## Academic Calendar 2006-2007

### 2006–FALL SEMESTER

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 1</td>
<td>APPLICATION DEADLINE FOR REGULAR ADMISSION</td>
</tr>
<tr>
<td>14</td>
<td>Faculty Duty Day</td>
</tr>
<tr>
<td>18</td>
<td>Holiday: Admissions Day</td>
</tr>
<tr>
<td>21</td>
<td>FIRST DAY OF INSTRUCTION*</td>
</tr>
<tr>
<td>21-25</td>
<td>Late Registration and Add/Drop Period</td>
</tr>
<tr>
<td>September 4</td>
<td>Holiday: Labor Day</td>
</tr>
<tr>
<td>10</td>
<td>Last Day of Erase Period</td>
</tr>
<tr>
<td>October 30</td>
<td>LAST DAY OF OFFICIAL WITHDRAWAL, FALL SEMESTER</td>
</tr>
<tr>
<td>November 7</td>
<td>Holiday: Election Day</td>
</tr>
<tr>
<td>10</td>
<td>Holiday: Veterans Day</td>
</tr>
<tr>
<td>23-24</td>
<td>Thanksgiving Recess</td>
</tr>
<tr>
<td>December 7</td>
<td>Last Day of Instruction &amp; Last day to Certify for Fall 2006 Graduation</td>
</tr>
<tr>
<td>15</td>
<td>End of Fall Semester</td>
</tr>
</tbody>
</table>

### 2007–SPRING SEMESTER

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 15</td>
<td>APPLICATION DEADLINE FOR REGULAR ADMISSION</td>
</tr>
<tr>
<td>January 8</td>
<td>FIRST DAY OF INSTRUCTION*</td>
</tr>
<tr>
<td>8-12</td>
<td>Late Registration and Add/Drop Period</td>
</tr>
<tr>
<td>15</td>
<td>Holiday: Martin Luther King Jr. Day</td>
</tr>
<tr>
<td>28</td>
<td>Last Day of Erase Period</td>
</tr>
<tr>
<td>February 19</td>
<td>Holiday: Presidents Day</td>
</tr>
<tr>
<td>March 2</td>
<td>Excellence in Education (Non-instructional day)</td>
</tr>
<tr>
<td>16</td>
<td>LAST DAY OF OFFICIAL WITHDRAWAL, SPRING SEMESTER</td>
</tr>
<tr>
<td>26-30</td>
<td>SPRING RECESS</td>
</tr>
<tr>
<td>April 6</td>
<td>Holiday: Good Friday</td>
</tr>
<tr>
<td>16</td>
<td>Commencement Program Deadline</td>
</tr>
<tr>
<td>May 2</td>
<td>Last Day of Instruction &amp; Last day to Certify for Spring 2007 Graduation</td>
</tr>
<tr>
<td>7-10</td>
<td>Exam Period</td>
</tr>
<tr>
<td>11</td>
<td>End of Semester</td>
</tr>
<tr>
<td>12</td>
<td>Commencement</td>
</tr>
<tr>
<td>13</td>
<td>Last Faculty Duty</td>
</tr>
</tbody>
</table>

*See Schedule of Classes for first day of instruction dates for 5-, 8-, or 13-week classes.

- Erase/withdrawal dates are for 15-week classes only. Please contact Admissions and Records for erase/withdrawal dates for 5-, 8-, or 13-week classes.

### 2007 SUMMER SESSION

(To be announced)

**Boldface** = Indicate academic dates of significance

**= Holidays
Windward Community College is committed to excellence in the liberal arts and career development; we support and challenge individuals to develop skills, fulfill their potential, enrich their lives, and become contributing, culturally aware members of our community.

University of Hawai‘i System
Windward Community College
45-720 Kea‘ahala Road
Käne‘ohe, HI 96744
Telephone: (808) 235-7400
Fax: (808) 247-5362
http://www.windward.hawaii.edu

Hearing impaired individuals desiring information may contact the College by using the Telecommunication Device for the Deaf (TTY) relay service at 643-8833.

This catalog provides general information about Windward Community College, its programs and services, and summarizes those major policies and procedures of relevance to the student. The information contained in this catalog is not necessarily complete. For further information, students should consult with the appropriate unit. This catalog was prepared to provide information and does not constitute a contract. The College reserves the right to, without prior notice, change or delete, supplement or otherwise amend at any time the information, requirements, and policies contained in this catalog or other documents.

Table of Contents

The College and Its Policies
The College ........................................................................................................... 2
Mission, Core Values and Vision ................................................................. 2
Purpose .................................................................................................................. 2
Accreditation ....................................................................................................... 2
Educational Rights and Privacy of Students .................................................... 3
Use of Social Security Number ....................................................................... 4
Nondiscrimination and Affirmative Action ..................................................... 4
Discrimination Complaints ............................................................................. 5
Federal Campus Sex Crimes Prevention Act ................................................ 5
Student Misconduct Grievances ................................................................. 5
Vocational and Community Education (VCE) ............................................. 5
Employment Training Center .................................................................... 5
Office of Continuing Education ................................................................. 6
Office of International Programs and Services .......................................... 6

Advisory Committees
Advisory Committees ...................................................................................... 6

Admission Information
Eligibility and General Admissions Requirements ........................................ 7
Admissions Information .................................................................................... 7
Admission of International Students ........................................................... 7
Residency Regulations for Tuition Purposes ............................................... 7
Residency Appeal Process ........................................................................... 8
Statutory Exemptions to Residency ............................................................. 8
Misrepresentation .......................................................................................... 8

Financial Information
Tuition and Fees ............................................................................................. 9
Payments and Refunds ................................................................................... 9
Financial Obligations to the University ..................................................... 10

Financial Aid Information
Federal Financial Aid Programs .................................................................... 11
State Financial Aid Programs ........................................................................ 11
Private Scholarships ....................................................................................... 11
Short-Term Loans .......................................................................................... 12
Selective Service Registration and Federal Student Aid ......................... 12
Application Process ......................................................................................... 12
Refund Allocation Policy for Financial Aid Recipients ............................ 12
Veterans Administration ................................................................................ 12
# Table of Contents

## Centers for Learning
- Computer Labs ......................................................... 13
- The Learning Center (TLC) ........................................... 13
- Library ........................................................................ 13
- Math Lab ................................................................. 13
- Media Center .............................................................. 14
- Fujio Matsuda Technology Training and Education Center ......................................................... 14
- Aerospace Exploration Lab ........................................ 14
- Hawai‘i Space Grant Consortium – Windward ................. 14
- Ho‘ailua RS/GIS Center ............................................... 15
- Hōkūlani Imaginarium ................................................ 15
- Ku‘i Lai‘au .................................................................. 15
- Water Quality Lab ....................................................... 15
- Lanaihuli Observatory .................................................. 15
- NASA Flight Training Aerospace Education Laboratory .................. 15

## Student Affairs
- Academic Rights and Freedoms of Students .................... 16
- Attendance, Student Conduct, Impermissible Behavior, Academic Dishonesty, Cheating, Plagiarism. ...................... 16
- Student Academic Grievance Procedures ......................... 16
- Change of Address ..................................................... 17
- Change of Major ........................................................ 17
- Student Services ......................................................... 17
- Academic Advising ....................................................... 17
- Placement Testing ....................................................... 18
- Personal Counseling .................................................... 18
- Student Employment .................................................... 18
- Services for Students with Disabilities ........................ 18
- TRIO Student Support Services (formerly STARR) .................. 18
- Food Services ............................................................ 18
- Parking ....................................................................... 18
- Bookstore ................................................................... 18
- Health Services .......................................................... 18
- Lost & Found .............................................................. 19
- Housing ..................................................................... 19
- Smoking ..................................................................... 19
- Illicit Drugs and Alcohol .............................................. 19
- Lethal Weapons ........................................................ 19
- Sexual Assault Policy .................................................. 19
- Sexual Harassment Policy .......................................... 19

## Academic Regulations
- Definition of Terms Used at WCC .................................. 20
- Credits, Grades, and Exams .......................................... 21
- Scholastic Standards ................................................... 21
- The Dean’s List .......................................................... 21
- Grade Reports ............................................................ 21
- Academic Probation Policy .......................................... 21
- Repeating Courses ...................................................... 21
- Transfer of Credits from Other Institutions .................... 22
- Evaluation of Transfer Credits ...................................... 22
- Advanced Placement Examination (AP) ......................... 22
- Credit-by-Examination ............................................... 22
- College Level Examination Program (CLEP) ................... 22
- Grade Point Average .................................................. 23
- Grading ................................................................. 23
- Credit/No Credit Option ............................................. 23
- Other Registration and Course Information .................... 24
- Auditing ................................................................. 24
- Class Size .................................................................. 24
- Cancelled Classes ....................................................... 24
- Concurrent Registration .............................................. 24
- Distance Education ..................................................... 24
- Course Load ............................................................. 24
- Returning Students ..................................................... 24
- Summer Session ....................................................... 24
- Terms and Semesters .................................................. 24
- Withdrawing from Classes ........................................... 24
- Official Withdrawal ..................................................... 24

## Degree and Certificate Programs
- The Instructional Program .............................................. 25
- Summary of Degrees and Certificates Offered .................. 25
- Associate in Arts Degree .............................................. 26
- Associate Degree in Technical Studies ........................... 26
- Certificate Programs ................................................... 26
- Military Science Courses ............................................. 26
- Independent Studies .................................................... 26
- Service Learning ....................................................... 27
- Cooperative Education .............................................. 27
- Marine Option Program (MOP) ....................................... 27

## Graduation Requirements
- Application for Graduation ........................................... 28
- Associate in Arts Degree .............................................. 28
- Associate Degree in Technical Studies ........................... 32
- Certificate of Completion – Agricultural Technology, Plant Landscaping/Agricultural Technology ......................... 32
- Academic Subject Certificate – Art ................................ 33
- Academic Subject Certificate – Bio-Resources and Technology, Bio-Resources Development and Management .................. 34
- Academic Subject Certificate – Bio-Resources and Technology, Plant Biotechnology ................................................. 35
- Academic Subject Certificate – Business ......................... 36
- Academic Subject Certificate – Hawaiian Studies ................ 37
- Academic Subject Certificate – Psycho-Social Developmental Studies ......................................................... 36

## Course Descriptions
- Credit ..................................................................... 38
- Course Numbering ..................................................... 38
- Articulation Codes ...................................................... 38
- Description of Courses ............................................... 39

## Transferring to Another College
- Transferring to Another College ................................... 84

## Student Activities and Organizations
- Student Participation in College Governance .................... 85
- Clubs and Societies ...................................................... 85

## Faculty and Staff
- WCC Faculty and Staff ................................................ 86

## Index
- Index ....................................................................... 91

## Map
- Map .......................................................................... 94

## Telephone Numbers
- Telephone Numbers .................................................... 94
- Inside Back Cover
Aloha,

On behalf of the faculty, students and staff at Windward Community College, I am pleased that you have chosen to explore our college. You are certain to find that our instructional programs and services offer you many opportunities for intellectual growth and personal development. We can help prepare you to transfer to a four-year college by providing you a first-rate education. Our programs can also train you to develop the technical skills necessary for employment in Hawai‘i’s businesses and government agencies.

We are a friendly campus, nestled at the foot of the Ko‘olau mountain range, offering several alternatives for achieving a college education or for pursuing an interest through our noncredit programs. While many students spend the better part of each day with us completing liberal arts courses in order to earn an A.A. degree (credits may be transferred to a four-year college or university), others come to take only a course or two and learn a bit more about the world in which they live or attend classes after working a full day. Some want to upgrade their skills in order to be promoted or be qualified for better jobs. You set your own pace; we help you decide how fast and how far to go.

If you wish to enroll at Windward Community College, you will find qualified and very dedicated faculty and staff to help you plan your studies. We have an excellent library, an active student government, lots of free parking and a helping attitude that makes Windward Community College a very special place to continue your education.

Angela Meixell
Chancellor
The College

Windward Community College is one of seven public community colleges in Hawai‘i governed by the Board of Regents of the University of Hawai‘i. The College is situated in Kāne‘ohe on the island of O‘ahu. It opened in the fall of 1972 with an enrollment of 525 students and had a fall 2005 enrollment of 1,732 students. The College offers both liberal arts and vocational educational programs.

A variety of noncredit courses is also offered; public affairs forums and cultural presentations are scheduled throughout the year. Courses are offered during the day and evenings, both on and off campus.

The Mission, Core Values, and Vision of Windward Community College

Mission of Windward Community College

Windward Community College is committed to excellence in the liberal arts and career development; we support and challenge individuals to develop skills, fulfill their potential, enrich their lives, and become contributing, culturally aware members of our community.

Windward Community College is further committed to the mission of the Community Colleges of the University of Hawai‘i:

• To broaden access to post-secondary education in Hawai‘i by providing open-door opportunities for students to enter quality educational programs within their own communities.
• To specialize in the effective teaching of remedial/developmental education, general education, and other introductory liberal arts, pre-professional, and selected baccalaureate courses and programs.
• To provide the trained workforce needed by the State, by offering occupational, technical, and professional courses and programs which both prepare students for immediate employment and career advancement.
• To provide opportunities for personal enrichment, occupational upgrading, and career mobility through credit and noncredit courses and activities.
• To contribute to and stimulate the cultural and intellectual life of the community by providing a forum for the discussion of ideas; by providing leadership, knowledge, problem-solving skills, and general informational services; and by providing opportunities for community members to develop their creativity and appreciate the creative endeavors of others. (University of Hawai‘i Community Colleges, Strategic Plan, 2002-2010, November 2002)

Core Values of Windward Community College

• Learning and teaching
• Academic excellence
• Critical thinking
• Creativity and innovation
• Collegial and family or ‘ohana spirit
• Diversity
• Intellectual freedom
• Service
• Cooperation and collaboration
• Scholarly communication and research
• Global perspective
• Commitment to the use of technology

Vision for Windward Community College

Students and community members will be enriched and able to live full, productive lives in a quickly changing, technologically oriented society through the quality education, effective training, dedicated support services, and imaginative artistic productions provided by Windward Community College and its partners in the community.

Purpose

Windward Community College’s purpose is to serve the postsecondary educational needs of individuals residing in the communities served by the College. The College fulfills this purpose by the following offerings:

• a wide variety of liberal arts and science courses for individuals seeking to meet the first two-year requirements of a baccalaureate degree program or to further their knowledge of themselves and their social and physical environments;
• vocational courses in selected areas for individuals seeking to acquire preservice, entry-level skills, or those seeking to upgrade existing skills;
• a selection of developmental courses for persons needing to review the basic learning skills: reading, writing, speaking, listening, and arithmetic. Students who need remedial preparation are directed to Adult Education classes offered by the Department of Education. Students are notified of this option on their placement test scores.
• public service programs, noncredit courses, forums and cultural activities for those individuals seeking to develop leisure time skills, further their understanding of topics of current interest, or increase their awareness of the many ethnic heritages in the Islands.

The College also provides support services such as academic advising, financial aid, tutoring, library services, and career counseling.

Accreditation

Windward Community College is fully accredited by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges.
EDUCATIONAL RIGHTS AND PRIVACY OF STUDENTS

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 University of Hawai‘i Windward Community College are hereby notified of the following:

1. It is the policy of Windward Community College to subscribe to the requirements 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 Windward Community College of personally identifiable information contained in education records without permission of the student involved.
   d. The right to file complaints concerning alleged failure by Windward Community College to comply with the Act.

3. Students are advised that institutional policy and procedures required under the Act have been published as Administrative Procedure A7.022, Procedures Relating to Protection of the Educational Rights and Privacy of Students. Copies of A.P. A7.022 may be obtained from The Office of the Dean of Student Services of Windward Community College.

4. Directory Information
   Students are advised that certain personally identifiable information listed below is considered by the College to be directory information and, in response to public inquiry, may be disclosed in conformance with State law, at the College’s discretion, without prior consent of the student unless the student otherwise so informs the College not to disclose such information.
   a. Name of student.
   b. Local address and zip code maintained in the campus locator printout.
   c. Local telephone number maintained in the campus locator printout.
   d. Major field of study.
   e. Educational level (e.g., freshman, sophomore, etc.).
   f. Fact of participation in officially recognized activities and sports.
   g. Weight and height of members of athletic teams.
   h. Dates of attendance.
   i. Degrees, awards and academic honors received.
   j. Most recent educational institution attended.
   k. E-mail address.
   l. Enrollment status (full-time or part-time).
   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 the Admissions and Records Office which of the above items are not to be disclosed without the prior consent of that student.
5. A parent or spouse of a student is advised that information contained in educational records, except as may be determined to be directory information, will not be disclosed to him/her without the prior written consent of the son, daughter, or spouse.

**Use of Social Security Number**

Section 7(b) of the Privacy Act of 1974 (5U.S.C.522a) requires that when any federal, state, or local government agency requests an individual to disclose his or her social security account number, that individual must also be advised whether that disclosure is mandatory or voluntary, by what statutory or other authority the number is solicited, and what use will be made of it.

Accordingly, each applicant is advised that disclosure of a social security account number (SSAN) is required as a condition for making application to any of the campuses of the University of Hawai‘i system, in view of the practical administrative difficulties that the University of Hawai‘i system would encounter in maintaining adequate student records without the continued use of the SSAN.

The SSAN will be used to verify the identity of the applicant and as a student identification number throughout the period in which the applicant is enrolled, or otherwise associated with the University, in order to record data accurately. As a student identification number the SSAN is used in such activities as reconciliation of documents in order to determine eligibility for admission and residency for tuition purposes, registration and academic recordkeeping, use of library materials, student affairs programs requiring verification of enrollment for the purpose of providing services, and alumni affairs.

Authority for requiring the disclosure of an applicant’s SSAN is from Section 304.2 and Section 304.4, Hawai‘i Revised Statutes as amended, which provides that the Board of Regents of the University of Hawai‘i system shall have general management and control of the affairs of the University. The University of Hawai‘i system has, for several years, consistently required the disclosure of SSAN numbers on the Common Admission Forms and other necessary University documents.

In addition, it should be noted that the SSAN of a parent, guardian, or spouse of an applicant is also requested if the applicant claims residency on the basis of the residency of the parent, guardian, or spouse. A parent, guardian, or spouse is advised that disclosure of his or her SSAN for the above purpose is mandatory. Failure to provide it may affect the applicant’s admission to the University and the tuition charged to the applicant when such applicant registers for classes. Parent’s, guardian’s, or spouse’s SSANs will be recorded only on the Common Admission Form (Residence Form) itself and will not be maintained in any other system of records. Its use will be restricted to further verification of information reported on the Common Admission Form (Residence Form) by the applicant and/or parent, guardian, or spouse.

**Nondiscrimination and Affirmative Action**

It is the policy of the University of Hawai‘i to comply with Federal and State laws which prohibit discrimination in University programs and activities, including but not necessarily limited to the following laws which cover students and applicants for admission to the University: Title VI of the Civil Rights Act of 1964 as amended (race, color, national origin); Age Discrimination Act of 1975 (age); Titles VII and VIII of the Public Health Service Act as amended (sex); Title IX of the Education Amendments of 1972 (sex, blindness, severely impaired vision); Section 504 of the Rehabilitation Act of 1973 (disability); and to comply with Federal and State laws which mandate affirmative action and/or prohibit discrimination in employment (including, but not limited to, hiring, firing, upgrading, salaries, benefits, training, and other terms, conditions, and privileges of employment): Title VII of the Civil Rights Act of 1964 as amended (race, color, national origin, religion, sex, pregnancy); Executive Order 11246 as amended (race, color, national origin, religion, sex); Equal Pay Act of 1963 as amended by Title IX of the Education Amendments of 1972 (sex); Age Discrimination in Employment Act of 1967 (ages 4070); Section 402 of the Vietnam Era Veteran’s Readjustment Assistance Act of 1974 (veteran’s status); Section 503 and 504 of the Rehabilitation Act of 1973 (disability); Hawai‘i Revised Statutes, Chapter 76, 78, 378 (race, sex, sexual orientation, age, religion, color, ancestry, political affiliation, disability, marital status, arrest and court record). The UH Community Colleges strive to promote full realization of equal opportunity through a positive, continuing program including Titles I-IV of the Americans with Disabilities Act (ADA) P.L.101336. Accordingly, vocational education opportunities will be offered without regard to race, color, national origin, sex or disability. American citizens or immigrants with limited English proficiency skills will not be denied admission to vocational education programs.

In addition, employees and applicants for employment are protected under Title IX and Section 504.

As an integral part of its Policy on Nondiscrimination and Affirmative Action, the Office of the President, University of Hawai‘i hereby declares and reaffirms its commitment to the University’s pursuit of equal education and employment opportunity and further declares that any harassment of students or employees on the basis of sex is prohibited and will not be tolerated. Complaints of this nature will be handled by Steve Nakasone, WCC’s Section 504 Coordinator.

Individuals designated to coordinate the University of Hawai‘i Community Colleges’ nondiscrimination and affirmative action programs are:

- Steve Nakasone (Section 504 Coordinator) - 235-7403
- Karen Cho (EOO/AA) (Title IX Coordinator) - 235-7404
- Windward Community College
- 45-720 Ke‘ahalana Road
- Kāne‘ohe, HI 96744
Discrimination Complaints

Students, employees, or applicants for admission or employment who believe that they have been discriminated against on the basis of race, sex, age, religion, color, ancestry, sexual orientation, national origin, disability, marital status, veteran’s status or arrest and court record may file a complaint with Karen Cho, 235-7404, Hale Alaka’i, Room 120, EEO/AA coordinator. The EEO/AA coordinator will explain the available avenues of recourse and direct the person to the appropriate person or office.

Federal Campus Sex Crimes Prevention Act

"The release of relevant information that is necessary to protect the public shall be accomplished by public access to a file containing the relevant information on each registered sex offender, a copy of which shall be provided for inspection upon request at the Hawai’i criminal justice data center and at one or more designated police stations in each county, between the hours of 8:00 a.m. and 4:30 p.m. on weekdays excluding holidays. The chief of police and the attorney general shall provide the relevant information on sex offenders upon payment of reasonable fees. Relevant information on each registered sex offender may also be released from an electronic database maintained by the respective law enforcement agencies that is accessible to users through an interactive computer-based system."

Student Misconduct Grievances

The process of addressing allegations of discrimination are described in the CCCM No. 2210, UH Community College Procedure and Guidelines, Relating to Complaints of Discrimination and in campus Section 504 /ADA Grievance Procedure.

Students may also file complaints of discrimination with the Office for Civil Rights, 915 Second Avenue, Room 3310, Seattle, WA 981741099. Phone: (206) 2207920 FAX: (206) 220-7887.

The process of addressing allegations of misconduct is described in the procedures for Handling Impermissible Behavior and the Academic Grievance Procedures. Copies are available at the Windward Community College Student Services Office.

Vocational and Community Education (VCE)

Employment Training Center

The Employment Training Center (ETC) was established in 1964 within the State of Hawai’i and transferred to the University of Hawai’i Community Colleges in 1968. It was initially called the Manpower Training Office reflecting the national initiative set by the Manpower Development and Training Act.

ETC’s primary mission is to serve Hawai’i’s at-risk population who can benefit from support services and training designed to prepare them for successful transition to employment or further education. ETC adapts programs to serve unemployed, academically under-prepared, persons with disabilities and alienated youth through frequent entry/frequent exit vocational and basic skill programs.

On January 19, 2002, the University of Hawai’i Board of Regents approved the ETC merger with Windward Community College. ETC is now operating with the division of WCC’s Office of Continuing Education and Training.

ETC is accredited by the Western Association of Schools and Colleges and was recognized by the American Association of Community Colleges and the U.S. Department of Labor as the Exemplary Program for At-Risk and Special Needs Youth.

ETC offers the following education and training programs:

- Essential Skills - Workplace Success
- Essential Skills - Math or Communication
- Office Administration and Technology I and II [articulated with Leeward Community College]
- Keyboarding
- Electronic Calculator
- Certified Nurse’s Aide
- Intro to Windows XP
- Intro to Win 2002
- Intro to Excel 2002
- Intro to Powerpoint 2002
- Intro to Access 2002
- Auto Body Repair and Finishing [articulated with Honolulu Community College]
- Culinary Arts at Windward CC campus and Honolulu CC [articulated with Kapi‘olani Community College]
- Facilities Maintenance and Construction Occupations at Windward CC
To enroll in ETC programs, please contact the main administrative office at:
45-720 Kea‘ahala Road
Kāne‘ohe, HI 96744
Telephone: (808) 235-7362
Fax: (808) 235-7434
http://etc.wcc.hawaii.edu

**Office of Continuing Education**

Windward Community College seeks to improve the quality of life and provide direct educational assistance to individuals, businesses, and special interest groups. The College provides services for individual communities and the general public by making available a variety of instructional, cultural, recreational, and vocational services in which the institution has special competence or the community has special needs.

The College makes available credit and noncredit instructional opportunities on and off-campus in Windward O‘ahu. Persons who are interested in seminars or courses should contact the Office of Continuing Education at 235-7433. This office also coordinates campus and off-campus programs for senior citizens.

**Office of International Programs and Services**

Windward Community College participates with the Office of International Programs and Services. The Office of International Programs and Services administers the International Agreements Fund and serves as a clearinghouse for information on the University of Hawai‘i’s international involvement.

