Certificate of Achievement (30 Units)

Requirements (listed by suggested course sequence)		Units
LIB 20	Introduction to Library Services (Fall only)	2
LIB 22	Public Services (Fall only)	3
ENG 100	Expository Writing	3
*MATH 1G	Basic Mathmatics I	2
*MATH 1H	Basic Mathematics II	2
LIB 24	Technical Services (Spring only)	3
SP 151	Personal and Public Speech	3
**TYPW 30	Intermediate Typing	3
OFPRO 22B	Duplicating Techniques, Part I	1
LIB 30	Library Technology Work Study (Fall only)	5
**Electives		3
	Total Units	30

*A higher Math course will fulfill program requirement.
**Prepare for the requirement of TYPW 30 by taking TYPW 20B, 20C and 20D if needed.
A student may also take LIB 40, 41, 42, 43, ED 25, 26, or 27 as elective courses.

Associate in Science Degree (60 Units)

Requirements (listed by suggested course sequence)		Units
LIB 20	Introduction to Library Services (Fall only)	2
LIB 22	Public Services (Fall only)	3
ENG 100	Expository Writing	3
*MATH 1G	Basic Mathematics I	2
*MATH 1H	Basic Mathematics II	2
LIB 24	Technical Services (Spring only)	3
LIB 40	Technical Services: Cataloging Techniques I (Spring only)	1
LIB 41	Technical Services: Cataloging Techniques II (Spring only)	1
LIB 42	Technical Services: Cataloging Techniques III (Spring only)	1
ED 25	Introduction to Technological Media	1
ED 26	Introduction to Graphic Media	2
SP 151	Personal and Public Speech	3
**TYPW 30	Intermediate Typing	3
ICS 100	Computer and Its Role in Society	3
MGT 20	Introduction to Management	3
OFPRO 22B	Duplicating Techniques, Part I	1
LIB 30	Library Technology Work Study (Fall only)	5
***General Education Electives		21
	Total Units	60

*A higher Math course will fulfill program requirement.
**Prepare for the requirement of TYPW 30 by taking TYPW 20B, 20C and 20D if needed.
LIB 43 and ED 27 are highly recommended as additional courses.
***General Education Electives. The 21 elective units must include: (a) six (6) credits in Arts and Humanities electives, (b) three (3) credits in Mathematics and Natural Sciences electives, (c) six (6) credits in Social Sciences electives and (d) six (6) additional elective credits in general education.
The following General Education courses are suggested as possibilities for meeting elective requirements: ENG 251-252, GRAPH 36, HIST 151-152, LING 102, POLSC 110, PSY 100, SCI 121-122 and SP 233.

MANAGEMENT
MGT

Certificate of Completion (15 Units)
Banking

This program is designed to prepare the student for entry-level employment in the banking industry and for members of the banking industry seeking to upgrade their knowledge. Credit will also be granted by the American Institute of Banking (AIB) to any bank employee (AIB student) who successfully completes a course under this program. Retroactive credit will be granted by the American Institute of Banking (AIB) to any non-AIB student, should he/she eventually enter the banking industry.

Requirements		Units
BUS 30	Principles of Bank Operations	3
MGT 20	Introduction to Management	3
1 Course from GROUP I, GROUP II, and GROUP III		
GROUP I: ECON 120, ECON 150 or ECON 151		3
GROUP II: COMUN 145, ENG 22, ENG 100 or SP 151		3
GROUP III: ACC 201, BUS 55, LAW 200, *SHTHD 21, *SHTHD 30 or *SHTHD 40		3
	Total Units	15

*The student should refer to the course description for the appropriate level.

Certificate of Achievement
Option A: Banking (36 Units)

This program is designed to prepare the student for entry-level employment in the banking industry and for members of the banking industry seeking to upgrade their knowledge.

Credit will also be granted by the American institute of Banking (AIB) to any bank employee (AIB student) who successfully completes a course under this program. Retroactive credit will be granted by the American Institute of Banking (AIB) to any non-AIB student, should he/she eventually enter the banking industry.

Requirements		Units
BUS 30	Principles of Bank Operations	3
BUS 32	Money and Banking	3
MERCH 40	Principles of Marketing	3
ACC 201	Elementary Accounting I	3
MGT 20	Introduction to Management	3
MGT 22	Human Relations in Business	3
1 Course from GROUP I:	ECON 120, ECON 150 or ECON 151	3
2 Courses from GROUP II:	COMUN 145, ENG 22, ENG 100, ENG 209, SP 151, SP 251	6
3 Courses from GROUP III:	ACC 202, BUS 55, LAW 200, *SHTHD 21, *SHTHD 30, *SHTHD 40	9
	Total Units	36

*The student should refer to the course description for the appropriate level.

Option B: Credit Union (30 Units)

This program is designed to prepare the student for entry-level employment in the credit union industry and for members of the credit union industry seeking to upgrade their knowledge. The program has been coordinated with the Hawaii Credit Union League.

Requirements		Units
ACC 24	Principles of Accounting I OR	
ACC 201	Elementary Accounting I	3
BUS 20	Introduction to Business	3
BMACH 20	Business and Office Machines	3
BUS 55	Computational Problems in Business	3
MERCH 40	Principles of Marketing	3
LAW 200	Legal Environment of Business	3
MGT 20	Introduction to Management	3
BUS 60	Credit Union Operations I	3
BUS 61	Credit Union Operations II	3
ENG 100	Expository Writing	3
	Total Units	30

Associate in Science Degree
Option A: Supervisory Management (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		Units
ACC 24 & 25	Principles of Accounting I & II OR	
ACC 201 & 202	Elementary Accounting I & II	6
ACC 36	Cost Accounting	3
MERCH 40	Principles of Marketing	3
LAW 200	Legal Environment of Business	3
ICS 100	The Computer and Its Role in Society	3
MGT 24	Personnel Management	3
ECON 150	Principles of Economics I	3
ECON 151	Principles of Economics II	3
ENG 22	Introduction to Expository Writing OR	
ENG 100	Expository Writing	3
ENG 209	Business Writing	3
MGT 20	Introduction to Management	3
MGT 22	Human Relations in Business	3
BUS 45	Principles of Financing	3
BUS 55	Computational Problems in Business	3
PSY 110	Personal Adjustment OR	
SSCI 101	Self Development	3
TYPW 20B, C, D	Beginning Typing I, II, III OR	
TYPW 30	Intermediate Typing OR	
TYPW 40	Advanced Typing	3
**Business Education Electives		6
Arts and Humanities Electives		6
	Total Units	63

*Highly recommended electives for students wishing to pursue a career in retailing are BUS 93B/C/D/E and MERCH 30.

Option B: Retailing (60 Units)

This program is designed to prepare the student for entry-level employment in the retailing industry and for members of the retailing industry seeking to upgrade their knowledge.

Requirements		Units
ACC 24	Principles of Accounting I OR	
ACC 201	Elementary Accounting I	3
BUS 20	Introduction to Business	3
BMACH 20	Business and Office Machines	3
MERCH 30	Principles and Methods of Salesmanship	3
MERCH 32	Merchandising Analysis	3
MERCH 93	Retailing Cooperative Education	3
LAW 200	Legal Environment of Business	3
ICS 100	The Computer and Its Role in Society	3
ECON 150	Principles of Economics I	3
ECON 151	Principles of Economics II	3
ENG 100	Expository Writing	3
ENG 209	Business Writing	3
MGT 20	Introduction to Management	3
BUS 45	Principles of Financing	3
BUS 55	Computational Problems in Business	3
MERCH 45	Principles of Retailing	3
PSY 100	Survey of Psychology	3
MERCH 40	Principles of Marketing	3
MERCH 20	Advertising and Display	3
Arts and Humanities Electives		6
	Total Units	63

MARINE TECHNOLOGY
MAR

The Marine Technology 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/her vocational and educational needs.

Certificate of Completion
Option A: Seamanship (12 Units)

Requirements		Units
MAR 26	Seamanship I	3
MAR 31	Piloting I	2
MAR 33	Seamanship II	3
MAR 36	Piloting II	2
HPER 230	First Aid	2
	Total Units	12

Option B: Fishing (13 or 16 Units)

Requirements		Units
MAR 26	Seamanship I	3
MAR 31	Piloting I	2
MAR 55	Fishing Gears and Techniques	3
HPER 230	First Aid	2
AND		
Electives		
AMT 80	Small Engine Repairs	2
AMT 86	Outboard Engine I	4
OR		
MAR 40	Marine Engines and Auxiliary Equipment	3
	Total Units	13 or 16

Option C: Outboard Engines Service and Maintenance (12 Units)

Requirements		Units
AMT 80	Small Engine Repairs	2
AMT 86	Outboard Engine I	4
AMT 87	Outboard Engine II	4
HPER 230	First Aid	2
	Total Units	12

Option D: Navigation (16 Units)

Requirements		Units
MAR 26	Seamanship I	3
MAR 31	Piloting I	2
MAR 36	Piloting II	2
MAR 46	Celestial Navigation	3
MAR 48	Electronic Navigation	3
MATH 50M	Technical Mathematics I: Marine Technology	3
	Total Units	16

Option E: Diving (11 Units)

Requirements		Units
MAR 20	Scuba Diving	3
MAR 22	Advanced Diving	3
MAR 26	Seamanship I	3
HPER 230	First Aid	2
	Total Units	11

Associate in Science Degree (63 Units)

Requirements		Units
MAR 20	Scuba Diving	3
MAR 22	Advanced Diving	3
MAR 26	Seamanship I	3
MAR 31	Piloting I	2
MAR 33	Seamanship II	3
MATH 50M	Technical Mathematics I: Marine Technology	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
*ZOOL 200	Marine Biology	4
BIOL 291B OR		
OCEAN 214	Field Biology	4
ENG 100	Expository Writing	3
ENG 106	Technical Writing	3
Arts and Humanities Electives		6
***Mathematics and Natural Sciences Electives		7
Social Sciences Electives		6
	Total Units	63

*ZOOL 101 is strongly recommended as preparation for ZOOL 200.
**MAR 50V or MAR 93D/E 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.
***Selection of electives should be made from the following: CHEM 151B, PHYS 151 and 151L, or PHYS 170 and 170L.

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 Achievement or an Associate in Science Degree. Special occupations that may be pursued include:

Seaman	Commercial diving tender
Small boat operator	Steward/Stewardess
Commercial fishing	Underwater photography
Marine Engine Maintenance	Hull Maintenance

Core Requirements for Individualized Certificate or Degree:

MAR 26	Seamanship I	3 Units
MAR 33	Seamanship II	3 Units

At least 2 Units in:

MAR 60V	Practical Shipboard Operation, OR
MAR 93D/E	Cooperative Education, OR
OCEAN 215V	Marine Ecology Field Work

An individualized Certificate of Achievement requires a minimum of 30 units of course work including the above Core Requirements and courses in a specialized program of study.

An individualized Associate in Science Degree requires a minimum of 60 units of course work including the above Core Requirements, major and general education courses, and courses in a specialized program of study.

TO DEVELOP AN INDIVIDUALIZED PROGRAM, SEE THE MARINE PROGRAM COORDINATOR.

*E.g. Suggested courses for marine servicing and repairing:

AMT 80	Introduction to Small Engine Repairs	2 Units
AMT 86	Outboard Engine I	4 Units
AMT 87	Outboard Engine II	4 Units
MAR 40	Marine Engines & Auxiliary Equipment	4 Units
MAR 42	Boat Maintenance and Repair	4 Units

RECREATIONAL INSTRUCTOR
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. Students who intend to transfer to a four-year college should plan to meet the general requirements of the transfer institution.

Students pursuing an Associate in Arts Degree may also concentrate in the Recreational Instructor Program. See counselor for the appropriate sequence of courses.

Associate in Science Degree (60 Units)

Core Requirements (24 Units):		Units
HPER 208	Introduction to Recreation	3
HPER 230	First Aid	2
HPER 238	Outdoor Recreation	3
HPER 240	Recreation Group Leadership	3
HPER 220	Performing Arts in Recreation	3
HPER 248	Program Planning and Organization	3
HPER 249	Social Recreation	3
HPER 80	Field Work (Spring only)	4
	Total Units	24

Options. In addition to those core required courses, the student must elect Option A, B, or C as follows:

Option A: Games & Sports

		Units
Core Requirements		24
HPER 136, 212, 252 (Fall only)	Football, Officiating, Coaching OR	
HPER 137, 213, 253 (Fall only)	Basketball, Officiating, Coaching	6
ENG 100	Expository Writing	3
HPER 134, 210, 250 (Spring only)	Baseball, Officiating, Coaching OR	
HPER 135, 211, 251 (Spring only)	Volleyball, Officiating, Coaching	6
COMUN 145	Interpersonal Communication	3
HPER 233	Physical Education (Elementary) (Fall only)	3
HPER 260	Advanced Lifesaving	2
*BUS 55	Computational Problems in Business	3
**HPER Electives		4
HPER 133	Track and Field (Spring only)	3
Social Sciences elective		3
	Total Units	60

*A 100 or higher level math course will fulfill program requirement.
**Four (4) units of credit should be taken from the following HPER Electives: HPER 101, 103, 104, 107, 108, 110, 111, 112, 115, 161, 262.

Option B: Outdoor Recreation

		Units
Core Requirements		24
ENG 100	Expository Writing	3
ART 52	Three-Dimensional Art (Fall only)	3
COMUN 145	Interpersonal Communication	3
MUS 180	Fundamentals of Western Music	3
*BUS 55	Computational Problems in Business	3
HAWNA 110	Outdoor Recreation: Hawaiiana	3
HPER 260	Advanced Lifesaving	2
**HPER Electives		4
HPER 215	Outdoor Recreation: Camping (Spring only)	3
ART 51	Two-Dimensional Art (Spring only)	3
DRAMA 170	Introduction to Creative Drama	3
Social Sciences Elective		3
	Total Units	60

*A 100 or higher level math course will fulfill program requirement.
**Four (4) units of credit should be taken from the following HPER Electives: HPER 101, 103, 104, 107, 108, 110, 111, 112, 115, 161.

Option C: Creative Arts

		Units
Core Requirements		24
ENG 100	Expository Writing	3
ART 52	Three-Dimensional Art (Fall only)	3
DRAMA 170	Introduction to Creative Drama	3
COMUN 145	Interpersonal Communication	3
ART 51	Two-Dimensional Art (Spring only)	3
*BUS 55	Computational Problems in Business	3
HAWNA 110	Outdoor Recreation: Hawaiiana	3
DRAMA 176	Introduction to Puppetry	3
**HPER Electives		5
DRAMA 245	Recreational Drama	3
Social Sciences Elective		3
HPER 124	Dances of Hawaii	1
	Total Units	60

*A 100 or higher level math course will fulfill program requirement.
**Five (5) units of credit should be taken from the following HPER Electives: HPER 101, 103, 104, 107, 108, 110, 111, 112, 115, 161.

SECRETARIAL SCIENCE
Certificate of Achievement (30 Units)

This program is designed to prepare the student for entry-level employment in a position as a steno-typist or clerk-typist.

Requirements		Units
BUS 20	Introduction to Business	3
BMACH 20	Business and Office Machines	3
OFPRO 20B	Filing	1
OFPRO 22B	Duplicating Techniques, Part I	1
TYPW 35B	Machine Transcription I	1
ENG 22	Introduction to Expository Writing OR	
ENG 100	Expository Writing	3
*SHTHD 21	Beginning Theory/Dictation	3
*SHTHD 30	Intermediate Shorthand	3
COMUN 145	Interpersonal Communication OR	
SP 151	Personal and Public Speech	3
TYPW 20B	Beginning Typing I	1
TYPW 20C	Beginning Typing II	1
TYPW 20D	Beginning Typing III	1
TYPW 30	Intermediate Typing	3
BUS 55	Computational Problems in Business	3
	Total Units	30

*For the clerk-typist certificate, substitute 6 units of Business Education electives. TYPW 40 is highly recommended.

Associate in Science Degree (60 Units)

This program is designed for the student seeking job-entry skills or retraining and upgrading in office skills. In addition, the program offers courses for personal use and general education.

Requirements		Units
BUS 20	Introduction to Business	3
BMACH 20	Business and Office Machines	3
BUS 55	Computational Problems in Business	3
OFPRO 20B	Filing	1
OFPRO 22B	Duplicating Techniques, Part I	1
TYPW 35B	Machine Transcription I	1
OFPRO 50	Secretarial Procedures	3
SHTHD 21	Beginning Theory/Dictation	3
SHTHD 30	Intermediate Shorthand	3
SHTHD 40	Advanced Shorthand	3
TYPW 20B	Beginning Typing I	1
TYPW 20C	Beginning Typing II	1
TYPW 20D	Beginning Typing III	1
TYPW 30	Intermediate Typing	3
TYPW 40	Advanced Typing	3
*ENG 105	Business Writing	3
1 Course from GROUP I, II and III		
GROUP I	ECON 101, ECON 120 or ECON 150	3
GROUP II	ENG 22 or *ENG 100	3
GROUP III	COMUN 145 or SP 151	3
Arts and Humanities Electives		6
Mathematics and Natural Sciences Electives		6
Social Sciences Elective		3
	Total Units	60

MILITARY SCIENCE
MSci

The Army Reserve Officers Training Corps program (ROTC) provides college-trained officers with commissions as second lieutenants in the U.S. Army, Hawaii Army National Guard, or U.S. Army Reserve. Officers have an option of being commissioned in a reserve component and pursuing their civilian careers; going on active duty; or receiving an educational delay and earning a graduate or professional degree. Four-year and two-year program options are available.

The four-year program is divided into a two-year Basic and two-year Advanced course. For students who enter ROTC at the beginning of, or during, their freshman year, this is the traditional program which offers a moderately paced course of military and academic training resulting in completion of ROTC and award of a commission on graduation day. All basic courses are electives and no obligations are incurred.

The two-year advanced program can be taken without taking the Basic Course by attending and completing a six-week summer camp at Fort Knox, KY, for which the student receives approximately $475.00. Likewise, veterans of all services; three-year JROTC graduates; and National Guardsmen and Reservists may be exempt from the Basic Course. Should an individual qualify, select, and complete this option, he/she may receive an early commission by the end of the sophomore year. Students must have four semesters of college work remaining after finishing the Basic Summer Camp or qualifying for the exemptions mentioned earlier.

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 the Advanced Camp is $100 per month during the school year and approximately $536.00 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 Simultaneous Membership Program allows cadets to participate with, and receive drill pay from Army Reserve or Hawaii National Guard units as an officer trainee while they complete the Army ROTC advanced course. This is in addition to the monthly ROTC living allowance and any GI Bill educational benefits to which the individual may be entitled.

Selected students pursuing demanding programs may receive credit for some other university courses toward completion of the Basic Course. The required participation in the Military Science Program is achieved through planned participation in leadership laboratory and other activities of the Military Science Program. Participation in such a modified program is planned in advance by the student and the staff.

Financial assistance scholarships of one, two, three and four years are available. They provide for tuition, fees, books, laboratory expenses, travel, and $100 per month for the period of the scholarship. In addition, Hawaii residents in the Advanced Course qualify for a state tuition waiver.

All students have the opportunity to attend Airborne, Air Assault, and Ranger Schools. Women are eligible for the program and comprise 25 percent of the ROTC Corps.

Army ROTC courses are offered at all Manoa affiliated community colleges and Hawaii Pacific College, Chaminade and BYU-Hawaii.

Information and counseling on the ROTC program are available at the offices of the Military Science Program or by phone at 948-7744 or -7766.

Course Offerings

ACCOUNTING
ACC

24 Principles of Accounting I — **3 Units**
The student will learn the basic structure of accounting, basic accounting terminology, classification of accounts and business transaction analysis. He/she will learn the accounting cycles of a service enterprise and a merchandising enterprise. Recommended preparation: BUS 55 or taken concurrently with ACC 24.

25 Principles of Accounting II — **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: ACC 24 or equivalent.

26 Principles of Accounting III — **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 merchandising partnership and a computerized application. Specialized areas willbe assigned on an individual basis. Recommended preparation: ACC 25 or ACC 201 or equivalent.

34 Income Tax Preparation — **3 Units**
An interpretive approach to Federal and State of Hawaii individual income tax law, with emphasis on basic tax concepts and principles and their applications to practical problems. The history of Federal income tax laws are studied and how such laws and regulations may arise—as legislative mandates expressed in laws enacted by the U.S. Congress, as judicial decisions, as administrative determinations handed down by the Tax Court and as administrative rules promulgated by the various agencies administering the tax laws.

36 Cost Accounting — **3 Units**
The student will learn the principles and procedures of cost accounting; development and application of job order, process, standard cost systems and manufacturing cost controls. Recommended preparation: ACC 25, ACC 201 or equivalent.

201 Elementary Accounting I — **3 Units**
An introduction to accounting theory emphasizing financial accounting 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. Recommended preparation: basic skills in English and Mathematics. Recommended that 100-level courses be completed prior to this course.

202 Elementary Accounting II — **3 Units**
A continuation course to Elementary Accounting I, emphasizing managerial accounting. Areas covered are partnerships, corporate accounting, analysis and interpretation of financial statements, departmental and cost accounting, budgeting and accounting for income taxes, cost revenue analysis and capital budgeting. Recommended preparation: ACC 201 or its equivalent.

AGRICULTURE
AG

44 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. Class meets during the first accelerated session of a semester, once a week for 4 hours of lecture/lab.

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, the student shall examine some aspects of early American culture and trace them into modern society. The student will analyze the philosophical importance of those concepts as they relate to early America with the intent of judging their philosophical and practical import today. The student will compare such cultural concepts as they exist on the mainland with ideals in Hawaii. Satisfies Arts and Humanities elective requirement, not Social Sciences. Offered one semester per year 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, the student will analyze much of modern culture with the intent of tracing its roots. The student will analyze today's philosophy, its beginnings and attempt to predict its future. The student will compare such cultural concepts as they exist on the mainland with ideals in Hawaii. Satisfies Arts and Humanities elective requirement, not Social Sciences. Offered one semester per year only.

211 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 problems and the ways in which the problems have been dealt with, as well as future possibilities for minimizing them, will be covered. Offered Fall semester only.

212 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 problems and the ways in which the problems have been dealt with, as well as future possibilities for minimizing them, will be covered. Offered Spring semester only.

225 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. Offered Spring semester only.

ANTHROPOLOGY
ANTH

150 Human Adaptations — **3 Units**
A survey course of physical and cultural anthropology. Major topics include human evolution, prehistoric development of culture, recent and contemporary human cultures, 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 principals 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/her own as well as other cultures. Additional topics include: history and theory of cultural anthropology, culture and personality, processes of cultural change, applied anthropology.

210 Archaeology — **3 Units**
An introduction to prehistoric archaeology, methods and techniques of excavation and laboratory analysis, as well as a survey of human cultural growth and prehistoric times.

215 Physical Anthropology — **3 Units**
An introduction to the methodology and principles of physical anthropology. Topics covered include: heredity, evolution, human variation, primatology, fossil (humans), eugenics. Offered Spring semester only.

ART
ART

51 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. Offered Spring Semester only.

52 Three-Dimensional Art — **3 Units**
A basic course in the three-dimensional sphere to provide experiences with wood, paper, paper mache, plaster, metal and theatre arts. It also prepares students with techniques in teaching processes. Some supplies (materials) for projects are to be provided by students. Offered Fall Semester only.

101 Introduction to the Visual Arts — **3 Units**
Introduction to the language and concepts of the Visual Arts. This course is recommended preparation for Art 113, 114, 115, 116, 270, and 280. In general it is better if a student takes this course before pursuing other art courses. Transferable for Art credit at Manoa.