The Office of International Programs and Services establishes and implements systemwide policies and procedures to ensure the effective systemwide coordination of the university’s international programs relating to immigration, study abroad, scholar services, protocol, exchanges, and cooperative agreements for systemwide implementation. The University of Hawai‘i has exchanges and cooperative agreements at both the student and faculty levels with universities around the world and it has especially close ties with many universities in the AsiaPacific region. Please contact 956-6940 for more information.

**Advisory Committees**

Windward Community College has invited a number of community leaders in business, industry, and the professions to advise the staff in the development of curricula in accordance with requirements in their fields. Consultations with these leaders relate to course content, selection of training equipment, the nature and extent of employment needs, and evaluation of the effectiveness of the curriculum. New advisory committees are formed as new needs and programs are identified.

**Agriculture Advisory Committee**
Daryl Cazinha
Dale Fukada
Al Kakazu

**Hawaiian Studies Advisory Committee**
Thomas Cummings
Robert loach
Roy Fujimoto
Mark Hamasaki
Kelikokauaikeikakoe Johnson
Rubellite Kawena Johnson
Fred Kalani Meinecke

**Windward CC Ambassadors**
Pastor Dave Barr
Ron Bright
Abid Butt
Sarah Cadiz
Peter Dyer, Ed.D.
Chuck Eakes
Luann Foos
Iris Fukui
Terry George
Wilson Keokoa Ho
Maj. Patricia Johnson, USMC
Corbett Kalama
Eppy Kerr
Jonathan Kim
Jacqueline Maly, Ed.D.

**Annual Friends Steering Committee**

**Kokua Palikū**
Jeanne E. Bernauer
Denise Frank Ellinwood
Mary Lou Hata Foley
Amy Hammond
Dana Hensarling
Henry T. Iida
Catherine A. Lyman
Susan MacKinnon

**Friends of Lanihuli**
Sharon Billingsley and Bob Stephenson
Tracey Stott Kelley
Jacqueline Maly, Ed.D.
Marnie McClain

**Agriculture Advisory Committee**

**Hawaiian Studies Advisory Committee**

**Windward CC Ambassadors**

**Annual Friends Steering Committee**

**Kokua Palikū**

**Friends of Lanihuli**

Rich V. Pinto
Ray Sanborn
Libby Ellett Tomar and Paul Tomar
Lynne T. Waters
Admission Information

Eligibility

Windward Community College welcomes part-time and full-time students who desire to attend college and can benefit from the educational programs offered. Windward Community College is open to Hawai’i residents who are 18 or older. A special early admissions program for high school students with outstanding academic records accommodates students on a space available basis (contact the Admissions Office for application information and deadlines). The enrollment of non-residents and international students is limited by the Board of Regents policy and the Controlled Growth policy respectively.

General Admissions Requirements

WCC Application Deadlines

<table>
<thead>
<tr>
<th></th>
<th>Fall 2006</th>
<th>August 1, 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spring 2007</td>
<td>December 15, 2006</td>
</tr>
<tr>
<td>Fall 2007</td>
<td>August 1, 2007</td>
<td></td>
</tr>
<tr>
<td>Spring 2008</td>
<td>December 15, 2007</td>
<td></td>
</tr>
</tbody>
</table>

1. Application

a. Complete and submit the University of Hawai’i System Application Form by the application deadline. Applications are available at Windward Community College, from any Hawai’i high school counselor, and at our website, www.windward.hawaii.edu.

b. Those who apply by the regular application deadline register during regular registration. Late applications will be accepted on a space available basis. Some programs have limited openings.

c. Students who leave Windward Community College for a semester or more must complete a new application for the semester or term they wish to re-enter.

2. Placement testing in math and English is required if a student wishes to register in math and English courses or any course with a math/English prerequisite. Test results will indicate the level at which to start at Windward.

Transfer students who have completed college-level courses in math and English are not required to take the placement tests, and the orientation session is optional. Proof of completed courses will be required at the time of registration.

All new and transfer students are encouraged to attend a preregistration academic advising session conducted by our counselors. At this meeting, students receive information on how to select classes and how to register.

3. Health Clearances

In compliance with public health regulations, applicants, prior to registration, must submit proof of health clearances for tuberculosis (TB) and measles.

Windward Community College complies with all applicable requirements of other state health agencies and councils as may be required by laws, rules and regulations.

4. Registration

Students who have applied and been accepted may then register for classes. For registration periods, please refer to the Academic Calendar (inside front cover). Please see the schedule of classes for payment deadlines.

Admission of International Students

Windward Community College is authorized under federal law to enroll non-immigrant alien students.

International students must take the Test of English as a Foreign Language (TOEFL) examination and earn a score of 500 or more. Some students may be referred to nearby English as a Second Language Programs based on their placement testing. Official high school and college transcripts are required of each international student.

International applicants must comply with all regulations of U.S. Immigration and Customs Enforcement (USICE) as well as with applicable policies of the Board of Regents of the University of Hawai’i and the policies of Windward Community College. For purposes of clarifying requirements for admission, international students who are not U.S. citizens and who have not been admitted to live in the U.S. permanently are designated as nonimmigrants. Windward Community College is authorized under Federal law to enroll nonimmigrant alien students.

Contact the Admissions and Records Office for rules and regulations, admission requirements and deadlines.

International Students Application deadline

<table>
<thead>
<tr>
<th></th>
<th>Fall Semester</th>
<th>June 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spring Semester</td>
<td>November 1</td>
</tr>
</tbody>
</table>

All non-resident international students must demonstrate proof of enrollment in a health and accident insurance program before any such student shall be permitted to enroll. The intent of this requirement is to protect international students against the high cost of unanticipated health care expenses resulting from accidents or illness.

Residency Regulations for Tuition Purposes

Students, other than statutory exempt individuals, who do not qualify as bona fide residents of the State of Hawai’i, according to the University of Hawai’i rules and regulations in effect at the time they register, must pay the non-resident 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.
The maximum number of non-resident students that can be accepted by the College is limited by the Board of Regents policy.

Some of the more pertinent University residency regulations follow. For additional information or interpretation, contact the residency officer in the Admissions and Records Office (235-7432).

DEFINITION OF HAWAI‘I RESIDENCY: A student is deemed a resident of the State of Hawai‘i for tuition purposes if the student (18 or older) or the student (under 18) and his/her parents or legal guardian have:

1. Demonstrated intent to permanently reside in Hawai‘i (see below for indicia);
2. Been physically present in Hawai‘i for the 12 consecutive months prior to the first day of instruction, and subsequent to the demonstration of intent to make Hawai‘i his/her legal residence; and
3. The student, whether adult or minor, has not been claimed as a dependent for tax purposes by his/her parents or legal guardians who are not legal residents of Hawai‘i.

To demonstrate the intent to make Hawai‘i your legal residence, the following indicia apply:

- a. Voting/registering to vote in the State of Hawai‘i.

Other indicia, such as permanent employment or the ownership or leasing of a dwelling in Hawai‘i may apply, but no single act is sufficient to establish residency in the State of Hawai‘i.

Other legal factors involved in making a residency determination include:

1. The twelve months of continuous residence in Hawai‘i shall begin on the date upon which the first overt action (see indicia above) is taken to make Hawai‘i the permanent residence.
2. Residency in Hawai‘i and residency in another place cannot be held simultaneously.
3. Presence in Hawai‘i primarily to attend an institution of higher learning does not create resident status. Continued presence in Hawai‘i during vacation periods and occasional periods of interruption of the course of study does not itself overcome this presumption.
4. The residency of unmarried students who are minors follows that of the parents or of the legal guardian. Marriage emancipates a minor.
5. The residency of a married person may follow that of the spouse.
6. Resident status, once acquired, will be lost by future voluntary action of the resident inconsistent with such status. However, Hawai‘i residency 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.

These considerations do not exhaust all of the factors that affect the determination of residency. For more information, consult the “Rules and Regulations Governing Determination of Residency as Applied to Tuition Payments and Admission at All Institutions Under the Jurisdiction of the Board of Regents of the University of Hawai‘i.”

RESIDENCY APPEAL PROCESS

Residency decisions may be appealed by contacting the residency officer. Appeals are heard by the Committee on Resident Status only after the tuition is paid. Contact the residency officer for the filing deadline.

RESIDENCY RECLASSIFICATION

If you are currently classified as a non-resident for tuition purposes and would like to petition for reclassification, you must file the petition with the Admissions and Records Office prior to the first day of the semester. Please contact the residency officer for more information about residency reclassification.

STATUTORY EXEMPTIONS TO RESIDENCE

Students classified as non-residents are required to pay non-resident tuition, unless exempted from paying such tuition through one of the statutory exemptions listed below:

a. United States military personnel and their authorized dependents during the period such personnel are stationed in Hawai‘i on active duty.

b. Persons who are legal residents of any Pacific Island or Asian district, commonwealth, territory, or insular jurisdiction, state, or nation which provides no public institution of higher learning.

c. Employees of the University of Hawai‘i and their spouses and legal dependents.

d. Hawaiians, descendents of the aboriginal peoples that inhabited the Hawaiian Islands and exercised sovereignty in the Hawaiian Islands in 1778.

Resident or non-resident status for admission and tuition purposes is determined by answers to questions in the residency portion of the University of Hawai‘i System Application Form. The form is available from the Admissions and Records Office at Windward Community College or from high school guidance counselors throughout the State of Hawai‘i. For more detailed information, refer to the section on “Residency Regulations for Tuition Purposes.”

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 admission and/or tuition purposes is subject to the regular disciplinary measures of the University of Hawai‘i.

FOR INQUIRIES ON ADMISSION TO THE COLLEGE, CALL 235-7432 OR VISIT THE ADMISSIONS OFFICE IN HALE ALAKA‘I, ROOM 112.
FINANCIAL INFORMATION

Tuition and Fees

<table>
<thead>
<tr>
<th></th>
<th>Resident*</th>
<th>Non-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition</td>
<td>$56 per credit</td>
<td>$249 per credit</td>
</tr>
<tr>
<td>Student Activities Fee</td>
<td>$1 per credit (up to $10)</td>
<td>$1 per credit (up to $10)</td>
</tr>
<tr>
<td>Student Publication Fee</td>
<td>$1 per credit (up to $10)</td>
<td>$1 per credit (up to $10)</td>
</tr>
<tr>
<td>Total Per Credit</td>
<td>$58</td>
<td>$251</td>
</tr>
</tbody>
</table>

*Includes active duty military assigned in Hawai‘i and their dependents and some international students. Pending approval, some courses may require additional fees.

1. Credit Courses
   All tuition and fee charges at University of Hawai‘i campuses are subject to change in accordance with requirements of state law and/or action by the Board of Regents or the University administration.

2. Non-credit Courses
   Tuition and fees vary, depending on the length of the course. Please call 235-7433 for detailed information.

Dishonored Check Fee: A $15 service charge will be assessed for checks which are made out to the University of Hawai‘i and returned for any cause. Interest charges at the rate of $.10 per month, or a fraction of a month, will also be charged until the dishonored check is cleared.

Late Registration Fee: A late registration fee of $30 is charged (in addition to tuition and student activity and publication fees) for registering after the regular registration period. If a student registers late on more than one campus, the late fee is paid only once.

Course Change Fee: A $5 Change of Registration fee is charged for each change made at the request of a student.

Graduation Fee: A $15 graduation fee is payable at the time of application for graduation. Diplomas and certificates will not be processed without this payment. Diplomas printed in Hawaiian are available for an additional $15. **English language diplomas must be ordered first or at the same time.**

Transcript Fee: A $5 fee is charged for each transcript. A $15 rush fee is charged for transcripts processed over-the-counter or by the next business day. Transcripts can be released only upon the duly signed request of the student. Telephone requests cannot be honored.

Non-Resident Application Fee: A $25 fee is charged for all non-residents, excluding military-exempt personnel and their authorized dependents.

Duplicate Fee Slip: A $2 fee is charged for a duplicate fee slip.

Printing Fee: A minimum fee of $.09 per page is charged to print on the public printers in the Library, The Learning Center (TLC) and the No’eau Computer Lab. Black and white, and color printers are available.

**Payments**

All fees must be paid by cash, check or credit card (Visa, Mastercard or JBL) at the time of registration. No provisions are made for deferral of tuition payment.

**REFUNDS**

Tuition and Special Course Fees Refund Policy—Regular (15-week) Academic Semester

In the event a student initiates a complete withdrawal from the University (or College), change from full-time to part-time status, or change from one tuition rate to another during the three-week refund period, tuition and special course fees are refunded as indicated below:

1. **100% refund for complete withdrawal only if made on or before the last day of late registration (add period).**
2. **100% refund for change in status or tuition rate if made on or before the last day of late registration (add period), unless otherwise stipulated by federal regulations.**
3. **50% refund for complete withdrawal or change in status or tuition rate if made after the late registration period (add period) but on or before the end of the refund period (third week of instruction), unless otherwise stipulated by federal regulations.**
4. **0% refund if complete withdrawal or change in status or tuition rate is made after the refund period, unless otherwise stipulated by federal regulations.**
When changes by the University (or 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 to another tuition rate, and the changes to the published schedule occurred after the student registered, tuition and special course fees are refunded as indicated below upon approval of the College’s Dean of Student Services.

1. 100% refund if complete withdrawal is necessary and if application for refund is made within two weeks of the date of the change(s) to the established 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 established schedule.

Student Activity Fees Refund Policy—Regular Academic Semester

1. 100% refund for complete withdrawal only if made on or before the last day of late registration (add period).

2. No refund of the student activity fee if complete withdrawal is made after the first day of instruction.

Tuition and Special Course Fees Refund Policy—Non-Semester Long Credit Courses

The refund policy at all institutions shall be 20% of the instructional period. The instructional period includes all calendar days beginning from the first day of instruction and ending on the last day of instruction. No refunds will be made for courses where the instructional period is 10 days or less, except before the first day of instruction. Refunds for credit courses that are not semester long shall be as follows:

1. 100% refund for complete withdrawal only if made on or before the last day of late registration (add period) as established at each institution.

2. 50% refund for complete withdrawal or change in status or tuition rate if made after the late registration period (add period) but on or before the end of the refund period as defined above, unless otherwise stipulated by federal regulations.

Non-Credit Courses or Workshops Refund Policy

1. One to five weeks in length—100% refund for complete withdrawal if made on or before the last day of instruction; thereafter no refund.

2. Six weeks or longer—100% refund for complete withdrawal if made on or before the fifth day after the first day of instruction; thereafter no refund.

Refunds for Cancelled Classes

A 100% tuition refund is made available to a student if classes are cancelled by the College and the student does not reenroll in other classes.

Financial Obligations to the University

Students who have not satisfactorily adjusted their financial obligations to any part of the University System (such as tuition and fees, traffic violations, parking tickets, unreturned library books, library fines, other fines, locker fees, laboratory breakage charges, transcript fees, loans past due, rental payments, etc.) may be denied grades, transcripts, diplomas and registration.

A copy of the “Rules and Regulations Governing Delinquent Financial Obligations Owed the University of Hawai‘i,” promulgated by the Board of Regents, is on file in the Office of the Dean of Student Services.
Financial Aid Programs

Federal Financial Aid Programs

Financial assistance is available for eligible students who seek help in funding expenses associated with their enrollment. The Financial Aid Office administers Federal and State student aid programs at Windward Community College. The Financial Aid Office is located in Hale Alaka‘i, Room 107 and the phone number is 235-7449. Federal and State financial aid programs are available in the form of grants, low-interest rate student loans, campus employment, tuition waivers and scholarships. The programs available at the College are described below.

Federal Financial aid programs are subject to change.

Federal Financial Aid Programs

The majority of aid awarded by Windward Community College is federal and based on demonstrated financial need. Eligibility requirements are determined by federal rules and include the following:

Applicant must:
- be a U.S. citizen or an eligible noncitizen (permanent resident)
- be enrolled in a degree granting program (classified student)
- be making satisfactory academic progress toward a degree
- not be in default on a loan or owe a refund on a federal grant
- have obtained a high school diploma, GED, or have passed a federally approved test.
- be registered with Selective Service, if required.

Federal Financial aid includes:

FEDERAL PELL GRANTS: These are federal entitlements available to any qualified, needy undergraduate student who is attending college at least halftime and who has not previously earned a Bachelor’s degree.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (SEOG): This grant is available to undergraduate students with exceptional financial need who are attending school at least half-time.

FEDERAL WORK STUDY PROGRAM (FWSP): Funds part-time employment on campus. Students are limited to a maximum of 20 hours per week during academic terms. An individual student’s award is based upon his or her individual need and the availability of funds.

FEDERAL PERKINS LOAN PROGRAM: Awards are based on demonstrated financial need and availability of funds. Repayment begins nine months after the borrower ceases to be enrolled on at least a half-time basis. Deferments are available.

SUBSIDIZED FEDERAL STAFFORD LOAN:
A Federal Stafford loan is made through a bank or lending institution and guaranteed by a state agency. Annual loan limits differ depending on a student’s academic level and existing Stafford loan balance. Repayment begins six months after the borrower ceases to be enrolled on at least a half-time basis. Deferments are available.

UNSUBSIDIZED FEDERAL STAFFORD LOAN: The maximum amounts and interest rates of this loan program are similar to the Subsidized Federal Stafford Loan program. However, interest begins accruing upon disbursement of the funds. Deferments are available.

FEDERAL PARENT LOAN FOR UNDER-GRADUATE STUDENTS (FPLUS): This program provides additional loan funds for a student’s educational expenses. Parents of dependent students may borrow up to the calculated cost of attendance minus other student aid for their child from the FPLUS program. The interest rate on FPLUS loans are variable. Interest begins accruing upon disbursement of the funds. Deferments are available.

State Financial Aid Programs

STATE HIGHER EDUCATION LOAN (SHEL): This loan program is available to Hawai‘i residents. Awards are based on demonstrated financial need and availability of funds. Repayment begins nine months after the student ceases to be enrolled on at least a half-time basis. Deferments are available.

HAWAII STUDENT INCENTIVE GRANT (HSIG): Tuition grant available to needy undergraduate students attending school at least half-time. To qualify, a student must be eligible for a Pell Grant and be a resident of Hawai‘i for tuition purposes.

TUITION WAIVERS Windward Community College issues a limited number of needs-based tuition waivers. Tuition waivers waive a student’s tuition and are included as part of a student’s financial aid package based on availability of funds.

State tuition waivers are awarded to students on the basis of demonstrated financial need, academic merit, school service, or Native Hawaiian ancestry.

Private Scholarships

Many scholarships are offered by private donors and organizations. Throughout the school year, the Financial Aid Office posts scholarship announcements on the Scholarship Board located in the hallway next to Hale Alaka‘i, Room 107.

FOR INQUIRIES ON FINANCIAL AID,
CALL 235-7449, VISIT THE FINANCIAL AID OFFICE IN HALE ALAKA‘I,
ROOM 107, OR
LOG ONTO OUR WEB SITE AT www.windward.hawaii.edu
**Short-Term Loans**

Short-term loans are available to meet emergency educational expenses. The student must be enrolled at least half-time and the loan must be repaid within 30 days.

**Selective Service Registration and Federal Student Aid**

Military Selective Service Act (P.L. 97-252) requires that beginning July 1, 1983, any student who is required to register with the Selective Service System and fails to do so shall be ineligible to receive Federal Title IV student financial aid including: Federal Pell Grants, Federal Supplemental Educational Opportunity Grants (SEOG), Hawai‘i Student Incentive Grant (HSIG), Federal Perkins Loan Program, Federal Family Educational Loan Program, Subsidized Federal Stafford Loan, Unsubsidized Federal Stafford Loan, Federal Parent Loan for Undergraduate Students. This requirement affects all male students who are at least eighteen years of age, who were born after December 31, 1959, and who are not currently on active duty with the armed forces. Members of the Reserves and National Guard are not considered on active duty and must be registered. The group of affected males include citizens and noncitizens eligible to receive Federal financial aid except permanent citizens of the Federated States of Micronesia, the Republic of Marshall Islands or the permanent residents of the Republic of Palau.

**Application Process**

Students applying for federal and state aid at WCC are encouraged to apply on-line and as early as possible since some financial aid programs have limited funds. To apply, please follow the steps below:

1) Complete a FAFSA (Free Application for Federal Student Aid) and submit it to the federal government. There are two ways to submit a FAFSA:
   a. The most common way to file the FAFSA is electronically at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). You can download the FAFSA ON THE WEB WORKSHEET to collect your answers and organize them for submission. You (and your parent if you are classified as a dependent based on the FAFSA definition) will need a PIN number(s) for electronic signature purposes. A PIN number can be obtained by visiting [www.pin.ed.gov](http://www.pin.ed.gov). Upon obtaining your PIN number(s), you can submit your FAFSA data electronically. If you encounter difficulties in the electronic process, please contact the Federal Student Aid Information Center at 1-800-433-3243 for assistance. Windward Community College’s Federal School Code is 010390.
   b. The other way to file a FAFSA is by mailing the paper application to the federal government. We have a supply of paper applications in our office.

2) The WCC Financial Aid Office will notify you in writing if any additional information or documentation is required to complete your file to determine your eligibility.

3) Upon determination of your eligibility, the WCC Financial Aid Office will inform you in writing of your award status and provide you with additional information concerning your financial aid award.

Students are encouraged to apply as early as possible since some of the financial aid programs offered by the College have limited funds.

**Refund Allocation Policy for Financial Aid Recipients**

In the event a financial aid recipient completely withdraws from the College, any refund due to unearned tuition and fees will be applied to the financial aid program(s) from which the student benefitted. The order of financial aid programs to which the refund will be applied is available at the Financial Aid Office.

Financial aid recipients are advised to contact the Financial Aid Office prior to withdrawing from classes at the College.

**Additional Information**

Additional information is available in the U.S. Department of Education’s publication, “The Student Guide.” This publication is free and available at the Financial Aid Office or at [www.studentaid.ed.gov](http://www.studentaid.ed.gov). All questions regarding aid at Windward Community College may be directed to the Financial Aid Office.

**Veterans Administration**

Windward Community College is a State-approved school for veterans’ benefits. Information regarding eligibility, entitlement and types of training authorized may be obtained from the Veterans Administration Regional Office. Please call our Admissions Office for information about using your benefits at Windward Community College.
Centers for Learning

Computer Labs
Windows PCs and Apple Macintosh computers with Internet access are available for use by all Windward students in the No’eau 121 Computer Lab, The Learning Center, and the Library. Students may print to black-and-white and color laser printers in the labs for a reasonable per-page fee.

The computer labs provide access to flatbed scanners, floppy and Zip drives, CD-RW drives and DVD-R drives. The software applications available include Microsoft Office, (Word, PowerPoint, Excel and Access), Microsoft FrontPage, Macromedia Dreamweaver MX, Adobe Acrobat Professional, Adobe Illustrator CS, Adobe InDesign CS, Adobe Photoshop CS and AppleWorks.

Use of the computer labs and all other Windward computing resources must conform to UH Executive Policy E2.210 “Use and Management of Information Technology Resources” (http://www.hawaii.edu/infotech/policies/itpolicy.html).

The Learning Center (TLC)
The Learning Center, located in Hale Mānāleo, is open daily. Services include assessment of students’ skills in reading, writing, math, and study skills.

Workshops and individualized programs tailored to students’ needs are offered in the Center. Formal registration for help from the Center is not necessary, and students are welcome to begin using the Center at any time throughout the semester. Computers are available to supplement coursework. Resource teachers provide help in mathematics, reading, writing, and study skills on a drop-in basis.

Library
The library in Hale La’akea serves both as a source of learning materials and a place to study and use these materials. The collection includes print materials such as books, periodicals, newspapers and pamphlets, nonprint materials and online databases. Internet stations are provided for student and faculty research. Print and nonprint materials are shelved together on open stacks, and equipment for using the nonprint materials is available in many of the carrels. While primarily for the use of students of the College, the library also welcomes use by other University of Hawai‘i students and community members.

Resources of other libraries in the University of Hawai‘i system are available to students and faculty at Windward Community College through interlibrary loans.

A reference librarian is available at all times to assist students and faculty in using the library’s resources. The library staff welcomes both questions and suggestions about any of these services. For additional information, contact the library at 235-7338, or http://library.wcc.hawaii.edu.

Math Lab
The Math Lab, located in Hale Mana’o’pono, Room 103, is open daily. Services include drop-in tutorial assistance in math, access to math lab resources and references, and assessment/advising in math.
**Media Center**
The Media Center is maintained by the College primarily to serve the instructional staff in the development of instructional/learning resources. The Center provides service to students by assisting them with the audiovisual requirements of student projects. The Center is located in Hale No'eau.

**Fujio Matsuda Technology Training and Education Center**
The Office of Continuing Education and Training administers the Fujio Matsuda Technology Training and Education Center which was established in 1985 to serve as a technological education center for the Windward O‘ahu community. The Center, supported by a generous contribution of $1 million over a 5-year period from a group of donors, provides a “high tech, high touch” approach to computer education and training.

The Matsuda Center offers personal advising, a wide range of non-credit courses and workshops, and followup activities to individuals who wish to learn about computers in a friendly, low anxiety, high touch environment. The Center is an accessible and valuable community resource which meets the educational and training needs of individuals and businesses in Windward O‘ahu. For additional information on the Matsuda Center, please call 235-7433.