105 Elementary Studio: Ceramics — **3 Units**
Features studio experience for mainly non-majors in ceramic handbuilding techniques. Course includes both lectures and projects, with an approximate cost of $5-10 in tools and $10-20 in clay. No credit toward major requirements in Art at Manoa.

105B Elementary Studio: Ceramics (Wheel Throwing) — **3 Units**
An introduction to the use of the potter's wheel to acquire basic throwing skills with an approximate cost of $5-10 in tools and $15-30 in clay. Prerequisite: ART 105 or instructor's permission.

106 Elementary Studio: Sculpture — **3 Units**
Introduction to basic sculpture techniques, concepts, and materials through both lectures and projects. Supplies and materials for projects are to be provided by students. No credit toward major requirements in Art at Manoa.

107 Elementary Studio: Photography — **3 Units**
Introduction to basic photographic techniques and concepts through both lectures and projects. Supplies or materials for all projects are to be provided by students, with each student required to have own camera. No credit toward major requirements in Art at Manoa.

108B Elementary Studio: Drawing — **3 Units**
A basic drawing class for non-art majors. Introduces general drawing and compositional principles. Supplies are to be provided by students. May not be counted toward a major in Art at Manoa. May be repeated for additional credit.

108C Elementary Studio: Painting — **3 Units**
An introductory studio course in painting for non-majors. Supplies are to be provided by students. May not be counted toward a major in Art at Manoa. May be repeated for additional credit. Recommended preparation: Art 108B.

113 Foundation Studio — **3 Units**
A beginning drawing course which uses a variety of approaches and materials. Recommended preparation: Art 101 (may be taken concurrently). Transferable for Art credit at Manoa.

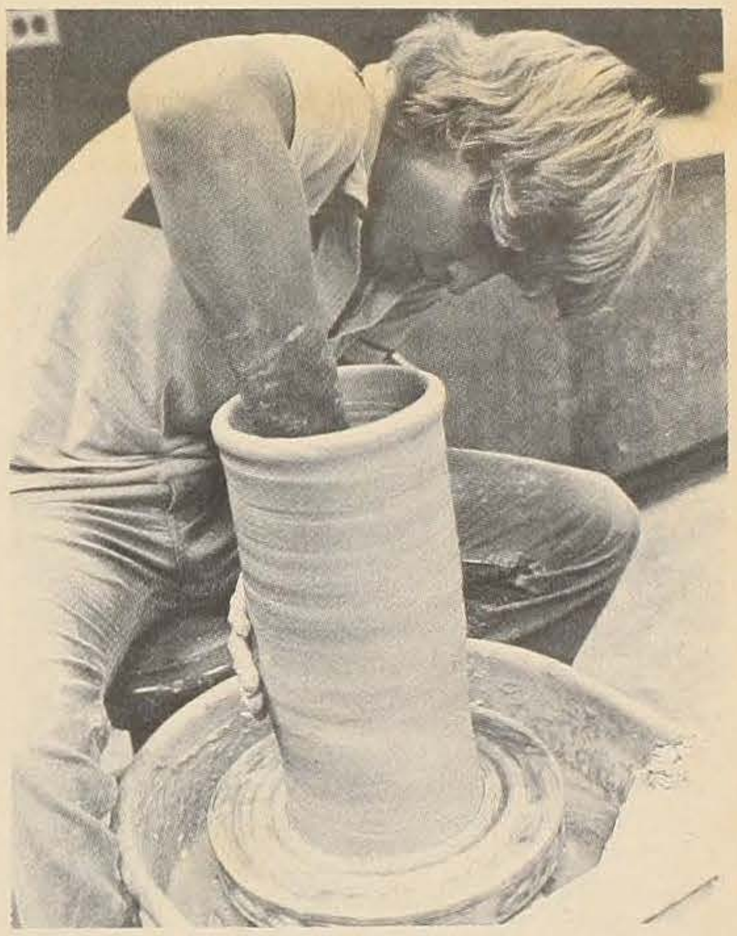
114 Foundation Studio — **3 Units**
Emphasis on fundamental objective and subjective aspects and theories of color and their practical application. Recommended preparation: Art 101 (may be taken concurrently). Transferable for Art credit at Manoa.

115 Foundation Studio — **3 Units**
Emphasis on basic two-dimensional design concepts, elements and principles of organization. Recommended preparation: Art 101 (may be taken concurrently). Transferable for art credit at Manoa.

116 Foundation Studio — **3 Units**
Emphasizes three-dimensional design through projects which cover basic concepts of form/space relationships, processes and techniques. Recommended preparation: Art 101 (may be taken concurrently). Transferable for Art credit at Manoa.

145 Etching — **3 Units**
Basic metal plate etching and printmaking techniques. No credit toward major requirements in Art at Manoa.

150 Ceramics Studio — **3 Units**
Intermediate ceramics will cover more advanced techniques in handbuilding and/or wheel throwing, with students becoming



more familiar with the operation and maintenance of equipment in the ceramics lab. There will be an approximate required cost of $5-10 in tools and $15-30 in clay. No credit toward major requirements in Art at Manoa, but may be repeated for additional credit. Prerequisite: ART 105 or ART 105B or instructor's permission.

270 Aspects of European and American Art — **3 Units**
Surveys art history of major works in painting, sculpture and architecture of western civilization. Transferable for Art credit at Manoa.

280 Aspects of Asian Art — **3 Units**
A study of painting, sculpture and architecture of India, China, Japan and Southeast Asia. Transferable for Art credit at Manoa.

ASTRONOMY
ASTRO

110 Survey of Astronomy — **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 devoted to viewing stars and constellations and a telescope will be available for viewing some of the planets.

111 Concepts in Contemporary Astronomy — **3 Units**
Various topics will be covered in more detail than in ASTRO 110. The topics may include stellar evolution, extraterrestrial life, stellar structure or other topics the class would like to investigate. ASTRO 110 is not a required preparation for this course.

AUTOMOTIVE TECHNOLOGY
AMT

Modular courses, most classes meet daily. Students provide own tools. Approximate cost: $250

20 Introduction to Automotive Mechanics **1 Unit**
(20 hours)
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.

23 Automotive Lubrication and Service **1 Unit**
(20 hours)
This course covers the various kinds of lubricants and their uses, operation of lubrication equipment as well as proper lubrication procedures.

30 Engines **7 Units**
(180 hours)
This course covers the maintenance and repair of the modern internal combustion engine. Emphasis is on precision measurement and the inspection of parts. Includes the application of diagnostic skills and shop operations. Recommended preparation: AMT 20 or equivalent.

30E Engines I **3 Units**
This course covers the theory, design, construction, service and repair of upper and external engine components, such as cylinder heads, valves, cams, timing gears and chains, and manifolds. Shop activities include disassembly, cleaning, inspection and reassembly. Recommended preparation: AMT 20. OFFERED BY MANPOWER TRAINING OFFICE.

30F Engines II **4 Units**
This course covers the theory, construction, design, service, and repair of lower engine components, such as block, piston, rods, crank-shaft, lubrication and cooling systems. Recommended preparation: AMT 30E. OFFERED BY MANPOWER TRAINING OFFICE.

40C Electrical Systems **4 Units**
(90 hours)
This course covers the theory and operation of the various units in the starting and charging system and electrical accessories. Includes application of diagnostic skills and techniques with the emphasis on realism in laboratory and shop operations. Recommended preparation: AMT 20 or equivalent.

40D Tune Up **7 Units**
(180 hours)
This course covers the theory and operation of the various units in the fuel and ignition system. Includes the application of diagnostic skills and techniques with the emphasis on realism in laboratory and shop operations. Recommended preparation: AMT 20 or equivalent, AMT 40C.

43 Automotive Air Conditioning **4 Units**
(90 hours)
The construction, operation, maintenance and testing of air conditioning and equipment for automobiles will be covered. Includes the application of diagnostic skills and techniques with the emphasis on realism in laboratory and shop operations. Recommended preparation: AMT 20 or equivalent, AMT 40C.

46B Standard Transmissions and Clutch **4 Units**
(90 hours)
The disassembly, inspection and assembly of the standard transmission will be covered. Clutch repairs and adjustment will also be taken into consideration. Includes the application of diagnostic skills and techniques with the emphasis on realism in laboratory and shop operations. Recommended preparation: AMT 20 or equivalent.

46C Differential Rear Axle **4 Units**
(90 hours)
This course covers the skills of troubleshooting, parts replacement and maintenance of final drive units. Includes the application of diagnostic skills and techniques with the emphasis on realism in laboratory and shop operations. Recommended preparation: AMT 20 or equivalent.

50 Automatic Transmission **7 Units**
(180 hours)
This course is designed to familiarize the student with the maintenance and repair procedure of the automatic transmission. Recommended preparation: AMT 20 or equivalent.

50B Automatic Transmission I **3 Units**
This course covers construction, design and operation of the automatic transmission. Included are hydraulics, planetary gear set, fluid coupling and torque converter. Recommended preparation: AMT 20. OFFERED BY MANPOWER TRAINING OFFICE.

50C Automatic Transmission II **2 Units**
This course covers the use of testing equipments (pressure readings and vacuum test), adjusting bands, linkage adjustments, replacing worn parts and trouble-shooting procedures. Recommended preparation: AMT 50B. OFFERED BY MANPOWER TRAINING OFFICE.

50D Automatic Transmission III **2 Units**
The course provides intensive diagnostic, service and repair experiences with automatic transmissions. Exposure to actual "live-job" problems builds the student's confidence and improves the approach to trouble-shooting and repair. Emphasis is on accuracy, neatness, safety and speed. Recommended preparation: AMT 50C. OFFERED BY MANPOWER TRAINING OFFICE.

53 Brake Systems **4 Units**
(90 hours)
This course covers the theory, operation and repairs of various types of brake systems. Includes the application of diagnostic skills and techniques with the emphasis on realism in laboratory and shop operation. Recommended preparation: AMT 20 or equivalent.

53B Brake Systems I **2 Units**
This course is designed to provide the students with related technical information and manipulative skills on the maintenance and repair of the hydraulic and power brake assist system. Recommended preparation: AMT 20 or consent of instructor. OFFERED BY MANPOWER TRAINING OFFICE.

53C Brake Systems II **2 Units**
This course is designed to provide the students with a realistic on-the-job type of training. The student will be exposed to different types of "live jobs" to build the person's self-confidence, to improve the person's approach to troubleshooting and practice skills of the trade with emphasis on accuracy, neatness and speed. Recommended preparation: AMT 53B. OFFERED BY MANPOWER TRAINING OFFICE.

55 Suspension and Steering **4 Units**
(90 hours)
The course is designed to develop skill in the automotive suspension and steering systems. Complete front-end alignment will be covered. Includes the application of diagnostic skills and techniques with the emphasis on realism in laboratory and shop operations. Recommended preparation: AMT 20 or equivalent.

55B Suspension and Steering **2 Units**
This course covers the theory and practice involving the design, construction, service and repair of standard and power steering, and front and rear suspensions, including tires, wheels, alignment and balancing. Recommended preparation: AMT 20. OFFERED BY MANPOWER TRAINING OFFICE.

55C Wheel Balancing **1 Unit**
(20 hours)
The student is introduced to the various aspects and application of wheel balancing. Includes the application of diagnostic skills and techniques with the emphasis on realism in laboratory and shop operations.

55D Advanced Suspension and Steering **2 Units**
This course is designed to provide the students with intensive diagnostic, service and repair experience with steering and suspension systems. Exposure to actual problems on "live jobs" will build the student's confidence, and improve the approach to trouble shooting and repair. Emphasis is on accuracy, safety, neatness and speed. Recommended preparation: AMT 55B. OFFERED BY MANPOWER TRAINING OFFICE.

80 Small Engine Repairs **2 Units**
(30 hours)
The student will be introduced 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.

81 Motorcycle and Small Engine Repair—2-stroke **4 Units**
(90 hours)
This course covers the theory and operation of two-stroke motorcycle and small engines with practical experience in all aspects of their repair. Operating principles, carburetor and fuel system, lubrication, ignition system, cooling system, mechanical construction, reconstruction and trouble shooting will be covered. Recommended preparation: AMT 80 (Completion of this course aims toward eligibility for state examination in 2-stroke motorcycle engine repair).

82 Motorcycle and Small Engine Repair—4-stroke **4 Units**
(90 hours)
This course covers the theory and operation of four-stroke motorcycle and small engines with practical experience in all aspects of their repair. Operating principles, carburetor and fuel system, lubrication, ignition system, cooling system, mechanical construction, reconstruction and trouble shooting will be covered. Recommended preparation: AMT 80. (Completion of this course aims toward eligibility for state examination in 4-stroke motorcycle engine repair).

86 Outboard Engine I **4 Units**
(90 hours)
This course will cover the theoretical and operational aspects of two- and four-cycle engines and their maintenance and repair. Classroom and laboratory experiences will include operating principles, carburetor and fuel systems, lubrication, cooling, mechanical construction of powerhead and troubleshooting. Recommended preparation: AMT 80.

87 Outboard Engine II **4 Units**
(90 hours)
This course covers the practical application and theory of newly-designed outboard engines. Included is coverage of the latest type electronic ignition system, powerheads, starter systems, mechanical construction and service, maintenance and repair procedures and techniques. Recommmended preparation: AMT 80.

93D/E Cooperative Education **3-4 Units**
Provides practical work experiences in Automotive Technology 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. Number of units will be dependent on the number of hours spent at the job station. One unit is granted for each five hours a week spent on the job. Student registers for a definite number of units, as approved by the instructor at the time of registration. "D" indicates 3 units, "E" indicates 4 units. (Normally taken after completion of two (2) full semesters in the occupational major.) Highly recommended additional course for Certificate of Achievement and Associate in Science Degree in Automotive Technology. May be repeated up to eight units.

BAKING
BAKE

20 Fundamentals of Baking **4 Units**
(105 hours)
The study and development of basic skills in baking as practiced and required in the food service industry today. Offered Fall Semester only.

22 Advanced Baking **4 Units**
(105 hours)
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. Offered Spring Semester only.

BIOLOGY
BIOL

60 Microorganisms, Foods and Sanitation **2 Units**
This course concerns the biology and economic importance of viruses, bacteria, yeasts, molds and parasitic worms. Food spoilage organisms, food preservation techniques and the rationale behind sanitary practices are discussed after an introduction to the basic biology and the microbial world. The roles of bacteria, yeasts and molds in the preparation of beer, wine, shoyu, bread, cheese and yogurt and microorganisms as causal agents of disease are discussed. This course is designed primarily to meet the needs of students in the food service program for a science course relating to the biology of microorganisms in food and beverages and is also open to all interested students.

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. Not applicable toward a major in biological science. Class meets for 2 hours of lecture and a minimum of 2 hours supervised study.

291B Field Biology **4 Units**
Techniques of collecting, recording, and evaluating data in environmental science are stressed. Ecological relationships in the terrestrial, freshwater and marine environment are observed. Facility with arithmetic (fractions, decimals, ratios and proportions) is helpful. Class meets for 1 hour of lecture and 5 hours of field work per week. Recommended preparation: ZOOL 101 or concurrent registration.

BLUEPRINT READING
BLPRT

22 Blueprint Reading and Drafting **3 Units**
(3 hours per week for 15 weeks)
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: None.

23 Blueprint Interpretation and Sketching **3 Units**
(3 hours per week for 15 weeks)
This is a basic blueprint course designed for students in vocational-technical programs. Theories and principles of graphic communication and presentation used in mechanical drawing, interpretation of technical drawing and technical sketching will be stressed. Recommended preparation: None.

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 function, 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 and 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.

BUSINESS
BUS

20 Introduction to Business **3 Units**
A practical approach to understanding concepts related to types of business organizations, internal organization structure and Human Resources administration, labor-management relations, economics, short-term and long-term financing, insurance, government regulations and taxation. Problem-solving is the basic method of study.

30 Principles of Bank Operations **3 Units**
This course presents the fundamentals of bank functions, such as operations and loans, in a descriptive fashion so that the student may acquire a broad perspective necessary for employment and advancement in banking. It explains to students what a bank does and why it does so in order that the student may have an understanding of the nature and purpose of the various banking functions.

32 Money and Banking **3 Units**
This course presents the basic economic principles relating to the subject of money and banking. It stresses the practical application of the economics of money and banking to the individual bank. Some of the subjects covered include structure of the commercial

banking system, banks and the money supply, bank investments and loans, the Federal Reserve System and its policies, and the international monetary system.

45 Principles of Financing **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: ECON 150, MGT 20, ACC 24 or ACC 201.

55 Computational Problems in Business **3 Units**
The student will develop skill and accuracy in mathematics. Included is a review of decimals, fractions, aliquot parts, percentages, and the study of cash and trade discounts, inventory, payroll, interest, checking accounts, selling goods, loans, analysis, graphs, etc. Recommended preparation: Math 1G and 1H, or skill in whole numbers, fractions, decimals and percents.

60 Credit Union Operations I **3 Units**
This course is designed as an in-service training course for credit union employees and pre-employment training for other students. An introduction to credit union operations. Bookkeeping and accounting applied to a Federal Credit Union (FCU). Topics covered include the preparation of necessary FCU forms (including the preparation of financial and statistical reports), internal control and the processing of transactions. Recommended preparation: basic courses in English and Mathematics; also an accounting course. Offered during Fall evening classes only.

61 Credit Union Operations II **3 Units**
A continuation course for additional coverage of Credit Union Operations. Topics include accrual accounting, financial statement analysis, cash budgets, income and expense budgets, EDP and internal control, and break-even analysis. Offered during Spring evening classes only.

93B/C/D/E Cooperative Education **1-4 Units**
Provides practical work experiences in Business 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. Number of units will be dependent on the number of hours spent at the job station. One unit is granted for each five hours a week spent on the job. Student registers for a definite number of units, as approved by the instructor at the time of registration. "B" indicates 1 unit, "C" indicates 2 units, "D" indicates 3 units, and "E" indicates 4 units. (Normally taken after completion of two (2) full semesters in the occupational major.) Highly recommended elective for Associate in Science Degree in Accounting and in Management and as an additional course in Secretarial Science. May be repeated up to eight credits in each program of study with the approval of the cooperative education coordinator.

120 Principles of Business **3 Units**
In-depth analysis of and perspective to the role of a business enterprise in a capitalistic society with emphasis on the functional processes of a business and of the force fields that affect the modes of business behavior. Course requirements will include essay examinations and research project. Prerequisite: Nelson-Denny reading score of 58 or a minimum grade of "C" in ENG 100. Instructor's approval required for those not meeting prerequisite. May be substituted for BUS 20. Credits transfer to University of Hawaii (Manoa).

BUSINESS MACHINES
BMACH

20 Business and Office Machines **3 Units**
The student will learn the fundamental operation and application of the 10-key adding-listing machine and the electronic calculator in business situations. Recommended preparation: BUS 55 or taken concurrently.

CIVIL ENGINEERING
CE

270 Applied Mechanics I (Statics)
Equilibrium of particles, rigid bodies, frames and machines; vectors, centroids, friction, and moments of inertia. Required of CE and ME majors. Prerequisite: PHYS 170.

CHEMISTRY
CHEM

100B Chemistry and Man **4 Units**
Survey of the basic principles of chemistry intended for the non-science major. Emphasis will be placed on man and his effect on the environment to illustrate the interrelationships of atoms and molecules—air and water pollution, energy resources and consumption, problems generated by man's rapid technological advancements. This is a lab-oriented course in which students will be encouraged to learn by doing. Class meets in a lecture-lab format, 2 hours each meeting, three times a week. Recommended preparation: MATH 25.

102 Basic Chemical Concepts and Applications **4 Units**
An introductory course on the basic principles of chemistry. Emphasis will be placed on basic chemical concepts and their applications. This course is designed for students who intend to major in science or science-related fields but who have had little or no science background, or for those students who need a refresher course for technical and professional improvement. This is a laboratory-oriented course where lab skills and their applications will be emphasized. Class meets in a lecture-lab format 2 hours each meeting for three times a week. Recommended preparation: MATH 25 or equivalent.

151B Elementary Survey of Chemistry (Lecture/Lab) **4 Units**
An introductory course to the fundamental theories and experimental methods of chemistry intended for science majors. Course materials include the basic language of chemistry, atomic structure, chemical bonding, structure-property relationships and the beginning of the chemistry of reactions and solutions. Students will be required to attend additional remedial sessions which will depend on their performance on placement tests to be administered on the first day of class. Class meets for 3 hours of lecture and 3 hours of lab per week. Prerequisite: MATH 25 or equivalent.

171B General Chemistry (Lecture/Lab) **5 Units**
Topics include solutions and solution chemistry with an emphasis on chemical dynamics—why and how various reactions occur (kinetics), the changes in energy involved (thermodynamics), and the extent to which they occur (equilibrium). The concept of oxidation-reduction will also be included. Laboratory work is emphasized. Each student will complete a short independent lab project. Class meets for 4 hours of lecture and 3 hours of lab per week. Prerequisite: CHEM 151B or equivalent.

172B Organic Chemistry I (Lecture/Lab) **4 Units**
Emphasis is placed on the structure and shape of atoms and molecules and the experimental methods for determining their structures and shapes. Topics include molecular structure; nomenclature and properties; stereochemistry; infrared, ultraviolet and nuclear magnetic resonance spectroscopy; and mass spectroscopy. Laboratory emphasizes the methods of separation and identification of carbon compounds. Class meets for 3 hours of lecture and 4 hours of lab per week. Prerequisite: CHEM 171B or equivalent. Offered in Fall semester only.

251 Biochemistry **4 Units**
Topics include the structure, nomenclature and properties of the major classes of organic and biochemical compounds. Emphasis is placed on the chemical principles and concepts as they apply to living systems. Materials concerning enzymology, metabolism and its regulation will also be included. Laboratory activities will also be included as part of the lecture sessions. Class meets for 3 hours of lecture and 2 hours of discussion/lab per week. Prerequisite: CHEM 151B or equivalent. Offered in Spring semester only.

273B Organic Chemistry II (Lecture/Lab) **4 Units**
Emphasis is placed on the reactions of carbon compounds, the mechanisms by which they occur and the philosophy and techniques of their synthesis. Topics include the application of the principles of thermodynamics, kinetics and equilibrium in the development of the mechanisms for the major reactions types. Laboratory emphasizes the synthesis of carbon compounds. Class meets for 3 hours of lecture and 4 hours of lab per week. Prerequisite: CHEM 172B or equivalent. Offered in Spring semester only.

COMMUNICATIONS
COMUN

101 American Sign Language I **3 Units**
An overview of various forms of manual communication including Ameslan, SEE signs, manual English, and fingerspelling. A brief introduction to deafness and the psychology of deafness.

145 Interpersonal Communication **3 Units**
Introduction to communication strategies and outcomes through participation in interpersonal communication activities.

210 Intercultural Communication **3 Units**
Survey of social-psychological and cultural variables which affect communication among peoples of different cultures. Use of this knowledge in understanding and facilitating social and cultural change. Recommended preparation: prior course in COMUN, JOURN, ENG.

235 Perspectives on Telecommunication **3 Units**
Telecommunication services, including broadcasting and interactive media, as they serve communication needs in society.

263B/C/D Broadcasting Laboratory **3-3-3 Units**
Introduction to equipment and operation of radio and television studios and roles of members of the production team. Basic production techniques. (B) Radio Production; (C) Television Production; (D) Performance. May be taken 3 times—1 semester for Radio (B), 1 semester for Television (C) and 1 semester for Performance (D).