**Aerospace Exploration Lab**
The Aerospace Exploration Lab is a science education resource center and hands-on exploratorium providing instructional materials and services in astronomy, astronautics (rockery), aeronautics (aviation) and atmospherology (weather and climate). The facility is located in Room 135 of the science building, Hale ʻImiloa.

A library of aerospace books, magazines, audio and video tapes, posters, curricular programs, and demonstration models is available to teachers and students. Hours of operation are Monday through Friday from 10:00 a.m. to 1:00 p.m.

School tours of the Aerospace Exploration Lab are also offered on a reservation basis. Visitors can explore the world of science at the Discovery Pad (a hands-on exploratorium) as well as view numerous displays depicting air and space exploration from early flight to the future.

The Aerospace Exploration Lab also sponsors teacher workshops and offers consultation to students and teachers alike on aerospace education and science projects. All services are free of charge. For inquiries and reservations call 235-7321, or visit http://aerospace.wcc.hawaii.edu/AEL.html.

**Hawai‘i Space Grant Consortium—Windward**
Windward Community College is a participating member of the Hawai‘i Space Grant College, which promotes student involvement in space science education. Each semester, a limited number of stipends are available to students engaged in space-related projects. Students choose a topic under the guidance of a faculty mentor with whom they work throughout the semester. Sample projects might focus on space science curriculum development, actual astronomical observations, remote sensing of the earth and space art. At the beginning of the semester, students will have the opportunity to make a brief presentation of their work at a forum of the Hawai‘i Space Grant Consortium. Contact Dr. Joseph Ciotti for further information at 236-9111 or visit the Web site at http://aerospace.wcc.hawaii.edu/HSGC.html.

**Hoa‘aina RS/GIS Center**
The Hoa‘aina RS/GIS Center serves to facilitate WCC’s undergraduate curriculum in Remote Sensing (RS), Geographic Information Systems (GIS) and Global Positioning System (GPS). This center further serves as a resource to researchers, managers, educators and community members whose work can benefit from the application of these advanced technologies. Current applications involve coral reef monitoring in Kāne‘ohe Bay, stream monitoring in the Windward watershed and archaeoastronomical surveys.

The Hoa‘aina RS/GIS Center is designated as a NASA Center of Excellence in remote sensing. For further information, visit: http://hoaaina.wcc.hawaii.edu/mainmenu/descript.htm.

**Hōkūlani Imaginarium**
The Hōkūlani Imaginarium is a multi-media, state-of-the-art planetarium. The theater houses a Digistar II projector with over 80 additional special effects projectors. Its 66 seats are equipped with interactive buttons for audience participation and infrared hearing devices. This facility is available for K-12 visits as well as group and public shows. For additional information, call 235-7321 or the Office of Continuing Education (OCE) at 235-7433, or visit the Web site at http://aerospace.wcc.hawaii.edu/imaginarium.html.

**Gallery ʻIolani**
Gallery ʻIolani is recognized as one of the finest exhibition sites in the state of Hawai‘i, showing work from local, national and international venues. It is the mission of Gallery ʻIolani to promote exhibitions of cultural and educational significance. The gallery also serves as a classroom for students studying gallery design and management at WCC. Gallery ʻIolani is located adjacent to Palikū Theatre in the Hale Palanakila complex. For more information about the gallery and/or opportunity to study in the gallery design class, contact art professor Toni Martin at 236-9150, or visit gallery.wcc.hawaii.edu.
Kuhi Lā‘au

The Kuhi Lā‘au — Tropical Plant and Orchid Identification Facility: Inouye and Rifai Collections is located in Hale ‘Imiloa, Room 112-A. The facility provides a free plant identification service, focusing on plants of Hawaiʻi, tropical plants of Asia and the Pacific, and orchids. Fresh samples of branches, flowers or fruits should be sent to the facility. Information regarding plant names and ethnobotanical uses will be mailed to the sender within a week. For further information, contact either Dr. Floyd McCoy (236-9115) or Dr. David Krupp (236-9121).

Water Quality Lab

The Water Quality Lab, a Windward Community College project, is part of the Department of Natural Sciences. Located in Hale ‘Imiloa, the Lab conducts collaborative projects with community agencies and is a learning center for students who wish to gain experience in sampling and analysis of stream water. Students may participate in the project for credit as an undergraduate directed research course. Paid internships may be available from the Pacific Center for Environmental Studies. For additional information, contact either Dr. Floyd McCoy (236-9115) or Dr. David Krupp (236-9121).

Lanihuli Observatory

The Lanihuli Observatory is an astronomical/meteorological facility which provides students with hands-on opportunities in basic observation and research. In partnership with NASA Goddard Space Flight Center, this facility operates a log-periodic radio telescope which supports the Radio Jove Project. Signals from Jupiter and the Sun are streamed over the internet. This observatory also houses a NOAA weather satellite tracking station, which provides real-time downlinks of weather conditions over the Hawaiian Islands. A 16” optical telescope and a solar heliostat will be added to this facility. Visit the Web site at http://jupiter.wcc.hawaii.edu/newradiojove/lanihuli.html for more information.

NASA Flight Training Aerospace Education Laboratory

Operated in affiliation with NASA Glenn Research Center, this Aerospace Education Laboratory (AEL) houses computer simulators designed for exploring careers in aerospace. This facility houses a research-grade windtunnel, a zero-gravity drop tower and a flight simulator. Located in Hale ‘Imiloa, Room 112, the NASA Flight Training Aerospace Education Laboratory is available to WCC students and as a community outreach resource for students in grades six and above. For more information, contact Dr. Jacob Hudson at 347-8246 or visit http://aerospace.wcc.hawaii.edu/NASAAEL.html.

Haunted Village 2005 featured shows in the Imaginarium with Halloween-related themes, which attracted nearly 500 visitors to the event.

Palikū Theatre

The Palikū Theatre — the jewel of Windward, O‘ahu—is a state-of-the-art, 300-seat theatre that provides theatrical opportunities to students, faculty and the community, while promoting cultural diversity in an educational setting. Palikū Theatre has been in operation since July, 2002 and offers a unique, flexible and affordable performance venue for students and members of the community to showcase their talents. The theatre is also home to an in-house production company, which has successfully staged such popular productions as *Fiddler on the Roof, My Fair Lady, and Big River*. The facility is also used as a venue for lectures, seminars and special speaking engagements as part of the college’s educational and community service programs. For more information, you may contact the theatre manager Tom Holowach at 235-7330, or visit: http://www.wcc.hawaii.edu/paliku.
STUDENT AFFAIRS

STUDENT AFFAIRS

Although advisory services are provided and students are encouraged to take advantage of them, students themselves are ultimately responsible for following the proper procedures and completing the work required in courses and programs.

FOR FURTHER INFORMATION, CALL 235-7413 OR VISIT STUDENT SERVICES IN HALE ĀKOAKOA, ROOM 203.

ACADEMIC RIGHTS AND FREEDOMS OF STUDENTS

Windward Community College embraces those aspects of academic freedom that guarantee the freedom to teach and the freedom to learn. Free inquiry and free expression for both students and faculty are indispensable and inseparable. As members of the academic community, students are encouraged to develop a capacity for critical judgment and to engage in a sustained and independent search for truth.

ATTENDANCE

Regular class attendance is expected of all students. Students who stop attending classes are likely to receive an F grade. To avoid this, official withdrawal should be made in the Admissions and Records Office.

STUDENT CONDUCT

The University of Hawai‘i Windward Community College has a Code of Student Conduct which defines expected conduct for students and specifies those acts subject to University sanctions. Students should familiarize themselves with the Code of Student Conduct, since upon enrollment at UH Windward Community College the student has placed herself/himself under the policies and regulations of the University and its duly constituted bodies. The disciplinary authority is exercised through the Student Conduct Committee. The Committee has developed procedures for hearing allegations of misconduct.

Copies of the Student Conduct Code are available at the Office of the Dean of Student Services in Hale ‘Ākoakoa, Room 202.

IMPERMISSIBLE BEHAVIOR

The Board of Regents of the University of Hawai‘i has established a policy on impermissible behavior which applies to students at Windward Community College. Students alleged to have violated this policy are subject to the disciplinary procedures of the College. Copies of the hearing procedures used are available in the Office of the Dean of Student Services, the Dean of Instruction, and the library.

ACADEMIC DISHONESTY

Academic dishonesty cannot be condoned by the University. Such dishonesty includes cheating and plagiarism (examples of which are given below) which violate the Student Conduct Code and may result in expulsion from the University.

CHEATING

Includes but is not limited to giving unauthorized help during an examination, obtaining unauthorized information about an examination before it is administered, using inappropriate sources of information during an examination, altering the record of any grades, altering answers after an examination has been submitted, falsifying any official University record, and misrepresenting the facts in order to obtain exemptions from course requirements.

PLAGIARISM

Includes but is not limited to submitting any document to satisfy an academic requirement that has been copied in whole or part from another individual’s work without identifying that individual; neglecting to identify as a quotation a documented idea that has not been assimilated into the student’s language and style, or paraphrasing a passage so closely that the reader is misled as to the source; submitting the same written or oral material in more than one course without obtaining authorization from the instructors involved; ordrylabbing, which includes (a) obtaining and using experimental data from other students without the express consent of the instructor, (b) utilizing experimental data and laboratory writeups from other sections of the course or from previous terms during which the course was conducted, and (c) fabricating data to fit the expected results.

The process of addressing allegations of misconduct or acts of discrimination are described in the procedures for Handling Impermissible Behavior and the Academic Grievance Procedures and in CCCM No. 2210 UH Community College Procedure and Guidelines Relating to Complaints of Discrimination. Copies are available at the Windward Community College Student Services Office.

STUDENT ACADEMIC GRIEVANCE PROCEDURES

The College has adopted the University of Hawai‘i’s Policy and Procedures for Student and Applicant Complaints and Grievances. Copies of the procedures are available in the Office of the Dean of Student Services. Students may also file complaints of discrimination with:

The Office of Civil Rights
U.S. Department of Education
Old Federal Building
50 United Nations Plaza, Rm. 239
San Francisco, California 94102
Phone: (415) 556-7035

Students having concerns about educational and civil rights matters are encouraged to contact:

Dean of Student Services
Windward Community College
45-720 Ke‘ahakala Road
Kāne‘ohe, Hawai‘i 96744
Phone: 235-7466
The College maintains formal procedures for resolving complaints and grievances brought by students who believe a faculty member has acted improperly or in a manner inconsistent with the student’s customary academic expectations. These procedures are contained in the WCC Policy Guidelines Manual, No. 4-6. The manual is available in the Office of the Dean of Student Services, the Office of the Dean of Instruction, and the library. The following is a general summary of the steps in resolving a complaint. Students who have a complaint are urged to consult Policy No. 4-6 for more information if they wish to go beyond Step 2 below.

The WCC Academic Grievance Procedures protect students’ freedom of expression, right to orderly and fair grading and evaluation, and right to confidentiality. These are defined in more detail in the policy.

Students who have a complaint must follow strict timelines to have their complaint resolved under this policy, as follows:

**Step 1:** Within 14 days after a student has become aware of the problem, she or he must attempt to resolve the matter with the faculty member involved.

**Step 2:** If the matter is not resolved, the student may discuss the matter with the faculty member’s Assistant Dean. This must be done within 7 days after the last scheduled meeting with the faculty member. The Assistant Dean has 7 days to resolve the complaint.

**Step 3:** If the student is not satisfied with the results of Step 2, he or she may file a written complaint with the Dean of Instruction. This must be done within 7 days after notification by the Assistant Dean. The Dean has 14 days to resolve the matter.

**Step 4:** If the matter is not satisfactorily resolved by the Dean of Instruction, the student may file a written grievance with the Chairperson of the Academic Grievance Committee. This must be done within 7 days after notification by the Dean.

Within 10 days, the Academic Grievance Committee must convene a hearing, detailed procedures for which are contained in the Policy Guidelines Manual. The Committee informs the Chancellor of its findings and recommendations within 5 days after the close of the hearing. The Chancellor’s decision is final within the University.

The process of addressing allegations of misconduct or facts of discrimination are described in the procedures for *Handling Impermissible Behavior and the Academic Grievance Procedures* and in CCCM No. 2210, *UH Community College Procedure and Guidelines Relating to Complaints of Discrimination*. Copies are available at Windward Community College’s Student Services Office.

Students may also file complaints of discrimination with the Office of Civil Rights, Region IX, Henry M. Jackson Federal Building, 915 Second Avenue, Rm. 3310, Seattle, WA 98174-1099. Phone: (206) 220-7900, FAX: (206) 220-7887.

**Change of Address**

Students are responsible for keeping the Admissions and Records Office informed of their correct mailing address.

**Change of Major**

Students who are already enrolled in the College and wish to change their majors must submit the change form to the Admissions and Records Office in Hale Alaka’i, Room 112.

**Student Services**

The Student Services office is located in Hale ‘Åkoakoa, Room 203.

**Academic Advising**

Academic advisors are available to help students develop a program of study to meet their educational objectives. In meeting with an academic advisor, students will have an opportunity to develop an individualized educational plan along with a program of academic support throughout their college experience. Students will also receive guidance in academic planning through assistance in course selection.

Academic advising sessions are conducted throughout the early registration period and may be arranged on an appointment basis by phoning Student Services at 235-7413.
Placements Testing

Windward Community College offers placement testing in math and reading to assist students in choosing math and English courses. Based on the results of the test, students will be advised into the appropriate math and/or English course.

All students planning to enroll in English or math classes must have on file the results of the English or math placement test before registering. No student may register for a math or English class without either a placement test score or transcript showing completion of a prerequisite course. Test scores and prerequisite courses are valid for two years.

The placement tests are for placement purposes only and are not admission tests. There is no charge for placement testing. Please follow the instructions in your admission letter regarding the test.

Personal Counseling

Student Services counselors are available to assist students with personal or college-related problems and to help assess personal growth and development.

Student Employment

Job placement assistance is available on a limited basis for referrals to on-campus jobs through the Personnel Office. Eligibility is based on a minimum enrollment of 6 credits within the University of Hawai‘i system and a minimum GPA of 2.0. Call 235-7404 or stop by Hale Alaka‘i, Room 120. See the Federal Work Study Program (FWSP) section for more information.

Services to Students with Disabilities

In accordance with Section 84.4 of the Federal rules and regulations governing Section 504 of the Rehabilitation Act of 1973, no qualified individual with a disability shall, on the basis of his/her disability, be excluded from participation in, be denied benefits of, or otherwise be subjected to discrimination under any program or activity which receives or benefits from Federal financial assistance.

Students with disabilities, either permanent or temporary, are provided the following services:

• personal, academic and career counseling
• admissions and financial aid application assistance
• campus orientation
• registration assistance
• tutorial, reader, notetaker, interpreter, and/or other academic support services as needed
• campus accessibility map
• specifically designed auxiliary equipment to meet the needs of the disabled student

Students desiring special services are advised to contact the Disabilities Accommodations Coordinator at least six weeks prior to the beginning of the semester so that services may be arranged on a timely basis. For further information and assistance please call 235-7489.

For disability accommodations, please call 235-7489 or the TTY relay service at 1711 or 1511. Advance notice requested.

Hearing impaired individuals desiring information may contact the College by using the Telecommunication Device for the Deaf (TTY) relay service at (808) 643-8833 or by using the TTY phone located in Hale Alaka‘i.

TRIO Student Support Services (formerly STAAR)

Windward Community College, in association with the federal government, has developed a program to assist students with special needs to make their college experience successful. The program provides remedial/developmental coursework, academic advising, counseling services, and free tutorial assistance for students who meet the federal government eligibility criteria. Students are encouraged to visit the TRIO Student Support Services office located in Hale Mānaleo, Room 107, or to call 235-7487, for further information.

Food Services

Cafeteria services are available in Hale ‘Ākoakoa (Campus Center). Several campus buildings are equipped with vending machines. There are several fast food restaurants in nearby Kāne‘ohe town.

Parking

There is no charge for parking, but parking is permitted in designated areas only. Cars parked in restricted areas may be towed away at the owners’ expense. The College assumes no liability for damage to or thefts from automobiles parked on campus.

Parking is permitted in the parking lots and along the roads marked for parking. No parking is permitted on the grass or in restricted areas indicated by signs or red or yellow markers.

Parking for disabled persons is provided in specially marked stalls. Special placards issued by the City and County of Honolulu are required to park in these marked stalls. Vehicles without a valid placard are in violation of HRS Sec. 19.150 and may be towed away at owners’ expense, in accordance with City Ordinance Sec. 15-24.11 (3d).

Bookstore

The Windward Community College Bookstore is operated for the convenience of the College’s students and staff and members of the community. Textbooks, related reference materials, and some supplies are available.

The Bookstore is located in Hale ‘Ākoakoa and is open Monday-Friday, 9:00 a.m. to 3:30 p.m. Phone 235-7418.

Health Services

The College provides no health services. Students are eligible to participate in a group health insurance program. Information may be secured through Student Services. Programs offering certain free or lowcost health services are available at the Windward Comprehensive Health Center, adjoining the campus.
International Students (I-20 visas) must present proof of health insurance coverage before being allowed to register.

**LOST AND FOUND**
Articles which are lost and found are taken to/or held at the Business Office in Hale Alaka‘i, Room 114.

**HOUSING**
The College has no dormitories and does not assist students in locating housing.

**SMOKING**
In accordance with the State’s No Smoking Act, Act 108, SLH 1976 and Act 245, SLH 1987, Federal Drug-free Schools and Communities Act of 1989 and Drug Free Workplace Act of 1988, and the University smoking policy (effective January, 2003), smoking is prohibited in the following areas:

a) All interior spaces, including courtyards, terraces, stairways, ramps, patios, and lanais.
b) Within 20 feet of building entrances/exits, air intake vents, and windows not air-conditioned.
c) Within 50 feet of designated pick-up and drop-off points.
d) Any other area designated as a non-smoking area by the College’s administration.

**ILICIT DRUGS AND ALCOHOL**
In conformance with the existing law, University faculty, staff and students are not permitted to manufacture, distribute, possess, use, dispense or be under the influence of illegal drugs and/or alcohol as prohibited by State and Federal law, at University sponsored or approved events or on University property or in buildings used by the University for education, research or recreational programs. Consistent with its mission, the University will cooperate with law enforcement agencies responsible for enforcing laws related to the use of illegal drugs and alcohol. Students found in violation shall be subject to the provisions of the student conduct code. Faculty and staff found in violation are subject to disciplinary action as provided in collective bargaining agreements, University policy, and other applicable State laws and rules.

The University recognizes that substance abuse is a complex problem that is not easily resolved solely by personal effort and may require professional assistance and/or treatment. Students, faculty and staff members with substance abuse problems are encouraged to take advantage of available diagnostic, referral, counseling and prevention services. The University will not excuse misconduct by employees and students whose judgment is impaired due to substance abuse.

The purchase, possession or consumption of alcoholic beverages is regulated by state law. Students are expected to know and abide by state law and by University rules and regulations governing the use and consumption of alcoholic beverages on campus. Students are referred to Board of Regents policy, executive policies and campus guidelines regulating the use and consumption of alcoholic beverages on campus.

Students are not permitted to be under the influence of, possess, manufacture, distribute, or sell illicit drugs, as prohibited by state law, at University sponsored or approved events, on University property or in buildings used by the University for its educational or recreational programs. Reasonable suspicion of possession or use of illegal drugs and substances on campus may subject the students involved to investigation.

Sanctions which may be imposed on violators of the alcohol and drug related sections of the Student Conduct Code include disciplinary warning, probation, suspension, expulsion, or rescission of grades or degree. Copies of the full text of the Code are available in the Office of the Dean of Student Services.

School sponsored activities on campus that involve either the serving or selling of alcoholic beverages must be in compliance with applicable College/University policies and State laws.

Copies of policies governing the possession, consumption, serving and sale of alcoholic beverages on the University of Hawai‘i Windward Community College campus are available in the Office of Student Services.

**LETHAL WEAPONS**
Firearms, spear guns, and bows and arrows are prohibited on campus except with specific prior permission of the Chancellor.

**SEXUAL ASSAULT POLICY**
As required by the Higher Education Amendments of 1992, the College has a Sexual Assault Prevention Policy which explains the College’s Sexual Assault Program presented to promote awareness of rape, acquaintance rape and other sex offenses and the procedures for reporting offenses. A copy of the Sexual Assault Policy can be obtained from the Office of Student Services, Hale ‘Akokoaoa, Room 202.

**SEXUAL HARASSMENT POLICY**
It is the policy of the College to provide a safe and comfortable learning and working environment for students and employees. Sexual harassment is a form of discrimination that can undermine the foundation of trust and mutual respect that must prevail if the University is to fulfill its educational mission. Sexual harassment will not be tolerated in any part of the University’s programs and activities. Sanctions will be imposed on members of the University community who violate this policy. Disciplinary actions against employees will be subject to the collective bargaining agreements. For more information and/or copies of the procedure for the Sexual Assault Prevention Program, please contact the campus’ sexual harassment officers at the Office of Administrative Services in Hale Alaka‘i, Room 120.
Academic Subject Certificate: A college credential for students who have successfully completed a specific sequence of credit courses from the Associate in Arts (A.A.) curriculum. The sequence must fit within the structure of the A.A. degree, may not extend the credits required for the A.A. degree, and shall be at least 12 credit hours. The issuance of the Academic Subject Certificate requires that the student must earn a GPA of 2.0 or better for all courses required in the certificate.

Add: Transaction which occurs after students have registered and wish to increase their credit load. These occur within the add period which is announced in the academic calendar and on the schedule of classes each semester.

Certificate of Achievement: A credential awarded to students who complete a prescribed series of courses leading to an occupational skill and usually includes appropriate courses in related and general education. Depending on the program, the total number of units of credit required may vary from 24 to 45.

Certificate of Completion: 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 does not exceed 23.

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

Commencement: A public ceremony and celebration held at the end of the academic year at which degrees and certificates are awarded to students.

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

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

Erase Period: The first three weeks of a 15-week semester or the first two weeks for a 13-week term or the first week of a five- or eight-week term. During this time students dropping a course will have the class erased from their registration file.

Erase Period: The process of required forms and payment of fees after the erase period, for the purpose of disenrolling from a course or courses. Withdrawals can be total or partial.

Part-time student: A student carrying 11 or fewer credits in a semester.

Prerequisite: Skills or courses required prior to enrollment in a course. Course descriptions indicate prerequisites if they apply.

Program of Study: A carefully planned sequence of courses which the student is required to successfully complete in order to receive a certificate or degree in that particular program. Programs must have been officially approved by the College and the Board of Regents.

Schedule of Classes: A detailed listing of all the courses offered for a specified semester at the College.

Semester: A time span of fifteen weeks within a four and one-half 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 several “accelerated terms” within each semester. Two six-week summer sessions may also be held.

Semester Hours: The value assigned to each class of course. One credit hour usually equals fifteen hours in class per semester. The number of credit hours for each course is determined by the number of lecture, laboratory, or field experience hours determined necessary for each semester course.

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

Writing Intensive (WI) Courses: Writing Intensive (WI) Courses are part of a University of Hawaiʻi systemwide movement to incorporate more writing in courses from all disciplines. A WI course is a discipline-specific course in which writing plays a major integrated role. Students in course sections designated as a “WI” (preceding the course title in the Schedule of Classes) learn to understand course content through writing and to write in ways appropriate to that discipline. English 100 is a prerequisite before students take the two required WI courses for the Associate in Arts degree. Students transferring to some bachelor’s degree campuses in the UH system may bring two or three WI courses with them to count for the bachelor’s degree. The hallmarks of a writing intensive course are:

1) Writing promotes learning of course content.

2) Writing is considered to be a process in which multiple drafts are encouraged.

3) Writing contributes significantly to each student’s course grade.

4) Students do a substantial amount of writing, a minimum of 4,000 words. Depending on the types of writing appropriate to the discipline, students may write critical essays or reviews, journal entries, lab reports, research reports or reaction papers.

5) To allow for meaningful teacher-student interaction on each student’s writing, the class is restricted to 20 students.


Credit, Grades and Exams

Scholastic Standards
A cumulative 2.0 grade point average is required for graduation with the Associate in Arts Degree, and the Certificates of Achievement/Completion.

The Dean’s List
Each semester the Dean’s List recognizes students who have achieved academic excellence at the College. Students who have earned 24 credits at the College, who have a current and cumulative grade point average of 3.5 or better, and who have no N or NC grades in the current semester are automatically placed on the Dean’s List unless they request to be omitted. Notation of being on the Dean’s List is entered on the student’s transcript.

Grade Reports
Grade reports are available online at the end of each semester. Students should report any errors on their grade report to the Registrar as soon as possible.

Academic Probation Policy
Students who make unsatisfactory academic progress during a semester will be warned. If satisfactory progress is not made in ensuing semesters, the student will be placed on academic probation and eventually suspended or dismissed from the College.

Unsatisfactory academic progress occurs when a student has fallen into one of the following categories:

1. the student’s cumulative grade point average is lower than 2.0;
   OR
2. the student earns credit for fewer than 1/2 of the credits for which enrolled (excluding Withdrawals and NC grades).