285 Writing of Broadcast Messages **3 Units**
An introduction to the theory, format and styles of radio and television scripts for the following: commercials, public service announcements, news stories, documentaries and drama. Prerequisites: ENG 100, 140 or 170.

DATA PROCESSING
DPRO

20 Data Entry Operations **2 Units**
Practice exercises in key entry and verification of data, using key to tape machines. The course will develop speed and accuracy in standard operating procedure—similar to Key Punch Operations. Prerequisite: Typing, 45 WPM.

DANCE
DANCE

131 Modern Dance I **3 Units**
An introduction to basic technical skills and creative processes. Dance clothes are to be provided by students.

132 Modern Dance II **3 Units**
Provides interested students additional opportunity to develop more control and rhythm found in the disciplines of the first semester course. Dance clothes are to be provided by students. Recommended preparation: DANCE 131.

DRAFTING TECHNOLOGY
DRAFT

Modular courses, classes meet daily unless indicated otherwise. Students provide own tools. Approximate cost: $50

19 Basic Drafting **3 Units**
(60 hours)
A comprehensive study of basic drafting techniques, materials, tools and processes, including projections, sectioning, pictorial drawings, lettering and dimensioning. Required for students without prior experience in mechanical drawing. May be taken concurrently with DRAFT 20.

20 Introduction to Drafting **4 Units**
(90 hours)
A comprehensive study of basic techniques in architectural drafting, including lettering, free-hand sketching, symbols and conventions, and tracing practices. Recommended preparation: DRAFT 19 or high school Mechanical Drawing course or equivalent experience.

26 Construction Materials I **3 Units**
(60 hours)
An introduction to basic materials used in building construction: wood, concrete, concrete products, metals, plastics and glass. Plumbing fixtures, kitchen appliances, wood products and appropriate codes and regulations are introduced as they apply to the floor plan of a working drawing. Recommended preparation: DRAFT 20.

27 Construction Materials II **3 Units**
(60 hours)
This course continues the study of architectural materials and its application to various building types. Manufactured doors, windows, finishing materials such as plastics, floor covering, paints and acoustical finishes are incorporated into detailed drawings. Appropriate codes are introduced as they apply to the various drawings. Recommended preparation: DRAFT 20.

30B Architectural Construction I **2 Units**
(45 hours)
An introduction to various foundation types used locally, based on soil conditions and structural considerations. Foundation plan and sections are developed from various conditions. Appropriate codes are introduced. Recommended preparation: DRAFT 20.

30C Architectural Construction II **3 Units**
(60 hours)
This course introduces roof and floor framing systems. The sizing of wood framing is studied through the use of span/load tables. Applicable codes are introduced. Recommended preparation: DRAFT 20.

32 Structural Drafting **3 Units**
(60 hours)
An introduction to structural drafting of wood, reinforced concrete and steel structures and appropriate codes. Methods of determining live and dead loads are studied. Building sections are developed and connection points are detailed. Recommended preparation: DRAFT 20.

34B Residential Planning **3 Units**
(60 hours)
An investigative study of regional differences, orientation and different uses of structures as they apply to planning. Plot and landscaping plans are also included. Recommended preparation: DRAFT 20.

34C Presentation Drawings **3 Units**
(60 hours)
An introduction to shades and shadows, one-point and two-point perspectives and rendering. Recommended preparation: DRAFT 20.

36B Architectural Drafting I **2 Units**
(45 hours)
An introduction to stairway and fireplace design and construction. Applicable codes are studied and detailed drawings of various types of stairways using different materials are developed. A detailed drawing of a fireplace is also completed. Recommended preparation: DRAFT 20.

36C Architectural Drafting I **2 Units**
(45 hours)
Various materials for exterior use are studied for their textural qualities. Roofing materials as they apply to differing design criteria, wood and other exterior siding, various fenestration for sizes, utility and placement. Exterior elevations of various building types are drawn to working drawing standards. Recommended preparation: DRAFT 20.

36D Architectural Drafting I **2 Units**
(45 hours)
Elevation drawings of building interiors are drawn indicating various finishing materials and built-in work. Cabinet work detailing and various finishing hardware for cabinets are studied, designed and drawn. Recommended preparation: DRAFT 20.

38 Architectural Drafting II **5 Units**
(105 hours)
The coursework includes development of a complete set of working drawings for a substantial residential structure conforming to all local codes, regulations and current construction procedures and methods. The drawings 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: DRAFT 20, 26, 27, 30B, 30C, 32, 34B, 36B, 36C, 36D, and 44.

40 Architectural Drafting III **4 Units**
(90 hours)
The coursework includes development of a complete set of light working drawings for a commercial structure or a multi-family residential structure conforming to local codes, regulations and current construction procedures and methods. The drawings 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. All regulations and code requirements will be studied as they relate to the drawing project. Recommended preparation: DRAFT 20, 26, 27, 30B, 30C, 32, 34B, 36B, 36C, 36D, 42 and 44. Offered Fall Semester only.

42 Codes and Specifications **2 Units**
(30 hours)
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: DRAFT 20.

44 Building Services **3 Units**
(60 hours)
A study of the materials and equipment used in the mechanical and electrical systems of a building, as well as the methods of designing the various parts of the system. The class is not intended to be a comprehensive design course. Recommended preparation: DRAFT 20, 26, 27, or approval of instructor.

93D/E Cooperative Education **3-4 Units**
Provides practical work experience in Drafting Technology 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. Number of units will be dependent on the number of hours spent at the job stations. One unit is granted for each five hours a week spent on the job. Student registers for a definite number of units, as approved by the instructor at the time of registration. "D" indicates 3 units, "E" indicates 4 units. (Normally taken after completion of two (2) full semesters in the occupational major.) Highly recommended additional course for Certificate of Achievement and Associate in Science Degree in Drafting Technology. May be repeated up to eight units.

DRAMA
DRAMA

101 Introduction to Drama and Theatre **3 Units**
A study of selected plays representative of important historical periods, with a review of the elements and forms of drama and some practice of theatre skills.

170 Introduction to Creative Drama **3 Units**
An examination and practice of informal drama activities and guidance methods through active participation and observation of drama exercises, story dramatizations and created plays. May be repeated for additional credit.

176 Introduction to Puppetry **3 Units**
The scope of puppetry, with a brief history, objectives and values in recreation and education. The course includes construction of simple puppets, manipulation skills and presentation methods. May be repeated for additional credit.

221 Beginning Acting I **3 Units**
An introduction to acting with individual and group exercises in movement for the stage, improvisation, scene preparation and performance.

222 Beginning Acting II **3 Units**
Advanced work on improvisation. Vocal and physical training is emphasized, particularly on scene work. Actors are expected to work together to present scenes to the class and are required to audition for at least one campus production during the course. Recommended preparation: DRAMA 221 or consent of the instructor.

240 Basic Stagecraft **3 Units**
An introduction to stagecraft and the technical aspects of theatre, including 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.

262 A Hawaiian Style Theatre **3 Units**
A practical performance-oriented theatre course which combines the local experience with practical productions. The student will be involved in the creation and performance of a play with Hawaiian themes. The actual production activities the student undertakes will vary with the production requirements of the play being produced. Recommended preparation: performance experience or experience in the subject matter of the play.

263 Musical Theatre **6 Units**
A study of the musical play as a theatrical form with particular emphasis on the production process from auditions to performances. Prerequisite: the student must be cast in the musical produced during the semester the student is enrolled in this course or have the written consent of the instructor. May be repeated for additional credit.

ECONOMICS
ECON

19 Consumer Education **3 Units**
Intended for those who need immediate, direct and 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, consumer protection. Students will also learn how to maximize their scarce and limited resources, i.e., money, time and energy.

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.

150 Principles of Economics I **3 Units**
Stresses macroeconomics with emphasis on modern theory of income determination indicating 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.

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.

EDUCATION
ED

24 Introduction to Technological Media **1 Unit**
(25 hours)
The student is introduced to a diverse range of technological media. The characteristics, advantages and limitations of various types of audiovisual equipment and materials are considered. The concept of the library as a total resource center is considered. Laboratory experiences are provided in the operation and minor maintenance of equipment and materials.

26 Graphics for Educational Media **2 Units**
(45 hours)
This course is designed to develop the basic skills necessary for the production of a variety of media materials. Training is provided in the application of the basic elements of graphic design and display and in the common forms of duplication, with emphasis on graphics not only useful in library operations, but wherever such techniques would be needed for effective communication.

27 Technological Media Production **2 Units**
(45 hours)
Media production in this course includes instruction in the production of slides, transparencies, audio tapes and videotapes. Practice is provided for students to acquire a working knowledge of cameras of various types and other audiovisual equipment used by the student in producing audiovisual aids.

100 Introduction to Education **3 Units**
An introductory course designed to familiarize and introduce the student to the field of education, its historical background, philosophies and the contemporary theories in education. This course will acquaint the student with the American educational system in terms of its problems, possibilities and potentials. School organization, elements of control, the basics of school financing and the different kinds of learners are examined. This course also provides the student an opportunity to visit and observe the classroom.

200 Basic Tutoring Principles for Students with Special Needs **3 Units**

200B	Mobility Aide Training	1 Unit
200C	Tutoring in Math	1 Unit
200D	Tutoring in Reading	1 Unit

This course, designed to prepare an individual to assist a professional in providing learning assistance and support services, will provide basic tutorial skills in three complementing but independent modules. Training will be provided in basic tutoring including human relations, communication, tutorial time management planning and evaluating tutorial sessions. Specific skills will be provided in preparing an aide role in a math and/or reading center and for assisting in a support service center for the physically handicapped.

ELECTRICAL ENGINEERING
EE

150 Introductory Computer Programming Methods **3 Units**
Introduction to computer programming methods, with emphasis on planning, writing, debugging of programs. Basic applications. Prerequisite: High school algebra or consent of instructor. Not intended for CE or ME students.

151 Introductory Computer Programming Methods Using FORTRAN **3 Units**
Principle emphasis will be on use of computers in solving mathematical and scientific problems. Introduction to numerical analysis, information structures, and research methodology. Emphasis on the development of the algorithmic process, as well as iterative methods and matrix techniques for solving simultaneous linear equations. Applications using the FORTRAN language. Prerequisites: High school algebra or consent. Not intended for EE students.

211 Basic Circuit Analysis **3 Units**
Study of basic circuits, time-domain analysis, transient and steady-state responses, phasors, impedance, and admittance; network or system functions, frequency response and filtering, resonance. Prerequisite: Credit in Math 206; credit on concurrent registration in PHYS 272, 272L.

266 Computer Organization and Programming Techniques **3 Units**
This course will cover the basic concepts of the organization and machine language of typical computers. In addition, the course will provide an introduciton to operating systems, data structures, sorting, and retrieving data from files of information. Prerequisite: EE 150 or equivalent.

ENGLISH
ENG

21 Basic Reading **3 Units**
This course is designed to assist students in developing or improving reading skills basic to college survival. Emphasis is placed on increasing comprehension, vocabulary development and study reading techniques. In addition to group activities, individualized programs are designed for students based on need and interest. The course is open to all students.

22 Introduction to Expository Writing **3 Units**
A basic course of composition and grammar designed to teach the student to produce standard and acceptable expository writing. Students who complete this course with a grade of "C" or better may enroll in English 100, 140 or 170.

100 Expository Writing **3 Units**
(See also ENG 140 and 170)
College-level writing course in which the student will write papers both in class and outside of class. All activities are designed to enable the student to write correctly, clearly, logically and effectively, in a style appropriate to the audience and purpose of each paper. Techniques for writing research papers are included. Prerequisite: Original placement test score higher than 10th grade level, or "C" letter grade or better in ENG 22, or approval from the Language Arts Division.

102 College Reading Skills **3 Units**
This course is designed for students scoring above average on the college-level reading test. 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: Nelson Denny test score 11th grade level or higher.

104 Introduction to Creative Writing **3 Units**
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. May be repeated for additional credit. Recommended preparation: ENG 100 or consent of instructor.

106 Technical Writing **3 Units**
This course involves writing which deals with subject matter in science, industry and in vocational fields. Using conventional report formats, 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 the audience and the commitment to objectivity and accuracy. Recommended preparation: ENG 100 or equivalent. Strongly recommended for Computer Science/ICS Majors.

170 Language and the Visual Media **3 Units**
This writing course fulfills the same degree requirements as English 100. The papers written for this course will analyze the use of language in television, film and advertising. Prerequisite: Original placement test score higher than 10th grade level, or "C" letter grade or better in ENG 22, or approval from the Language Arts Division.

209 Business Writing **3 Units**
This course is designed for students interested in a career in business. It will teach how to organize and evaluate effective communication in writing—how to compose the various forms of letters and reports found in the business field; how to evaluate job resumes. Most course work must be typed. Prerequisite: ENG 100 or equivalent, or permission from the Language Arts Division. (Formerly ENG 105).

215 Advanced Expository Writing **3 Units**
Second-year expository and persuasive writing. Practice in: 1) writing clearly and effectively for a variety of audiences; 2) writing with greater control over style; and 3) using different approaches to discover and refine ideas for writing. The papers (letters, essays, articles) written for this course will be appropriate for use in other classes, in business, or for publication. Required preparation: ENG 100, 140 or 170.

250 Major Works of American Literature **3 Units**
Topics in American literature from the pre-Civil War period to the present, featuring major works of American literature. Recommended preparation: ENG 100.

251 Major Works of British Literature **3 Units**
(Middle Ages to 1800)
A study of the major works of British literature. Recommended preparation: ENG 100.

252 Major Works of British Literature **3 Units**
(1800 to Present)
A survey of the major works of British literature in the 19th and 20th centuries. Recommended preparation: ENG 100.

253 World Literature **3 Units**
(Classical Times to Renaissance)
Features major works of Western and Eastern World literature from Classical times to the Renaissance. Recommended preparation: ENG 100.

254 World Literature **3 Units**
(1600 A.D. to Present)
Features major works of Western and Eastern World literature from Renaissance times to the present. Recommended preparation: ENG 100.

255 Types of Literature I **3 Units**
Practical criticism in major genres of literature, including the Short Story and the Novel. Narrative Poetry may also be included. Recommended preparation: ENG 100.

256 Types of Literature II **3 Units**
Practical criticism in major genres of literature, including Drama, and Poetry. Biography or the Essay may also be included. Recommended preparation: ENG 100.

257C Themes in Literature: Culture and Identity in Early Japanese Literature **3 Units**
Readings in English translations of the earliest works of Japanese Literature to 1868, with the focus on how the texts reflect the Japanese cultural character and world view as well as universal truths of the human condition. Selections from Japanese film classics are also featured. Recommended preparation: ENG 100.

257D Themes in Literature: Culture and Identity in Modern Japanese Literature **3 Units**
Readings in English translations of modern works of Japanese Literature from 1868 to the present, with the focus on how the texts reflect 19th and 20th century Japanese life as well as general truths of the human condition. Selections from modern Japanese film classics are also featured. Recommended preparation: ENG 100.

ENGLISH LANGUAGE INSTITUTE
ELI

2 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 non-native speakers of English. Co-requisite with ELI 3 and 4.

3 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 non-native speakers of English. Co-requisite with ELI 2 and 4.

4 Writing for Non-native Speakers **3 Units**
A writing program of intensive classroom instruction and activities designed for the non-native English-speaking student. Emphasizes sentence structure and paragraph organization. Open only to non-native speakers of English. Co-requisite with ELI 2 and 3.

7 Intermediate Reading for Non-Native Speakers **3 Units**
An individualized program at the intermediate level in reading comprehension, vocabulary building, speedreading, phonics and word attack skills, study skills, memory and concentration. Open only to non-native speakers of English and may be repeated. It is co-requisite with ELI 8.

8 Intermediate Writing for Non-Native Speakers **3 Units**
A writing program of intensive classroom instruction and activities designed for the non-native English-speaking student. Emphasizes sentence structure and paragraph organization. Open only to non-native speakers of English and may be repeated. It is co-requisite with ELI 7.

EUROPEAN LANGUAGE
EL

241 French Culture and Civilization **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.

261 Hispanic Civilization (Spain and Portugal) **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 EL 262)

262 Hispanic Civilization (Latin America) **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/her study more deeply in a selected area of interest. No necessary preparations.

FOOD AND NUTRITIONAL SCIENCE
FNS

19 Basic 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 Service Program. It will be open to other students in the college who are interested in nutrition. Offered Spring Semester only.

FOOD SERVICE
FSER

Modular courses, classes meet daily unless indicated otherwise. Students are required to provide cutlery and uniform. Approximate cost: $85

20 Introduction to Food Service **2 Units**
(30 hours)
An introductory course to the food industry dealing with current 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.

30 Storeroom Operation **3 Units**
(45 hours)
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.

50B Fundamentals of Cookery: Theory **2 Units**
(30 hours)
This course provides students with the opportunity to learn the fundamentals of basic cooking and serving. The course primarily focuses on learning the basic theories in general food preparation, serving and storage. May be taken concurrently with FSER 50C or FSER 50D.

50C Fundamentals of Cookery: Station Set-up and Initial Preparation **2 Units**
(60 hours)
This course provides students with the opportunity to learn basic skills in food preparation, food serving and proper practices in sanitation. The course primarily focuses on applying the basic theories and skills in general preparation, storage and related sanitation procedures. May be taken concurrently with FSER 50B or FSER 50D.

50D Fundamentals of Cookery: Serving, Storage and Pre-preparation **3 Units**
(90 hours)
This course provides students with the opportunity to learn fundamental skills in basic cooking and serving. The course primarily focuses on applying the theories and skills in general food serving, storage and related sanitation. May be taken concurrently with FSER 50B or FSER 50C.

52 Short Order Cookery **4 Units**
(105 hours)
Students will learn to manage and operate a coffee shop with a minimum of supervision. The coffee shop will simulate as closely as possible a coffee shop in industry. Recommended preparation: FSER 50B, C and D plus 54B, C and D.

54B Cold Food Pantry: Theory **2 Units**
(30 hours)
This course deals with the study of the basic skills and the knowledge required to prepare food and beverages in the pantry related area. The course primarily focuses on learning theories applicable to preparing pantry related food and beverages. May be taken concurrently with FSER 54C or FSER 54D.

54C Cold Food Pantry: Initial Preparation **2 Units**
(60 hours)
This course deals with the study of the basic skills and the knowledge required to prepare food and beverages in the pantry related area. The course primarily focuses on applying theory for setting up stations and the initial preparation of cold food pantry items. May be taken concurrently with FSER 54B or FSER 54D.

54D Cold Food Pantry: Preparation, Service and Storage **3 Units**
(90 hours)
This course deals with the study of the basic skills and the knowledge required to prepare food and beverages in the pantry related area. The course primarily focuses on applying theories for maintaining cold food pantry items, providing proper and sanitary storage and pre-preparation for future servings. May be taken concurrently with FSER 54B or FSER 54C.

60 Intermediate Cookery **4 Units**
(105 hours)
Students will increase their skills and techniques and prepare the various entrees as required by industry. They will prepare the various soups and sauces for the day, as well as supervise the preparation of the main entree of the day. Recommended preparation: FSER 50B, C and D plus 54B, C and D.

70 Advanced Cookery **7 Units**
(195 hours)
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. Recommended preparation: FSER 60.

93D/E Cooperative Education **3-4 Units**
Provides practical work experiences in Food Service 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. Number of units will be dependent on the number of hours spent at the job station. One unit is granted for each five hours a week spent on the job. Student registers for a definite number of units, as approved by the instructor at the time of registration. "D" indicates 3 units, "E" indicates 4 units. (Normally taken after completion of two (2) full semesters in the occupational major.) Highly recommended additional course for Certificate of Achievement and Associate in Science Degree in Food Service. May be repeated up to eight units.

FRENCH
FR

101-102 Elementary French I, II **4-4 Units**
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 Learning Resource Center during various hours each day and evening. Recommended preparation: None for FR 101; FR 101 or equivalent for FR 102.

201-202 Intermediate French I, II **4-4 Units**
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 form of resumes and discussion of characters, themes and ideas. Includes drills in the Learning Resource Center during various hours each day and evening. Recommended preparation: FR 102 or equivalent for FR 201; FR 201 or equivalent for FR 202. FR 201 offered Fall Semester only. FR 202 offered Spring Semester only.

GEOGRAPHY
GEOG

101 Man's Natural Environment **3 Units**
A survey of the basic elements of man's environment, especially climate, soils, landforms, water and natural vegetation. An optional Laboratory course is offered for those interested.

101L Man's Natural Environment Lab **1 Unit**
Laboratory course available with GEOG 101. Class will meet three hours each week. Topics of the course are: use of maps, analyzing soils, interpreting the weather, and identification of rocks and minerals. Field trips will be taken.

102 World Regional Geography **3 Units**
Geography of world's major cultural regions; emphasis on geographic aspects of contemporary economic, social and political conditions. 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 102M be taken first. Each mini-course listed below runs for 5 weeks or 1/3 of a semester; at least three mini-courses are offered each semester. Each of the mini-courses listed below may be taken for credit (up to a total of six credits).

102M	Introductory Concepts (5 weeks)	1 Unit
102N	Europe and the USSR (5 weeks)	1 Unit
102P	Asia (5 weeks)	1 Unit
102Q	Oceania (5 weeks)	1 Unit
102R	Middle East and Africa (5 weeks)	1 Unit
102S	The Americas (5 weeks)	1 Unit

122 Geography of Hawaii **3 Units**
The course is designed to acquaint the student with basic geographic principles and aid in understanding and appreciating the Hawaiian environment. Fundamental concepts of physical and cultural geography are presented with emphasis on Hawaii's volcanic landforms, coastal features, climate and vegetation. Geographic aspects of population, settlement, agriculture, economics and land use are also investigated.

151 Geography and Contemporary Society **3 Units**
Human 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.

GEOLOGY-GEOPHYSICS
GG

101 Introduction to Geology **3 Units**
Lecture course in the fundamentals of physical geology covering rocks and minerals, the external processes of weathering, mass wasting, erosion, the internal processes of magma movment and the dynamics of plate tectonics. Field trips will be made to nearby sites to study local volcanism. An optional lab course is offered. Geology majors should register concurrently in the lab course.

101L Introductory Geology Lab **1 Unit**
Laboratory course offered as an optional part of the general geology and geophysics lecture course. The class will study rocks and minerals, make topographic maps and interpret geologic maps. Three field trips will be made to illustrate the various forms of volcanism. Class meets for 3 hours of lab per week. Prerequisite: Completion or concurrent registration in GG 101.

GERMAN
GER

101-102 Elementary German I, II **4-4 Units**
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 Learning Resource Center until students can use them without hesitation in written and conversational exchanges. Includes drills in the Learning Resource Center during various hours each day and evening. Recommended preparation: None for GER 101; GER 101 or equivalent for GER 102.

201-202 Intermediate German I, II **4-4 Units**
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 Learning Resource Center during various hours each day and evening. Recommended preparation: GER 102 or equivalent for GER 201; GER 201 or equivalent for GER 202. GER 201 offered Fall Semester only. GER 202 offered Spring Semester only.

GRAPHIC ARTS
GRAPH

Modular courses, classes meet daily unless indicated otherwise. Students are required to provide various Graphic Arts tools. Approximate cost: $50

20 Graphic Communications **1 Unit**
(20 hours)
The course provides basic foundation in Graphic Arts—introduction to planning layouts, basic paste-up, copy preparation, camera, stripping, platemaking, press and bindery operations. All instructional activities will revolve around the graphic arts laboratory equipment to facilitate demonstrations and student involvement in practical applications. This is an introductory course to all Graphic Arts courses.