Warning. A student is placed on Warning for the subsequent semester after making unsatisfactory academic progress and is expected to see a counselor during that time.

Academic Probation. If a student makes unsatisfactory progress while on Warning, the student is placed on Academic Probation the following semester. A student on academic probation is required to see a counselor before registering. The student will be allowed to enroll only in those courses approved by the counselor and will meet regularly thereafter with the academic counselor to review progress.

Suspension. A student will be suspended for failing to make satisfactory progress during the probationary semester.

1. A suspended student is eligible to return to Windward Community College after the passage of at least one semester (not including summer session); a student returning to the College after suspension is on probation during the semester of re-entry.

2. Notation of suspension is made on the student’s permanent record.

3. Under extenuating circumstances, a waiver of suspension may be granted. The student must apply for a waiver from the Dean of Student Services prior to the beginning of regular registration for the following semester.
Dismissal. A student will be dismissed from the College for failing to make satisfactory progress (as defined above) during the semester following academic suspension. A student who has been dismissed will be readmitted only in unusual circumstances. Notation of dismissal is made on the student’s permanent record.

Appeals. The student may appeal a decision regarding academic probation, suspension, or dismissal at any time. Further details and the policy are available in the Office of the Dean of Instruction, the Office of the Dean of Student Services, and the library.

Repeating Courses
A student may repeat any course taken at the College but will receive additional credit only if the course description in the catalog states that the course may be repeated for additional credit. With the exception of courses which specifically allow repeating for additional credit, credit will be allowed only once for a course, and the student will receive the higher grade and grade point. The lower grade, however, shall remain on the student’s record.

Transfer of Credits from Other Institutions
Credits earned for courses taken at any of the public community colleges in Hawai‘i, or at the University of Hawai‘i at Mānoa and Hilo may be transferred to this College and applied to meet requirements of degree and certificate programs subject to the specific requirements in each program. Some credits, however, may be classified as electives if Windward Community College has no equivalent course.

Credits earned at a grade level of “D” (not D-) or better at other regionally accredited institutions either in Hawai‘i or another state or country may be transferable and applied to meet program requirements at Windward Community College. "CR” or similar “PASS” grades are acceptable if the awarding institution indicates the work is of "D” level or better. Counselors are available to discuss with students which credits are acceptable in transfer from other institutions. The College’s policy statement on the acceptance of transfer credits is available from the Office of the Dean of Student Services.

Students must be aware, however, that transfer credits awarded are applicable to meet requirements of this College but may not necessarily be accepted by any other institution upon transfer of the student from Windward Community College to another college.

Students transferring to other institutions from Windward Community College should refer to that institution's transfer information.

Evaluation of Transfer Credits
A request must be made by the student to have an official evaluation of transfer credits. The evaluation request form is available in the Admissions and Records Office.

Transcripts from institutions outside of the UH system must be sent directly to the Admissions & Records Office. For transcripts from other UH campuses, it is no longer necessary to request that transcripts be sent. UH system transcripts will be viewed electronically by the transcript evaluator.

Advanced Placement Examination (AP)
The Advanced Placement Examinations are administered in high schools by the Educational Testing Service for the College Entrance Examination Board for students who have completed specific college-level courses in high school. For the University’s credit policy, students should consult the Student Services Office.

Credit by Examination
Windward Community College students who present evidence of having achieved course objectives through prior experience may apply for credit by exam. Credit by exam, however, is not available for all courses. Students are advised to check with individual instructors and the Department Chairperson on a course-by-course basis. Students must be officially enrolled in at least one course at the College during the semester in which credit by exam is requested.

College Level Examination Program (CLEP)
Any student at Windward Community College is eligible to apply for the College Level Examination Program (CLEP). A passing score on a CLEP examination is recorded as CR (credit) and the credit is entered as “Advanced Standing” credit on the student’s transcript. Only students achieving CLEP examination scores at or above specified levels of achievement are awarded the number of credits indicated for each examination.

Students interested in applying for CLEP examinations must make their own arrangements at the University of Hawai‘i at Mānoa.

Examinations are available in the following areas:

General Examinations
- Natural Sciences
- Mathematics
- Humanities
- Social Sciences and History

Special Examinations
- Analysis & Interpretation of Literature
- Calculus with Elementary Functions
- General Biology (Objective & Essay)
- General Chemistry
- Microeconomics, Introductory
- Macroeconomics, Introductory
- Psychology, Introductory
- Human Growth and Development
- Sociology, Introductory

Further information regarding credit-by-examination of CLEP is available in the Office of the Dean of Student Services.
**Grade Point Average**

A student’s cumulative grade point average is computed by dividing the student’s total grade points earned by the total credits attempted, excluding the credits for classes in which grades of I, W, N, CR, and NC were awarded. Although I, W, N, and NC are not included in the grade point average, students are advised that some colleges, especially graduate and professional schools, do not look favorably upon transcripts containing these grades. Similar attitudes occur among some employers and scholarship grantors.

**Grading**

Letter grades and grade points are awarded to students to reflect their level of achievement of the objectives of a course. At the College, the letter grades which can be awarded include the following table:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Definition</th>
<th>Grade Point Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent achievement</td>
<td>4 grade points given (course credits awarded)</td>
</tr>
<tr>
<td>B</td>
<td>Above average achievement</td>
<td>3 grade points given (course credits awarded)</td>
</tr>
<tr>
<td>C</td>
<td>Average achievement</td>
<td>2 grade points given (course credits awarded)</td>
</tr>
<tr>
<td>D</td>
<td>Minimal passing achievement</td>
<td>1 grade point given (course credits awarded)</td>
</tr>
<tr>
<td>F</td>
<td>Less than minimal passing achievement</td>
<td>0 grade points given (no course credits awarded)</td>
</tr>
<tr>
<td>CR</td>
<td>Achievement of objectives of course at C level or higher. No grade points given (course credits awarded)</td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td>Used to denote achievement of objectives of the course No grade points given (no course credits awarded) at less than C level under the CR/NC option.</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>The &quot;N&quot; grade indicates that the student has worked conscientiously, attended regularly, finished all work, fulfilled course responsibilities, and has made measurable progress. However, either the student has not achieved the minimal student learning objectives and is not yet prepared to succeed at the next level, or the student has made consistent progress in the class but is unable to complete the class due to extenuating circumstances, such as major health, personal or family emergencies. No grade points given (no course credits awarded)</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>No grade points given and no course credit awarded until student completes course</td>
</tr>
<tr>
<td>W</td>
<td>Official withdrawal from course</td>
<td>No grade points given (no course credits awarded)</td>
</tr>
<tr>
<td>L</td>
<td>Audited Course</td>
<td>No grade points given (no course credits awarded)</td>
</tr>
</tbody>
</table>

**Credit/No Credit Option**

The Credit/No Credit option is maintained to encourage students to broaden their education by taking courses outside of major requirements without affecting their grade point averages. No grade points are given for courses taken under this grading option. Course credit is awarded for courses completed at Windward Community College with certain restrictions. This grading option is not offered in all courses and students majoring in a particular program are not permitted to take a major required course with the CR/NC grading option.

The student should consult the instructor’s course outline to determine if this option is available in a particular course. If this option is available, the student must declare for CR/NC by the dates published in the current Schedule of Classes.
Other Registration & Course Information

Auditing
Auditors must complete all admission and registration requirements and procedures, including the payment of tuition and fees. Students are permitted to audit certain classes with the written consent of the instructor.

Students who want to audit a course must submit the completed Auditor Request Form to the Admissions and Records office by the deadline. No credit is given for an audited course. The grade of “L” will be recorded for the course on the student’s transcript.

Class Size
Classes at the College normally range in size from 15 to 35 students; WI classes are usually limited to no more than 20 students.

Cancelled Classes
Courses are subject to cancellation due to low enrollment. Students whose classes are cancelled may make a change during the add period without payment of a change of registration fee. A list of cancelled classes will also be made available at the Admissions and Records Office. Cancelled class notices will be posted on the respective classroom doors.

Concurrent Registration
Under certain conditions, students at the College may register concurrently for courses at any campus within the University of Hawai‘i system. Details of the conditions governing concurrent registration on other campuses may be obtained from any academic advisor.

Distance Education
Working collaboratively, the UH Community Colleges now provide courses that allow Hawai‘i students to earn a degree through cable TV, Internet, and interactive television. Distance-delivered courses can increase student flexibility regarding time and place.

Course Load
A student carrying 12 or more credits in a semester or 6 or more credits during any 8-week term is considered a full-time student.

Definitions vary, however, for students receiving VA benefits and other social services assistance. Check with an academic advisor in the Office of the Dean of Student Services for details.

No student may register for more than 17 credits without obtaining approval from a counselor at registration.

Returning Students
Individuals who have been students at the College but who have missed a term or semester (excluding summer sessions) must reapply for admission if they wish to return to the College. These individuals will be considered “returning” students.

Students who are enrolled continuously at the College are considered “continuing” students and do not need to reapply for admission each term or semester.

Summer Session
The College usually offers two sessions during the summer. Tuition and fees for the summer session differ from those of the fall and spring. Limited counseling services are also available to students during the summer months. Students may register for summer and fall semesters during early spring.

Terms and Semesters
Courses offered by the College vary in length. Basically, a 15-week semester schedule is maintained. Some courses are also scheduled for 13-week, 8-week, and 5-week terms. These variations are intended to accommodate the differing learning styles of students at the College.

Eight-week classes are intended for a student who learns best by concentrating on a few courses at a time over a relatively short period, or for certain curricula which are best learned through this method. A full-time load consists of two to three courses during an 8-week term.

Fifteen-week classes are intended for the student who prefers to take several courses simultaneously but over a longer period. A full-time load consists of four or five courses taken during the 15-week term.

Students may develop a program of courses consisting solely of 15-week classes or may choose classes of varying lengths. Students receiving VA benefits are advised to consult with the College certifying officer to assure that combinations of 5-, 8-, 13- and 15-week courses will result in the desired eligibility for benefits.

Withdrawing from Classes
Students intending to drop classes are advised to do so as soon as possible so that the maximum amount of tuition can be refunded (if applicable) and grading penalties can be avoided. (See the Schedule of Refund of Tuition and Fees.) Students officially withdrawing from classes, by making the change through the Admissions and Records Office, by the erase deadline published in the current schedule of classes will have these classes erased from their registration file. These courses will not appear on the student’s transcript. After these periods, students officially withdrawing from classes will receive a W for the class provided they withdraw prior to the last day for official withdrawal.

Official Withdrawal is not complete until all required forms have been filled out and any required fees paid.

Official withdrawals must be completed in the Admissions and Records Office, Hale Alaka‘i, Room 112. Students failing to officially withdraw by the deadline for such withdrawals may receive an “F” grade.
The Instructional Program

The instructional program at Windward Community College recognizes that people differ in interest, motivation, ability, and learning styles. Thus, alternatives are stressed in the kinds, levels, and ways in which courses are offered.

Courses offered are intended to meet the needs of individuals:

• intending to earn an Associate in Arts degree in the liberal arts;
• intending to earn a Certificate of Completion in a vocational program;
• intending to transfer to a four-year college to earn a bachelor’s degree;
• interested in taking courses for personal enrichment;
• interested in acquiring skills and knowledge needed for employment in selected occupational fields;
• interested in reinforcing basic learning and study skills, e.g., reading, writing, notetaking, memory/concentration skills;
• interested in updating skills and knowledge for employment in certain vocational fields.

Modes of instruction also vary and students may enroll in group-learning, lecture-oriented classes, highly individualized classes, or independent study projects. A few classes take an interdisciplinary approach to a topic or problem.

Some coordinated studies packages are also offered. Here, instructors offering interrelated courses integrate their courses and provide students with a team of professionals who are concerned with all the learning activities of the student.

Piggyback courses are also offered. In some of these courses, where self-instructional materials are used, students can opt to meet the objectives of different courses, working at their own rate of speed and proceeding to a second level within the term, depending on their own abilities.

A pre-test may also be given in some classes. This is intended to help identify the knowledge and skills already possessed by students, thus enabling instructors to tailor the instruction to meet the special needs or interests of the class. (Pretests are not used in grading students.)

Summary of Degrees and Certificates Offered

Currently, the College offers students the opportunity to major in the following fields:

1. Liberal Arts (Associate in Arts Degree program).
2. Technical Studies (Associate Degree).
3. Agricultural Technology (Certificate of Completion).
4. Art (Academic Subject Certificate).

Students who are taking courses for enrichment purposes and do not intend to work toward a degree or certificate, or those who are undecided as to the field in which they wish to specialize are considered as having an unclassified major.

Students who can demonstrate achievement of the objectives of required courses through prior experience or by successful completion of equivalent courses may be exempted from certain program requirements.

Academic Subject Certificates offered in various disciplines.
Degrees and Certificates

Associate in Arts Degree

The Associate in Arts Degree is awarded to students who complete a general program of liberal arts courses which may be applied to meet baccalaureate degree requirements at a four-year college or to fulfill the general education interests of the student. Students who plan to transfer to other colleges, including the University of Hawai‘i at Mānoa, should work closely with a counselor to help ensure that courses taken for the A.A. degree are also applicable at their next campus.

The Associate in Arts Degree at Windward Community College is recognized and accepted as fulfilling the general education requirements at all University of Hawai‘i baccalaureate degree-granting campuses. The completed degree, however, does not necessarily fulfill all of the program requirements of the various baccalaureate degrees in the University of Hawai‘i System. Students are advised to visit one of the academic counselors on campus to review a program sheet for the specific degree being sought, e.g., Bachelor of Arts, Bachelor of Business Administration, Bachelor of Education, etc.

College catalogs are published once per year or less frequently and do not always reflect the most recent campus actions involving core courses. For the most recent information concerning core courses, students should check with their advisors.

Certificate Programs

The College offers certificate-level programs within the Associate in Arts Degree and certificate-level programs which are designed to prepare students for entry-level employment or upgrading of work skills in several vocational fields.

In the vocational area, certificates are offered in Agricultural Technology and Plant Landscaping.

Two types of certificates are awarded: an Academic Subject Certificate and a Certificate of Completion depending on the program of study completed.

Credits completed in certificate-level programs may be applied to meet the Associate in Arts Degree program requirements.

Students completing certificate program requirements must successfully complete credits in specified fields and maintain a grade point average of 2.0. At least 50% of the required courses in the major area (the final credits) must be earned at the College. Under certain circumstances, this requirement may be waived upon a request made to the Dean of Student Services.

Military Science Courses

Military science and air science courses are offered through the University of Hawai‘i at Mānoa. Windward students making satisfactory academic progress may enroll in these courses as concurrent students. For further information, contact the military departments at the Mānoa campus.

Independent Studies

This program offers students the opportunity to participate in the creation of academic learning experiences designed to meet individual needs, interests, aptitudes and desired outcomes. It is intended to serve the student, who after completing the requirements of an introductory course, may wish to continue an in-depth study of a particular topic or issue previously covered, or who may wish to reinforce understanding of concepts or relationships covered.

A student at the College, under faculty supervision, may design an independent study project at any of three levels: Vocational (099) or Academic (199)/(299). An independent study project could take the form of directed reading, research, or field work experience. Students are encouraged to develop original projects and the project must be appropriate to the student’s program of study, related to the existing college curriculum, and in the area of the supervising instructor’s and/or co-advisor’s expertise.

Independent study projects are undertaken with at least one student selected faculty advisor. The advisor must be a member of the College faculty and participation by this faculty member is voluntary. The advisor serves as a facilitator of learning, guiding the student in establishing and achieving the goals of the independent project. An advisor may recommend particular preparation before a student undertakes a project.

Associate Degree in Technical Studies

The Associate Degree in Technical Studies (ATS) is a two-year degree designed for students who wish to earn a technical occupational/professional degree that is not currently being offered at Windward Community College and provides them with skills and competencies for gainful employment.

Certificate Programs

The College offers certificate-level programs within the Associate in Arts Degree and certificate-level programs which are designed to prepare students for entry-level employment or upgrading of work skills in several vocational fields.

In the vocational area, certificates are offered in Agricultural Technology and Plant Landscaping.

Two types of certificates are awarded: an Academic Subject Certificate and a Certificate of Completion depending on the program of study completed.

Credits completed in certificate-level programs may be applied to meet the Associate in Arts Degree program requirements.

Students completing certificate program requirements must successfully complete credits in specified fields and maintain a grade point average of 2.0. At least 50% of the required courses in the major area (the final credits) must be earned at the College. Under certain circumstances, this requirement may be waived upon a request made to the Dean of Student Services.

Military Science Courses

Military science and air science courses are offered through the University of Hawai‘i at Mānoa. Windward students making satisfactory academic progress may enroll in these courses as concurrent students. For further information, contact the military departments at the Mānoa campus.

Independent Studies

This program offers students the opportunity to participate in the creation of academic learning experiences designed to meet individual needs, interests, aptitudes and desired outcomes. It is intended to serve the student, who after completing the requirements of an introductory course, may wish to continue an in-depth study of a particular topic or issue previously covered, or who may wish to reinforce understanding of concepts or relationships covered.

A student at the College, under faculty supervision, may design an independent study project at any of three levels: Vocational (099) or Academic (199)/(299). An independent study project could take the form of directed reading, research, or field work experience. Students are encouraged to develop original projects and the project must be appropriate to the student’s program of study, related to the existing college curriculum, and in the area of the supervising instructor’s and/or co-advisor’s expertise.

Independent study projects are undertaken with at least one student selected faculty advisor. The advisor must be a member of the College faculty and participation by this faculty member is voluntary. The advisor serves as a facilitator of learning, guiding the student in establishing and achieving the goals of the independent project. An advisor may recommend particular preparation before a student undertakes a project.
No more than 12 credits in any combination of independent study or cooperative education can be applied to meet the Associate Degree requirements. Procedural details may be obtained through an instructor or the Dean of Instruction’s Office. The deadline for registration in an independent study course is the end of the Add Period for the second 8-week session.

**Service Learning**

Service Learning is an option in which students can earn partial course credit in designated courses at Windward Community College. Working with their instructor, students who opt for a service learning component in a specified course will learn and develop academic skills from a course and apply their learning through active participation in an elementary, intermediate, or secondary school or at an approved community site. Service Learning is reciprocal in nature and is integrated into designated courses. It enhances the academic curriculum of the students through the educational component of the service learning course and is directed towards fostering civic responsibility in the student.

**Cooperative Education**

This program offers students opportunities to participate in career related experiences designed to reinforce skills learned in different areas and to apply these skills in actual job situations. Cooperative Education experiences are offered in Agriculture and Social Sciences. See each subject area and/or the department for eligibility requirements, prerequisites and information on procedures for setting up such a course.

**Marine Option Program (MOP)**

The Marine Option Program (MOP) is open to students of all disciplines who have an interest in the ocean. Its goal is to provide marine education to students through classroom courses and the acquisition of a water-related skill.

A certificate issued by the University of Hawai‘i at Mānoa is awarded to students who successfully complete at least 10 credit hours of marine-related courses (1-credit OCN 101, 3-credits OCN 201 or ZOOL 200, 6 credits marine electives) and the MOP skill project. The unique MOP skill project (2 or more credits, e.g., Academic Independent Study 199) allows students to design and conduct an independent aquatic project related to their academic field of interest or educational goals.

For information about the program, contact the Windward MOP Coordinator at 235-9118 or visit the MOP Office in Hale ‘Ilimo, Room 118 or e-mail wccmop@hawaii.edu.
Application for Graduation

Students should consult with their counselor/academic advisor at least one semester prior to registering for their projected final semester of study. For specific graduation requirements, see the programs of study listed in the catalog.

Students who intend to file for graduation must have a graduation certification done by a counselor prior to filing a graduation application form with Admissions and Records. The graduation fee of $15 is payable upon submission of the application for graduation.

Associate in Arts Degree

The Associate in Arts (A.A.) degree is a two-year direct transfer liberal arts degree consisting of at least 60 semester credits at the 100 and 200 levels.

To earn an Associate in Arts (A.A.) degree, Windward Community College students must complete 60 credits in courses numbered 100 or above with a grade point average of at least 2.0 and pass the College's Computer and Information Literacy (CIL) exam. Students who are awarded an Associate in Arts degree from a UH Community College must have a Community College cumulative GPA of 2.0 or higher for all course work taken in fulfillment of A.A. degree requirements. At least 12 of the credits for the A.A. degree must be earned at Windward Community College. No more than 12 credits may be independent study/cooperative education. Credits must be earned in the required areas.

The A.A. degree at Windward Community College is recognized and accepted as fulfilling the general education requirements at all University of Hawai‘i baccalaureate degree-granting campuses. The completed degree, however, does not necessarily fulfill all of the program requirements of the various baccalaureate degrees in the University of Hawai‘i System. Students are advised to visit one of the academic counselors on campus to review a program sheet for the specific degree being sought (e.g., Bachelor of Arts, Bachelor of Business Administration, Bachelor of Education, etc.).

Effective Fall 1994, students who have earned an articulated Associate in Arts (A.A.) degree from a University of Hawai‘i Community College shall be accepted as having fulfilled the general education core requirements at all other University of Hawai‘i campuses. While an articulated A.A. degree satisfies general education core requirements, students must also complete all specialized lower-division, major, college and degree/graduation requirements. Additional campus-specific requirements, such as competency in a foreign language or writing intensive courses may also be required. With planning, most, if not all, of these requirements may be incorporated into the Associate in Arts degree; if not, they are required in addition to the Associate in Arts degree.
Learning Outcomes for the AA degree

Learning experiences in the Associate in Arts degree program are designed to assist the student in realizing the following outcomes:

1. Draw on knowledge from the liberal arts to succeed in upper division courses.
2. Recognize and respond to the wonders and challenges of the natural environment, both biological and physical.
3. Use research and technology skills to access information from multiple sources; use critical thinking and problem-solving skills to evaluate and synthesize information to form conclusions, ideas, and opinions.
4. Express ideas clearly and creatively in diverse ways through the fine and performing arts, speech and writing.
5. Recognize one’s role in community and global issues with a respect for diverse cultures and differing views while embracing one’s own cultural values and heritage.
6. Engage in civic activities with a sense of personal empowerment.
7. Enter and perform effectively in the work force.
8. Develop skills that improve personal well-being and enhance professional potential.
9. Use knowledge and skills to maintain and improve mental and physical well-being.

The Associate in Arts degree includes the following:

- **Written and Oral Communications**
  Individuals need various modes of expression. These areas provide for the development of clear and effective written and oral communication skills.
  **REQUIREMENT:** Three credits in English 100 and three credits selected from Communications 145, Speech 151, Speech 231 or Speech 251.

- **Symbolic Reasoning**
  Individuals need to be able to use mathematical and/or logical reasoning techniques to reason, to understand, to interpret and draw conclusions. They need to be able to work within a formal logical system, to problem solve and to use mathematical and/or symbolic techniques to assist in problem solving.
  **REQUIREMENT:** Three credits selected from math courses numbered 100 or above or Philosophy 110.

- **Global and Multicultural Perspectives**
  An increasingly complex world demands responsible citizenship. The world civilizations requirement is designed to introduce students to the political, social, economic, and cultural development of the world’s major civilizations.
  **REQUIREMENT:** Six credits in History 151 and 152.

- **Arts and Humanities**
  Through study of artistic, literary, and philosophical masterworks and by examining the development of significant civilizations, cultures, and the nature of human communication, students should gain an appreciation of history and achievements. This experience should enable the student to approach future studies of a more specific character with a broadened perspective.
  **REQUIREMENT:** A total of 6 credits selected from two of three groups.

- **Natural Sciences**
  A scientifically literate person should know what science is, how scientific investigation is conducted, and that the activity of a scientist is a blend of creativity and rigorous thinking. Experimental investigations in the laboratory provide the student with first hand experience with the scientific method and research.
  **REQUIREMENT:** Minimum of 6 credits. Must include a biological science course, a physical science course, and a laboratory/field trip course.

- **Social Sciences**
  Every educated person should have some appreciation of the role of culture and social institutions in the shaping of individual personality and the creation of social identities. Students should also develop an understanding of the extent to which scientific inquiry is appropriate to the creation of social knowledge and of the alternative ways of organizing human institutions and interpreting social reality.
  **REQUIREMENT:** A total of 6 credits made up of two or more courses from two different subject areas.

- **Writing Intensive Courses**
  Because writing helps students to learn and to communicate, WCC encourages students to take writing intensive courses. English 100 is a prerequisite and enrollment is limited to 20 students. In small writing intensive classes, instructors work with students on writing related to course topics.
  **REQUIREMENT:** Two Writing Intensive (WI) courses are required. See the explanation on page 20, Definition of Terms.

- **Computer and Information Literacy Requirement (CIL)**
  Information technologies have become an essential part of our daily lives. In order to participate fully and effectively in today's society, students need to develop basic competencies in using computers to locate, manage, and communicate information.
  **REQUIREMENT:** Students must successfully pass the College’s Computer and Information Literacy (CIL) exam. For more information, contact your counselor or visit the Web site at http://www.hawaii.edu/wccil.

- **Math Placement Requirement**
  Students must place into Math 100 or successfully complete Math 25.
ASSOCIATE IN ARTS DEGREE

The Associate in Arts (A.A.) degree is a two-year direct transfer liberal arts degree consisting of at least 60 semester credits at the 100 and 200 levels.

To earn an Associate in Arts (A.A.) Degree, Windward Community College students must complete 60 credits in courses numbered 100 or above with a grade-point average of at least 2.0. Students who are awarded an Associate in Arts degree from a UH Community College must have a Community College cumulative GPA of 2.0 or higher for all course work taken in fulfillment of A.A. degree requirements. At least 12 of the credits for the A.A. degree must be earned at Windward Community College. No more than 12 credits in any combination of independent study or cooperative education may apply to the degree requirements. Credits must be earned in the required areas. Underlined courses are infrequently offered.

Graduation Requirements:

Writing Intensive (WI) (Required: A total of 2 courses)
Computer and information Literacy Requirement
Place into Math 100 or complete Math 25 with a “C” or higher.

Foundations Requirements:

WRITTEN COMMUNICATION (FW)
3 credits
ENG 100

ORAL COMMUNICATION (FO)
Required: A total of 3 credits
COM 145
SP 151, 231, 251

GLOBAL & MULTICULTURAL PERSPECTIVES (FG)
Required: A total of 6 credits
HIST 151, 152

SYMBOLIC REASONING (FS)
Required: A total of 3 credits
MATH 100, 103, 111, 112, 115, 135, 140, 203, 205, 206, 231
PHIL 110

Diversification Requirements:

ARTS, HUMANITIES, & LITERATURE
Required: A total of 6 credits, each course selected from 2 different groups.

Group 1: Arts (DA)
HPER 124, 125
HUM 100, 269V
SP 151, 231, 251
THEA 101, 211, 221, 222, 240, 260

Group 2: Humanities (DH)
ART 269V, 270, 280
HWST 107, 270
HIST 224, 241, 242, 281, 282
LING 102
MUS 106, 166
PHIL 100, 101, 102, 200, 213
REL 150, 151, 201, 205

Group 3: Literature (DL)
ENG 209, 250, 251, 252, 253, 254, 255, 256, 257
NATURAL SCIENCES
Required: A total of 6 credits. A minimum of 3 credits in the biological science area (Group 1) and a minimum of 3 credits in the physical science area (Group 2). In addition one of the two courses must include a laboratory/field trip course. Note: **BOLD** denotes fulfilling lab requirement (DY).

**Group 1: Biological Sciences (DB)**
AG 120
AQUA 106, 201, **201L**
BIOL 100, **100L**, 101, 124, **124L**, 171, **171L**, 172, **172L**, 200, **200L**, 265, **265L**, 275, **275L**
BOT 101, 130, 160, **181**, **205**, **210**
FSHN 185
MICR 130, **140**
NREM **250**
OCN 220
PHRM 203
SCI 123
ZOOL 101, **106**, **107**, **141**, **141L**, **142**, **142L**, **200**

**Group 1: Biological Sciences Lab (DY)**
AQUA **106**, **201L**
BIOL **100L**, 101, 124, **171L**, **172L**, **200L**, **265L**, **275L**
BOT **101**, **130**, **181**, **205**, **210**
MICR **140**
NREM **250**
SCI 123
ZOOL **101**, **107**, **141L**, **142L**, **200**

**Group 2: Physical Sciences (DP)**
ASTR 110, **130**, **110L**, 281, **294V**
CHEM 100, **100L**, **101**, **151**, **151L**, **152**, **152L**, **161**, **161L**, **162**, **162L**
GEOG 101, **101L**
GG **101**, **103**, **166**, **210**, **211**, **212**, **213**, **214**
MET 101
OCN 201

**Group 2: Physical Sciences Lab (DY)**
ASTR **110L**
CHEM **100L**, **101L**, **152L**, **161L**, **162L**
GEOG **101L**
GG **101**, **102**, **210**, **211**, **212**, **213**, **214**
OCN **201L**
PHYS **122L**, **151L**, **152L**, **170L**, **272L**

SOCIAL SCIENCES (DS)  Required: A total of 6 credits from 2 different subject areas.
ANTH 150, **175**, **175L**, **200**
BOT **105**
ECON 101, **120**, **130**, **131**
GEOG 102, **122**, **151**
GIS 150
ICS 100
POLS 110, **120**, **130**, **180**
PSY 100, **170**, **202**, **224**, **240**, **250**, **260**, **270**
SOC **100**, **218**, **231**, **250**, **251**
SSCI 200
WS **202**

Note: Any one course can fulfill only one area. (eg: SP151, SP231, SP 251)
ASSOCIATE DEGREE IN TECHNICAL STUDIES

The Associate Degree in Technical Studies (ATS) is designed for students who wish to earn a technical occupational/professional degree that is not currently being offered at Windward Community College. The two-year ATS degree must consist of at least 60 semester credits which provide the student with skills and competencies for gainful employment. At least 30 of the minimum 60 credits must be taken after the ATS Program of Study is established and signed by the student, Dean of Instruction, and two ATS Advisory Committee members. An individual contract will be prepared for each student who undertakes this degree.

Any student not on academic probation may apply for the ATS degree by submitting a proposal to a Windward Community College counselor. Students must apply between September 5 and October 15 for the spring semester and between January 25 and March 15 for the fall semester and before taking more than 30 credits of coursework to be included in the ATS degree.

CERTIFICATE OF COMPLETION - AGRICULTURAL TECHNOLOGY

PLANT LANDSCAPING/AGRICULTURAL TECHNOLOGY

The curriculum is designed for students desiring entry-level employment or to enhance their skills in the field of plant landscaping (landscape maintenance, turfgrass maintenance, nursery operations, and/or retail plant outlets). All courses are taught with a “hands-on, learn-by-doing” philosophy. Students are expected to make sound decisions about real life horticultural and environmental situations.

The Certificate of Completion in Plant Landscaping (CCPL) consists of 16 credits. Students must complete 12 credits of required courses and select a 4-credit area of specialization (Landscape Maintenance and/or Turfgrass Maintenance).

The Certificate of Completion Agricultural Technology (CCAT) consists of 15 credits. Students must complete 10 credits of required courses and select 5 credits of electives. See course descriptions for prerequisites.

Required courses for both Certificates (7 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 20  or AG 120</td>
<td>Plant Science</td>
<td>3 cr</td>
</tr>
<tr>
<td>AG 32B/C/D</td>
<td>Plant Disease &amp; Pest Control</td>
<td>3 cr</td>
</tr>
<tr>
<td>AG 36</td>
<td>Pesticide Safety</td>
<td>1 cr</td>
</tr>
</tbody>
</table>

Additional Requirements for Certificate of Completion in Plant Landscaping (CCPL)

Required courses (5 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 45</td>
<td>Irrigation Principles &amp; Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>AG 93V</td>
<td>Cooperative Education</td>
<td>1 cr</td>
</tr>
<tr>
<td>AG 100</td>
<td>AG Orientation: Careers</td>
<td>1 cr</td>
</tr>
</tbody>
</table>

Area of Specialization. Select one (1) of the two (2) pairs of classes below (4 credits)

**Landscape Maintenance:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 44</td>
<td>Landscape Equipment</td>
<td>1 cr</td>
</tr>
<tr>
<td>AG 80 or AG 180</td>
<td>Landscape Maintenance</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**AND/OR**

**Turfgrass Maintenance:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 40</td>
<td>Turfgrass Equipment</td>
<td>1 cr</td>
</tr>
<tr>
<td>AG 82 or AG 182</td>
<td>Turfgrass Management</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Additional Requirements for Certificate of Completion Agricultural Technology (CCAT)

Required course (3 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 49 or AG 149</td>
<td>Plant Propagation</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Electives. Select from the list below. (5 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 22</td>
<td>Soils Technology (3)</td>
<td></td>
</tr>
<tr>
<td>AG 30</td>
<td>Agricultural Business Management (3)</td>
<td></td>
</tr>
<tr>
<td>AG 45</td>
<td>Irrigation Principles &amp; Design (3)</td>
<td></td>
</tr>
<tr>
<td>AG 52 or AG 152</td>
<td>Orchid Culture (3)</td>
<td></td>
</tr>
<tr>
<td>AG 92</td>
<td>Special Topics (1-4)</td>
<td></td>
</tr>
<tr>
<td>AG 93V</td>
<td>Cooperative Education (1-4)</td>
<td></td>
</tr>
<tr>
<td>AG 100</td>
<td>AG Orientation: Careers (1)</td>
<td></td>
</tr>
</tbody>
</table>
ACADEMIC SUBJECT CERTIFICATE - ART

Drawing and Painting

The purpose of this Academic Subject Certificate in Drawing and Painting is to provide pre-professional training for students planning careers in the Visual Arts in the areas of drawing and painting. The certificate would meet the goals of students who plan to (1) transfer to a 4-year institution and earn a Bachelor of Fine Arts degree (BFA) and/or, (2) become a professional artist exhibiting in galleries and completing portraiture commissions, and/or, (3) enter a career in commercial art.

EXIT PORTFOLIO REVIEW

Completion of the Academic Subject Certificate in Art: Drawing and Painting requires a portfolio review. The student must consult with the full-time faculty in drawing and painting in preparation for his or her exit portfolio review. A review committee will be formed consisting of two faculty members in drawing and painting. The portfolio submission will occur in the week following spring break, or at the end of the first Summer Session, if the student completed the Windward Atelier as his or her last studio art course.

The student’s exit portfolio must include six to eight drawings and three to four paintings that demonstrate that the student has developed his or her skills in observational and figurative drawing and painting. A student’s work must pass the portfolio review in order to receive the Academic Subject Certificate. The portfolio review is the capstone of the Academic Subject Certificate in Art: Drawing and Painting.

REQUIRED COURSES

The Academic Subject Certificate in Art: Drawing and Painting consists of 21 credits. At least half of the classes must be taken at WCC.

The required courses are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 113</td>
<td>Introduction to Drawing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 114</td>
<td>Introduction to Color</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 115</td>
<td>Introduction to 2D Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 123</td>
<td>Introduction to Oil Painting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 213</td>
<td>Intermediate Drawing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 214</td>
<td>Introduction to Life Drawing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 224</td>
<td>Painting from Life</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

In addition, the drawing and painting faculty strongly recommend that the student complete:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>Introduction to the Visual Arts</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 111</td>
<td>Introduction to Watercolor Painting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 270</td>
<td>Introduction to Western Art</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
ACADEMIC SUBJECT CERTIFICATE - BIO-RESOURCES AND TECHNOLOGY

Bio-Resource Development and Management

The ASC in Bio-Resources and Technology (Bio-Resource Development and Management) will prepare students for careers in environmental science/studies and qualify them to transfer to bachelor of science degree programs. Knowledge and training in Bio-Resource Development and Management will be an asset to the productive and efficient use of natural resources for promoting sustainable management of our environment.

This certificate consists of 26 credits. See course descriptions for prerequisites.

Required courses (14 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 101*</td>
<td>Biology and Society</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOG 101**</td>
<td>The Natural Environment</td>
<td>3 cr</td>
</tr>
<tr>
<td>IS 201</td>
<td>The Ahupua’a</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOL 124***</td>
<td>Environment and Ecology</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOL 124L***</td>
<td>Environment and Ecology Lab</td>
<td>1 cr</td>
</tr>
</tbody>
</table>

*Biol 171/171L & 172/172L (General Biology I & II plus labs; 8 credits total) may replace BIOL 101. BIOL 171/171L & 172/172L are highly recommended for those students intending to major in an environmental science discipline at a four-year institution.

**GG 101 (Introduction to Geology; 4 credits) may replace GEOG 101.

***Students may also replace the BIOL 124/124L requirement with BIOL 172/172L provided they take BIOL 265/265L in Elective Set 2.

Elective Set 1:
Technology, Utilization, and Management
(6 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQUA 106</td>
<td>Small Scale Aquaculture</td>
<td>4 cr</td>
</tr>
<tr>
<td>AQUA 201</td>
<td>The Hawaiian Fishpond</td>
<td>3 cr</td>
</tr>
<tr>
<td>AQUA 201L</td>
<td>The Hawaiian Fishpond Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>BOT 105</td>
<td>Ethnobotany</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEM 151/151L</td>
<td>Elementary Survey of Chemistry/Lab (4)</td>
<td></td>
</tr>
<tr>
<td>ENVST 199/299</td>
<td>Independent Study (1-4)</td>
<td></td>
</tr>
<tr>
<td>GIS 150</td>
<td>Introduction to GIS/GPS</td>
<td>3 cr</td>
</tr>
<tr>
<td>NREM 250</td>
<td>GIS Application in Environmental Science and Natural Resource Management (2)</td>
<td></td>
</tr>
<tr>
<td>OCN 209</td>
<td>Oceanographic Techniques</td>
<td>3 cr</td>
</tr>
<tr>
<td>OCN 220</td>
<td>Hawai’i Fisheries</td>
<td>3 cr</td>
</tr>
<tr>
<td>ZOOL 105</td>
<td>Hawaiian Use of Fish &amp; Aquatic Invertebrates (3)</td>
<td></td>
</tr>
</tbody>
</table>

Elective Set 2:
Environment and Ecology (6 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Coral Reefs</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOL 200L</td>
<td>Coral Reefs Lab and Field Studies</td>
<td>2 cr</td>
</tr>
<tr>
<td>BIOL 265*/265L*</td>
<td>Ecology and Evolutionary Biology/Lab (4)</td>
<td></td>
</tr>
<tr>
<td>BOT 130</td>
<td>Plants in the Hawaiian Environment</td>
<td>4 cr</td>
</tr>
<tr>
<td>BOT 181</td>
<td>Plant Sea Life</td>
<td>4 cr</td>
</tr>
<tr>
<td>ENVST 199/299</td>
<td>Independent Study (1-4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 101L*</td>
<td>The Natural Environment Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>GG 103</td>
<td>Geology of the Hawaiian Islands</td>
<td>3 cr</td>
</tr>
<tr>
<td>OCN 201</td>
<td>Science of the Sea</td>
<td>3 cr</td>
</tr>
<tr>
<td>ZOOL 106</td>
<td>Hawaiian Marine Invertebrates</td>
<td>3 cr</td>
</tr>
<tr>
<td>ZOOL 107</td>
<td>Identification of Hawaiian Fishes</td>
<td>3 cr</td>
</tr>
<tr>
<td>ZOOL 200</td>
<td>Marine Biology</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

*Biol 265/265L and GEOG 101L are highly recommended for those students intending to enroll in a baccalaureate-level environmental science program.
# ACADEMIC SUBJECT CERTIFICATE -
# BIO-RESOURCES AND TECHNOLOGY

## Plant Biotechnology

The ASC in Bio-Resources and Technology (Plant Biotechnology) will prepare students for careers in biotechnology and qualify them to transfer to bachelor of science degree programs. Knowledge in Plant Biotechnology will be an asset in the application of this technology to bioprocessing production systems, assuring a safe food supply and environment.

This certificate consists of 26 credits. See course descriptions for prerequisites.

### Required courses (16 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 101*</td>
<td>General Botany</td>
<td>4 cr</td>
</tr>
<tr>
<td>BOT 160**</td>
<td>Identification of Tropical Plants</td>
<td>3 cr</td>
</tr>
<tr>
<td>BOT 210***</td>
<td>Phytobiotechnology</td>
<td>4 cr</td>
</tr>
<tr>
<td>MICRO 130</td>
<td>General Microbiology</td>
<td>3 cr</td>
</tr>
<tr>
<td>MICRO 140</td>
<td>General Microbiology Lab</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

*BOT 101* (General Botany) may replace BOT 101. BIOL 171/171L are recommended for students intending to major in General Biotechnology or the Environmental and Microbial Biotechnology at UHM.

**BOT 160** (Plants in the Hawaiian Environment) may replace BOT 160.

***BOT 210*** (Plant Biotechnology) may replace BOT 210.

### Electives (10 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 149</td>
<td>Plant Propagation (3)</td>
</tr>
<tr>
<td>AG 152</td>
<td>Orchid Culture (3)</td>
</tr>
<tr>
<td>BIOL 275</td>
<td>Cell and Molecular Biology (3)</td>
</tr>
<tr>
<td>BIOL 275L</td>
<td>Cell and Molecular Biology Laboratory (1)</td>
</tr>
<tr>
<td>BOT 105</td>
<td>Ethnobotany (3)</td>
</tr>
<tr>
<td>BOT 130</td>
<td>Plants in the Hawaiian Environment (4)</td>
</tr>
<tr>
<td>BOT 181</td>
<td>Plant Sea Life (4)</td>
</tr>
<tr>
<td>BOT 199/299</td>
<td>Independent Study or Summer Field Study Abroad (1-4)</td>
</tr>
<tr>
<td>BOT 205</td>
<td>Ethnobotanical Pharmacognosy (4)</td>
</tr>
<tr>
<td>CHEM 151+</td>
<td>Elementary Survey of Chemistry (3)</td>
</tr>
<tr>
<td>CHEM 151L+</td>
<td>Elementary Survey of Chemistry Laboratory (1)</td>
</tr>
<tr>
<td>CHEM 152</td>
<td>Survey of Organic &amp; BioOrganic Chemistry (3)</td>
</tr>
<tr>
<td>CHEM 152L</td>
<td>Survey of Organic &amp; BioOrganic Chemistry Lab (1)</td>
</tr>
<tr>
<td>FSHN 185</td>
<td>Human Nutrition (3)</td>
</tr>
<tr>
<td>GIS 150</td>
<td>Introduction to GIS/GPS (3)</td>
</tr>
</tbody>
</table>

+Students can take CHEM 151/151L or CHEM 161/161L (General Chemistry I and Lab; 4 credits) or CHEM 162/162L (General Chemistry II and Lab; 4 credits).
ACADEMIC SUBJECT CERTIFICATE - BUSINESS

The ASC in Business is a college credential for students who have completed a specific sequence of credit courses that prepare and qualify them for transfer to a four-year college. This certificate is designed to provide Windward Community College students with recognition for their accomplishments and to also serve as an indication to potential employers that students who have earned an ASC have specific prerequisite business skills.

This certificate consists of 24 credits. The sequence of courses required for the ASC in Business is designed to provide a foundation in accounting, economics, computer science, and written and oral communications, while also qualifying for articulation as transfer credits to four-year college business degree programs. See course descriptions for prerequisites.

Please note that completing the sequence of courses below does not automatically qualify a student for entrance in a four-year college program. There may be other required courses. See your WCC counselor or check the four-year institution’s applicable program requirements or its current catalog.

Required courses (24 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201</td>
<td>Intro to Financial Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ACC 202</td>
<td>Intro to Managerial Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECON 130</td>
<td>Principles of Economics (Microeconomics)</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECON 131</td>
<td>Principles of Economics (Macroeconomics)</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENG 100</td>
<td>Expository Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENG 209</td>
<td>Business Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ICS 101</td>
<td>Tools for the Information Age</td>
<td>3 cr</td>
</tr>
<tr>
<td>SP 151 or SP 251</td>
<td>Personal and Public Speech</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

ACADEMIC SUBJECT CERTIFICATE - PSYCHO-SOCIAL DEVELOPMENTAL STUDIES

The ASC in Psycho-Social Developmental Studies (PSDS) provides pre-professional training for students planning careers in human services (social work, counseling, education, corrections, psychology, and human development). The curriculum combines existing liberal arts courses and cooperative education at designated field sites in partnership with a social service agency or hospital. This certificate is unique because of the linkage and collaboration with liberal arts courses (interdisciplinary).

To earn the PSDS Academic Subject certificate, students must complete a total of 27 credits with a cumulative grade point average of 2.0 or better for all required courses. Twelve credits, including SSCI 193V and SSCI 293V must be taken at Windward Community College. See course descriptions for prerequisites.

Required courses (24 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 100</td>
<td>Survey of Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 170</td>
<td>Psychology of Adjustment or Introduction to Social Problems or Abnormal Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>SOC 218</td>
<td>Introduction to Social Problems or Developmental Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>SOC 231</td>
<td>Survey of General Sociology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 224</td>
<td>Abnormal Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 240</td>
<td>Developmental Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>SOC 100</td>
<td>Cooperative Arts &amp; Science Education</td>
<td>3 cr</td>
</tr>
<tr>
<td>SSCI 193V</td>
<td>Cooperative Arts &amp; Science Education</td>
<td>3 cr</td>
</tr>
<tr>
<td>SSCI 293V</td>
<td>Cooperative Arts &amp; Science Education</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Elective (3 credits)

Select one course from the list below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 200</td>
<td>Cultural Anthropology (3)</td>
</tr>
<tr>
<td>BOT 105</td>
<td>Ethnobotany (3)</td>
</tr>
<tr>
<td>ECON 120</td>
<td>Introduction to Economics (3)</td>
</tr>
<tr>
<td>ICS 100</td>
<td>Computing Literacy and Applications (3)</td>
</tr>
<tr>
<td>POLS 180</td>
<td>Introduction to Hawaiian Politics (3)</td>
</tr>
</tbody>
</table>
ACADEMIC SUBJECT CERTIFICATE - HAWAIIAN STUDIES

The ASC in Hawaiian Studies prepares students for careers in education, the visitor industry, or in fields requiring expertise in Hawaiian subject matter.

This certificate consists of a minimum of 25 total credits with three different areas of emphasis: Language, History/Culture, and Science. See course descriptions for prerequisites.

Required Core Courses for all Areas of Emphasis (11 credits)
- HAW 101 Elementary Hawaiian I (4)
- HAW 102 Elementary Hawaiian II (4)
- HWST 107 Hawai‘i: Center of the Pacific (3)

Required Courses for Area of Emphasis (6-9 credits)
(Select one Area of Emphasis)

Language (8 credits)
- HAW 201 Intermediate Hawaiian I (4)
- HAW 202 Intermediate Hawaiian II (4)
- MUS 177 Introduction to Hawaiian Music (3)

Recommended Electives for Language Emphasis
- AQUA 201 The Hawaiian Fishpond (3)
- AQUA 201L The Hawaiian Fishpond Lab (1)
- ART 189 Ka Unu Pa‘a—Introduction to Hawaiian Art & Design (3)
- ASTR 110 Introduction to Astronomy (3)
- BIOL 200 Coral Reefs (3)
- BOT 105 Ethnobotany (3)
- BOT 130 Plants in the Hawaiian Environment (4)
- IS 160 Polynesian Voyaging & Seamanship (3)
- IS 160L Polynesian Voyaging & Seamanship Lab (1)
- MUS 121F Beginning Slack Key Guitar (1)
- MUS 122F Intermediate Slack Key Guitar I (1)
- MUS 121Z Beginning ‘Ukulele (1)
- MUS 130F Slack Key Guitar Ensemble (1)
- MUS 177 Introduction to Hawaiian Music (3)
- MUS 201 Science of the Sea (3)
- MUS 260 Polynesian Voyaging and Stewardship (3)
- MUS 260L Polynesian Voyaging and Stewardship Lab (1)
- MUS 121F Beginning Slack Key Guitar (1)
- MUS 122F Intermediate Slack Key Guitar I (1)
- MUS 121Z Beginning ‘Ukulele (1)
- MUS 130F Slack Key Guitar Ensemble (1)
- MUS 177 Introduction to Hawaiian Music (3)
- OCN 201 Science of the Sea (3)
- OCN 260 Pacific Surf Science and Technology (3)
- OCN 260L O‘ahu Surf Science and Technology Lab (1)
- POLS 180 Introduction to Hawaiian Politics (3)
- REL 205 Understanding Hawaiian Religion (3)
- ZOOL 105 Hawaiian Use of Fish and Aquatic Invertebrates (3)

History/Culture (6 credits)
- HIST 224 History of Hawai‘i (3)
- HAWST 270 Hawaiian Mythology (3) or REL 205 Understanding Hawaiian Religion (3)

Recommended Electives for History/Culture Emphasis
- MUS 177 Introduction to Hawaiian Music (3)
- IS 160 Polynesian Voyaging & Seamanship (3)
- IS 260 Polynesian Voyaging & Seamanship (3)

Science (9 credits)
- BOT 105 Ethnobotany (3)
- IS 160 Polynesian Voyaging & Seamanship (3)
- IS 260 Polynesian Voyaging & Seamanship (3)

Recommended Electives for Science Emphasis
- ASTR 110 Introduction to Astronomy (3)
- BIOL 200 Coral Reefs (3)
- BOT 130 Plants in the Hawaiian Environment (4)
- BOT 181 Plant Sea Life (4)
- GG 103 Geology of the Hawaiian Islands (3)
- OCEAN 201 Science of the Sea (3)
- ZOOL 107 Identification of Hawaiian Fishes (3)
The following pages list courses of instruction. Courses may not be offered every semester; students should refer to the Schedule of Classes prior to registration. Changes, additions, or deletions may be necessary, and when possible, advance notice will be given.

**Credit**

The number of credits of each course is indicated by a number in parentheses following the title of each course.

**Course Numbering**

Each course is designated by an abbreviation which stands for the subject area of the course, followed by a number.

Courses numbered from 1-99 are generally not applicable for credit toward a baccalaureate degree but some are applicable to certificates.

Courses numbered from 100-199 are initial or introductory courses.

Courses numbered from 200-299 are generally second-year courses in a sequence or development within a field of study.