21 Art/Copy Preparation I **2 Units**
(45 hours)
This course covers the fundamental skills and knowledge of copy preparation and layout. Basic paste-up and cold type copy preparation skills are emphasized. It includes the preparation of rule and forms, methods of correction for photo reproduction. Lecture and lab experiences. Recommended preparation: GRAPH 20.

22 Art/Copy Preparation II **2 Units**
(45 hours)
An advanced lecture-laboratory course designed to provide skill development in machine composition and art and copy preparation. Emphasis is placed on application of the basic techniques toward greater job complexity, increased quality and increased productivity. Recommended preparation: GRAPH 20 and GRAPH 21.

25 Process Camera **3 Units**
(60 hours)
The course provides basic training in the use and operation of the process camera, lithographic film processing, organization of the darkroom, parts of the camera, lens and laws of light. Lecture and laboratory experiences. Recommended preparation: GRAPH 20.

27 The Process Camera—Halftone Screening **3 Units**
(30 days/60 hours)
This course instructs students to be proficient in operating the process camera, proper screen angles, special screening technique for multiple exposure, drop-outs and special effects. It includes a comprehensive study of sensitometry. Recommended preparation: GRAPH 20 and 25.

30 Stripping & Platemaking I **3 Units**
(60 hours)
The course provides basic training in stripping, opaquing, reverses, contacts, spreads and film scribing. Plate processing, multiple exposures, types of plates, additions and deletions are explored. Lecture and laboratory. Recommended preparation: GRAPH 20.

31 Stripping & Platemaking II **3 Units**
(60 hours)
An advanced lecture-laboratory course designed to provide skill development in stripping and platemaking. Emphasis is placed on application of the basic techniques toward greater job complexity, increased quality and increased productivity. Recommended preparation: GRAPH 20 and 30.

33 Press Operator I **4 Units**
(90 hours)
This course covers the fundamentals of offset press operation. Adjustment, operation and maintenance of offset presses are reviewed, including basic press theory, press problems, blankets, dampeners, register, pH, fountain solutions, offset inks and paper. Lecture and laboratory experiences. Recommended preparation: GRAPH 20.

34 Press Operator II **3 Units**
(60 hours)
This advanced lecture-laboratory course is designed to provide skill development in offset presses. Emphasis is placed on application of the basic techniques toward greater job complexity, increased quality and increased productivity. Recommended preparation: GRAPH 20 and 33.

36 Bindery **2 Units**
(45 hours)
This course provides training in bindery operations. Both hand and machine tasks are treated, including folding, stitching, trimming, punching, drilling, padding and binding. Lecture and laboratory experiences. Recommended preparation: GRAPH 20.

40 Estimating **3 Units**
(45 hours)
Students will be exposed to the skills and knowledge of estimating jobs that are consistent with industrial requirements for entry level occupations. The study of paper costs, press run charges, bindery, engravings, offset plates, plant overhead and profit is undertaken. Forms used by the printing estimator and practical estimating problems are reviewed. Recommended preparation: GRAPH 20, 21, 25, 30 and 33. Offered Spring Semester only.

44 Job Planning & Production **6 Units**
(135 hours)
This is an advanced course geared for students to apply skills learned from the Graphic Arts courses. Emphasis for this course is placed on solving various types of scheduling and production problems encountered in print shops and reinforcing, refining and developing graphic arts skills, proficiency and efficiency. Recommended preparation: GRAPH 20, 21, 22, 25, 27, 30, 31, 33 and 34.

93D/E Cooperative Education **3-4 Units**
Provides practical work experiences in Graphic Arts 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. Number of units will be dependent on the number of hours spent at the job station. One unit is granted for each five hours a week spent on the job. Student registers for a definite number of units, as approved by the instructor at the time of registration. "D" indicates 3 units, "E" indicates 4 units. (Normally taken after completion of two (2) full semesters in the occupational major.) Highly recommended additional course for Certificate of Achievement and Associate in Science Degree in Graphic Arts. May be repeated up to eight units.

HAWAIIAN
HAW

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

201-202 Intermediate Hawaiian I, II **4-4 Units**
Continuation of skills in Hawaiian 101-102. Intended to make the student proficient in the usage of the major sentence patterns in Hawaiian. Includes drills in the Learning Resource Center during various hours each day and evening. Recommended preparation: HAW 102 or equivalent for HAW 201; HAW 201 or equivalent for HAW 202. HAW 201 offered Fall Semester only. HAW 202 offered Spring Semester only.

HAWAIIANA
HAWNA

110 Outdoor Recreation: Hawaiiana **3 Units**
The course emphasis is on traditional cultural practices of Hawaiians. There is included a general overview of Hawaii's progression from the prehistoric into the period of "discovery". Instruction in the making of traditional crafts include corsage, sandals, skirts, nets, leis and others. Field experiences in Hawaiiana include hikes and visits to historic sites.

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.

HEALTH
HLTH

131 First Responder in Emergencies **3 Units**
This course is open to those who want to be prepared to respond effectively to disabling illness or injury. Major topics include basic lifesaving procedures (including CPR), and evaluation of injury and illness in order to handle primary emergency response in the most efficient manner. Prerequisite: Previous and/or concurrent registration in natural science courses. Adequate reading ability.

HEALTH & PHYSICAL EDUCATION
HPER

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

80 Field Work **4 Units**
To provide the student with actual work experience with the Parks and Recrcation Department concentrating on his/her major. Recommended preparation: 24 Units in the Recreation Instructor Program (RIP). Offered Spring Semester only.

101 Physical Fitness (Coed) **1 Unit**
This course is designed to improve physical fitness levels by providing health information and an intensive program of physical activity. Recommended preparation: Be in good health and a recent physical examination is 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 crosspool pushing and gliding. Offered off-campus.

104 Intermediate Swimming **1 Unit**
This course introduces students to the basic arm and leg strokes. It teaches the students to coordinate the arms and legs in two styles of swimming—one on the back and the other on the front side. It also teaches the students to turn in a closed course so as to enable them to swim continuously for the purpose of developing strength and endurance. Students learn to perform one or more methods of artificial respiration. Students are provided with additional survival skills. It improves the ability of the students to enter the water safely and effectively. Recommended preparation: HPER 103. Offered off-campus.

107 Tennis: Beginning **1 Unit**
This 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 are included.

108 Tennis: Advanced **1 Unit**
This 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 and problems in rules are treated. Recommended preparation: HPER 107 or its equivalent, or by arrangement with the instructor.

110 Beginning Golf **1 Unit**
An orientation to the basic golf skills, etiquette, rules and a general understanding of playing the game. Requires payment of green's fee for play on golf course.

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 are treated. Recommended preparation: HPER 110 or having a USGA handicap of 15. Requires payment of green's fee for play on golf course.

112 Advanced Golf **1 Unit**
An orientation to the basic golf skills, etiquette, rules 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: HPER 111 or having a USGA handicap of 12 or less. Requires payment of green's fee for play on golf course. Offered Fall Semester only.

115 Bowling **1 Unit**
This course provides an orientation to game, rules, fundamentals and etiquette. Foundations in the techniques of approaching and delivering—individual style analysis. Class participation at commercial lanes requires payment of fees for each lane bowled during class time.

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

127 Music for Recreation **1 Unit**
Building a repetoire of songs for recreational settings with emphasis on learning to make instruments as musical accompaniment and opportunities for developing music leadership skills. Offered Spring Semester only.

133 Track and 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. Offered Spring Semester only.

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

134 Baseball **1 Unit**
A basic course in baseball to provide the individual with the knowledge and skills of the game. To be taken concurrently with HPER 210 and 250. Offered Spring Semester only.

135 Volleyball **1 Unit**
A basic course in volleyball skills covering rules, serving, passing, setting-up, blocking, and offensive and defensive teamplay strategy. To be taken concurrently with HPER 211 and 251. Offered Spring Semester only.

136 Football **1 Unit**
A basic course in football to provide the individual with theoretical as well as practical knowledge and skills of the game. To be taken concurrently with HPER 212 and 252. Offered Fall Semester only.

137 Basketball **1 Unit**
A basic course in basketball to provide the individual with the theory, knowledge and skills of the game. To be taken concurrently with HPER 213 and 253. Offered Fall Semester only.

140 Outdoor Recreation: Hiking **1 Unit**
Familiarization with trail resources, hazards, conservation, preservation for State of Hawaii and an examination of the contribution hiking makes to meeting the recreational needs of the community. Offered Fall Semester only.

161 Aikido **1 Unit**
An introduction into Aikido custom, traditions and philosophies. Students will develop general competencies in: 1) mental development, 2) physical growth and development and 3) emotional and social development. Student must provide own uniform.

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.

210 Baseball Officiating **2 Units**
Techniques used by baseball officials with emphasis on general concepts of the roles of the official and a working knowledge of the basic mechanics of officiating. To be taken concurrently with HPER 134 and 250. Offered Spring Semester only.

211 Volleyball Officiating **2 Units**
Techniques used by volleyball officials with emphasis on general concepts of the role of the official and a working knowledge of the basic mechanics of officiating. To be taken concurrently with HPER 135 and 251. Offered Spring Semester only.

212 Football Officiating **2 Units**
Techniques used by football officials with emphasis on general concepts of the role of the official and a working knowledge of the basic mechanics of officiating. To be taken concurrently with HPER 136 and 252. Offered Fall Semester only.

213 Basketball Officiating **2 Units**
Techniques used by basketball officials with emphasis on general concepts of the role of the official and a working knowledge of the basic mechanics of officiating. To be taken concurrently with HPER 137 and 253. Offered Fall Semester only.

215 Outdoor Recreation: Camping **3 Units**
An introduction to the field of camping and outdoor education. It provides experience in various types of camping and instruction in outdoor living skills. An introduction to basic planning and organization of camp programming and activity instruction. Offered Spring Semester only.

220 Performing Arts in Recreation **3 Units**
An understanding of recreation leadership and its application to performing and applied arts, i.e., dance, drama, music, and arts and crafts; an appreciation for and leadership skill in cultural recreation. Emphasis on appreciation, organization and supervisory aspect of these activities, rather than on mastery of skills. Field trips to recreational, cultural and special need center in community. Offered Spring Semester only.

230 First Aid **2 Units**
Theory and practices in emergency care leading to certification in American Red Cross standard First Aid and CardioPulmonary Resuscitation.

233 Physical Education (Elementary) **3 Units**
Content and methods of physical education in the elementary school with emphasis on selection, planning, teaching and evaluation of movement on exploration and physical activities. Offered Fall Semester only.

238 Outdoor Recreation **3 Units**
To provide basic orientation in outdoor recreation skills. Special emphasis is placed on the application of the knowledge of outdoor, informal and formal education 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.

240 Recreation Group Leadership **3 Units**
A course designed to study those areas of human behavior that affect leadership in a recreational setting. The student will have the opportunity to examine what is involved in being a leader, to learn specific skills to improve ability to work with people in groups and to examine the various forces that affect the operation of the group. (Formerly SSCI 112)

248 Program Planning and Organization **3 Units**
A comprehensive study in the nature of the recreational service function. The course is designed to teach the student how to recognize, select and appropriately organize a basic recreational program to a respective community's needs. Emphasis will be placed on the student to understand the importance of the organization, the planning and the programming of the basic functions of a sound recreational program in the community. Offered Fall Semester only.

249 Social Recreation **3 Units**
This course is designed to provide students with the skills needed to carry out various aspects of social activities in the recreational field. Methods of planning, organizing, implementing and evaluating will be emphasized. In addition, students will have an opportunity to observe and participate in activities for various age groups and organizations within the community.

250 Baseball Coaching **3 Units**
This course is designed for students interested in learning the theory and strategy of baseball coaching. Emphasis will be on basic and fundamental skills: throwing and catching, fielding the ground ball and outfield, developing the catcher and pitcher, hitting, preparing for tvume, offensive strategy, defensive strategy, training and conditioning of the players and scouting. Taken concurrently with HPER 134 and 210. Offered Spring Semester only.

251 Volleyball Coaching **3 Units**
Theory and strategy of offensive and defensive volleyball coaching. Emphasis is on coaching philosophy, selecting and developing an offense and defense, organizing practices, scouting, training and conditioning. Taken concurrently with HPER 135 and 211. Offered Spring Semester only.

252 Football Coaching **3 Units**
This course is designed for students interested in learning theory and strategy of football coaching. Emphasis will be on team organization and morale, conditioning football players, offensive line play, offensive backfield play, the passing game, kicking game, defensive line play, defensive back field play, scouting opponents and how to care for common football injuries. Taken concurrently with HPER 136 and 212. Offered Fall Semester only.

253 Basketball Coaching **3 Units**
A comprehensive study of theories and strategies of offensive and defensive basketball coaching. Emphasis is placed on coaching philosophies, team organization, individual-player offense, basic defense, coordinating individual defense techniques against the offense, team defense, scouting, game organization and team strategy, training and conditioning. Taken concurrently with HPER 137 and 213. Offered Fall Semester only.

260 Advanced Lifesaving **2 Units**
To provide knowledge and skills to save one's own life or the life of another in the event of an emergency in the aquatic environment. Emphasis is on swimming skills, water rescue techniques, safety and first aid. Recommended preparation: HPER 104 or pass equivalent swimming test, approval of instructor. Offered off-campus.

262 Water Safety Instructor **3 Units**
Methods of teaching swimming, theory and techniques of life saving and water safety leading to American Red Cross certification (WSI). There is included a review of the courses the instructor is eligible to teach as well as teaching method relative to those courses, policy information for instructors and practice teaching. Recommended preparation: current lifesaving certificate (ARC). Offered off-campus.

HISTORY
HIST

151 World Civilization I **3 Units**
A 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.

152 World Civilization II **3 Units**
A 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.

224 History of Hawaii **3 Units**
A study of the major events of Hawaiian history from the earliest times to the present. The prehistoric Hawaiian migration from Polynesia, plus the arrival of other major migrating groups will be assessed. Emphasis will be placed on the monarchy period and the economic and cultural activities of merchants and missionaries, as well as the political movements from Monarchy to Republic, Territory and Statehood. Recommended preparation: HIST 151 and 152.

241-242 Civilizations of Asia I, II **3 Units each**
A two-semester survey of the history of Asian civilization with emphasis upon Japan, China, Korea, and Southeast Asia. The courses will use films and readings on the areas.

281 Introduction to American History I **3 Units**
A survey of the development of the American continent beginning with the arrival of Europeans and proceeding through the periods of exploration, colonization, revolution and expansion up to the Civil War. Emphasis is placed on the social and political evolution of the United States.

282 Introduction to American History II **3 Units**
A survey of the continuing development of the United States from the Civil War to the present time. Emphasizes the social and political structure and analyzes the major historical forces, movements and cultural developments which have brought the United States to its present position.

HUMAN DEVELOPMENT
HD

185 Basic Principles of Working with Special Children and Their Families I **3 Units**
Theoretical and practical aspects of working with handicapped children. The focus includes the following: normal child development; legal and ethical basis for providing education for all disabled children; basic components of agencies that provide such services; overview of major handicapping conditions and treatment approaches; and basic human service and teaching skills. In addition to classroom experience, students will be required to complete practicum work at a community agency for the handicapped. This course is specifically tailored for the first-year level student and offered one semester per year. Recommended preparation: PSY 100, PSY 110 or consent of instructor.

186 Basic Principles of Working with Special Children and Their Families II **3 Units**
Theoretical and practical aspects of working with handicapped children. The focus includes the following: rationales for and application of IEP-Individual Educational Programming (including the development of behavioral objectives, task analysis and use of evaluation procedures); overview of roles and skills of disciplines involved in the education and care of disabled children (including an introduction to the Transdisciplinary Approach); developing interpersonal skills related to working with family members. Practicum work required (see HD 185 description). This course is offered one semester per year. Recommended preparation: PSY 100, 110 or consent of instructor.

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. Recommended preparation: PSY 100 or PSY 110.

232 Introduction to Human Development II **3 Units**
Principles of development from puberty to death. Focus on the interrelation of physical, cognitive and social-emotional aspects of the individual during this period. Recommended preparation: PSY 100 and ENG 22 or ENG 100.

245 Group Leadership **3 Units**
A study of group process, group leadership and administrative principles and practices in which a student gains a knowledge of group dynamics, leadership abilities and the identification of the different types of groups and leadership especially as they apply to our democratic society. Group process and leadership applications deal with the student obtaining a practical knowledge of a group situation and the principles necessary for effective leadership. Laboratory experiences are afforded the student through observation, visitations and practical applications.

285 Advanced Principles of Working with Special Children and Their Families I **3 Units**
Advanced work in the theory and practice of working with handicapped children and their families. Course work includes advanced work in the following topic areas: description, prevention, treatment and research of various disabling conditions; related human service and teaching skills; the Transdisciplinary Approach to the education and care of handicapped children. Practicum work required (see HD 185 description). This course is offered only one semester per year and is designed for the second-year level student. Recommended preparation: PSY 220/HD 231 or consent of instructor.

286 Advanced Principles of Working with Special Children and Their Families II **3 Units**
Advanced work in the theory and practice of working with handicapped children and their families. Course includes advanced work in the following topic areas: IEP—Individual Educational Programming; roles and skills of disciplines involved in the education and care of disabled children; developing interpersonal skills related to counseling parents and siblings of disabled children. Community practicum work required (see HD 185 description). This course is offered only one semester per year and is designed for the second-year level student. Recommended preparation: PSY 220/HD 231 or consent of instructor.

HUMAN SERVICES
HSERV

101 Self Exploration for Human Service Workers **3 Units**
This group process course provides an opportunity for student exploration of personal feelings, values and goals which is designed to assist in developing greater insights into themselves and others. The students will be encouraged to identify personal characteristics that are important in understanding themselves. The focus will be in personally relating the above issues in determining individual potential as a human service worker.

110 Introduction to Human Services **3 Units**
This course will introduce the student to the field of Human Services. Topics covered will include an examination of current themes and approaches in human services, the nature and meaning of human service work and worker identity, primary roles and intervention activities utilized, major issues and types of problems encountered, and the basic knowledge, attitudes, values and skills characteristic of human service work. Also emphasized will be an understanding of the different community resource systems and social service agencies, and how to make appropriate referrals. (Formerly titled Community Resources.)

193C/D/E Human Services Practicuum (Cooperative Education) **2-4 Units**
This course is an examined work experience for Human Service majors who wish to gain field experience in the areas of mental health, special education, drug and/or alcohol abuse, and other social service agencies. May be repeated for up to 12 credits but note that 193 and 293 cannot total more than 12 credits together. C = 50 work hours (2 credits); D = 75 work hours (3 credits); E = 100 work hours (4 credits). A Certificate of Recognition is issued for more than 50 volunteer hours above those required for credit. Prerequisite: HSERV 101 and HSERV 110 or consent of instructor.

211 Community Action **3 Units**
The student is encouraged to develop a concept of human needs and examine how social institutions and sub-communities on Oahu provide for such needs. After examining social problems such as crime, physical and mental health, drug abuse, education, poverty and race relations, the student will identify one problem and develop a fundable proposal for action. The course is given in the form of a series of group and individual projects. Offered Spring semester only. (Formerly SSCI 211, Social Problems of Local Communities).

240 Individual Counseling **3 Units**
This course is designed to upgrade the understanding and counseling skills of para-professionals in the helping professions by study and evaluated practice in: 1) establishing a trust relationship, 2) interviewing, 3) empathic listening, 4) values clarification, and 5) problem solving.

245 Group Counseling **3 Units**
This course provides theoretical and experiential training at a paraprofessional level in facilitating self-exploration and growth groups. It is designed to provide understanding and experience in: selecting group members, establishing group norms and goals, setting group climate, developing group activities, promoting group and individual growth, and making appropriate group interventions. The course will provide an introduction to various counseling techniques including Gestalt, T.A. and Family Counseling. Prerequisite: HSERV 101 or any prior participation in a growth group, or consent of instructor.

248 Assessment Interviewing and Treatment Planning **3 Units**
Students will conduct intake and assessment interviews on a role-played client; prepare and defend a treatment plan; conduct progress and discharge interviews and maintain a problem-oriented client record system throughout. (Equivalent to off-campus courses SSCI 290G and SSCI 290U).

250 Revitalization Strategies for Human Service Workers **3 Units**
This course will enable human service students, paraprofessionals in the community and others to learn and teach strategies and techniques for revitalizing interest, enthusiasm, and effectiveness. Numerous studies have demonstrated the usefulness of certain easily learned key methods in maintaining optimal levels of functioning and preventing the so-called "burn-out syndrome." The focus of the class will be on learning and applying a variety of relaxation, meditation and cognitive and behavioral self-control techniques. The course consists of three one-credit modules, each module involving instruction and practice of specific techniques, supplemented by lectures and discussion. The three modules are designed to be taken together in one semester as a 3-credit package, except when only one module is offered (e.g., in community-based workshops).

250B	Self-Directed Relaxation	1 Unit
250C	Meditation	1 Unit
250D	Preventing and Coping with Burn-Out	1 Unit

293C/D/E Human Services Practicuum (Cooperative Education) **2-4 Units**
The course is an advanced skill development practicuum for those with previous field experience in their chosen area. Students will upgrade their knowledge and responsibilities by designing specific skill improvement objectives for use in a project. May be repeated for up to 12 credits but note that HSERV 193 and 293 cannot total more than 12 credits together. C = 50 work hours (2 credits); D = 75 work hours (3 credits); E = 100 work hours (4 credits). A Certificate of Recognition is issued for 50 or more volunteer hours above those required for credit. Prerequisite: HSERV 193 or consent of instructor.

HUMANITIES
HUM

200 The Individual and the Arts **3 Units**
An exploration of the fine arts as an approach to understanding the individual, both as participator and critic.

210 Humanities and Science in Science Fiction Literature **3 Units**
An interdisciplinary, interdivisional team-taught study of Science Fiction literature to show how science has shaped humanity's growing understanding of the universe and the position of our species in that universe. Recommended preparation: ENG 100—and an open, curious and flexible mind to best understand how science and the humanities work together to further man's understanding of himself and his place in the universe.

261 Hawaiian Literature **3 Units**
Hawaiian literature in English translation is studied in the context of the Hawaiian culture. Its characteristics, forms, relation to other Hawaiian arts, history and society are examined.

INFORMATION AND COMPUTER SCIENCE
ICS

100 Computer and Its Role in Society **3 Units**
A non-technical introduction to computers and their role in the modern world. Social benefits and problems created by the computer revolution and future implication. The material presented is chosen to encourage beginning students to evaluate their own career goals and plan their future studies. Students are expected to present their reactions in written reports, in individual conferences with the instructor and in oral presentation and discussion within the class. Priority is given to Business Majors.

101 Introduction to Computer Science I **3 Units**
A practical introduction to the theory of stored program digital computers. The students are taught flowcharting, documentation techniques and the use of BASIC PLUS to solve various scientific and business-oriented problems. The emphasis is on basic concepts and functional characteristics of a digital computer. Prerequisite: MATH 25.

155 Introductory Computer Methods in COBOL **3 Units**
This course is designed to improve the student's flowcharting and problem solving ability and to introduce students to COBOL language. The students will solve business-oriented problems assigned to them. At the completion of the course, students can expect to have developed capability to use COBOL language without difficulty in writing programs to process cards, tapes and sequential disk files. Prerequisite: ICS 101.

200 Information Systems **3 Units**
A study of data processing systems and procedures including the advantages and disadvantages of different types of systems, cards and forms design, controls, conversion techniques and facilities planning. Emphasis on various techniques and tools of the Systems Analysis, such as interviewing, procedure analysis and flowcharting. Prerequisite: ICS 155. Offered in Spring 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: QM 121. Offered Fall Semester only.