Undergraduate courses ending in -97 or -98 are experimental courses and will be offered for only one year on this basis.

Courses ending in -99 are independent study courses such as directed reading, research or field work experience.

The suffix “L,” when used, designates a laboratory course which is a companion course (whether required or not) to a given lecture course.

The suffix “V,” when used, designates variable credit. The credit to be earned is arranged with the instructor by each student at the time of registration.

The suffix “WI,” when used in the class schedule, designates a Writing Intensive course.

**Articulation Codes**

**Windward Community College (WCC)**

FW  Written Communication
FS  Symbolic Reasoning
FG  Global & Multicultural Perspectives
FO  Oral Communications
DA  Arts
DH  Humanities
DL  Literatures
DS  Social Sciences
DB  Biological Science
DP  Physical Science
DY  Laboratory Science

*View of the science complex from the balcony of Palikū Theatre.*
Accounting (ACC)

ACC 201 Introduction to Financial Accounting (3)
Introduction to accounting theory and methods used to record and report financial information according to generally accepted accounting principles. Taught as a WebCT hybrid course. Concurrent registration in ACC 201L highly recommended. (3 hrs. lect.)
The student learning outcomes are:
• Describe and understand the nature, environment and role of accounting as it relates to individuals, business organizations, and the business community.
• Analyze, record and report the business activities and transactions of a service and/or merchandising type organization using GAAP.
• Understand and describe what internal controls are, including its basic components and limitation, and apply internal control activities in the control of cash and merchandising transactions.
• Apply generally accepted accounting principles (GAAP) in accounting for financial assets and liabilities including, but not limited to, short term financial assets, inventories, long-term assets, and current liabilities.

ACC 201L Introduction to Financial Accounting Laboratory (1)
An optional laboratory course designed to reinforce concepts learned in ACC 201. Recommended for students with limited accounting background. Concurrent registration in ACC 201 required. (3 hrs. lab.)

ACC 202 Introduction to Managerial Accounting (3)
Introduction to practices and procedures used to report internal operations to management. Topics include manufacturing operations, budgeting, standard costs, cost-volume-profit analysis, product and process costing, statement of cash flows, and financial statement analysis. Taught as a WebCT hybrid course. Concurrent registration in ACC 202L highly recommended. (3 hrs. lect.)

Prerequisite ACC 201 with a grade of "C" or better or equivalent or consent of instructor.
The student learning outcomes are:
• Analyze, record, and report equity and long-term liability transactions related to partnerships and corporations from both an issuer and investor perspective using GAAP.
• Prepare and analyze the Statement of Cash Flows.
• Analyze financial statements using horizontal analysis, vertical analysis, and financial statement ratio techniques.
• Describe the concepts of managerial accounting and explain how they are applied to various business models.
• Analyze, record, and report the activities of a manufacturing company using process cost, job order cost, and standard cost accounting systems.
• Prepare information and reports that may be used by management to plan, direct, motivate, and control a business using Cost-Volume-Profit analysis, incremental analysis, and operational and capital budgeting techniques.

ACC 202L Introduction to Managerial Accounting Laboratory (1)
An optional laboratory course designed to reinforce concepts learned in ACC 202. Concurrent registration in ACC 202 required. (3 hrs. lab.)

Agriculture (AG)

AG 17 Home Gardening
The student learning outcomes are:
• Identify common garden pests.
• Select plants for environmental appropriateness.
• Apply soil amendments for plant growth.

AG 20 Plant Science (3)
The study of plant morphology, anatomy, physiology, classification, growth, growth regulators, and propagation. (2 hrs. lect.; 2 hrs. lect./lab.)
The student learning outcomes are:
• Describe and explain general plant structure and function in relation to plant growth and development.
• Demonstrate knowledge of horticultural principles in the cultivation of plants.
• Examine commercial agricultural enterprises for to become familiar with employment opportunities and the impact of horticulture on our lives.

AG 22 Soils Technology (3)
Identification, preparation and fertilization of soils, amendments and potting media, methods of sterilization, mulching and composting, and soil testing. Lecture/laboratory/field trip course. (2 hrs. lect.; 3 hrs. lab.)
The student learning outcomes are:
• Recommend control measures.
• Identify plant nutrient deficiencies.
• Interpret the results of a soil analysis.
• Demonstrate knowledge of horticultural principles in the cultivation of plants.

AG 20 Agricultural Business Management (3)
Introduces agricultural management practices, including decision making, planning, record keeping, economics, and use of computers in budgeting. Marketing of agricultural commodities included. (3 hrs. lect.)
The student learning outcomes are:
• Create a farm budget.
• Identify marketing strategies.
• Describe basic economic concepts.

AG 32B Plant Disease and Pest Control (1)
This course involves the recognition and control of plant diseases. Topics include: nutrition, bacteria, virus, and fungi. (2 hrs. lect./lab.)
The student learning outcomes are:
• List the characteristics of plant fungus, bacteria, virus, and nematode diseases.
• Identify plant abiotic disorders.
• Recommend control measures.

AG 32C Plant Disease and Pest Control (1)
This course involves the recognition and control of weeds found in landscapes and nurseries in Hawai‘i. (2 hrs. lect./lab.)
The student learning outcomes are:
• Identify common weeds found in Hawaii.
• Recommend appropriate control measures.
AG 32D  Plant Disease and Pest Control (1)
This course involves the recognition and control of insects found in landscapes and nurseries in Hawai‘i. (2 hrs. lect./lab.)
The student learning outcomes are:
- Identify common insects found on plants in Hawaii.
- Recommend appropriate control measures.

AG 36  Pesticide Safety (1)
Pesticide application, formulation, toxicity, transportation, storage, safety equipment, disposal, and rules and regulations governing pesticide use. (1 hr. lect.)
The student learning outcomes are:
- Select proper pesticide application equipment.
- Identify pesticides according to what they control.
- State the general rules and regulations governing the use of pesticides.

AG 40  Turfgrass Equipment (1)
Teaches the operation and maintenance of equipment used in turfgrass operations. (2 hrs. lect./lab.)
Prerequisite: Completion of or concurrent registration in AG 82.
The student learning outcomes are:
- Select the proper tool for the job.
- Demonstrate the effective use of the tool.
- List the advantages and disadvantages of various engine types.

AG 44  Landscape Equipment (1)
Teaches the operation and maintenance of equipment used in landscape operations. (2 hrs. lect./lab.)
Prerequisite: Completion of or concurrent registration in AG 80.
The student learning outcomes are:
- Select the proper tool for a job.
- Demonstrate the safe and effective use of the tool.

AG 45  Irrigation Principles and Design (3)
Fundamentals of irrigation principles, plant, soil, water relationships, soil moisture sensing devices, delivery systems, set up of drip, sprinkler, and surface irrigation systems. Use of chemigation. (2 hrs. lect; 2 hrs. lab.)
The student learning outcomes are:
- Determine water requirements for plant growth.
- Select the appropriate irrigation method for the situation.
- Design a basic drip and sprinkler irrigation system.

AG 49  Plant Propagation (3)
Introduction to the principles and practices of propagation of fruit, vegetable and ornamental crops by seed, cuttings, grafting, budding, layering and division. Lecture/laboratory/field trip course. (2 hrs. lect.; 3 hrs. lab.)
The student learning outcomes are:
- Describe basic plant growth.
- Relate the principles of plant growth to the solution of everyday problems in plant production.
- Understand the influence of environmental factors on plant growth.
- Propagate plants by various methods.

AG 52  Orchid Culture (3)
An extensive study of orchid identification, breeding, growth, and culture. (3 hrs. lect.)
The student learning outcomes are:
- Identify orchid species, hybrids and trace their pedigrees.
- Provide cultural requirements for each genus, including temperature, light intensity, humidity, watering, fertilizing, media composition, pest/disease control and repotting.
- Perform traditional and in vitro propagation techniques.
- Perform orchid breeding and discuss its economic importance.

AG 80  Landscape Maintenance (3)
Application of horticultural principles and practices to the maintenance of plants in the landscape. Emphasis on trees, shrubs, and annuals. (2 hrs. lect.; 2 hrs. lect/ lab.)
Prerequisite: AG 20 or equivalent.
The student learning outcomes are:
- Sketch a landscape plan.
- Install and maintain plants in a landscape.
- Identify common plants found in a landscape.

AG 82  Turfgrass Management (3)
Identification, planting, and maintenance of turfgrass for home, park, and golf areas. Discusses watering, fertilizing, insects, disease, and weed control in turfgrass. (2 hrs. lect.; 2 hrs. lect./lab.)
Prerequisite: Completion of or concurrent registration in AG 20.
The student learning outcomes are:
- Identify turf grasses found in Hawaii.
- Select the proper turf for a site.
- Describe and perform maintenance practices in a golf course situation.
AG 92V  Special Topics (1-4)
This course covers current agricultural topics. The course is designed to have variable credits to coincide with the rigor of the topics. A student may enroll and receive credit for this course more than one time (for different topics). A specific course description will be printed in the schedule of classes. (14 hrs. lect.; 18 hrs. lect./lab.)

Prerequisite: Determined by course.

The student learning outcomes are:
• To be determined by the instructor.

AG 93V  Cooperative Education (1-4)
This course provides college credit for compensated work experience to reinforce knowledge and skills learned in coursework for the Agricultural Technology Program. Related instruction may be provided as appropriate. Seventy-five hours of work per semester is required for each credit earned. Repeatable up to 4 credits, 1 credit applicable toward Certificate of Completion.

Prerequisite: Open to agriculture majors only. Instructor’s permission is required.

The student learning outcomes are:
• Demonstrate the utilization of course work in the field.

AG 100  Agriculture Orientation: Careers (1)
Familiarizes students with different agricultural operations in Hawai‘i through lectures, guest speakers and fieldtrips. (1 hr. lect.)

The student learning outcomes are:
• Describe various careers in agriculture.
• Identify positive and negative aspects of various agriculture careers.

AG 120  Plant Science (3)
The study of plant science, morphology, anatomy, physiology classification, growth, growth regulators, and propagation. Students are required to write a 10 to 15 page research report. (2 hrs. lect.; 2 hrs. lect./lab.) WCC: DB

Prerequisite: AG 20/120 or consent of instructor.

The student learning outcomes are:
• Describe and explain general plant structure and function in relation to plant growth and development.
• Demonstrate knowledge of horticultural principles in the cultivation of plants.
• Examine commercial agricultural enterprises for to become familiar with employment opportunities and the impact of horticulture on our lives.
• Research and report on a horticultural plant.

AG 149  Plant Propagation (3)
Introduction to the principles and practices of propagation of fruit, vegetable, and ornamental crops by seed, cuttings, grafting, budding, layering and division. (3 hrs. lect.)

Recommended Preparation: 12th grade reading level.

The student learning outcomes are:
• Describe basic plant growth.
• Relate the principles of plant growth to the solution of everyday problems in plant production.
• Understand the influence of environmental factors on plant growth.
• Propagate plants by various methods.
• Determine the best form of propagation for a selected plant.

AG 152  Orchid Culture (3)
An extensive study of orchid identification, breeding, growth, and culture. Students are required to write a 10 to 15 page research report. (3 hrs. lect.)

The student learning outcomes are:
• Identify orchid species, hybrids and trace their pedigrees.
• Provide cultural requirements for each genus, including temperature, light intensity, humidity, watering, fertilizing, media composition, and pest or disease control and repotting.
• Perform traditional and in vitro propagation techniques.
• Perform orchid breeding and discuss its economic importance.
• Conduct research and submit research paper.

AG 180  Landscape Maintenance (3)
Application of horticulture practices to the maintenance of plants in the landscape. Emphasis on trees, shrubs, and annuals. Students are required to write a 10 to 15 page research report. (2 hrs. lect.; 2 hrs. lect./lab.)

Prerequisite: AG 20/120 or consent of instructor.

The student learning outcomes are:
• Sketch a landscape plan.
• Install and maintain plants in a landscape.
• Identify common plants found in a landscape.
• Research and report on a landscape topic.

AG 182  Turfgrass Management (3)
Identification, planting, and maintenance of turfgrass for home, park, and golf course areas. Discusses irrigation, fertilization, cultivars, and pest control. Students are required to write a 10 to 15 page research report. (2 hrs. lect.; 2 hrs. lect./lab.)

Prerequisite: AG 20/120 or consent of instructor.

The student learning outcomes are:
• Identify turf grasses found in Hawaii.
• Select the proper turf for a site.
• Describe and perform maintenance practices in a golf course situation.
• Research and report on a turf grass topic.

Aquaculture (AQUA)
AQUA 106  Small Scale Aquaculture (4)
Survey of possibilities of small scale aquaculture. Application of basic biological and ecological concepts and theories to the selection, planning and design of small scale aquaculture systems. Lecture/laboratory/field trip course. (3 hrs. lect.; 3 hrs. lab.)
WCC: DB & DY

AQUA 201  The Hawaii Fishpond (3)
An introduction into the history, development, biology and ecology, management, restoration, and future of Hawaiian fishponds. This course will study traditional Hawaiian fishponds, merging traditional knowledge with the principles of modern Western science. (3 hrs. lect.)

Recommended Preparation: Concurrent registration in AQUA 201L
WCC: DB
WCC: DS

• Critically examine one’s own life and culture in a more critical manner in relation to the lives of people in other cultures.

ANTH 200 Cultural Anthropology (3)
Nature of culture, introduction to basic concepts for analyzing cultural behavior; patterning, integration, and dynamics of culture; culture and the individual. (3 hrs. lect.)
WCC: DS

The student learning outcomes are:
- Explain how anthropologists study and talk about economic, kinship, political, gender, and religious systems, and cultural change.
- Apply the concept of culture to analyze cross-cultural issues in Hawai’i, the US, and the world.
- Identify cross-cultural differences and similarities in multicultural societies, such as Hawai’i and between cultures of the world.
- Describe patterns of culture in societies which utilize various strategies of adaptation to their environments, including subsistence patterns, political organization, social organization, and stratification.
- Carry out ethnographic fieldwork in a subculture on O’ahu and produce a written description of the culture.
- Apply an anthropological perspective and research methods to careers and research outside of the discipline.
- Critically examine one’s own life and culture in a more critical manner in relation to the lives of people in other cultures.

ANTH 175 Polynesian Surf Culture (3)
Provides students with an understanding of surf culture in the Pacific Basin. Environmental and cultural factors are assessed in relation to surfing’s development in Polynesia, integration into Hawaiian culture, decline due to Western influence, and revitalization as a modern recreational activity. The modern surfing industry is also assessed through a cultural perspective that analyzes business practices utilized by surfing organizations today. (3 hrs. lect.)
WCC: DS

ANTH 175L Surf Culture Field Lab (1)
Compliments the lecture materials presented in the ANTH 175. Provides students with an understanding of surf culture in the Pacific Basin using O’ahu as a model for understanding ancient and modern surfing culture in Hawai’i. Field activities include surfing demonstrations and instruction, opportunities to speak with local cultural informants, and field trips to various museums to learn about Hawai’i’s surfing heritage. A coastal tour of O’ahu will be made to study the history of several major surf breaks. (3 hrs. lab.)
WCC: DS

ANTH 150 Human Adaptation (3)
Human variation, physical and cultural, examined for its adaptiveness. Alternative explanations of human behavior, with implications for the future. (3 hrs. lect.)
WCC: DS

The student learning outcomes are:
- Identify how an appreciation of the visual arts’ influences the quality of life.
- Analyze how the elements of form and principles of design work together with the creative process to produce a work of art.
- Describe individual art disciplines, media and specific methods of making art.
- Define major historical and contemporary movements in art and discuss how art reflects its time and culture.
- Execute studio art projects in order to experience visual concepts, art disciplines and media in each of the following:
  - Maintain a comprehensive sketchbook demonstrating understanding of the elements of art.
  - Create at least one basic 2D and 3D studio art project, utilizing media specific to the successful outcome of each project.
  - Execute one project based upon art history or museum observation.

ART (ART)

Note to Students: Some art courses are offered sequentially. However, not all courses are offered each semester.

ART 101 Introduction to the Visual Arts (3)
Art 101 is an introductory course that focuses on the question “What is the nature of visual art?” and the forms and conditions under which art is expressed. Projects will be required. Independent field trips to art galleries may be required. (3 hrs. lect.)
WCC: DA

The student learning outcomes are:
- Demonstrate through finished ceramic objects a basic understanding of the hand building techniques.
- Comprehend and sensitively apply the visual elements of line, shape, color, texture, volume and mass and the design principles of balance, rhythm, dominance, contrast, variation and unity to the execution of ceramic objects.
- Demonstrate a basic understanding of color and color theory as it related to the use of glazes.
- Complete the creative problem-solving process from planning and discovery to implementation and evaluation.
- Demonstrate a basic understanding of drawing as a means of notation, conceptualization and visual organization.
- Demonstrate an awareness of historic and contemporary examples of ceramics.
• Begin to use the ceramic process to express personal imagery.
• Demonstrate an ability to articulate the concepts and intent of a finished ceramic piece.

**ART 105C Ceramics Studio Wheelthrowing I (3)**

Studio experience mainly for non-majors. Introduction to the potter’s wheel. Emphasis on techniques of forming basic wheelthrown shapes on the electric or kick wheel. Emphasis also on decorating, glazing, and firing of ceramic pieces. (2 hrs. lect.; 4 hrs. studio.) WCC: DA

*NOTE: Art Majors: ART 105B and ART 105C must both be taken to receive equivalency at UHM as an art elective. Liberal Arts Students: ART 105B or ART 105C will transfer to fulfill the Humanities DA core requirements.*

The student learning outcomes are:

• Demonstrate through finished ceramic objects a basic understanding of wheel throwing techniques.
• Comprehend and sensitively apply the visual elements of line, shape, color, texture, volume and mass and the design principles of balance, rhythm, dominance, contrast variation and unity to the execution of ceramic objects.
• Demonstrate a basic understanding of color and color theory as it relates to the use of glazes.
• Complete the creative problem-solving process from planning and discovery to implementation and evaluation.
• Demonstrate a basic understanding of drawing as a means of notation, conceptualization and visual organization.
• Demonstrate an awareness of historic and contemporary examples of ceramics.
• Begin to use the ceramic process to express personal imagery.
• Demonstrate an ability to articulate the concepts and intent of a finished ceramic piece.

**ART 107 Elementary Studio: Photography (3)**

Studio experience mainly for non-majors. An introduction to black and white photography emphasizing a variety of picturemaking techniques. Assignments and field trips. Student must have film camera with adjustable shutter speeds and aperture settings. (2 hrs. lect.; 4 hrs. studio.) WCC: DA

*Recommended Preparation: ART 101.*

The student learning outcomes are:

• Operate your camera to obtain correctly focused and exposed negatives, and use aperture and shutter speeds to create an intended image.
• Develop black and white film and make contact prints.
• Operate an enlarger to make black and white prints that express, enhance and communicate an intended image.
• Process and present photographic prints that aesthetically expresses your feelings, ideas and/or concepts.

**ART 108 Elementary Studio: Drawing and Painting (3)**

This is an introductory studio experience focusing on basic drawing, color, and acrylic painting. The course is appropriate for all students, from beginner to more advanced artist. This course will emphasize appreciation of students’ creativity through art processes, while developing a virtual art language. Repeatable once for a total of 6 credits that may be applied to the AA degree. (6 hrs. lect.;ab.) WCC: DA

*Recommended Preparation: ART 101.*

The student learning outcomes are:

• Comprehend and use basic drawing techniques to create finished drawings.
• Use appropriate acrylic painting and color techniques to make finished paintings.
• Evaluate the creative problem-solving process to complete a final composition.
• Evaluate and critique works of art by using art terminology.

• Distinguish seeing from looking.
• Create a personal drawing and painting style through art practice and theory.

**ART 111 Introduction to Watercolor Painting (3)**

Art 111 is an introduction to watercolor painting materials and techniques. Repeatable once for a total of 6 credits. (6 hrs. lect./lab.) *Recommended Preparation: ART 101 and ART 113.*

WCC: DA

The student learning outcomes are:

• Complete assignments that reflect the use of watercolor techniques and design principles in watercolor composition.
• Use and care properly for watercolor painting tools.
• Discuss watercolor painting concepts and techniques.
• Critique work based on watercolor concepts and techniques.

**ART 113 Introduction to Drawing (3)**

Art 113 is an introduction to the materials and techniques of drawing, focusing on line drawing, rendering, and the use of perspective. This course will include the study of the drawings of old and modern masters. Repeatable once for a total of 6 credits. (6 hrs. lect./lab.)

*Recommended Preparation: ART 101.*

WCC: DA

The student learning outcomes are:

• Complete assignments that reflect the use of basic visual elements to create an illusion of space and form.
• Use linear perspective.
• Demonstrate through drawings, skill in hand-eye coordination.
• Use skillfully a variety of drawing materials and techniques.
• Identify drawing materials and techniques used by the old and modern masters.

**ART 114 Introduction to Color (3)**

Art 114 is an introductory course focusing on color theory and the application of color as related to studio art practice. (6 hrs. lect./lab.)

*Recommended Preparation: ART 101.*

WCC: DA

The student learning outcomes are:

• Formulate a personal and expressive sense of color.
• Recognize and comprehend color interaction, color phenomena, color theories and vocabulary specific to color study.
• Master skills in paint mixing, color matching and application as well as other art processes, to creatively solve color problems.
• Utilize the multiple dimensions of color: hue, value, intensity and temperature in specific color projects.
• Recognize and properly use the three types of color applications: opacity, transparency and optical mixing.

**ART 115 Introduction to 2D Design (3)**

Art 115 is an introductory course which focuses on the basic design concepts, elements and principles of art. This course emphasizes projects in basic two-dimensional design. (6 hrs. lect./lab.)

*Recommended Preparation: ART 101.*

WCC: DA

The student learning outcomes are:

• Become familiar with and successfully use the principles of design to develop individual creative designs and dynamic compositions.
• Use a variety of strategies to create and evaluate the creative problem-solving process through intuitive processes, revisions and risk-taking, to arrive at a final composition.
• Demonstrate proper use of diverse media and materials to produce a work of art.
• Evaluate and critique works of art and presentation by using art terminology.
• Identify historic references within the theory and practice of design.
• Organize a portfolio of works that demonstrate aesthetic understanding of the principles of design, elements of form, and appropriate presentation of art.

ART 116 Introduction to Three-Dimensional Composition (3)
Focuses on building three-dimensional structures and basic sculptural forms using various approaches and materials, as well as the designing of creative environments. The student’s awareness of the natural order and the aesthetic aspect of design is broadened and the student learns the use of texture, volume, color, temperature, proportion, space, time and movement in a three-dimensional form. Recommended Preparation: ART 113 or consent of instructor. WCC: DA

The student learning outcomes are:
• Demonstrate an understanding of the following sculpting processes: assemblage, carving, mold making, metal construction and casting.
• Utilize creative problem solving.
• Demonstrate and sensitively apply the visual elements of line, texture, color, volume and mass and the design principles of balance, directional force, rhythm, dominance, contrast, variation, and proportion.
• Demonstrate a basic understanding of drawing as a means of notation, conceptualization and visual organization.
• Demonstrate an awareness of historic and contemporary examples of sculpture.
• Begin to use the sculpting process to express personal imagery.

ART 123 Introduction to Oil Painting (3)
Art 123 is an introduction to the materials and techniques of oil painting. Classical painting techniques will be emphasized. Repeatable once for a total of 6 credits. (6 hrs. lect./lab.) Recommended Preparation: ART 101, 113 and 114.
WCC: DA

The student learning outcomes are:
• Execute paintings using traditional painting techniques.
• Complete the technical process from preparation of the ground (canvas) to the completion of a painting.
• Execute underpainting, grisaille and limited palette painting techniques.
• Apply the visual elements of line, shape, light and shadow, color, texture and space as well as the design principles of balance, rhythm, focal points, implied movement and unity to a painting.
• Discuss oil painting concepts and techniques.
• Critique work based on oil painting concepts and techniques.

ART 199V Special Projects in Painting
The student learning outcomes are:
• Skillfully use acrylic painting techniques with understanding of composition and color theory to create a painting.
• Create a personal painting style through art practice and theory.
• Embrace creative expression.
• Acquire confidence and express one’s own ideas in the process of painting.

ART 207 Introduction to the Techniques and Esthetics of Photography (3)
Basic techniques and esthetics of black and white photography; the camera as a tool for communication and self-expression. Student must have a film camera with adjustable shutter speeds and aperture settings. Repeatable up to 6 credits, 6 credits applicable toward A.A. degree. (2 hrs. lect.; 4 hrs. studio.) Prerequisite: ART 107, or consent of instructor. WCC: DA

The student learning outcomes are:
• Conceptualize an idea and translate it photographically into a visual form.
• Use different black and white films and development procedures to convey and express different photographic aesthetics.
• Express through refined photographic techniques your ideas, feelings and/or concepts.
• Produce photographic prints that require proficient skill in darkroom techniques.