260 Introduction to Computer Science II **3 Units**
Introduction to the use of a large scale operating system. Emphasis on utility program, assemblers, Input/Output control systems, supervisors and loaders. Programs will be written using IBM 370 Assembler language, utilizing tape and disk utilities. Prerequisite: ICS 101. Offered Fall Semester only.

267 Comparative Programming Language **3 Units**
Survey of a number of high level procedure-oriented high level languages and their relationship to digital computer systems. Syntactic descriptions and semantics of several programming languages (such as FORTRAN, ALGOL, COBOL, PL/1, APL and BASIC). Applications using several of the major languages discussed. Prerequisite: ICS 101. Offered in Spring Semester only.

INTERDISCIPLINARY STUDIES
IS

105 Career/Life Exploration and Planning **3 Units**
Preparation for effective career decisions, development of a career profile, survey of occupational clusters and job market, preparation of resumés, employment interview and job seeking techniques, introduction to cooperative education. Primarily for persons seeking direction with reference to career decisions.

JAPANESE
JPNSE

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

201-202 Intermediate Japanese I, II **4-4 Units**
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 Learning Resource Center during various hours each day and evening. Recommended preparation: JPNSE 102 or equivalent for JPNSE 201; JPNSE 201 or equivalent for JPNSE 202.

JOURNALISM
JOURN

150 The Press and Society **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. Offered Fall Semester only.

205 Newswriting **3 Units**
Practice and instruction in reporting, interviewing and newswriting techniques. Classwork will often be published in the college newspaper. Recommended preparation: ENG 100.

LAW
LAW

100 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, will and estates, constitutional laws, the philosophy of law and other legal areas of everyday concern.

200 Legal Environment of Business **3 Units**
This is an introductory course to law—its nature, development, flexibility and growth—and to the legal environment of business, with particular emphasis on contract law—dealing with the offer, acceptance, reality of consent, consideration, capacity to contract, illegality, the Statute of Frauds, the rights of third parties, the performance of contracts and remedies. It includes a study of the Uniform Commercial Code, the Uniform Partnerships Act and the Model Business Corporation Act. There is also treated the law of agency, partnerships and corporation, as well as government regulation of business.

211 Legal Environment of Business II **3 Units**
Critical study of legal environment of business administration, including legal aspects of real and personal property, landlord-tenant relationships and the environment; sales contracts; negotiable instruments; credit transactions and bankruptcy. Prerequisite: LAW 200.

LEARNING SKILLS
LSK

110 Relaxation, Concentration and Memory **3 Units**
This course will help students increase efficiency in concentration, relaxation, self-control and visualization as enhancements for overall learning capacity. It will advance their ability to recall written and spoken materials. It will also teach the student how to effectively control fears and anxieties in stress situations, such as taking tests. Techniques covered may bring positive changes in personality, enhancing the self-image.

LIBRARY TECHNOLOGY
LIB

20 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. Offered Fall Semester only.

22 Public Services **3 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. Offered Fall Semester only.

22B Basic Reference **1 Unit**
Locating information in libraries through indexes, bibliographies and selected basic reference works. Designed for those interested in acquiring skills needed by the non-professional in libraries and very useful for those wanting to improve self-help techniques in retrieving materials in libraries.

24 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 visiting book preparation centers. Offered Fall Semester only.

30 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 the instructor. Duties consists of work in public and/or technical service functions of a library. Students who have satisfactorily passed LIB 20, 22 and 24 will be considered for assignment in a library. The course includes 160 hours of work experience to the satisfaction of the student and participating library, with the approval of the instructor plus one class meeting a week on campus. Offered Spring Semester only.

40 Technical Services: Cataloging Techniques I **1 Unit**
Function of the catalog, kinds of library catalogs, how libraries acquire catalog cards and the development of basic skills in descriptive cataloging. The course includes 1 hour of lecture plus 4 hours of lab per week. Recommended preparation: LIB 20, 22 and 24. Offered Spring Semester only.

41 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. The course includes 1 hour of lecture plus 4 hours of lab per week. Recommended preparation: LIB 40. Offered Spring Semester only.

42 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 by using shortcuts. The course includes 1 hour of lecture plus 4 hours of lab per week. Recommended preparation: LIB 41. Offered Spring semester only.

43 Non-Book Technical Processes **2 Units**
The student is introduced to the way libraries handle non-book media. Processes include acquisition, organization of materials, methods of scheduling and distributing media equipment and materials. Non-book media include films, slides, sound recordings, charts, maps, art prints, etc.

LINGUISTICS
LING

102 Introduction to the Study of Language **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 if there is sufficient student demand.

MANAGEMENT
MGT

20 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 decision-making techniques.

22 Human Relations in Business **3 Units**
How to deal more effectively with supervisory problems in areas such as motivation, communication skills, discipline, leadership, resistance to change and labor relations.

24 Personnel Management Relations **3 Units**
Introduction to principles, organizations and techniques of personnel administration. Procurement and placement, improvement of performance, management and labor relations, remuneration and security and other services provided to the firm by the personnel section. Designed to give students an operational knowledge of the activities involved in personnel management relations in regard to their future roles in business.

MARINE TECHNOLOGY
MAR

20 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. Medical clearance required. Approximately $40 for scuba rental.

22 Advanced Diving **3 Units**
The student will be given the knowledge and skills necessary to safely perform basic underwater work performance. Recommended preparation: MAR 20 and basic scuba diving certification. Approximately $40 for diving gear rental.

24 Underwater Mechanics **4 Units**
An introduction to the use and maintenance of lightweight deep-sea diving equipment and the mechanics of underwater work. The course covers basic commercial diving techniques and leads to entry-level employment as a commercial diving tender. Recommended preparation: HPER 230 and MAR 22. Offered Spring only.

26 Seamanship I **3 Units**
This is an introductory course intended to acquaint the student with the basic terminology and procedures associated with ships and boats and includes practical underway experience aboard a vessel. Marlinspike seamanship, knots and splices, rules of the nautical road, aids to navigation, emergency procedures, shipboard duties and safety are included in the topics covered in the course.

31 Piloting I **2 Units**
Piloting is the frequent or continuous determination of a vessel's position from observations of visual landmarks on the surface of the earth, such as lighthouses, other aids to marine navigation, prominent structures, geographic features, etc. The student will be introduced to the instruments, charts, publications and techniques by which the position of the vessel can be determined.

33 Seamanship II **3 Units**
This is a continuation of the study and practice of basic seamanship subjects. The student will be given instruction in the principles of shiphandling and will be given the opportunity to practice this skill. The course also includes further study of the rules of the road, voice radio and visual communications, towing, weather and its prediction, rules and regulations, use of wire and synthetic fiber rope, cargo handling and safety.

36 Piloting II **2 Units**
This course is a continuation of MAR 31 for those students who wish to further their knowledge of coastal navigation. Additional methods of fixing a vessel's position are presented. Procedures for keeping a vessel in safe water without a fix are covered, and the student is provided with opportunities for practicing these skills at sea.

40 Marine Engines and Auxiliary Equipment **3 Units**
The development of a basic understanding of the theory and practical operation of marine engines and auxiliary equipment. Emphasis is placed on operational principles of the diesel engine. Introductory concepts of repair and maintenance of refrigeration, electrical and firefighting systems are included. Offered Spring Semester only.

42 Boat Maintenance and Repair **4 Units**
This course is designed to provide the student with an understanding of the materials and types of construction used in boats, of the most commonly encountered maintenance problems, and the tools and techniques used to avoid or remedy those problems. Concentration will be on boats constructed of wood or fiberglass. The course covers hull maintenance and repair and does not include work with marine engines.

46 Celestial Navigation **3 Units**
An introduction to nautical astronomy, the sextant, its corrections and use; time as used in celestial navigation; use of the Nautical Almanac and sight reduction tables in locating one's position on the high seas; techniques of finding latitude and longitude by sightings of sun, stars and planets. Recommended preparation: MAR 36.

48 Electronic Navigation **3 Units**
This course introduces the student to the various marine radionavigation systems in common use, including Loran C, Omega, Decca, and radiobeacons/radio direction finders. Basic electronic theory and procedures for determining a vessel's position will be covered. Students will also be introduced to the use of radar for navigation and collision avoidance. Recommended preparation: MAR 36. Offered Spring Semester only.

50V Practical Shipboard Operation **3-6 Units**
Advanced skills in navigation, seamanship, diving and offshore instrumentation while on an extended cruise aboard a vessel. 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. Recommended preparation: MAR 33, 36 and 46. Offered Summer Semester only.

55 Fishing Gear and Techniques **3 Units**
This introductory course in commercial fishing techniques includes discussions and practicum experiences in preparing appropriate baits for fishing, techniques in catching different species and how to properly store the caught fish. Also included will be discussions of career opportunities in this field and general information about the variety of marketable uses of fish. Recommended preparation: MAR 26.

93D/E Cooperative Education **3-4 Units**
Provides practical work experiences in Marine Technology 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. Number of units will be dependent on the number of hours spent at the job station. One unit is granted for each five hours a week spent on the job. Student registers for a definite number of units, as approved by the instructor at the time of registration. "D" indicates 3 units, "E" indicates 4 units. (Normally taken after completion of two (2) full semesters in the occupational major.) Highly recommended additional course for Certificate of Achievement and Associate in Science Degree in Marine Technology. May be repeated up to eight units.

MATHEMATICS
MATH

Mathematics is a highly sequential subject in which concepts and problem-solving techniques are greatly dependent on each other. Work in mathematics and in all areas in which mathematics is used as a tool requires accuracy of performance with the basic operations and the manipulation of algebraic symbols and an understanding of what processes and manipulations mean. The fundamentals of arithmetic are basic to algebra, and the fundamentals of algebra are basic to any subsequent mathematics or Quantitative Methods (QM) courses. It is important that the student adheres to the sequence of courses as diagrammed below.

1G Basic Mathematics I **2 Units**
Instruction in the four basic operations on whole numbers and fractions with emphasis on the development of computational and problem solving skills in working with these numbers. Additional topics include divisibility rules, factors, primes, prime factorizations, greatest common factor, least common multiple, exponents, square roots, averages and order of operations. Additional and optional topics include arithmetic in geometry, integers and application problems involving integers. Class meets during the first accelerated session of a semester for 4 hours of lecture per week. Prerequisite: None.

1H Basic Mathematics II **2 Units**
Instruction in the four basic operations on decimals with emphasis on the development of computational skills and in the application of mathematical understanding in problem solving situations. Ratios and proportions in problem situations will be introduced. Instruction on percents will be on the development of skills to deal with percents in computational and application situations. Additional instruction on arithmetic in geometry will be presented. Optional topics will be taken from introductory algebra. Class meets during the second accelerated session of a semester for 4 hours of lecture per week. Prerequisite: MATH 1G or equivalent.

24 Elementary Algebra I **3 Units**
To develop a mastery of the basic concepts of elementary algebra and an understanding and an appreciation of the structure of the real number system. Emphasis will be placed on the natural numbers, integers, first-degree equations and inequalities in one variable, and products and factors. This course covers the first half of the topics that are normally part of a first-year algebra course. It is designed for the student who did not do well in his first-year algebra course in high school or who had algebra before the new nomenclature came into common use. Prerequisites: C or better in MATH 1G and 1H or equivalent.

25 Elementary Algebra II **3 Units**
Covers elementary concepts of algebra, with emphasis on special products and factors, fractions and fractional equations, first-degree equations in two variables, quadratic equations, radical expressions and number systems. This course covers the second half of the topics that are normally part of a first-year algebra course. Prerequisite: C or better in MATH 24 or equivalent.

27 Intermediate Algebra **3 Units**
A continuation of MATH 25, with emphasis on the functional approach to algebraic operations as well as the solution of equations. This course is roughly equivalent to the second-year of high school algebra so it 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 required as preparation for MATH 120 for those who feel their algebra background is deficient. Prerequisite: C or better in MATH 25 or equivalent.

50C Technical Mathematics I: Automotive and Diesel Mechanics **3 Units**
The application of basic arithmetic, algebraic and trigonometric operations to the solution of problems confronting automotive technologists. Topics include piston displacement, pressure, force, load, tolerance, compression ratio, etc., calculated in both English and metric systems. Prerequisite: None.

50H Technical Mathematics I: Food Service **3 Units**
A course to develop the knowledge and skills of mathematics that are necessary in hospitality education, especially in the area of food trades. Relates instruction in the fundamentals of whole numbers, fractions, decimals, ratios, proportions and percents of food trades problems. Topics include dry measurements, liquid measurements, measurement by weight, converting recipes, price markup, food cost problems and preparation of various business forms related to the food industry. Prerequisite: None.

50K Technical Mathmatics I: Drafting and Graphic Arts **3 Units**
A course to develop the mathematical skill useful in technical and trade vocations, especially in areas of drafting technology. Topics include practical uses of fractions, decimals and percents, equations in algebra, measurement, trade formulas, ration and proportion, applied geometry, indirect measurement and trigonometric functions. Prerequisites: C or better in MATH 1G and 1H, or equivalent. Offered Fall Semester only.

50M Technical Mathematics I: Marine Technology 3 Units
A mathematics course for marine technology majors intended to provide basic skills in the analysis of approximate numbers and dimensional relations, algebra, geometry and trigonometry. Prerequisite: MATH 25 or equivalent.

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 to be chosen by instructor could 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. Prerequisite: MATH 25 or equivalent.

111 Introduction to 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. Prerequisite: C or better in MATH 25 or equivalent. Offered Spring Semester only.

115 Statistics 3 Units
Methods of making decisions or predictions in the face of uncertainty; gathering data by measurement or counting; analysis of data; drawing inferences and making generalizations from samples and testing hypotheses. This course is of value to students of biology, business, computer science, economics, management, psychology, sociology, etc. Prerequisite: C or better in MATH 25 or equivalent. Offered Spring Semester only.

120 Pre-Calculus: College Algebra 3 Units
A functional approach to algebra which includes polynomial, exponential and logarithmic functions; higher degree equations; inequalities; sequences; binomial theorem; partial fractions. This course is recommended for students majoring in mathematics, sciences or engineering. Prerequisite: C or better in MATH 27 or equivalent.

123 Pre-Calculus: Trigonometry 3 Units
A functional approach to trigonometry, including trigonometric functions, angles, triangles, inverse functions and trigonometric equations. Prerequisite: C or better in MATH 120 or equivalent.

126 Pre-Calculus: 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 the study of calculus. Prerequisites: C or better in MATH 120 and 123 or equivalent.

205 Calculus I 3 Units
Basic concepts; differentiation with applications; log and exponential functions. Prerequisite: C or better in MATH 126 or in equivalent courses covering trigonometry and analytic geometry.

206 Calculus II 3 Units
Integrals of trigonometric, exponential and logarithmic functions, techniques of integration; Taylor approximations. Prerequisite: C or better in MATH 205 or equivalent.

231 Calculus III 3 Units
Vector-oriented study of functions of several variables; partial differentiation and line integrals; multiple integrals. Prerequisite: C or better in MATH 206 or equivalent.

232 Calculus IV 3 Units
The course is primarily designed for engineering and physical science students. The emphasis is on the methods of solving first and second order ordinary differential equations, linear equations with constant coefficients and second order linear equations with variable coefficients using infinite series. Prerequisite: C or better in MATH 231 or equivalent.

MECHANICAL ENGINEERING
ME

113 Introduction to Engineering Design 3 Units
Introductory experience in analysis, synthesis, and communication used in solving engineering problems. Prerequisites: high school physics and 2 years of high school algebra, or equivalent.

MERCHANDISING
MERCH

20 Advertising and Display 3 Units
Students will learn and practice the principles and skills of advertising, space sales, advertising rates, ad layouts, billing procedures, sales techniques, evaluating the role and appropriateness of various kinds of advertising and analyzing the results of advertising.

30 Principles and Methods of Salesmanship 3 Units
An introduction to personal selling. This course covers the principles and methods of professional selling including approach, presentation, demonstration, overcoming objections and closing the sale; behavior forces in selling; buying motives; industrial and retail selling; and sales management. Oral sales presentation by students are required.

32 Merchandising Analysis 3 Units
The course is an introduction to fashion merchandising. It describes the environment in which fashion thrives. It discusses the usage of product knowledge and channel of distribution in fashion merchandising. Buying, pricing and promotion is reviewed in its relationship with fashion merchandising. It identifies and explores specific jobs in fashion merchandising. Terminology of the field is also reviewed. Recommended preparation: MERCH 30 and 45.

40 Principles of Marketing 3 Units
An introduction to marketing principles including channels of distribution, pricing, government regulations, consumer behavior, marketing functions and organization, product analysis and promotional activity. Recommended preparation: MGT 20, ACC 201 or 24 and ECON 150.

45 Principles of Retailing 3 Units
An introduction to retailing. It surveys the institutions, structures and organizations of retailing. It explains retailing functions—merchandising, buying, pricing and personal selling and promotion. It also covers consumer behavior, accounting controls and the computer in retailing. Recommended preparation: BUS 55.

93B/C/D/E Retailing Cooperative Education 1-4 Units
Provides practical work experience in retailing so that the student has an opportunity to apply conceptual and academic learning to a practical work situation and thereby gains work experience and related competencies. Emphasis is placed on the development of operational competencies, social, personal habits, attitudes and skills essential for job entry, tenure and success in retailing careers. Intended primarily for students enrolling in or interested in the Retailing Program of the Management Curriculum. 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. "B" indicates 1 unit, "C" indicates 2 units, "D" indicates 3 units, and "E" indicates 4 units. (To provide more flexibility during the Fall semester, the required number of work hours may be met by equivalent full-time work during the Christmas retail period). Students normally enroll for 3 units requiring 180 hours of related work and scheduled seminar hours. May be repeated up to eight credits in each program of study with the approval of the cooperative education coordinator.

MICROBIOLOGY
MICRO

130 General Microbiology 3 Units
This course covers the fundamentals of microbiology and the role of microorganisms in the environment and in human affairs. Viruses, bacteria, algae, protozoa and fungi are described and their economic importance is discussed. Other topics include cell structure and metabolism; microbial genetics; medical, food, water and soil microbiology. Emphasis is given to medical aspects —bacterial and viral diseases, immunology and chemotherapy. Class meets for 3 hours of lecture per week.

130L General Microbiology Laboratory 2 Units
Experiments involve aseptic technique and manipulation of microorganisms under laboratory conditions to illustrate the basic principles of microbiology with emphasis on health aspects. Primarily for students majoring in the health sciences. Class meets for two 2-hour lab sessions per week. Prerequisites: CHEM 151 or CHEM 251, and credit or registration in MICRO 130.

MILITARY SCIENCE
(MSci)

103 Introduction to Military Science 2 Units
U.S. Army force structure and its relationship to other Armed Forces elements and to foreign armies. Lab: basic military organizational structures and interrelationship of basic organizations.

104 American Defense Establishment 2 Units
Survey of national defense establishment of U.S., its organization, history, functioning and relation to American society. Lab provides continued application in organizational principles embodied in the structure presented in lectures.

203 Fundamentals of Leadership 2 Units
Introduction to basic principles and methods of assessing leadership, including individual behavior and motivation, group interaction, theories of effective leadership. Lab: application of assessment instruments and case study opportunities at small group level.

204 Introduction to Military Geography 2 Units
Introduction to interpretation and use of topographic maps. Use of necessary instruments and land navigation techniques. Lab: field application of classroom subjects.

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.

104 Beginning Stage Band 1 Unit
Performance of stage band music that is classified from easy to medium difficulty. Students are expected to have some background on alto, tenor or baritone saxophone, tuba, trumpet, trombone, string bass, piano or guitar, but need not read music well.

107 Music in World Cultures 3 Units
Designed for the general student, the course views music both as sound organization and as a product of specific cultures or peoples. Topics of discussion are tribal traditions in the cultures of Polynesia and Africa, tribal and folk traditions in the United States and Central America, and folk and art traditions in the Middle East and Asia.

115 First-Level Piano I 1 Unit
A study of piano as a secondary performance field including the application of music theory to problems in improvising, harmonizing, creating accompaniments, transposing and sightreading at the keyboard.

116 First-Level Piano II 1 Unit
A continued study of Piano as a secondary performance field including the application of music theory to problems in improvising, harmonizing, creating accompaniments, transposing and sight-reading at the keyboard. Prerequisite: MUS 115 or equivalent.

121 Beginning Instrumental Class Lessons 1 Unit
Offers two hours of beginning class lessons per week.
MUS 121 C Classical Guitar—students must own or have use of a nylon-string classical guitar.
MUS 121 D Woodwind, Brass or Percussion
MUS 121 G Folk Guitar

122 Intermediate Instrumental Class Lessons 1 Unit
Offers two hours of intermediate class lessons per week. Prerequisite: MUS 121.
MUS 122 C Classical Guitar—students must own or have use of a nylon-string classical guitar.
MUS 122 D Woodwind, Brass or Percussion
MUS 122 G Folk Guitar

123 Elementary Voice Class 1 Unit
Beginning class lessons: Beginning Class Voice. Class meets three (3) hours per week.

124 Intermediate Voice Class 1 Unit
Intermediate class lessons: Intermediate Class Voice. Class meets three (3) hours per week. Prerequisite: MUS 123 or equivalent.

160 Introduction to Music Literature 3 Units
Covers the elements, forms and styles of music. Emphasis is on music of the Western hemisphere from the listener's point of view.

180 Fundamentals of Western Music 3 Units
Covers fundamental concepts in organization of music as an expressive medium in Western culture, including the roles of composer, performer and listener. Notation as a mode of experience, and discovery and verification of ideas through laboratory experience is practiced. Emphasis will be on singing, music reading, dictation, ukelele or guitar and recorder-type instrumental playing, using folk and composed song material including repertoire applicable to recreational experiences.

181 Elementary Music Theory I 2 Units
Covers the materials and organization of music, with emphasis on analysis and writing. Notation, Scales, Modes, Intervals, Key, Tonality, Melodic organization, Instrumentation and Harmonic Progression as well as Musical Styles. Should be taken concurrently with MUS 183. Placement testing required. Prerequisite: MUS 180 or equivalent.

182 Elementary Music Theory II 2 Units
Covers the materials and organization of music with emphasis on analysis and writing. The course will also feature Seventh chords, Modulation and Two and Three part forms. Should be taken concurrently with MUS 184. Prerequisites: MUS 181 and MUS 183.

183 Aural Training and Sightsinging I 1 Unit
A systematic study of problems in perception, identification, singing and notation of musical sounds. Singing, identifying and notating simple diatonic stepwise melodies. All intervals and scales will also be covered. To be taken concurrently with MUS 181. Prerequisite: MUS 180 or equivalent.

184 Aural Training and Sightsinging II 1 Unit
A systematic study of problems in perception, identification singing and notation of musical sounds. The course also covers chord identification and notation with singing, identifying and notating melodies built around primary diatonic chords. Continued review of all intervals is also emphasized. To be taken concurrently with MUS 182. Prerequisite: MUS 183.

201 Vocal Ensemble 1 Unit
Performance of *a capella* literature and choral-instrumental repertoire for mixed male and female voices. May be repeated for additional credit. Recommended preparation: previous choral experience and instructor's approval.

202B Introduction to Concert Band 1 Unit
Performance of wind ensemble and band literature from easy to medium difficult. Emphasizes fundamentals of concert band performance through performing, listening and composing. May be repeated for additional credit. Recommended preparation: two years of performance on instrument.

202C Community College Band 2 Units
Performance of wind ensemble and band literature from medium difficult to difficult. May be repeated for additional credit. Open to community and college personnel. Recommended preparation: MUS 221D or equivalent.

202D Symphonic Wind Ensemble 2 Units
This course is performance oriented, with emphasis in: (1) excellence in musical performance, (2) human development and (3) community outreach. Members in this class and organization will participate in class activities, clinics and concerts. May be repeated for additional credit.

203 Instrumental Ensemble 1 Unit
Performance of ensemble literature. May be repeated for additional credit. Prerequisite: one year of class instruction or equivalent.
MUS 203 D Keyboard
MUS 203 I Woodwind
MUS 203 N Mixed Instruments
MUS 203 O Percussion

204 Stage Band 1 Unit
Performance of stage band music from the 1930's to the present. May be repeated for additional credit. Recommended preparation: MUS 104 or equivalent.

215 Second-Level Piano I 1 Unit
A continuation of class piano instruction of the first year (MUS 115-116). Intended for music majors planning to qualify for applied music (MUS 231) at transfer time or before. Also intended for non-music piano majors who wish to develop skills and understanding beyond that of the first year for personal enjoyment. Prerequisite: MUS 116 or equivalent.

216 Second-Level Piano II — **1 Unit**
A continuation of class piano instruction which is intended for music majors planning to qualify for applied music (MUS 231) at transfer time or before. The course is also intended for non-music majors who wish to develop skills and understanding beyond that of the first year for personal enjoyment. Prerequisite: MUS 215 or equivalent.

221 Advanced Instrumental Class Lessons — **1 Unit**
Offers two hours of advanced class lessons per week. May be repeated for additional credit. Prerequisite: MUS 122.
MUS 221 D Woodwind, Brass or Percussion

223 Advanced Voice Class — **1 Unit**
An extension of MUS 123/124. Advanced class lessons, with class meeting two hours per week. May be repeated for additional credit. Prerequisite: MUS 124 or equivalent.

231 Applied Music — **1 Unit**
Offers individual music instruction for intended music majors. May be repeated for additional credit. Prerequisite: audition.

MUS 231 B	Voice	MUS 231 N	Oboe
231 C	Piano	231 O	Clarinet
231 D	Organ	231 P	Bassoon
231 E	Harpsichord	231 Q	Saxophone
231 F	Harp	231 R	Trumpet
231 G	Classical Guitar	231 S	French Horn
231 H	Violin	231 T	Trombone
231 I	Viola	231 U	Tuba
231 J	Cello	231 W	Baritone Horn
231 K	Double Bass	231 Y	Percussion
231 M	Flute	231 Z	Other

265 History of Western Music to 1750 — **3 Units**
Covers the development of Western music from its origins to 1750, including styles, schools and composers. Prerequisite: MUS 182 or consent of instructor.

266 History of Western Music after 1750 — **3 Units**
Covers the development of Western music from 1750 to the present, including styles, schools and composers. Prerequisite: MUS 265 or consent of instructor.

281 Intermediate Music Theory I — **2 Units**
Covers the materials and organization of music, with emphasis on analysis and writing. The course includes Variation, Sonata Allegro and Rondo forms; Borrowed, 9th, 11th, 13th, Neapolitan, Augmented 6th chords; Altered dominant and Chromatic Mediant chords; and analysis on 16th polyphony, 18th Symphony and 19th century forms. Should be taken concurrently with MUS 283. Prerequisite: MUS 184.

282 Intermediate Music Theory II — **2 Units**
Covers the materials and organization of music, with emphasis on analysis and writing. The course includes two voice 18th century counterpoint, Fugue; Musical devices of the late 19th and early 20th centuries; and contemporary devices and materials. Should be taken concurrently with MUS 284. Prerequisite: MUS 281.

283 Intermediate Aural Training I — **1 Unit**
A systematic study of problems in perception, identification, singing and the notation of musical sounds. The course also includes melodies that modulate and compound rhythms, part singing and jazz and contemporary melodies. To be taken concurrently with MUS 281. Prerequisite: MUS 184.

284 Intermediate Aural Training II — **1 Unit**
A systematic study of problems in perception, identification, singing and the notation of musical sounds. The course also includes late 19th century as well as 20th century melodies; compound intervals in both directions; and Asymmetric rhythms. To be taken concurrently with MUS 282. Prerequisite: MUS 283.

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.

210 Oceanographic Instrumentation I — **4 Units**
An intensive study of the instruments and techniques used in the study of the oceans. Meets twice weekly, each for four hours. Recommended preparation: OCEAN 201, MATH 50M (or its equivalent) and CHEM 102. Currently offered during the Spring Semester only.

211 Oceanographic Instrumentation II — **4 Units**
A continuation of OCEAN 210 with emphasis on modern oceanographic and geophysical techniques and instruments. Meets twice weekly, each session for four hours. Prerequisite: OCEAN 210. Currently offered during the Fall Semester only.

214 Techniques in Marine Ecology — **4 Units**
Techniques of collecting, recording and evaluating data in the field are stressed. Work will be done in the marine environment with SCUBA. Class meets for 1 hour lecture and 5 hours of field work per week. Students must have SCUBA certification and ZOOL 101 or ZOOL 200 is recommended preparation or concurrent registration. (Formerly BIOL 291C, Field Marine Biology)

215V Marine Ecology Field Work — **2-6 Units**
Ecological data collection of offshore waters; environmental impact statement studies. 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. Prerequisite: Scuba certificate. Recommended preparation: ZOOL 200 or OCEAN 214.

OFFICE PROCEDURES
OFPRO

20B Filing — **1 Unit**
The student will refine and develop selected office skills and learn some of the job performance requirements and traits of effective clerical and secretarial workers. Emphasis will be on study and application of the rules of alphabetic and subject filing. Credit is not transferable. Secretarial degree candidates will enroll in this course and in TYPW 35B and OFPRO 22B as preparation for OFPRO 50. Recommended preparation: Completion of at least one semester of typewriting at LCC with a minimum speed of 45 WPM.

22B Duplicating Techniques, Part I — **1 Unit**
The student will refine and develop selected office skills and learn some of the job performance requirements and traits of effective clerical and secretarial workers. Emphasis will be on production of high quality mimeograph and fluid duplicator copy. Credit is not transferable. Secretarial degree candidates will enroll in this course and in OFPRO 20B and TYPW 35B as preparation for OFPRO 50. Recommended preparation: Completion of at least one semester of typewriting at LCC with a minimum speed of 45 WPM.

50 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 knowledge necessary to solve the problems which the secretary may encounter on the job. Emphasis placed on problem-solving and decision-making. Recommended preparation: OFPRO 20B, 22B, TYPW 35B and 40 and SHTHD 40. SHTHD 40 may be taken concurrently with OFPRO 50.

PERSONNEL AND INDUSTRIAL RELATIONS
PIR

200 Career Placement. — **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 / resumés / self-inventories, persistency and factors which create barriers to employment. See Career Development Center Information in "To Serve You" section.

PHILOSOPHY
PHIL

100 Introduction to Philosophy: Survey of Problems — **3 Units**
A historical and positional approach to the major problems of Philosophy. The course will include analyses of such concepts as Reason, Meaning, Knowledge, Mind, God, Good and Law, which will be discussed with a view toward relating them to everyday reasoning.

101 Introduction to Philosophy: Morals and Society — **3 Units**
An introductory study of social and individual values, obligations, rights, and responsibilities.

102 Introduction to Philosophy: Asian Traditions — **3 Units**
Methods and fields in philosophy from the historical and positional perspective of leading Hindu, Buddhist, Chinese and Japanese philosophers and schools of thought.

200 History of Philosophy I — **3 Units**
A study of Western philosophy from the era of great Greek thinkers to the Renaissance. Offered during Fall semester only.

201 History of Philosophy II — **3 Units**
A study of Western philosophy from the Renaissance to the present. Offered during Spring semester only.

210 Introduction to Logic (Formal Logic) — **3 Units**
An examination of the principles involved in clear thinking using both traditional and/or symbolic techniques. The logical structure of language will be studied in order to develop analytical problem-solving skills in the student. Definitions, truth and validity, and modes of argument will also be emphasized. Fulfills requirements for Division of Arts and Humanities and Division of Mathematics and Natural Sciences. Prerequisite: MATH 27 or 2 years of high school algebra.

220 Philosophical Psychology — **3 Units**
An introduction to the philosophical assumptions and consequences related to the major contemporary psychological theories of mind and human nature.

PHYSICS
PHYS

63 Applied Marine Science — **3 Units**
A course for students of Marine Technology dealing with physical principles as applied to the handling of ships. Topics include statics, hydrostatics, dynamics, heat electricity and magnetism. Recommended preparation: first-year high school algebra.

100B Survey of Physics (Lecture/Lab) — **4 Units**
An introduction to the science of physics through topics selected from mechanics, thermodynamics, electricity and magnetism, relativity, atomic and/or nuclear physics. Emphasis will be placed on understanding basic principles and concepts. Simple algebra will be used. This course is a terminal physics course for non-science majors but also provides a useful background for science majors. A pocket calculator is required. Prerequisite: two years of high school algebra or MATH 27, or equivalent.

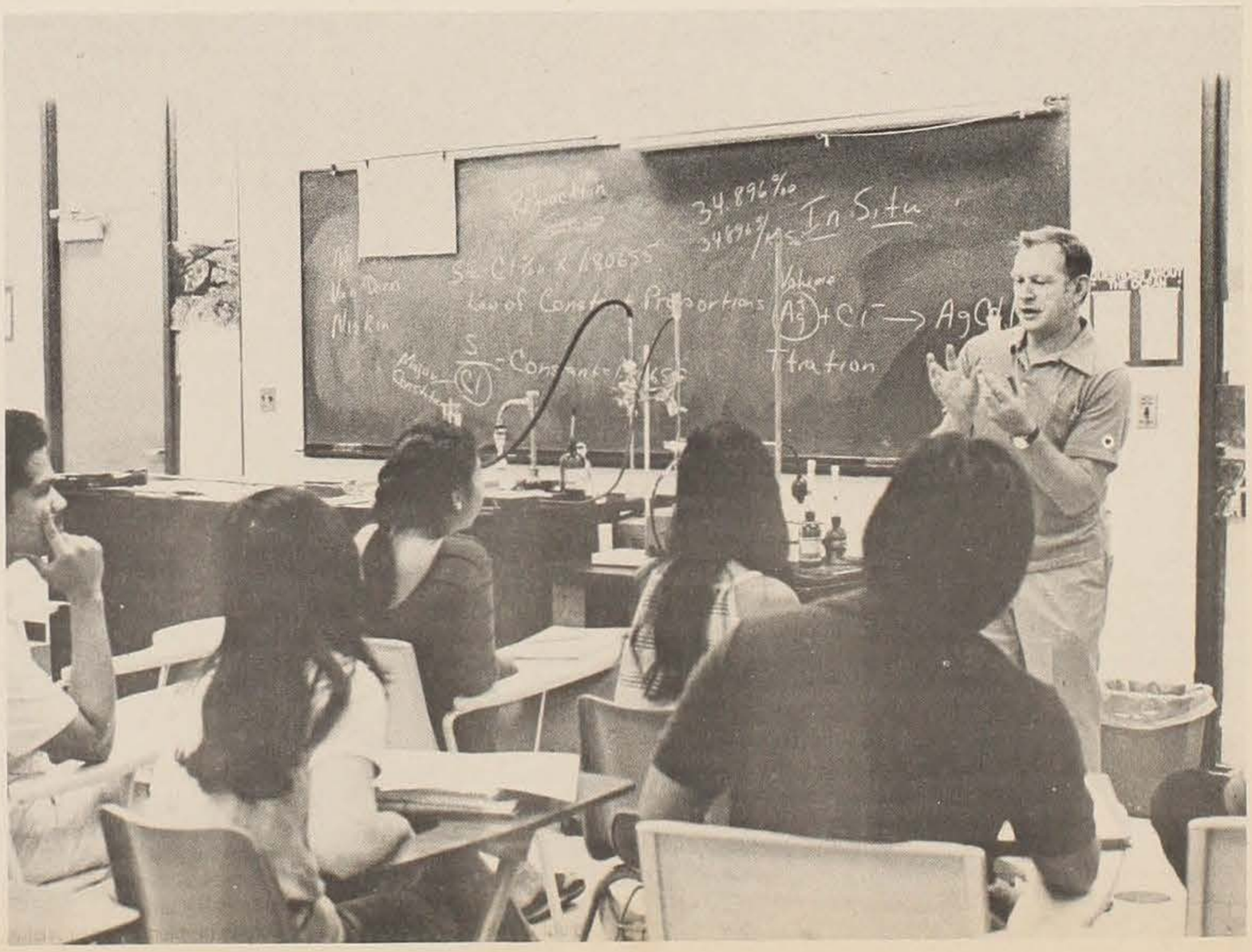
114 Introduction to Physical Electronics — **3 Units**
A basic course in electronics designed for the layman. No prior experience in physics or electronics is needed and no math beyond basic algebra is involved. This course surveys the role of electronic devices in the home and introduces the basic concepts involved in the operation of common electric circuits. Students are provided with practical experiences in circuit assembly and applications. A pocket calculator is required. Prerequisite: two years of high school algebra or MATH 27, or equivalent.

151 College Physics I — **3 Units**
The first course in a two-semester sequence in introductory physics intended for 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. Required: Pocket Trig-type calculator. Prerequisite: credit or registration in MATH 123. Offered Fall Semester only.

151L College Physics Laboratory I — **1 Unit**
An experimental analysis (laboratory) course paralleling PHYS 151 in content and mathematical level, intended for science majors. Class meets once a week for 3-hour sessions. Prerequisite: credit or registration in PHYS 151. Offered Fall Semester only.

152 College Physics II — **3 Units**
The second course in a two-semester sequence in introductory physics intended for 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. Required: Pocket trig-type calculator. Prerequisite: PHYS 151. Offered Spring Semester only.

152L College Physics Laboratory II — **1 Unit**
An experimental analysis (laboratory) course paralleling PHYS 152 in content and mathematical level, intended for science majors. Class meets once a week for 3-hour sessions. Prerequisite: credit or registration in PHYS 152. Offered Spring Semester only.



170 General Physics I **4 Units**
A rigorous introductory course in classical mechanics and thermodynamics for physical science and engineering majors, emphasizing the mathematical techniques used in the explanation of physical phenomena. Required: Pocket trig-type calculator. Class meets for 5 hours of lecture per week. Prerequisite: credit or registration in MATH 206.

170L Experimental Analysis in Mechanics and Thermodynamics **1 Unit**
A laboratory course designed to accompany PHYS 170 and required for programs where PHYS 170 is required. Prerequisite: credit or registration in PHYS 170.

272 General Physics II **3 Units**
The second course in introductory general physics covering electromagnetism and optics for physical science and engineering majors. Required: pocket scientific calculator. Prerequisite: PHYS 170, credit or registration in MATH 206.

272L General Physics II Laboratory **1 Unit**
Experimental analysis in electricity, magnetism and optics. Prerequisite: credit or registration in PHYS 272.

274 General Physics III **3 Units**
Modern physics, consisting of relativity, introduction to quantum mechanics, atomic and nuclear physics, and physical optics; the last of the three-semester rigorous introductory physics sequence. Required of physical science and engineering majors (except CE). Class meets for 4 hours of lecture per week. Prerequisite: PHYS 272.

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. The course is designed to provide knowledge of government and to encourage creative and critical thinking about political concepts, institutions and practices.

220 Introduction to World Politics **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.

230 Introduction to American Politics **3 Units**
A contemporary look at the ideology behind the problems, the structure and policy formation process of the American political system. Comparisons will be made from analyses of the problems with actual government policies intended to deal with them. This course will attempt to present an even-handed treatment unveiling the problems as well as the strengths of the American political system.

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 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.

210 Consciousness and the Human Potential **3 Units**
Theoretical and practical study of the nature of human consciousness. The questions: "*What* do/can we human beings know?" and "*How* do/can we human beings know?" will be investigated both conceptually and directly. Major emphasis on the relationship of selected psychological models and methodologies to the evolution of our maximum human potential. Experiential aspects of the course include deep relaxation, meditation and guided imagery. Recommended preparation: PSY 100 or 110, or consent of instructor.

212 Introduction to Methodology in Psychology **3 Units**
Planning, executing and evaluating behavioral research with emphasis upon research design, laboratory procedures, data compilation, interpretation and communication. Recommended preparation: PSY 100 or equivalent and High School Algebra or equivalent.

220 Developmental Psychology **3 Units**
Study of the physical, intellectual, 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. Recommended preparation: PSY 100 or some introduction to psychology.

224 Abnormal Psychology **3 Units**
Nature and causes of psychoneuroses and psychoses; abnormalities of intelligence; psychotherapy. Prerequisite: PSY 100.

285 Cross-Cultural Psychology **3 Units**
Psychological theories, models and methods of different cultural systems; understanding of own and other cultures; cultural similarities and differences in approaches to intrapersonal growth and interpersonal relations. Recommended preparation: PSY 100 or 110 or equivalent or instructor's approval.

QUANTITATIVE METHODS
QM

121 Mathematics for Decisionmaking I **3 Units**
Mathematical operations relating 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. Prerequisite: C or better in MATH 27 or equivalent.

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. Prerequisites: ECON 150 or ECON 151; C or better in QM 121.

RELIGION
REL

150 Introduction to the World's Major Religions **3 Units**
A study of the world's living major religions through lecture and discussion.

151 Religion and the Meaning of Existence **3 Units**
Emphasizes contemporary religious thought regarding the human person's consciousness of human existence.

200 Understanding the Old Testament **3 Units**
Intellectual analysis of the developing beliefs and practices of the Hebrew religion as set forth in the Old Testament. This Bible study will highlight the meaning of the Hebraic faith for the modern world.

201 Understanding the New Testament **3 Units**
Intellectual analysis of the origin and development of the early Christian message as set forth in the New Testament. Special attention will be given to the message of Jesus and Paul and its relevance to the modern world.

205 Understanding Hawaiian Religion **3 Units**
A general introductory survey of Hawaiian religious teaching and practices from ancient times to the present.

SCIENCE
SCI

107 The Molecular Basis of Life **3 Units**
The topic of LIFE will be examined from the molecular standpoint. Topics include the combination of atoms to form complex molecules such as Proteins, Carbohydrates, Lipids, and DNA—the genetic material. Chemical Digestion of Foods; Intermediate Metabolism; Molecular Evolution, and a Biological Viewpoint of the Origin of Life. Prerequisite: None.

121 Introduction to Science—Biological **4 Units**
An introduction to the philosophy and history of science from the viewpoint and perspective of the biological scientist. Topics include an understanding of the conceptual framework of science, science as a human activity and the interrelationships of science and society. To illustrate these topics, the major biological concepts of genetics, evolution and ecology will be covered. Lab attendance is required. Prerequisite: None. Offered Fall Semester only.

122 Introduction to Science—Physical **4 Units**
An introduction to the conceptual framework of science and technology from the viewpoint and perspective of the physical scientist. Topics include an understanding of the differences between science and technology, their relationship, science as as a human activity and the interrelationships of science and society. To illustrate these topics, the major physical and chemical principles of science as they apply to environmental science will be covered. Lab attendance is required. Prerequisite: MATH 25 or one year of high school algebra. Offered Spring Semester only.

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 an 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 ecological action of the individual student. Course includes laboratory and field trip experience. Prerequisite: None.

SHORTHAND
SHTHD

21 Beginning Theory/Dictation **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.

30 Intermediate Shorthand **3 Units**
The student will concentrate on speed-building and typewritten transcription skills. Upon completion of this course, the student will have passed 3 official dictation tests at a minimum speed of 60 words per minute with 95% accuracy. Recommended preparation: SHTHD 21 or equivalent, TYPW 30 or equivalent.

40 Advanced 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 2 official dictation tests at a minimum of 100 words per minute with 95% accuracy. Recommended preparation: SHTHD 30 or equivalent.

SOCIAL SCIENCE
SSCI

101 Self Development **3 Units**
Exploration and communication of student goals and feelings about oneself 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 the various potentials as one encounters himself/herself in a group at this point in life as a student. May be repeated up to six credits.

113 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.

130 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, psychology, ethics and religion.

190 Special Topics Series **1-4 Units**
Special Topics courses provide specialized training to paraprofessionals, practicum students, volunteer workers, community residents and others in practical human service skills and related concepts. These courses are initiated either by the Social Science Division or by a community agency or group, developed jointly, and then taught either by regular Leeward faculty or by the staff of the agency or group. A few examples of SSCI 190 "skill courses" are: Group Therapy, Use of Behavioral Objectives and Behavior Modification, Coping with Drug Related Problems, Facts About Substance Abuse, Community Needs Assessment and Evaluation, and a series of courses for developmental disabilities home operators.
(NOTE: Many Special Topics offerings do not appear in Leeward's regular semester schedule of courses. For a complete list of current offerings, contact the division chairpersons or secretary.)

210 Physical Problems of Local Communities **3 Units**
The student will look at housing, population growth, land use, transportation, environmental pollution and other physical problems in his/her own community. For each area, background information and problem-solving techniques are discussed. The course is presented in a series of projects that permits the student to concentrate on those problems that are of interest and concern to him/her and his/her community. Offered Fall semester only.

221 Types of Marriage and Alternative Lifestyles **3 Units**
This course includes a description and analysis of the pros and cons of the types of marriage (traditional and non-traditional) and alternative lifestyles (primary adult sexual and nonsexual relationships), heterosexual, homosexual and ambisexual. Personal and social functions related to sexual celebration on the one hand and procreation and parenting on the other hand will be considered through values clarification, problem-solving and other methods. Basic courses in Anthropology, Human Sexuality, Psychology and Sociology would be most helpful and related before or after this course.

225 Pilipino-American 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. Offered Spring semester only.

230 Culture and Society of the Hawaiian People **3 Units**
Application of the perspectives of the social sciences and the process of scientific observation and analysis to the Hawaiian Ethnic Community. Study of the social behavior of the Hawaiian people in an 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. Offered Fall semester only.

240 Growth Facilitation Training **3 Units**
Students taking this humanistic social science course will learn recipes, theories, skills and attitudes to allow other people to systematically experience, explore, accept and expand their inner realities. Students will learn to focus on other people in ways that provide the emotional atmosphere for them to share their feelings, work out their own problems and feel better about themselves. Students will attend seminars, hold one-to-one sessions with people exploring themselves, turn in weekly exercises on the readings and confer individually with the instructor. Prerequisite: PSY 100, or SSCI 101, or consent of the instructor.

290 Special Topics Series **1-4 Units**
The 290 series of Special Topics courses are similar in purpose to the 190 series but provide an advanced level of training in specific areas. (See SSCI 190 for basic course description.) A few examples of SSCI 290 "skill courses" are: Individual and Family Counseling, Self-Exploration and Experience, Effective Parenting, Assertiveness Training, Art in Therapy, Sex and Intimacy and a series of courses for drug abuse counselors.

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.

218 Introduction to Social Problems **3 Units**
Application of a social problem perspective to selected problems afflicting modern industrial societies. Emphasis on understanding the nature, causes, and effects of social problems in relationship to social processes and social structures. Different research data and theoretical approaches are examined. Prerequisite to all Manoa 300-level sociology classes.

275 Introduction to Sociological Inquiry **3 Units**
Introduction to methods and analytical techniques used in sociology with an emphasis on theory when relevant. A wide range of subject areas within sociology is covered to illustrate the principles of analysis. Emphasis is on learning by doing and providing basic skills in doing sociology. Required of majors; prerequisite to all Manoa 400-level sociology courses. Recommended preparation is one of the following: SOC 100 or 218.