ART 208 Intermediate Photo: Color Studio (3)
Color in photography emphasizing communication and self-expression. Lectures, demonstrations and projects. Students must supply film camera and materials. (2 hrs. lect.; 4 hrs. studio.) Prerequisite: ART 101, 107, or consent of instructor.
WCC: DA

ART 213 Intermediate Drawing (3)
Art 213 is a continuation and development of drawing ideas and skills introduced in Art 113. A variety of materials, techniques and concepts are explored, particularly pertaining to drawing concepts unique to the 20th century. Portraiture will also be introduced. Repeatable up to 6 credits. (6 hrs. lect./lab.) Recommended Preparation: ART 101 and ART 113.
WCC: DA

The student learning outcomes are:
• Exhibit a continued development of the skills and craft of drawing, as introduced in ART 113.
• Use perspective traditionally as well as in imaginative and creative ways.
• Draw portraits from life.
• Execute drawing concepts unique to the 20th century.
• Use drawing skills necessary to visually express creative ideas.

ART 214 Introduction to Life Drawing (3)
Art 214 is an introductory figure drawing course. Anatomical construction, light, space, diagrammatic analysis, and thematic content will be studied through the drawing process. Repeatable once for a total of 6 credits. (6 hrs. lect./lab.) Prerequisite: ART 113 or consent of instructor. Recommended: ART 101 and 213.
WCC: DA
The student learning outcomes are:

- Draw the human figure accurately and expressively.
- Investigate through drawing, the interaction of structure, anatomy, design and expression, as it relates to the figure.
- Demonstrate an understanding of the relationship between the internal structure of the figure and its effects on topography.
- Discuss figure drawing concepts and techniques.
- Critique work based on figure drawing concepts and techniques.

**ART 220 The Windward Atelier (Intensive Study in Drawing and Painting) (6)**

Art 220 is an intensive course of study in the classical techniques of drawing and painting. Cast drawing, portraiture and figure painting will be the focus of instruction. The Windward Atelier is designed primarily for those students who have some prior studio experience in drawing. (34 hrs. lect./lab. for 6 weeks.)

**Prerequisite:** Acceptance through a drawing portfolio which demonstrates evidence of skills in observation drawing.

The student learning outcomes are:

- Make accurate drawings and paintings from observation.
- Perceive and record values accurately and use various sighting techniques in order to develop observational drawing and painting skills.
- Draw from classical plaster casts using mapping, memory and sighting techniques.
- Execute the painting process from canvas preparation to the completion of a painting.
- Execute underpainting, grisaille and limited palette painting techniques.
- Properly care for brushes and wooden palette, stretch and prepare a canvas, and make the Maroger Medium.
- Apply the visual elements of line, shape, light and shadow, color, texture, and space, and the design principles of balance, rhythm, focal points, implied movement and unity to cast drawing, portraiture and figure painting projects.
- Discuss classical drawing and painting concepts and techniques.
- Critique work based on classical drawing and painting concepts and techniques.

**ART 224 Painting from Life (3)**

Art 224 is a survey of the figurative tradition of painting, using the model as the primary subject matter. This course is an intensive studio experience of painting from the model. Repeatable once for a total of 6 credits that may be applied to the AA degree. (6 hrs. lect./lab.)

**Prerequisite:** ART 123 and 214, or consent of instructor.

**WCC: DA**

The student learning outcomes are:

- Create paintings that exhibit a working knowledge of the figurative tradition of painting from the Renaissance to the present.
- Paint the human figure accurately and expressively.
- S sensitively apply the visual elements of line, shape, light and shadow, color, texture and space, and the design principles of balance, rhythm, focal points, implied movement and unity to figure painting projects.
- Execute the painting process from canvas preparation to the completion of a painting.
- Create limited palettes, and explore color harmony and balance within a painting.
- Use art terminology to evaluate paintings.

**ART 243 Ceramics Studio Handbuilding II (3)**

Development of handbuilding techniques, sculptural and vessel concepts, and surface treatment and glazing. Repeatable up to 6 credits, 6 credits applicable toward A.A. degree. (6 hrs. lect./lab.)

**Prerequisite:** ART 105B or consent of instructor.

**Recommended Preparation:** ART 101, 116.

**NOTE:** Art Majors: ART 243 and 244 must both be taken to receive equivalency at UHM as ART 242, Introduction to Ceramics.

**WCC: DA**

The student learning outcomes are:

- Demonstrate an understanding of the three basic hand-building techniques and the potential of each as structural and decorative elements.
- Demonstrate an understanding of two different clay bodies and their potential as structural and decorative elements.
- Demonstrate an awareness of the varieties of materials and techniques of the glazing and firing processes.
- Demonstrate innovative and inventive problem solving through creative decision-making and insightful articulation of finished ceramic vessels and sculptural forms.
- Demonstrate an ability to generate creative ideas through three-dimensional visualization techniques.
- Demonstrate an understanding of color and color theory as it relates to three-dimensional form in the use of glazes and oxides.
- Demonstrate an understanding of historic and contemporary examples of hand built ceramics.
- Demonstrate an understanding of drawing as a tool for conceptualization and documentation of personal imagery and technical investigation of the ceramic process.
- Demonstrate an appreciation for and awareness of ceramic objects.
- Demonstrate an awareness of the visual elements and the design principles while creating ceramic vessels and sculptural forms.
- Demonstrate an ability to articulate the concepts and intent of a completed piece.
ART 244  Ceramics Studio Wheelthrowing II (3)
Development of wheelthrowing techniques, vessel and structural concepts, and surface treatment and glazing. Repeatable up to 6 credits, 6 credits applicable toward A.A. degree. (2 hrs. lect.; 4 hrs. studio.)
Prerequisite: ART 105C, or consent of instructor.
NOTE: Art Majors: ART 243 and 244 must both be taken to receive equivalency at UHM as ART 242, Introduction to Ceramics.
WCC: DA
The student learning outcomes are:
• Demonstrate through completed projects, a basic proficiency in wheel throwing techniques.
• Demonstrate an understanding of color and color theory through the use of various decorated techniques: slips, oxides, engobes, stains, and glazes.
• Demonstrate an understanding of clay bodies, oxidation and reduction firing, and of the basic chemical compositions of glazes.
• Demonstrate an awareness of the visual elements and the design principles while creating ceramic vessels and sculptural forms.
• Demonstrate innovative and inventive problem solving, through creative decision-making and insightful articulation of finished ceramics vessels and sculptural forms.
• Demonstrate an ability to generate creative ideas through three-dimensional visualization techniques.
• Demonstrate an understanding of drawing as a tool for conceptualization and documentation of personal imagery and technical investigation of the ceramic process.
• Demonstrate an understanding of historic and contemporary examples of wheel made ceramics.
• Demonstrate an ability to articulate the concepts and intent of a finished ceramic object.

ART 253  Figure Modeling (3)
Modeling the human figure in clay, with emphasis on the basic skeletal structure and muscles in relation to surface modulation, proportion, volume and gesture. (6 hrs. lect./lab.)
Prerequisite: ART 101, 113, or 116 or Instructor's consent.
Recommended Preparation: ART 105B.
WCC: DA

ART 260  Gallery Design and Management (3)
Design theory and techniques for presentation of art work and mounting an exhibition. Repeatable up to 6 credits, 6 credits applicable toward A.A. degree. (1 hr. lect.; lab variable, in gallery)
Prerequisite: Consent of instructor.
WCC: DA

ART 269C  Study Abroad: Japanese Cultural Tour—Ceramic Pottery and Kilns (4)
An on-site study of Japanese pottery and kilns, using clay and sumi brush to analyze, understand and appreciate the development of Japanese Ceramic Art.
Prerequisite: ART 105, 105B, or 105C or consent of instructor.

ART 269V  Study Abroad (Designated Region, Variable Credit) (1-6)
An on-site study of the art/architecture of a designated location(s), using lectures and discussions and/or an art studio medium as a tool to analyze, understand and appreciate the development of this region's art/architecture. (30 hrs. lect./lab. per credit trip total)
Prerequisite: Meet with instructor for approval.
WCC: DH

ART 270  Introduction to Western Art (3)
The study of major developments in Western art from prehistory to the present. (3 hrs. lect.)
Recommended Preparation: ART 101 or consent of instructor.
WCC: DH
The student learning outcomes are:
• Think and act with intellectual integrity to access, critically evaluate and synthesize information from scholarly resources to make or express critical judgments about historical and contemporary issues in Western art.
• Demonstrate understanding that art is a visible manifestation of cultural values, which mirror its time period.
• Incorporate writing as a tool for analyzing art forms.
• Make a critical comparison of the past and present in Western art.
• Analyze style both descriptively and comparatively.

ART 280  Introduction to Eastern Art (3)
Major developments in the Arts of Asia. (3 hrs. lect.)
Prerequisite: ART 101 or consent of instructor.
WCC: DH

Astronomy (ASTR)

ASTR 110  Introduction to Astronomy (3)
Introduction to the astronomical universe for non-science students. (3 hrs. lect.)
WCC: DP
The student learning outcomes are:
• Outline the development of astronomy from ancient times to present and explain the role of the scientific method in this historic context.
• Describe and explain the apparent motions of the celestial bodies, especially as related to naked-eye observations.
• Identify the appropriate instruments used by astronomers to understand the universe.
• Outline the origins of our solar system and appraise the leading cosmological theories of the origin of the universe.
• Describe the physical and chemical properties of the objects in our solar system and apply the concept of comparative planetology.
• Describe the physical and chemical nature of stars, and especially our sun, and apply the astronomical techniques used to measure stellar properties.
• Outline the evolutionary stages in a star’s life and compare and contrast the structure of our Milky Way and other galaxies.
• Apply astronomical concepts to the search for extraterrestrial life.

**ASTR 110L Introduction to Astronomy Laboratory (1)**
Demonstration of astronomical principles through laboratory observations and analysis of astronomical data. Not required for ASTR 110. (3 hrs. lab.)
**Prerequisite:** Credit or concurrent enrollment in ASTR 110 or consent of instructor.

**WCC: DY**
The student learning outcomes are:
• Apply the scientific method to a selected group of topics in astronomy.
• Collect, report and analyze data obtained in a laboratory and/or observatory setting in a manner exhibiting organization, proper documentation and critical thinking.
• Demonstrate a basic understanding of the use of standard astronomical instruments.
• Perform image analysis, especially as related to astronomical photographic data.
• Identify environmental factors, which affect the outcome of an experiment or observation and apply basic error analyses techniques.
• Demonstrate a working knowledge of computer on-line and Internet astronomical programs.

**ASTR 130 Introduction to Archaeoastronomy (3)**
Introduction to the interdisciplinary study of cultures and astronomy for non-science majors. Topics include naked-eye astronomy, myths and rituals, calendar systems, architectural alignments and navigation. (3 hrs. lect.)
**Recommended Preparation:** ASTR 110.
**WCC: DP**

**ASTR 281 Space Explorations (3)**
Current topics in planetary exploration, extraterrestrial life, and space resources and colonization. (3 hrs. lect.)
**Prerequisite:** ASTR 110 or consent of instructor.
**WCC: DP**

The student learning outcomes are:
• Outline the characteristics and origins of objects in our solar system, including the sun, planets, moons, meteoroids, asteroids and comets.
• Compare and contrast terrestrial and jovian worlds and apply geological and atmospheric concepts to comparative planetology.
• Explain the effects and implications of collisional impacts on planetary surfaces.
• Apply the laws of planetary motion and celestial mechanics.
• Outline the historical development of manned and unmanned space flight.
• Identify and describe the appropriate instruments, detectors and space probes used by astronomers and space scientists to explore the solar system, especially in the area of remote sensing.
• Discuss the future of space colonization and exploitation.
• Discuss the nature and origin of life on earth and apply the astronomical concepts related to the search for extraterrestrial life.

**ASTR 294V Special Topics in Astronomy (1-4)**
This course covers current topics in astronomy. The course is designed to have variable credit to coincide with the rigor of the topic. A student may enroll and receive credit for this course more than one time (for different topics). A course description will be presented in the schedule of classes. (1-4 lect. hrs.)
**Prerequisite:** ASTR 110 or consent of instructor.
**WCC: DP**
The student learning outcomes are:
• Identify the important concepts and facts presented for the topic under examination.
• Make inferences and draw conclusions from the special topics under discussion.
• Apply skills appropriate to the topic under discussion.
• Evaluate the science and technology of astronomy and space science.

**BIOLOGY (BIOL)**

**BIOL 100 Human Biology (3)**
Introduction to structure and functions of cells, tissues, organs, and systems of the human body. Topics related to physical fitness, nutrition, health, and disease. *Not intended for science majors.* Students who have received credit for or are currently enrolled in ZOOL 101 may not receive credit for BIOL 100. (3 hrs. lect.)
**Prerequisite:** Grade of C or higher in ENG 21, or placement in ENG 100, or consent of instructor.
**WCC: D8**

**BIOL 100L Human Biology Laboratory (1)**
Laboratory to accompany BIOL 100 (Human Biology). Emphasizes the application of the scientific method, basic laboratory methods and procedures in biology, and facts and principles of human anatomy and physiology. (3 hrs. lab.)
**Prerequisite:** Prior or concurrent enrollment in BIOL 100 or equivalent preparation or consent of instructor.
**WCC: DY**

**BIOL 101 Biology and Society (4)**
Historical development of scientific concepts, characteristics, and interaction of science and society from the perspective of biological sciences. (3 hrs. lect.; 3 hrs. lab.)
**Eligibility for placement in ENG 100, or consent of instructor.**
**WCC: D8 & DY**

**BIOL 124 Environment & Ecology (3)**
A study of human ecology through the analysis of the interrelationships between science and technology, the means these provide for manipulation of environment and the effects of this manipulation on the environment and on human populations. Lecture/field trip course designed for non-science majors. (3 hrs. lect.)
**WCC: D8**

**BIOL 124L Environment & Ecology Laboratory (1)**
Companion laboratory class to BIOL 124, Environment and Ecology. This class, providing hands-on experience in the laboratory and in the field, enhances the student’s understanding of basic environmental science and ecological concepts presented in BIOL 124. (3 hrs. lab.)
**Prerequisite:** BIOL 124 or concurrent registration in BIOL 124 or consent of instructor.
**WCC: DY**
Biol 171 General Biology I (3)
Introductory biology for all life science majors. Cell structure and chemistry, growth, reproduction, genetics, evolution, viruses, bacteria, and simple eukaryotes. (3 hrs. lect.)
Prerequisite: Chem 151 or 161 (or concurrent enrollment) or equivalent preparation or consent of the instructor.
Corequisite: Biol 171L or consent of the instructor.
Recommended Preparation: High school biology.
WCC: DB

Biol 171L General Biology Lab I (1)
Laboratory to accompany Biol 171. (3 hrs. lab.)
Prerequisite: Chem 151L or 161L (or concurrent enrollment) or equivalent preparation or consent of the instructor.
Corequisite: Biol 171 or consent of the instructor.
Recommended Preparation: High school biology and college level reading and writing skills.
WCC: DY

Biol 172 General Biology II (3)
Continuation of Biol 171. Anatomy, physiology, and systematics of plants and animals, behavior, ecosystems, populations, and communities. (3 hrs. lect.)
Prerequisite: Biol 171 and 171L.
Corequisite: Biol 172L.
Recommended Preparation: High school biology and college level reading and writing skills.
WCC: DB

Biol 172L General Biology Lab II (1)
Laboratory to accompany Biol 172. (3 hrs. lab.)
Prerequisite: Biol 172;
Corequisite: Biol 172L.
Recommended Preparation: High school biology and college level reading and writing skills.
WCC: DY

Biol 200 Coral Reefs (3)
Introduction to the biology, ecology and geology of stony corals and the reef structures they build. Topics include, but not limited to, the following: photobiology, biochemistry, physiology, reproduction, ecology, biogeography and evolution of stony corals; contributions made by other members of the coral reef community, such as algae, invertebrates, fish, sea turtles, sea birds, and marine mammals; reef formation and geomorphology; corals as resources for human utilization and the impacts of human activities upon reefs throughout the world. Emphasis will be on Hawai‘i’s coral reefs, but comparisons will be made among reefs from other areas. (3 hrs. lect.)
WCC: DB

Biol 200L Coral Reef Laboratory and Field Studies (2)
Laboratory and field studies of the biology, ecology, and geology of stony corals and the reef structures they build; companion course to Biol 200. (6 hrs. lab.)
Prerequisite: Biol 200 (or concurrent) and Math 27 (or equivalent preparation) or consent of instructor.
WCC: DY

Biol 265 Ecology and Evolutionary Biology (3)
Principles of ecology and evolution for life science majors stressing integrated approach and recent advance. (3 hrs. lect.)
Prerequisite: Biol 171/171L and 172/172L; or one year of introductory college biology plus labs; or equivalent preparation; or consent of the instructor.
Co-requisite: Biol 265L; or consent of the instructor.
WCC: D8

Biol 265L Ecology and Evolutionary Biology Lab (1)
Laboratory to accompany Biol 265. (3 hrs. lab.)
Prerequisite: Biol 265; or consent of the instructor.
Recommended Preparation: ICS 101 or ICS 105B-E; or familiarity with spreadsheets, word processing, and Internet browsers.
WCC: DY

Biol 275 Cell and Molecular Biology (3)
Integrated cell and molecular biology for life science majors. Modern advances in recombinant DNA technology. (3 hrs. lect.)
Prerequisite: Biol 171/171L and 172/172L, Chem 152/152L or Chem 272/272L; or one year of introductory college biology plus labs; or equivalent preparation; or consent of the instructor.
Co-requisite: Biol 275L; or consent of the instructor.
WCC: D8

The student learning outcomes are:
• Describe the principles of cytology including cell organization, structures and functions.
• Describe cell biochemistry including macromolecules of the cells, enzymes, membrane transport, cell signaling, and energy flow in cells during respiration and photosynthesis.
• Describe the principles of genetics including DNA replication, protein synthesis, meiosis, meiosis, genetic recombination and gene expression.

Biol 275L Cell and Molecular Biology Lab (1)
Laboratory for cell and molecular biology. (3 hrs. lab.)
Prerequisite: Biol 275; or consent of the instructor. Recommended Preparation: ICS 101 or ICS 105B-E, calculus or algebra.
WCC: DY

The student learning outcomes are:
• Operate equipment used in cell and molecular biology laboratory.
• Conduct experiments including DNA/RNA/protein extraction and electrophoresis, enzyme kinetics, ELISA, RFLP, PCR, gene expression.
• Produce lab reports using the standard scientific format.

Botany(BOT)

Bot 101 General Botany (4)
Introduction to plant structure, function, reproduction, and evolution; plants in relation to the environment and human activities. Lecture/laboratory/field trip course. (3 hrs. lect.; 3 hrs. lab.)
Recommended Preparation: High school biology.
WCC: DB & DY

The student learning outcomes are:
• Discuss basic concepts of plant morphology, anatomy, physiology, cytology, taxonomy and genetics.
• Discuss life cycles of division in Thallophyta, Bryophyta, Pteridophyta and Spermatophyta.
• Discuss interrelationship between plants and animals, and socio-economic importance of plants on humans.
• Discuss plant biotechnology.
• Operate dissecting and compound microscopes.
• Perform traditional and in vitro propagations.
BOT 105 Ethnobotany (3)
Study of Polynesian introduced plants and some native plants, and their role in Hawaiian culture, particularly during PreCook period. Lecture/field trip course. Meets Social Science area requirement. (3 hrs. lect.)
WCC: DS
The student learning outcomes are:
- Identify plants of major importance in various aspects of Hawaiian, Asian and Pacific Islands cultures.
- Describe general plant structures, parts of the plants that have been utilized, their specific uses and methods of propagation.

BOT 130 Plants in the Hawaiian Environment (4)
Introduction to the evolution of plant communities and species of Hawaiian ecosystems; ecological interactions; observations, identification and systematics of native and introduced flora. Lecture/laboratory/field trip course. (3 hrs. lect.; 3 hrs. lab.)
WCC: DB & DY
The student learning outcomes are:
- Discuss geological history of the Hawaiian Islands and natural history of plants in Hawaii.
- Discuss the arrival, establishment, major evolutionary trends and adaptive radiation of some of the surviving native species.
- Discuss natural and human-mediated changes in the ecosystems, plant succession, and interaction between native and introduced species of plants.
- Discuss botanical terminology for use in identifying native Hawaiian plants.

BOT 160 Identification of Tropical Plants (3)
Nontechnical course in identification of common plants of tropics; includes native and introduced flora. (3 hrs. lect.)
WCC: DB
The student learning outcomes are:
- Operate dissecting microscopes.
- Recognize unique vegetative and generative characteristics of plant families.
- Use manuals, flora and monographs to identify plants.
- Prepare herbaria.

BOT 181 Plant Sea Life (4)
Survey of marine plants. Major macroalgal groups, phytoplankton, and marine flowering plants. General structure, life histories, ecology, distribution, interaction with certain animal groups, mariculture, industrial, and food uses. Lecture/laboratory/field trip course. (3 hrs. lect.; 3 hrs. lab.) Recommended Preparation: Ability to swim.
WCC: DB & DY

BOT 199/299: INDEPENDENT STUDY
The student learning outcomes are:
- Perform research in botanical sciences from the following selected areas: tissue culture, bioprocessing, bioengineering, ethnopharmacognosy, food medicine, ethnobotany, or phylogenetic study.
- Produce a scientific paper using the standard scientific format.

BOT 205 Ethnobotanical Pharmacognosy (4)
A study of medicinal plants of Hawai‘i, their characteristics, and the extraction, separation, isolation and identification of their chemical constituents for possible uses in pharmaceuticals or in their natural state. This course is designed to train students for careers in plant and medical biotechnology. Lecture and laboratory/field trip course. (3 hrs. lect.; 3 hrs. lab.)
Prerequisite: Credit or concurrent enrollment in any of these courses: BOT 101, BOT 105, BOT 130, MICR 130, MICR 140, BIOL 172/172L, CHEM 152/152L or consent of instructor. Recommended: High school biology, chemistry and math.
WCC: DB & DY
The student learning outcomes are:
- Discuss theories and principles in the study of medicinal and nutritious plants.
- Perform plant extraction, separation, isolation and identification of their chemical constituents for possible uses in pharmaceuticals and nutraceuticals.
- Discuss ethics, intellectual property rights and conservation of traditional knowledge.
- Produce lab reports using the standard scientific format.

BOT 210 Phytobiotechnology (4)
Introduction to practical aspects of Plant Biotechnology. Topics include micropropagation techniques, such as plant tissue, cell and protoplast cultures: DNA-based technologies, such as DNA extraction, DNA sequencing, PCR; and methods of plant genetic engineering. This course is designed to train students for careers in advanced agriculture technology and industry. (3 hrs. lect.; 3 hrs. lab.)
Prerequisite: Concurrent registration in BOT 101, or AG 152, or MICR 130 and MICR 140, or BIOL 171/171L, or consent of instructor; eligibility for placement in MATH 25. Recommended Preparation: High school biology and chemistry, and MATH 24.
WCC: DB & DY
The student learning outcomes are:
- Apply the principles of genetics.
- Discuss and perform experiments including plant/bacterial/human DNA/protein electrophoresis, Southern and Western blots, plant genetic engineering using biolistic bombardment and bacterial gene transformation.
- Apply bioinformatics and DNA sequencing.
- Discuss ethical issues, risks and benefits of biotechnology.
- Produce lab reports using the standard scientific format.

Business Technology (BUSN)

BUSN 20B Basic Keyboarding, Part 1 (1)
In this introductory course you’ll learn the following: basic computer parts, keying alphabetic and punctuation keys by touch on a computer and proper keyboarding techniques. (1 hr. lect.)
The student learning outcomes are:
- Accurately and productively key text using proper techniques.
- Use the computer operating system to log in, run keyboarding applications, exit the program, and shut down.
- Demonstrate workplace values in completing assignments.

BUSN 89 Electronic Calculating (1)
This course gives students practice with real world skills used in the modern business environment; emphasizes proper technique and speed with the ten-key pad found on calculators, computer keyboards, and cash registers; develops the ability to work with numbers and use of a calculator to perform business computations. (1 hr. lect.)
The student learning outcomes are:
- Demonstrate speed and accuracy on numeric keypad.
- Demonstrate ability to use common calculator functions.
BUSN 121 Introduction to Word Processing (3)
Introduces computer terminology and proper keyboarding skills. Use of the Internet to access world-wide network searches for information will be included. (3 hrs. lect.)
The student learning outcomes are:
• Key by touch when inputting information (alphabetic, numeric, and symbolic), using proper techniques with accuracy.
• Use the computer’s operating system to manage documents and folders.
• Produce business documents using word processing software. Produce basic mailable business documents in a timely manner using word processing software.

BUSN 123 Word Processing for Business (3)
Uses advanced features from a word processing program to create business documents emphasizing production and proofreading. Integrates knowledge of the Internet and the computer. Includes timed computer keyboarding skills for creating and editing business documents and sending electronic attachments. (3 hrs. lect.)
Recommended Preparation: 35 gwam; or “C” or better in OAT 21B/C/D, OAT 121, BCIS 20; BUSN 121, BUSN 121B/C/D; or instructor approval.
The student learning outcomes are:
• Apply advanced features of current word processing software to produce mailable documents, which facilitate timely internal and external business communication.
• Apply ethical and professional practices to perform business tasks, e.g.:
  a. compliance with copyright laws
  b. meet deadlines
  c. adhere to codes of conduct.
• Use electronic operating system software to organize and maintain folders and files.
• Key information accurately and efficiently to meet business standards.