SPANISH
SPAN

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

201-202 Intermediate Spanish I, II **3-3 Units**
Continuation of skills learned in SPAN 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 Learning Resource Center during various hours each day and evening. Recommended preparation: SPAN 102 or equivalent for SPAN 201; SPAN 201 or equivalent for SPAN 202. SPAN 201 offered Fall Semester only. SPAN 202 offered Spring Semester only.

SPEECH
SP

151 Personal and Public Speech **3 Units**
Introduction to major elements of speech. Activities for students to acquire competence in two-person, small group, and public situations. Models and concepts to explain the speech act.

251 Principles of Effective Public Speaking **3 Units**
Adaptation of rhetorical theory to particular speakers, audiences, occasions. Extensive practice in planning and delivering speeches. Prerequisite: SP 151 or equivalent.

TAGALOG
TAG

101-102 Elementary Tagalog/Pilipino I, II **4-4 Units**
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 TAG 101; TAG 101 or equivalent for TAG 102.

TYPEWRITING
TYPW

20B Beginning Typing I **1 Unit**
This basic course in typewriting includes learning what is called touch typing. Letter, number, punctuation and symbol keys are memorized; and through practice and drills, a firm foundation for building typewriting skill is established.

20C Beginning Typing II **1 Unit**
This basic course is a continuation of TYPW 20B 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: TYPW 20B or equivalent.

20D Beginning Typing III **1 Unit**
This basic course is a continuation of TYPW 20C with continued practice in the mastery of the keyboard emphasizing speed, accuracy and office standards. Students will apply their knowledge and skill in producing tables, manuscripts and centering problems. Recommended preparation: TYPW 20C or equivalent.

30 Intermediate Typing **3 Units**
The student will review the typewriting fundamentals and develop increased accuracy and speed. He/she 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: TYPW 20D or equivalent.

35B Machine Transcription I **1 Unit**
The student will refine and develop selected office skills and learn some of the job performance requirements and traits of effective clerical and secretarial workers. Emphasis will be on developing employable skills in the use of a machine transcriber. Credit is not transferable. Secretarial degree candidates will enroll in this course and in OFPRO 20B and OFPRO 22B as preparation for OFPRO 50.

Recommended preparation: completion of at least one semester of typewriting at LCC with a minimum speed of 45 WPM.

40 Advanced Typing **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.

WOMEN'S STUDIES
WS

280 The American Woman's Story **3 Units**
The course will focus on the roles and status of women at selected times in the past and in the present. Topics covered include the biological and psychological aspects of women's roles, socialization, economic and legal implications of sex roles, issues in the women's movement and women in Hawaii. Recommended preparation: one introductory level course in either sociology, anthropology, psychology or permission of the instructor.

290 Topics in Women's Studies **1-6 Units**
A selection of various topics in Women's Studies utilizing perspectives and data from many disciplines. Each topic examines the issues involved in sexism and sex role differentiation by focusing on women's positions, contributions, concerns and problems. Recommended preparation: WS 280 and/or an introductory level course in contributing discipline area for all 290 topic courses.

290C Women and Religion **3 Units**
A survey of the influence of religious teaching and practice on the condition of women in representative cultures, past and present. Emphasis is given to the contribution of women in the various religions, the view of women in the official teachings and the relationship of religion to the contemporary status of women. The potential of religion for correcting the subjugation of women is explored. Recommended preparation: WS 280.

290D Women in Hawaii **3 Units**
An investigation of the status of women in Hawaii, past and present: their roles, diversified cultural backgrounds and achievements. Special attention will be given to the creative tensions between traditional and emerging values with an emphasis on the potential of women for the Hawaii of the future.

290E Is Anatomy Destiny? A Look into the Psychology of Women **3 Units**
The Psychology of Women surveys the status of women today from various psychological perspectives and describes the traditional as well as alternative roles of women as a function of specialized institutional settings (e.g., family, education, work force, law and politics, health and mental health). This course also deals with understanding the forces, both social and psychological, underlying some of the unique problems faced by contemporary women and introduces strategies to deal with such problems. No prior preparation necessary.

WORD PROCESSING
WPRO

50 Introduction to Word Processing **3 Units**
An introduction to word processing concepts and system management, the development of power typewriting skills, and reinforcement of communication skills using the transcriber. Prerequisite: Approval by instructor. Satisfactory completion of TYPW 30, TYPW 35B, and ENG 100.

ZOOLOGY
ZOOL

101 Principles of Zoology **4 Units**
An introduction to the study of animal life. Basic principles of biology are covered including the role of plants as primary producers of chemical energy. The mechanisms of digestion, circulation, osmoregulation, excretion, locomotion, nerve action and reproduction in representative animals are discussed. The chemical and cellular mechanisms involved in the transmission of inheritance are studied. The evolution of plant and animal life, the interaction of organisms in their environment, food chains and trophic levels, and ecological distributions are introduced. Representative animal phyla including both invertebrates and vertebrates are studied from the viewpoint of systematics and structural characters. This course is designed to provide the student with basic information and vocabulary in preparation for advanced courses in zoology and biology. Class meets for 2 1/2 hours of lecture and 3 hours of lab per week. Recommended preparation: Score of 58 or better on the Nelson-Denny Reading Test.

200 Marine Biology **4 Units**
An introduction to marine animals and plants, their ecological relationships, structures and systematics. Primary productivity in the sea, tropic levels, benthic and pelagic habitats, coral reef ecology, the intertidal zone, osmoregulation, zoogeography and faunal regions of the seas are studied. Various shallow water habitats on Oahu, including tidepools, mudflats and coral reefs, are explored on field trips. Class meets for 2 1/2 hours of lecture and 3 hours of laboratory or field work per week. Recommended preparation: that the student be familiar with animal physiology and with the phyla and classes of invertebrate and vertebrate animals. Credit in ZOOL 101 is strongly urged.

230 Survey of Ecology **3 Units**
A survey of the basic principles of ecology which will include basic theories of community interaction, population dynamics, diversity in nature, etc. This course has a biological emphasis as opposed to a sociological emphasis. Class meets for 3 hours of lecture per week. Prerequisite: ZOOL 101.

240-241 Human Anatomy and Physiology **4 Units**
Designed for students who plan careers in fields of health care, i.e., nursing, medicine, medical technology, dietetics, dentistry, veterinary medicine, etc. Structure and function of human body organs and tissues. The laboratory of ZOOL 240 will include a thorough dissection of a generalized mammal, the cat, with a view to understanding the functional anatomy of the human. Articulated and disarticulated human skeletons are available for study. ZOOL 241 laboratory will include the histology of major tissues and organs, the dissection of a mammalian brain and cranial nerves, and demonstrations of biotelemetry. Recommended preparation for ZOOL 240: It is expected that students will be able to read college-level textbooks that have a large measure of technical vocabulary, and that they will be able to express themselves adequately in essay-type examinations.

Prerequisites for ZOOL 240: None
Prerequisites for ZOOL 241: ZOOL 240; CHEM 151 (which may be taken concurrently)

Credit *will* be given for ZOOL 240 without 241.

ADDITIONAL COURSES

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 be approved by the advisor's Division Chairperson. 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.

The number of credits to be awarded will be determined by the nature and extent of the work involved in the project

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

Faculty/Staff

Arts and Humanities

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Language Arts

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Vocational-Technical Education

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Delaney, Frederick, Instructor, Marine Technology; U.S. Naval Instructor School; U.S. Navy Diving Schools; Master Diver; NAUI Instructor.

deSilva, Edwin, Instructor, Drafting Technology.

Fasick, Howard C., II, Instructor, Automotive Technology; A.S., Automotive Mechanics, Honolulu Community College; B.A., University of Colorado; M.A., University of Hawaii.

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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.

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Student Services

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Uesato, Stuart, Coordinator of Student Activities; B.A., University of Hawaii; M.A., New York University.

Veregge, Marvin L., Instructor, Social Science—Counselor; A.B., M.A., University of California at Berkeley.

White, Elaine, Instructor, Social Science—Counselor; B.A., M.A., M.Ed., University of Hawaii.

Wiggers, Stewart E., Instructor, Social Science—Counselor; B.A., San Jose State College; B.S., M.S., San Diego State College.

Williams, Ilima, Instructor, Social Science—Counselor; A.A., Stockton Junior College; B.A., College of the Pacific; M.A., California State Polytechnical College.

Wong, Dick L., Outreach Counselor; B.ED., University of Hawaii; M.A., Pepperdine University.

Library and Educational Media Center

DeCosin, Marri L., Librarian; B.S., West Chester State College; M.S.L.S., University of Illinois.

Goldstein, Laurence B., Librarian; B.S., M.S.L.S., M.A., University of Hawaii.

King, Muriel, Librarian; B.A., University of Hawaii; M.S.L.S., University of Illinois.

Klim, Blanche, Graphic Artist; B.F.A., California Institute of Arts.

McNeil, Don, Librarian; B.A., Buena Vista College; M.S.L.S., University of Kentucky; M.Ed., University of Hawaii.

Pecsok, Michael, Media Specialist; B.A., University of California, Berkley.

Tsujimura, Jackson, Audio-Visual Technician; San Francisco Technical College.

Uchima, Gilbert, Audio-Visual Technician; Honolulu Community College.

Yoshishige, George, Coordinator of Educational Media Center; B.A., M.Ed., University of Hawaii.

Academic and Institutional Support

Hemler, Edward B., Assistant to the Coordinator, Strengthening Developing Institutions Program; B.A., S.T.B., S.T.L., St. Mary's University, Baltimore; M.A., Ph.D., Catholic University of America, D.C.

Shiraki, Joyce, Fiscal Officer.

Suzuki, Joanne, Staff Development Specialist; B.A., University of Hawaii; M.S.W., State University of New York.

Special Programs and Community Services

Ranney, Donald J. Jr., Theatre Technician; B.A., Chaminade College; M.F.A., University of Hawaii

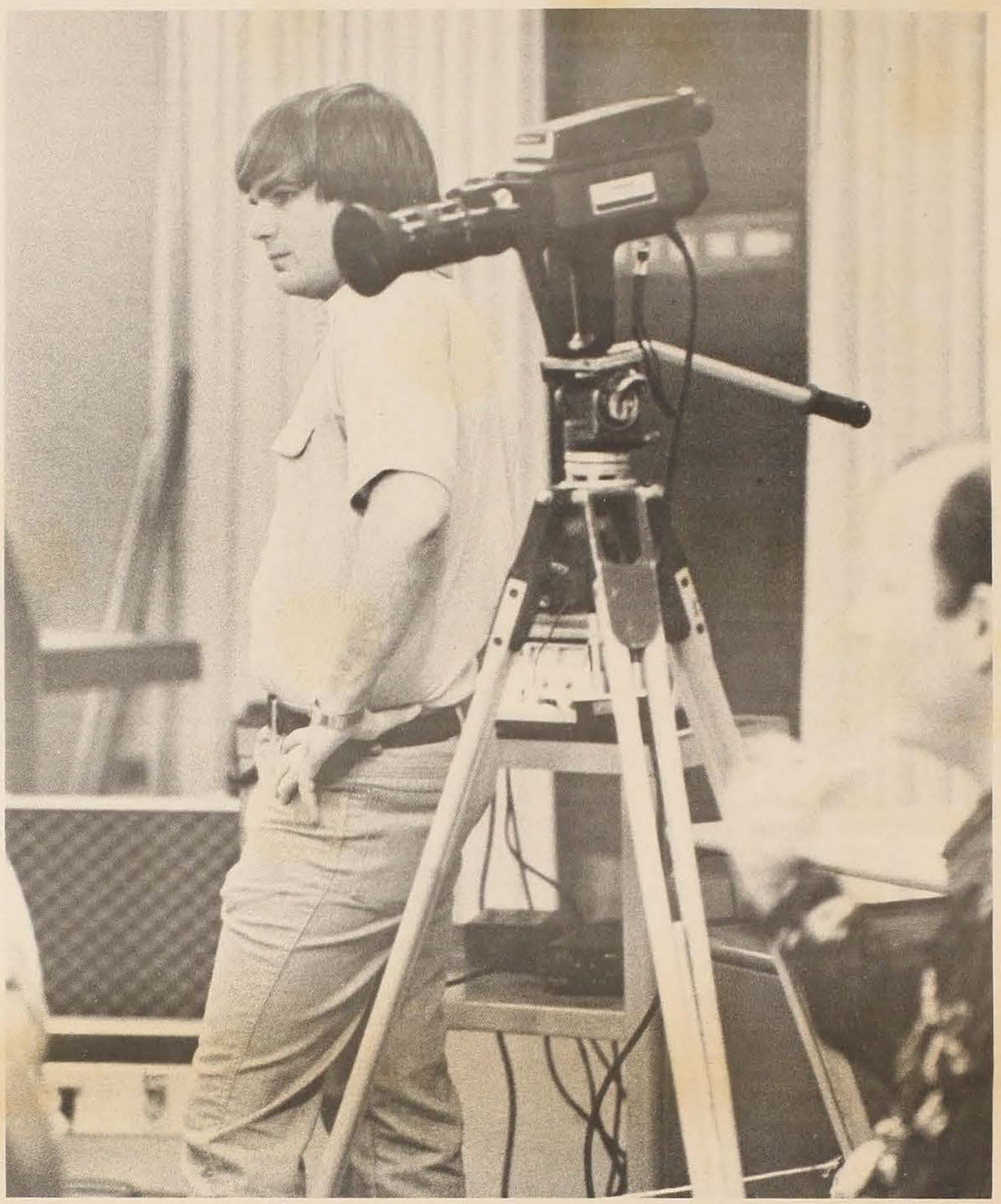
Wright, Ginger L., Education Specialist; B.A., M.A., University of Hawaii

Wai'anae-Nānākuli Education Center

d'Argy, Elizabeth, Learning Lab Coordinator; B.A., Oakland University; M.Ed., University of Hawaii

Padeken, Frances, Community Education Assistant; Waianae High School

Villarin, Phyllis, Community Education Assistant; A.S., Honolulu Community College



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Howard K. Kam, Jr., Arthur Young and Company
Hiram C. Lau, CPA
Susan Tamura Sato Davis, Playdon and Gerson
William Scharff, Tax Advisory Service
Theodora Tamanaha, State Farm Insurance

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Lynette Smith, C. S. Wo and Sons, Ltd.

Transfer Information

Information on transfer to Leeward Community College is in the Admissions Information section.

How to Transfer From Leeward Community College to the Manoa Campus

1. Work closely with LCC counselors in planning your course of study. See General Education Requirements for the Major Colleges within the U.H. at Manoa in this section.

2. Consult the current University of Hawaii Catalog for further information.

If You Plan to Transfer to Manoa:

and you have not completed 24 credit hours of "transferable" level courses at LCC, you are 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 of the Scholastic Aptitude Test of the College Entrance Examination Board.

and you were originally admitted to Manoa but elected instead to begin at Leeward CC, you may transfer to Manoa at any time regardless of the number of credit hours you have completed at the Community College. For continued registration at Manoa, a student must meet the grade point average required of Manoa students.

and you have completed 24 credit hours in transferable courses with a grade point average of 2.0 or higher, you may transfer to Manoa even if you were not able to meet Manoa's admission requirements as an entering freshman. There is a possibility of being accepted as an unclassified student with a GPR of at least 1.7. (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.)

Submit Official Transcripts From All Schools:

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

General Definition of Transferable Courses:

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 Education 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.

D Grades When Transferring to Manoa:

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 has been earned are not acceptable for credit at Manoa.

Will All of Your Courses Over 100 Be Acceptable 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 the course of study very carefully with Leeward counselors, taking into consideration the specific curricular requirements of the college in which he/she wishes to enroll and the courses required for the major field of study.

Minimum Number of Credits Numbered 200 and Above:

Baccalaureate Requirements. To qualify for any baccalaureate degree from the University, students must satisfactorily complete (1) the general education requirements, (2) at least 60 additional credit hours of non-introductory courses, (meaning, there is an explicit college-level prerequisite) and (3) the requirements of the college (which may overlap University requirements).

Credit/No Credit Option at Manoa:

The only courses that may be taken by Manoa students for credit/no credit are elective courses. This option is no longer allowed for any courses taken to fulfill a University or College core requirement or Department requirement, with the exception of those offered for mandatory credit/no credit. Students planning to transfer to Manoa are cautioned to abide by this Manoa policy.

Transfer of Grade Point Average to Manoa:

Leeward students transferring to Manoa do not receive grade point credit for courses completed at the community college which are accepted for transfer by Manoa. Although the grade point average is not transferred to Manoa, it is usually considered for admission purposes by the various programs at Manoa.

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/she 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/she wishes to enroll when he/she 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.

General Information Requirements for the Major Colleges Within the U.H. at Manoa:

In four-year college and university programs, a student takes most of the required courses for his/her major in the junior and senior years. The first two years are spent primarily in completing the general education requirements for that college and taking any freshman and sophomore courses that may be required to prepare students for advanced work in the major. The University of Hawaii at Manoa is made up of twelve colleges and schools which grant undergraduate degrees. Although there is a minimum or "core" of general education required for all students regardless of the college in which they enroll, each college and major modifies the "core" to meet the educational needs of their particular students. Which college a student will enroll in is determined by the student's choice of major. Because most students have not chosen a major before entering college, the broad term "liberal arts" is used for all transfer students rather than classifying them as pre-psychology, pre-engineering, pre-education, etc. However, every student will be required to designate a more specific major at the beginning of the junior year. As the choice of major depends upon the type of career for which the student is preparing, students who have not yet determined their career goals are urged to consult with the staff of the Career Development Center (AD-221) or with any counselor early in their first semester. Early identification of career goals and major will enable the student to avoid taking courses that do not meet the general education requirements of their eventually chosen program.

How to Transfer from Leeward Community College to the West Oahu College Campus

1. Work closely with your LCC counselor in planning your course study. Refer to West Oahu College's catalog section on **General Education Requirements: Lower-Division Core.**

2. Contact the West Oahu College's Registrar for additional information or answers to questions.

Admission Requirements:

West Oahu College, as an upper-division campus, will admit any student who has completed 55 units or more of lower-division college courses at any college of the University of Hawaii system or other college of good standing. Hawaii residents who are community college graduates with an Associate in Arts degree or an Associate in Science degree with a grade point average of 2.0 or higher will be automatically accepted. Students transferring with an Associate in Science degree will be required to meet the lower-division general education requirements listed in the Academic Program section of West Oahu College's general catalog. Students who have completed some previous college-level work, but have yet to attain the 55 credit minimum, may have their transcript evaluated for possible admission as unclassified students.

While it is not a requirement for admission to West Oahu College, students are urged to complete their general education course work at the lower-division level before applying to West Oahu College since initially the college offers no lower-division programs.

Submit Official Transcripts from all Schools:

Any Leeward student transferring to West Oahu College after attending any college or university must submit transcripts from those schools as well as from Leeward. The credits and grades earned will be evaluated by WOC to determine eligibility for transfer.

General Definition of Transferable Courses:

Courses acceptable for transfer to WOC are those numbered 100 and above and are classified as college transfer courses. The fact that transfer credit may be allowed for a course toward the number of credits required for graduation does not necessarily mean that the course will satisfy the general education or core requirements for WOC.

Minimum Number of Credits Numbered 300 and Above:

The minimum criterion for a Bachelor's degree is 120 credits of acceptable college work. Of these 120 credits, a minimum of 55 must be earned in upper-division courses (300 and 400 series). At least 30 credits must have been earned in courses taken at West Oahu College. The maximum number of credits from community college courses and credit/no credit courses applicable to this requirement is 60 college-level credits. The maximum number of credits in any one academic discipline, lower- and upper-division combined, which can be applied to the degree, is 48.

Transfer of Grade Point:

Leeward Community College students transferring to West Oahu College receive grade point credit for all courses completed at the community college which are accepted for transfer to WOC. The LCC grade point average will be included when computing the overall grade point average for all work toward the baccalaureate degree at WOC. However, the grade point average which transfers is computed according to WOC's system.

Three grade point averages, each 2.0 or higher, are required for graduation:

(a) An average based on all courses completed at West Oahu College.

(b) An average based on all courses completed at West Oahu College and at other universities, liberal arts colleges and community colleges.

(c) An average based on all upper-division courses completed in the major.

General Education Requirements:

West Oahu College, operating as an upper-division college during the first few years, does not offer lower-division courses. It is assumed that lower-division work will have been completed at a community or four-year college. Credits from any accredited college or university will be reviewed for transferability towards meeting the quantitative credit requirements for graduation.

Any student who has successfully completed the requirements for an Associate in Arts degree at one of the University of Hawaii's community colleges will be considered to have met the necessary general education or core requirements. For other students, the following credit requirements, by general academic area, must be completed at the lower division level:

(a) Humanities and Language Arts: 18 semester hours selected from at least three of the following: Art, English, History, Language, Music, Philosophy, Religion, Speech and Area Studies.

(b) Social Sciences: 15 semester hours selected from at least three of the following: Anthropology, Economics, Business, Ethnic Studies, Geography, Sociology, Political Science, Psychology and Education.

(c) Natural Sciences: 12 semester hours selected from courses in Biology, Chemistry, Computer Science, Engineering, Geography, Geophysics, Mathematics and Physics.

Articulation Agreement—Management Program:

There exists between West Oahu College and Leeward Community College a formal articulation agreement covering the Management Program. Students who are in LCC's Management Program and who are planning to transfer to West Oahu College are encouraged to see a counselor concerning the details.

How to Transfer to Institutions Other Than the Manoa Campus and West Oahu College

Students planning on transferring to a college other than the University of Hawaii at Manoa or West Oahu College are urged to consult a counselor early in their college career so that a planned program can be arranged to meet the general education requirements of the college to which they plan to transfer. It is the student's responsibility to obtain catalogs from any college or university that is being considered for transfer.

Policies and Statements

OF THE UNIVERSITY OF HAWAII AND THE STATE AND FEDERAL GOVERNMENTS

Code of 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 . . . including the staff, faculty and students . . .

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

Category 2. Behavior intended directly or indirectly to interfere with or disrupt the 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."

Procedures 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 procedures are available in the offices of the Provost, Dean of Educational Services and the Coordinator of Student Activities.

Residency Regulations for Tuition Purposes

Students who do not qualify as bona fide residents of the State of Hawaii, according to the University of Hawaii regulations in effect at the time they register, must pay nonresident tuition. An official determination of residency status will be made at the time of application. Applicants may be required to provide documentation to verify residency status. Once classified as a nonresident, a student continues to be so classified during his/her term at the college until he/she can present satisfactory evidence to the residency officer that proves otherwise.

Some of the more pertinent University residency regulations follow. For additional information or interpretation, contact the residency officer in the Admissions Office.

GENERALLY, ADULT (OVER 19) AND MINOR (UNDER 19) STUDENTS ARE DEEMED RESIDENTS OF THE STATE OF HAWAII FOR TUITION PURPOSES IF THE ADULT STUDENTS OR IN THE CASE OF MINOR STUDENTS, THEIR PARENTS OR LEGAL GUARDIANS, HAVE RESIDED IN AND DEMONSTRATED THE NECESSARY INTENT TO MAKE HAWAII THEIR LEGAL, PERMANENT RESIDENCE AT LEAST 12 CONSECUTIVE MONTHS PRIOR TO THE FIRST DAY OF INSTRUCTION.

The **criteria** for establishing Hawaii residency are:

A. Registering to vote in the State of Hawaii
B. Voting in Hawaii
C. Filing Hawaii Resident State Income Tax Returns
D. Obtaining a Hawaii Motor Vehicle License
E. The presence of immediate family in Hawaii
F. Other such criteria

NO SINGLE ACT IS SUFFICIENT TO ESTABLISH RESIDENCE IN THE STATE OF HAWAII. Having registered to vote in the State of Hawaii and filing Hawaii Resident Income Tax Returns are probably the two most important considerations for establishing intent. Other legal factors involved in making a residency determination include:

A. Residency in Hawaii and residency in another place cannot be held simultaneously.
B. Presence in Hawaii primarily to attend an institution of higher learning does not create resident status.
C. The residency of unmarried students who are minors follows that of the parents or of the legal guardian. Marriage emancipates a minor.
D. The residency of a married person may follow that of his or her spouse.
E. Resident status, once acquired, will be lost by future voluntary action of the resident inconsistent with such status. However, Hawaii residence will not be lost solely because of absence from the state while a member of the United States Armed Forces, while engaged in navigation, or while a student at any institution of learning.

Statutory exemptions may be granted to nonresidents under the following circumstances:

A. Persons who are legal residents of a state or foreign country which permits Hawaii residents to pay the same tuition at its public institutions of higher learning as are paid by its own residents.
B. United States military personnel and their authorized dependents during the period such personnel are stationed in Hawaii on active duty.
C. Persons who are legal residents of a district, commonwealth, territory, or insular jurisdiction, state, or nation which provides no public institution of higher learning.
D. Employees of the University of Hawaii and their spouses and legal dependents.

Appeal Process

Residency decision may be appealed by contacting the residency officer for information on how to initiate an appeal *before* students register for classes. Appeals are heard only *after* the *resident* tuition is paid.

Misrepresentation

A student or prospective student who intentionally or willfully misrepresents any fact on any form or document intended for use in determination of resident status for tuition purposes will be subject to the regular disciplinary measures of the University of Hawaii.

For further information or interpretation, contact the Registrar.

Refund Policy

Regular Academic Semester:

In the event a student initiates before the fifth week of instruction a complete withdrawal from the College, a change from full-time to part-time status, or a change from one tuition rate to another, if applicable, tuition and special course fees are refunded as indicated below:

1. 100% refund for a complete withdrawal only if made on or before the last day of regular registration as announced in the registration information booklet.
2. 80% refund if a complete withdrawal or a change in status or a change from one tuition rate to another tuition rate is made within the first two weeks of instruction.
3. 40% refund if a complete withdrawal or a change in status or a change from one tuition rate to another tuition rate is made within the third and fourth weeks of instruction.
4. No refund if a complete withdrawal or a change in status or a change from one tuition rate to another tuition rate is made after the fourth week of instruction.

When changes by the College to the published schedule of classes precipitate a complete withdrawal or a change from full-time to part-time status or a change from one tuition rate, and the changes to the published schedule have occurred after the student registered, tuition and special course fees are refunded as indicated below upon approval of the College Dean of Instruction or Dean of Students:

1. 100% refund if a complete withdrawal is necessary and if application for refund is made within two weeks of the date of the change(s) to the published schedule.
2. the difference between the amount assessed at registration at the start of the semester and the amount assessed due to change in status or tuition rate if such a change is necessary and if application for refund is made within two weeks of the date of the change(s) to the published schedule.

After the required approvals have been secured by the student, the application for refund must be submitted to the College's Business Office for payment. In no case shall payment of a refund be made when a student fails to make application for a refund within two weeks of date of withdrawal, change in status or change in tuition rate.

Special Course Fees Refund—CCECS and Summer Session:

1. For credit courses with equal distribution of class meeting hours through the term of the course:
   a. 100% refund for complete withdrawal if made on or before the last working day before the first day of instruction.
   b. 80% or 40% refund in accordance with the schedule below, which is based on the length of term of the course and the number of working days elapsed, including the first day of class instruction, when the withdrawal is made:

TERM	*80% Refund*	*40% Refund*
1 week	No refund	No refund
2 weeks	1st day	2nd day
3 weeks	1st-2nd day	3rd day
4 weeks	1st-2nd day	3rd-4th day
5 weeks	1st-3rd day	4th-5th day
6 weeks	1st-3rd day	4th-6th day
7 weeks	1st-4th day	5th-7th day
8 weeks	1st-4th day	5th-8th day
9 weeks	1st-5th day	6th-9th day
10 weeks	1st-5th day	6th-10th day
11 weeks	1st-6th day	7th-11th day
12 weeks	1st-6th day	7th-12th day
13 weeks	1st-7th day	8th-13th day
14 weeks	1st-7th day	8th-14th day
15 weeks	1st-8th day	9th-15th day
16 weeks	1st-8th day	9th-16th day

2. For credit courses with unique distribution of class meeting hours through the term of the course, the refund schedule will be based on the elapsed instructional time for that course as a percentage of the total instructional time for that course:
   a. 100% refund for complete withdrawal if made on or before the last working day before the first day of instruction.
   b. If not more than 10% of the course's instructional time has elapsed at time of withdrawal, an 80% refund will be made.
   c. If more than 10% but not more than 20% of the course's instructional time has elapsed at time of withdrawal, a 40% refund will be made.
   d. If the elapsed instruction time at time of withdrawal exceeds 20%, no refund will be made.
3. For non-credit courses or workshops:
   a. One to five weeks in length - 100% refund for complete withdrawal if made on or before the last working day before the first day of class meeting; thereafter no refund.
   b. Six weeks or longer - 100% refund for complete withdrawal if made on or before fifth working day has elapsed after the first day of class instruction; thereafter no refund.

Student Activity Fee:

1. 100% refund of student activity fee if complete withdrawal is made within the first two weeks of instruction.
2. No refund of the student activity fee if complete withdrawal is made after the second week of instruction.

Non-Discrimination and Affirmative Action

It is the policy of the University of Hawaii to provide equity of opportunity in higher education, both in the educational mission and as an employer. The University is committed to comply with all State and Federal Statutes, rules and regulations which prohibit discrimination in its policies and practices and direct affirmative action, including but not limited to Title VII of the Civil Rights Act of 1964, as amended, Title IX of the 1972 Education Amendments, the Equal Pay Act of 1963, and Executive Order 11246, as amended.

The University shall promote full realization of equal opportunity through a positive, continuing program on each campus. Individuals designated to coordinate the LCC effort are:

Employment matters:

Administrative Officer
Leeward Community College
Room AD-120, 455-0328

Educational matters:

Dean, Educational Services
Leeward Community College
Room AD-109, 455-0228

Family Educational Rights and Privacy Act

Pursuant to Section 99.6 of the rules and regulations governing the Family Educational Rights and Privacy Act of 1974 (hereinafter the Act), students in attendance at the campuses of the University of Hawaii are hereby notified of the following:

1. It is the administrative policy of the University of Hawaii to subscribe to the requirement of Section 438 of the General Education Provision Act, Title IV, of Public Law 90-247, as amended, and to the rules and regulations governing the Act, which protect the privacy rights of students.

2. The rights of students under the Act include the following subject to conditions and limitations specified in the Act:

   (a) The right to inspect and review education records.
   (b) The right to request to amend education records.
   (c) The right of protection from disclosure by the University of Hawaii of personally identifiable information contained in education records without permission of the student involved.
   (d) The right to waive certain rights under the Act.
   (e) The right to file complaints concerning alleged failure by the University of Hawaii to comply with the Act.

   There is a $1 fee for each copy of an Educational Record requested by the student.

3. Students are advised that institutional policy and procedures required under the Act have been published as Business Manual Instruction 1614, **Policies and Procedures Relating to the Family Educational Rights and Privacy Act of 1974 for Students Enrolled in Postsecondary Programs of the University of Hawaii.** Copies of BMI 1614 may be obtained from the Office of the Dean for Student Services, the Dean for Student Affairs or the Dean for Academic Services, at the campuses of the University of Hawaii at which a student is in attendance.

4. Directory Information. Students are advised that certain personally identifiable information is considered by the University to be Directory Information and, in response to public inquiry, may be disclosed without prior consent of the student unless the student otherwise so informs the University not to disclose such information.

   (a) Name of student.
   (b) Major field of study.
   (c) Fact of participation in officially recognized activities and sports.
   (d) Weight and height of members of athletic teams.
   (e) Dates of attendance.
   (f) Most recent educational institution attended.
   (g) Degrees and awards received.
   (h) Educational level (i.e. freshman, sophomore, etc.).

A student has the right to request that any or all of the above items not be designated Directory Information with respect to that student. Should a student wish to exercise this right, he or she must in person and in writing, not earlier than the first day of instruction nor later than fourteen calendar days from the first day of instruction for the academic term or semester, or the fourth day of a summer session, inform each Campus Registrar at each campus he or she is attending which of the above items are not to be disclosed without the prior consent of that student.

Parents of students are advised that information contained in education records, except as may be determined to be Directory Information, will not be disclosed to them without the prior written consent of their sons and daughters.

Persons desiring additional information about the University policies and procedures should call or write Associate Dean for Student Services, 96-045 Ala Ike, Pearl City, Hawaii 96782. Telephone 455-0244.

NOTICE TO HANDICAPPED PERSONS

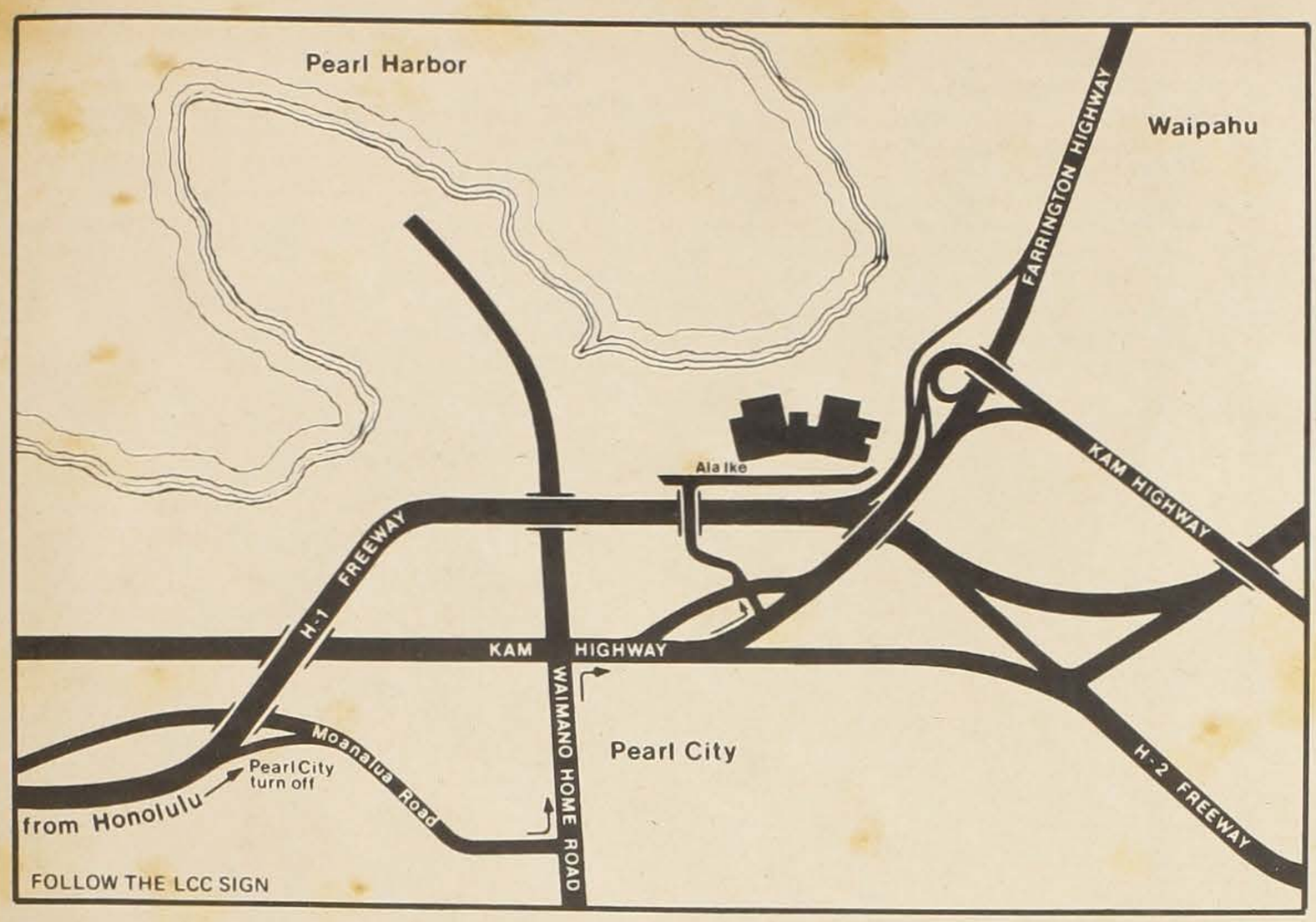
STATE OF HAWAII

IN ACCORDANCE WITH FEDERAL RULES AND REGULATIONS GOVERNING SECTION 504 OF THE REHABILITATION ACT OF 1973, LEEWARD COMMUNITY COLLEGE PROVIDES NOTICE TO THE PUBLIC THAT NO QUALIFIED HANDICAPPED PERSON SHALL, ON THE BASIS OF HANDICAP, BE SUBJECTED TO DISCRIMINATION NOR SHALL ANY HANDICAPPED PERSON BE EXCLUDED FROM PARTICIPATION NOR BE DENIED THE BENEFIT OF ANY SERVICE, PROGRAM OR ACTIVITY OFFERED BY THE COLLEGE.

COPIES OF UNIVERSITY OF HAWAII POLICIES ON NONDISCRIMINATION AND AFFIRMATIVE ACTION ARE AVAILABLE FOR INSPECTION AT THE COLLEGE. FURTHER INFORMATION ABOUT THE EXISTENCE AND LOCATION OF LEEWARD'S PROGRAMS, SERVICES, ACTIVITIES AND FACILITIES WHICH ARE ACCESSIBLE AND USABLE BY HANDICAPPED PERSONS CAN ALSO BE OBTAINED. SUPPORT SERVICES FOR THE DISABLED STUDENTS ON CAMPUS ARE OFFERED THROUGH THE "KOMO MAI CENTER," LOCATED IN AD-224 (PHONE 455-0288). FOR FURTHER INFORMATION PLEASE CALL OR WRITE:

DR. ED LAU, 455-0288, 0304, 0233

LEEWARD COMMUNITY COLLEGE
96-045 ALA IKE
PEARL CITY, HAWAII 96782



How To Find LCC

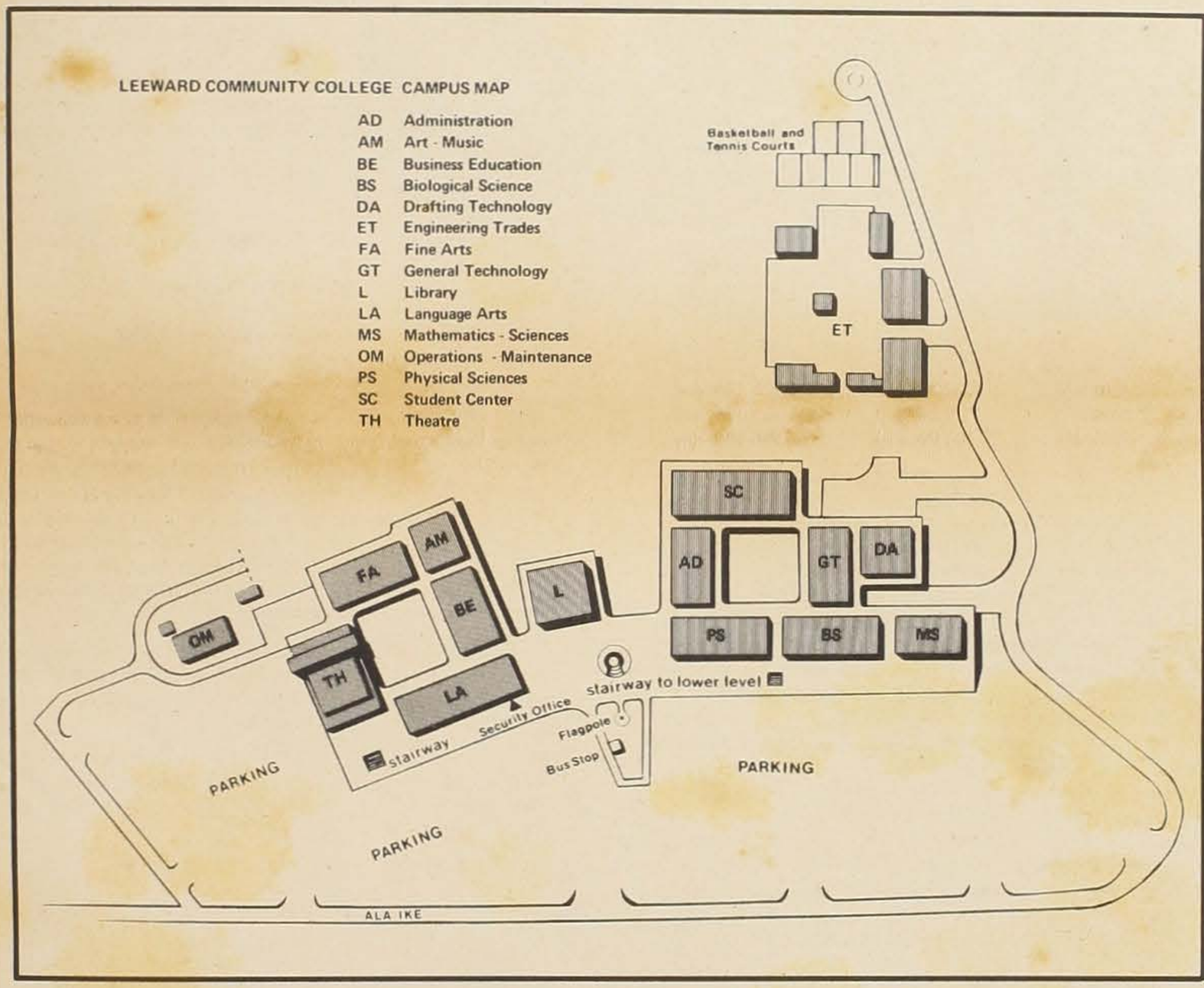
From Honolulu: Take the Pearl City turn off, turning to the right and following Moanalua Road for one mile to Waimano Home Road. Turn left on Waimano Home Road. Continue on Waimano Home Road until you reach Kam Highway. (Pearl City Tavern is a familiar landmark on this intersection.) Turn right into Kam Highway and stay on the extreme left lane. Continue for approximately 7/10 mile. Turn a sharp left at the LCC sign and follow signs to the campus.

Kokua Center: for information about LCC Day or Night
Telephone: 455-0220
Hours: Monday-Thursday, 8:00 am-2:30 pm
4:00 pm-8:00 pm
Friday, 9:00 am-2:30 pm

Public Transportation

The Mass Transportation Services (TheBus) 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.

The City and County has initiated trial shuttle minibus service between the campus and Pearl City. Check with the Kokua Center (AD 219. Telephone 455-0220) for current status and timetable.



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 the rules and regulations. Copies of the Rules and Regulations are available at the Office of Admissions and Records, AD 220.

Frequently Called Numbers

AD-220	Admissions and Records	455-0218
SC	Bookstore (Lower Level)	455-0205
AD-113	Business Office	455-0325
SC	Cafeteria	455-0375
LA-238	Campus Security	455-0295
AD-221	Career Development Center	455-0237
AD-221	Career-Life Planning	455-0247
BS-109	Computer Center	455-0271
AD-221	Cooperative Education	455-0249
	Counseling and Guidance	
AD-208	Day	455-0233
AD-219	Evening	455-0220
	Divisional Offices	
FA-109	Arts and Humanities	455-0350
BE-213	Business Education	455-0344
LA-201	Language Arts	455-0330
BS-106A	Mathematics & Natural Sciences	455-0251
FA-220	Social Sciences	455-0360
GT-116	Vocational-Technical Education	455-0300
LA-222	English Language Institute	455-0359
AD-221	Financial Aids	455-0248
L-102	Foreign Language Lab	455-0412
SC-220	Gourmet Dining Room	455-0322
AD-224	Handicapped/KOMO MAI Center	455-0288
AD-122	Health Center	455-0216
FA-201	Human Services Learning Center	455-0360
AD-219	Information/KOKUA Center	455-0220
AD-221	Job Placement/Counseling	455-0236
L-102	Learning Resource Center	455-0412
L	Library (Second and Third Levels)	455-0377
L	Media Center (First Level)	455-0201
L-102	Reading/Writing Lab	455-0412
AD-220	Registrar's Office	455-0218
AD-221	Special Programs and Community Services	455-0230
SC-202	Student Activities Office	455-0208
SC-203	Student Government Office	455-0287
AD-221	Testing/Psychometry	455-0237
	Theatre	
	Box Office	455-0385
	Manager	455-0389
AD-220	Veterans' Affairs	455-0218
	Waianae Education Center	696-6378

Course areas in each division

ARTS AND HUMANITIES
AMST 201-202
ART, except ART 51, 52
DANCE
DRAMA
ENGLISH 250-257C
HISTORY
HUMANITIES
LITERATURE, See ENGLISH
MUSIC
PHILOSOPHY
RELIGION

BUSINESS EDUCATION
ACCOUNTING
BUSINESS
BUSINESS MACHINES
LAW 200, 211
MANAGEMENT
MERCHANDISING
OFFICE PROCEDURES
PERSONNEL AND INDUSTRIAL RELATIONS
SHORTHAND
TYPEWRITING
WORD PROCESSING

LANGUAGE ARTS
COMMUNICATIONS
ENGLISH, except ENG 250-257C
ENGLISH LANGUAGE INSTITUTE
EUROPEAN LANGUAGE
FRENCH
GERMAN
HAWAIIAN
HAWAIIANA 231
JAPANESE
JOURNALISM
LEARNING SKILLS
LINGUISTICS
READING, See ENGLISH
SPANISH
SPEECH
TAGALOG
WRITING, See ENGLISH

MATHEMATICS AND NATURAL SCIENCES
AGRICULTURE
ASTRONOMY
BIOLOGY
BOTANY
CHEMISTRY
CIVIL ENGINEERING
DATA PROCESSING
ELECTRICAL ENGINEERING
GEOGRAPHY
GEOLOGY-GEOPHYSICS
HEALTH
INFORMATION & COMPUTER SCIENCE
MATHEMATICS
MECHANICAL ENGINEERING
MICROBIOLOGY
OCEANOGRAPHY
PHYSICS
QUANTITATIVE MATHEMATICS
SCIENCE
ZOOLOGY

SOCIAL SCIENCES
AMERICAN STUDIES 211-225
ANTHROPOLOGY
ECONOMICS
EDUCATION 100-200
GEOGRAPHY 102-151
HUMAN DEVELOPMENT
HUMAN SERVICES
LAW
POLITICAL SCIENCE
PSYCHOLOGY
SOCIAL SCIENCE
SOCIOLOGY
WOMEN'S STUDIES

VOCATIONAL TECHNICAL EDUCATION
ART 51-52
AUTOMOTIVE TECHNOLOGY
BAKING
BLUEPRINT READING
DRAFTING TECHNOLOGY
EDUCATION 24-27
FOOD AND NUTRITIONAL SCIENCE
FOOD SERVICE
GRAPHIC ARTS
HAWAIIANA 110
HEALTH AND PHYSICAL EDUCATION
LIBRARY TECHNOLOGY
MARINE TECHNOLOGY

ADDITIONAL COURSES
INDEPENDENT STUDY (99, 199, 299)
INTERDISCIPLINARY STUDIES
MILITARY SCIENCE

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