BUSN 166 PROFESSIONAL EMPLOYMENT PREPARATION
Facilitates employment search by emphasizing professional techniques and standards in the preparation of application forms, resumes, cover letters, and employment interviews. (1 hr. lect.)
Recommended Preparation: ENG 22, keyboarding skills, and knowledge of word processing.
The student learning outcomes are:
• Integrate job interview preparation techniques into a live interview.
• Utilize resources needed to find a job.
• Assemble a career portfolio for ongoing career development.

BUSN 188 Business Calculations (3)
Introduces various quantitative computational procedures used in accounting and finance such as present and future value concepts, payroll, inventory, and international currency exchange rates. Utilization of the electronic 10-key pad as a tool for calculating will be stressed. (3 hrs. lect.)
Recommended Preparation: Placement into MATH 22 and completion of/or concurrent enrollment in ENG 21 or ENG 22 or equivalent.
The student learning outcomes are:
• Apply mathematical functions to arrive at calculations to be used in business decisions.

• Interpret how calculations are used in making business decisions.
• Operate ten-key by touch at a minimum rate of 100 ndpm.

BUSN 193V COOPERATIVE EDUCATION (1-4)
Cooperative Education provides practical career-related work experience through a program used nationally in colleges and universities to apply classroom knowledge and to develop job competencies. Full-time or part-time work in private and public sectors of the business, government and industrial communities is utilized for this program. The number of credits earned depends upon the number of hours spent at the job station during the semester. To receive credit for cooperative education, a student must complete a minimum of 60 work hours per credit and attend cooperative education seminars twice a month. Work must be supervised by an approved employer in the public or private sector.
Prerequisite: Department/instructor approval.
The student learning outcomes are:
• Perform duties at a worksite according to industry standards.
• Evaluate career choice based on personal traits, industry expectations, and work experience.

Chemistry (CHEM)

Note to Students: Each chemistry course requires a separate registration for both the lecture and laboratory/field trip course(s).

CHEM 100 Chemistry in Society (3)
Provides a survey of basic concepts and applications of chemistry with emphasis on the role of chemistry in the real world. This is suitable for students who had little or no background in chemistry and serves to fulfill a general education physical science core course for the nonscience major or as a preparatory course for CHEM 151. (3 hrs. lect.) WCC: DP
The student learning outcomes are:
• Describe the relationship between properties and structure of matter.
• Name chemicals, balance chemical and nuclear equations.
• Solve problems involving mole and mass ratios in chemical reactions.
• Identify the types of chemical reactions (i.e. acid-base, redox, nuclear) and their applications to everyday lives.
• Explain the chemistry of household chemicals, and the composition of air and water.
• Apply knowledge of a specific chemical concept to a current environmental, health, industrial, or technological issue or condition by writing a short research paper.

CHEM 100L Chemistry in Society Laboratory (1)
Experiments in everyday chemistry. (3 hrs. lab.)
Prerequisite: Credit or registration in CHEM 100.
WCC: DY
The student learning outcomes are:
• Identify/locate laboratory safety equipment and apply laboratory safety procedures.
• Construct molecular models to determine molecular shape and properties.
• Assemble apparatus to perform common laboratory techniques to verify fundamental chemistry principles in everyday life.
• Make and record accurate observations and precise quantitative measurements.
• Synthesize conclusions based on observations and data in a formal laboratory report.
• Identify sources of error in laboratory experiments.

**CHEM 151   Elementary Survey of Chemistry (3)**
Provides the student with an adequate background in the fundamentals of chemistry. Covers the basic language and quantitative relationships of chemistry, including atomic structure, chemical bonding, structure-property relationships, chemical reactions. Prerequisite to CHEM 152 for majors in medical technology and nursing and other allied health and science-related fields, or can be taken as a preparatory course for CHEM 161. Students will not receive credit for both CHEM 151 and 161. (3 hrs. lect.)
Prerequisite: Credit in MATH 24, grade of C or higher in ENG 21 or higher, or placement in ENG 100, or consent of instructor.
Recommended Preparation: MATH 25 or equivalent.
WCC: DP

The student learning outcomes are:
• Predict properties of chemical elements based on their atomic structure and their location in the Periodic Table.
• Name chemical compounds, balance chemical and nuclear reactions.
• Predict properties of chemical compounds based on chemical bonding, molecular shapes, and polarity.
• Calculate mass relationships in chemical reactions and the quantity of matter in gaseous chemicals and chemical solutions.
• Predict the products of common chemical reactions.
• Apply knowledge of chemical concepts to a current environmental, health, industrial, or technological issue or condition by writing a short research paper.

**CHEM 151L   Elementary Survey of Chemistry Laboratory (1)**
Experiments introducing laboratory techniques and illustrating chemical principles; supplemented by films, demonstrations, and problem sessions. (3 hrs. lab.)
Prerequisite: Credit or registration in CHEM 151.
WCC: DY

The student learning outcomes are:
• Identify and locate laboratory safety equipment and apply laboratory safety procedures.
• Assemble apparatus to perform common laboratory techniques to verify basic chemistry laws on gases, chemical stoichiometry, chemical equilibrium and others.
• Use molecular models and technology to investigate chemistry concepts.
• Make and record accurate observations, precise measurements and calculations applying rules on significant figures.
• Develop hypotheses, use critical thinking to process results and identify sources of error.
• Apply and articulate the scientific method by preparing a lab report using the standard scientific format.

**CHEM 152   Survey of Organic and BioOrganic Chemistry (3)**
Structure, nomenclature, properties and reactions of organic compounds will be studied with emphasis on those compounds of practical importance in life science and related fields. (3 hrs. lect.)
Prerequisite: CHEM 151 or equivalent.
WCC: DP

The student learning outcomes are:
• Construct molecular models and use these to describe chemical structure, geometry and physical properties.
• Identify, classify and name organic and biochemical compounds.
• Predict products of fundamental organic reactions.
• Use the vocabulary on organic chemicals and reactions in metabolism and other biochemical applications.
• Explain the role of enzymes in metabolism.
• Apply knowledge of biochemical concepts to discuss the genetic cause of a metabolic disorder in a short research paper.

**CHEM 152L   Survey of Organic and BioOrganic Chemistry Laboratory (1)**
Techniques of preparation, purification, and identification of organic compounds. (3 hrs. lab.)
Prerequisite: CHEM 151L and completion or concurrent registration in CHEM 152.
WCC: DY

The student learning outcomes are:
• Develop an appreciation for the methods of scientific inquiry though laboratory experiments.
• Identify functional groups of organic chemicals using tests based on chemical properties.
• Carry out common laboratory methods of separation and purification of materials.
• Prepare polymers, esters, soap and other common organic chemicals.
• Apply laboratory safety procedures, recognize and respond to hazards.
• Gain experience in the use of several techniques to identify unknown chemicals and detect enzyme activity.

**CHEM 161   General Chemistry I (3)**
Basic principles of inorganic chemistry with an emphasis on problem solving. First course of a two-course sequence designed to meet the one-year General Chemistry requirement for pre-med, science and engineering majors. Topics include chemical calculations, electronic structure, chemical bonding, states of matter and solutions. Concurrent registration in CHEM 161L is required. (Offered Fall semester only). (3 hrs. lect.)
Prerequisite: A grade of "C" or better in Math 27 or 103, or placement into Math 135 or instructor’s consent.
Co-requisite: Concurrent registration in CHEM 161L.
Recommended Preparation: Student should have taken high school chemistry, CHEM 100 or CHEM 151. Students will not get credit for both CHEM 151 and 161.
WCC: DP

The student learning outcomes are:
• Use the mole concept in solving stoichiometry problems involving solids, liquids, gases and solutions.
• Balance chemical equations, classify reactions, identify and analyze the role of the chemicals involved in chemical reactions.
• Predict the behavior of gases while undergoing changes in volume, pressure, temperature and quantity.
• Manipulate thermochemical equations and calculate the amount of energy involved in chemical reactions.
• Predict physical and chemical properties of elements based on electronic structure and location in the Periodic Table.
• Predict physical and chemical properties of compounds based on chemical bonding, geometry and intermolecular interactions.
CHEM 161L General Chemistry Laboratory I (1)
Laboratory experiments illustrating fundamental principles of chemistry. (3 hrs. lab.)
Prerequisite: Credit or registration in CHEM 161.
WCC: DY
The student learning outcomes are:
• Apply laboratory safety procedures and respond to hazards.
• Use molecular and crystal models, perform common laboratory techniques competently and computer-based experiments to verify chemistry laws on stoichiometry, thermochemistry, behavior of gases and liquids.
• Apply and articulate the scientific method by preparing lab reports using the standard scientific format. Express in writing core chemistry principles, results of experiments and do critical thinking by synthesizing conclusions based on observations and data.
• Make and record precise measurements, calculate results using significant figures, standard deviations and identify sources of error in laboratory experiments.
• Use computer competently, word-processing, spreadsheet and graphing.
• Prepare chemical solutions, perform dilutions, calculate solution concentrations and generate a calibration curve.

CHEM 162 General Chemistry II (3)
Second course of a two-course sequence designed to meet the one-year General Chemistry requirement for pre-med, science and engineering majors. Topics include thermochemistry, kinetics, acid-base equilibrium, solubility equilibrium and electrochemistry. Emphasis on problem solving. Concurrent registration in CHEM 162L is required. (Offered spring semester only.)
Prerequisite: A grade of "C" or better in CHEM 161, credit or concurrent registration in MATH 135, or instructor’s consent.
Co-requisite: Concurrent registration in CHEM 162L.
WCC: DP
The student learning outcomes are:
• Predict properties of pure substances using phase diagrams.
• Predict properties (boiling point, melting point, osmotic pressure, vapor pressure) of solutions based on concentration.
• Determine reaction rate law and calculate rate constants and half-life based on experimental data.
• Calculate the equilibrium concentration of chemicals in solution involved in precipitation, and acid-base and reactions.
• Predict spontaneous reactions based on enthalpy and entropy considerations.
• Determine the electrochemical potential of redox reactions.

CHEM 162L General Chemistry Laboratory II (1)
Laboratory experiments illustrating fundamental principles of chemistry. (Offered spring semester only.) (3 hrs. lab.)
Prerequisite: Credit or registration in CHEM 162.
WCC: DY
The student learning outcomes are:
• Develop an appreciation for the methods of scientific inquiry though computer-based laboratory experiments showing real-time data.
• Apply knowledge to determine molar mass of unknown substance using freezing point depression data of solution.
• Calculate chemical reaction rate and constant using graphing analysis.
• Predict the effects of concentration and temperature changes on equilibrium mixtures using Le Chatelier’s principle.
• Determine whether equilibrium is established and calculate equilibrium concentrations/ constants and cell potentials.
• Apply and articulate the scientific method by preparing lab reports using the standard scientific format. Express in writing core chemistry principles, results of experiments and do critical thinking by synthesizing conclusions based on observations and data.

COMMUNICATION (COM)
COM 145 Interpersonal Communication (3)
Introduction to theory and practice of interpersonal communication. Emphasis on practical application of theory to improve communication skills, improve interpersonal relationships, and reduce communication breakdowns. (3 hrs. lect.)
Prerequisite: Placement in ENG 21 or higher.
WCC: FO
The student learning outcomes are:
• Identify and exhibit an awareness of communication in everyday life.
• Convey in writing and discussion the interpretation and evaluation of interpersonal communication.
• Use effective and appropriate communication strategies.

ECONOMICS (ECON)
Note to students: At the University of Hawai‘i, Mānoa campus, generally no more than 6 credits for ECON 120, 130, and 131 will be accepted.
ECON 120 Introduction to Economics (3)
Nature of economic problems and economics; price system, supply and demand, competition, market failure, role of government, national income, monetary system, unemployment, and inflation. (3 hrs. lect.)
Students planning to attend the College of Business Administration at UHM should not enroll in ECON 120.
WCC: DS
ECON 130 Principles of Economics (Microeconomics) (3)
Study of how individuals make decisions which affect their income and wealth; how firms make decisions which affect profits and production. Relationship to demand, supply and prices of goods, and natural resources. (3 hrs. lect.)
Recommended that students also take ECON 131 but not necessarily the same semester.
WCC: DS
The student learning outcomes are:
• Translate important microeconomic terms and theories into various forms.
Skills needed to achieve this outcome:
  o Writing ability, ability to translate economic terms into their own words.
  o Mathematical ability, ability to translate and interpret economic theories in a two dimensional graphical space.
• Explain the basic underpinnings of consumer and producer behavior.
Skills needed to achieve this outcome:
  o Research skills
  o Interview skills
  o Ability to formulate a hypothesis
  o Ability to use the scientific method.
ECON 131 Principles of Economics (Macroeconomics) (3)  
Study of the economic forces which determine a country’s income, employment, and prices. Roles of consumers, businesses, banks, and governments are explored. (3 hrs. lect.)  
WCC: DS  
The student learning outcomes are:  
- Translate important microeconomic terms and theories into various forms.  
Skills needed to achieve this outcome:  
  - Writing ability, ability to translate economic terms into their own words  
  - Mathematical ability, ability to translate and interpret economic theories in a two dimensional graphical space  
- Identify, explore and analyze macroeconomic concepts using economic analysis and research skills.  
Skills needed to achieve this outcome:  
  - Research skills  
  - Writing skills  
  - Ability to formulate a thesis statement  
  - Ability to back up arguments using published research and to cite that research appropriately

ENG 100 Expository Writing (3)  
A composition course on the writing process including description, narration, exposition, and argument. Course stresses unity, development, organization, coherence, and other basic writing skills necessary for college writing. For all sections of ENG 100 designated as Computer Assisted Instruction (CAI), two (2) hours of computer lab per week are required in addition to class time. (3 hrs. lect.)  
Prerequisite: “C” or higher in ENG 22 or placement into ENG 100 or approval of designated Language Arts representative.  
WCC: FW  
The student learning outcomes are:  
- Write well-reasoned compositions that reveal the complexity of the topic they have chosen to explore or argue.  
- Read for main points, perspective, and purpose; evaluate the quality of evidence, negotiate conflicting positions, and analyze the effectiveness of a text’s approach in order to integrate that knowledge into their writing.  
- Choose language, style, and organization appropriate to particular purposes and audiences.  
- Synthesize previous experience and knowledge with the ideas and information they encounter as they read and discover as they write.  
- Use sources such as libraries and the Internet to enhance their understanding of the ideas they explore or argue in their writing; analyze and evaluate their research for reliability, bias, and relevance.  
- Use readers’ responses as one source for revising writing.  
- Use standard disciplinary conventions to integrate and document sources.  
- Edit and proofread in the later stages of the writing process, especially when writing for public audiences. Control such surface features as syntax, grammar, punctuation, and spelling.

ENG 102 College Reading Skills (3)  
Emphasizes speed, vocabulary, comprehension, and critical thinking. Develops skimming, scanning and study reading techniques. Course requires lab work in addition to class time. (3 hrs. lect.)  
Prerequisite: Placement into ENG 100, or completion of ENG 22, or consent of instructor.  
The student learning outcomes are:  
- Match an effective reading speed to one’s purpose in reading different materials.  
- Read with increased speed.  
- Read with improved comprehension with an emphasis on critical reading skills.

ENG 209 Business Writing (3)  
A study of business and managerial writing; practice in writing letters, memos, and reports, including a report requiring research and documentation. Upon successful completion of this course, the student should be able to:  
- Understand the nature and functions of business and managerial writing.  
- Apply the principles of effective business writing in composing business messages.  
- Adapt a business message to its context, audience, and purpose.  
- Prepare business reports, including a research report involving gathering and analyzing information, drawing conclusions, making recommendations, and documenting sources.
• Proofread and edit business writing for grammatical, spelling, punctuation and mechanical errors.
• Prepare and make effective use of presentation software.
• Compose an effective resume and employment letters. (3 hrs. lect.)

Prerequisite: “C” or better in ENG 100.

WCC: DL

ENG 250 Major Works of American Literature (3)
An introductory literature course including drama, poetry, essays, short stories, and novels of major American writers. Emphasis is on discussion of and writing about characteristics and themes of the works. (3 hrs. lect.) Prerequisite: ENG 100 or consent of instructor.

WCC: DL

The student learning outcomes are:
• Use concepts and terminology particular to literary study to analyze and interpret imaginative literary works orally and in writing.
• Respond to a work of literature as an expression of a culture’s values and compare those values with the student’s own.
• Enjoy a more creative, enlightened, and fulfilled life through an appreciation of literature’s social, cultural, political, and philosophical significance.
• Exhibit knowledge of some works, characteristic themes, and techniques of selected American writers.
• Develop an awareness of the evolution of ideas in American culture.

ENG 251 Major Works of British Literature (Middle Ages to 1800) (3)
An introductory literature course including major British plays, prose, and poetry from the Anglo-Saxon period to the seventeenth century. Emphasis is on discussion of and writing about characteristics and themes of the works. (Offered alternate years preceding English 253.) (3 hrs. lect.) Prerequisite: ENG 100 or consent of instructor.

WCC: DL

The student learning outcomes are:
• Use concepts and terminology particular to literary study to analyze and interpret imaginative literary works orally and in writing.
• Respond to a work of literature as an expression of a culture’s values and compare those values with the student’s own.
• Enjoy a more creative, enlightened, and fulfilled life through an appreciation of literature’s social, cultural, political, and philosophical significance.
• Exhibit knowledge of some works, characteristic themes, and techniques of selected major British writers before 1800.

ENG 252 Major Works of British Literature (1800 to Present) (3)
An introductory literature course including major British plays, novels, and poetry from the nineteenth century to the present. Emphasis is on discussion of and writing about characteristics and themes of the works. (Offered alternate years following English 251.) (3 hrs. lect.) Prerequisite: ENG 100 or consent of instructor.

WCC: DL

The student learning outcomes are:
• Use concepts and terminology particular to literary study to analyze and interpret imaginative literary works orally and in writing.
• Respond to a work of literature as an expression of a culture’s values and compare those values with the student’s own.
• Enjoy a more creative, enlightened, and fulfilled life through an appreciation of literature’s social, cultural, political, and philosophical significance.
• Exhibit knowledge of some works, characteristic themes, and techniques of selected major British writers after 1800.

ENG 253 World Literature I (3)
An introductory literature course including major Asian and European prose and poetry from the earliest recorded literature through the Renaissance. Emphasis is on discussion of and writing about characteristics and themes of the works. (Offered alternate years following English 254.) (3 hrs. lect.) Prerequisite: ENG 100 or consent of instructor.

WCC: DL

The student learning outcomes are:
• Use concepts and terminology particular to literary study to analyze and interpret imaginative literary works orally and in writing.
• Respond to a work of literature as an expression of a culture’s values and compare those values with the student’s own.
• Enjoy a more creative, enlightened, and fulfilled life through an appreciation of literature’s social, cultural, political, and philosophical significance.
• Exhibit knowledge of selected major non-Western, Classical, Medieval, and Renaissance literary works, their characteristic themes, and techniques.
• Recognize themes and values in literature that transcend individual cultures.

ENG 254 World Literature II (3)
An introductory literature course including major Asian and European plays, prose, and poetry from the seventeenth century to the present. Emphasis is on discussion of and writing about characteristics and themes of the works. (Offered alternate years following English 253.) (3 hrs. lect.) Prerequisite: ENG 100 or consent of instructor.

WCC: DL

The student learning outcomes are:
• Use concepts and terminology particular to literary study to analyze and interpret imaginative literary works orally and in writing.
• Respond to a work of literature as an expression of a culture’s values and compare those values with the student’s own.
• Enjoy a more creative, enlightened, and fulfilled life through an appreciation of literature’s social, cultural, political, and philosophical significance.
• Exhibit knowledge of selected major literary works after 1600, their characteristic themes, and techniques.
• Recognize themes and values in literature that transcend individual cultures.

ENG 255 Types of Literature I: Short Stories and Novels (3)
An introductory literature course featuring techniques of reading and analyzing short stories and novels. Emphasis is on discussion of and writing about characteristics and themes of the works. (3 hrs. lect.) Prerequisite: ENG 100 or consent of instructor.

WCC: DL

The student learning outcomes are:
• Use concepts and terminology particular to literary study to analyze and interpret imaginative literary works orally and in writing.
• Respond to a work of literature as an expression of a culture’s values and compare those values with the student’s own.
• Enjoy a more creative, enlightened, and fulfilled life through an appreciation of literature’s social, cultural, political, and philosophical significance.
• Exhibit knowledge about selected short story writers and novelists, and their characteristic themes and techniques.
• Explore the distinction between the short story and novel as types of fiction.

ENG 256 Types of Literature II: Poetry and Drama (3)
An introductory literature course featuring techniques of reading and analyzing poetry and drama. Emphasis is on discussion of and writing about characteristics and themes of the works. (3 hrs. lect.)
Prerequisite: ENG 100 or consent of instructor.

The student learning outcomes are:
• Use concepts and terminology particular to literary study to analyze and interpret imaginative literary works orally and in writing.
• Respond to a work of literature as an expression of a culture’s values and compare those values with the student’s own.
• Enjoy a more creative, enlightened, and fulfilled life through an appreciation of literature’s social, cultural, political, and philosophical significance.
• Integrate knowledge of selected poets and dramatists, and their characteristic themes and techniques.
• Explore the characteristics of poetry and drama as types of literature.
• Adapt to the differing expectations put on the reader of poetry as compared to the reader or audience of drama.

ENG 257 Themes in Literature (3)
Selected topics in literature drawn from a cross section of literary types and periods. (Offered occasionally) (3 hrs. lect.)
Prerequisite: ENG 100 or consent of instructor.

The student learning outcomes are:
• Use concepts and terminology particular to literary study to analyze and interpret imaginative literary works orally and in writing.
• Respond to a work of literature as an expression of a culture’s values and compare those values with the student’s own.
• Enjoy a more creative, enlightened, and fulfilled life through an appreciation of literature’s social, cultural, political, and philosophical significance.
• Integrate knowledge of selected poets and dramatists, and their characteristic themes and techniques.
• Explore the characteristics of poetry and drama as types of literature.

Food Science & Human Nutrition (FSHN)

FSHN 185 Human Nutrition (3)
An introductory level biological science course which integrates basic concepts of science with the study of human nutrition. Designed for students who want an introduction to nutrition, as well as those who later choose to major in it. Meets natural science core requirement. (3 hrs. lect.)
Prerequisite: Placement into ENG 100 and MATH 25 or consent of instructor.

The student learning outcomes are:
• Write a lab report using the standard scientific format.
• Use the metric system, scientific notation, graphs, and geographic and basic statistical measurements.
• Define a problem for a study, gather and record data, analyze the data, arrive at appropriate conclusions, and report the findings in written form.
• Apply the scientific method to study a physical environment: Define a problem for a study, gather and record data, analyze the data, arrive at appropriate conclusions, and report the findings in written form.

Geographic Information Systems (GIS)

GIS 150 Introduction to GIS/GPS (3)
An introductory course in the applications of geographic information systems (GIS) with a special emphasis on using ArcView GIS. Includes database construction and techniques for spatial data manipulation, analysis and display. Students will also gain basic experience with the use of Global Positioning System (GPS). Applications will be cross-disciplinary in nature, including such fields as the environmental sciences, business marketing, geopolitical demography, health/epidemic monitoring and real estate management. (3 hrs. lect.)
Note: Familiarity with basic computer operations and databases highly recommended.

The student learning outcomes are:
• Use basic ArcGIS desktop software functions such as displaying, modifying, and analyzing maps.
• Independently plan, organize, and present a GIS research project.
• Use a GPS unit to find locations, and import obtained GPS data into ArcGIS for further investigations.

Geography (GEOG)

GEOG 101 The Natural Environment (3)
Survey of the natural environment; distribution and interrelationships of climates, vegetation, soil, and land forms. (3 hrs. lect.)

The student learning outcomes are:
• Describe the components (inputs), processes (actions) and resulting spatial patterns (outputs) of the physical environment (atmosphere, hydrosphere, lithosphere and biosphere) as a system.
• Apply the scientific method, and theories and concepts of geography to explain a physical environment.
• Illustrate how his/her views of the physical environment have (or have not) changed.

GEOG 101L The Natural Environment Laboratory (1)
Analysis by use of maps, air photos, field and laboratory observation, and experimentation. Emphasis on Hawai‘i and on human modification of environment. Required field trips during regular class hours. (3 hrs. lab.)
Prerequisite: Credit or concurrent enrollment in GEOG 101.

GEOG 101L The Natural Environment Laboratory (1)
Analysis by use of maps, air photos, field and laboratory observation, and experimentation. Emphasis on Hawai‘i and on human modification of environment. Required field trips during regular class hours. (3 hrs. lab.)
Prerequisite: Credit or concurrent enrollment in GEOG 101.
GEOG 102  World Regional Geography (3)
Designed to acquaint the student with the cultural regions of today's world, with emphasis on the interrelationships and interactions of each region's ideological, economic, political, and physical elements. (3 hrs. lect.)
WCC: DS
The student learning outcomes are:
• Identify locations on regional and world maps.
• Compare and contrast the major geographic regions of the world, applying theories and concepts of geography.
• Apply a spatial perspective to critically explain current world events and issues and daily events.
• Illustrate how his/her views of the world have (or have not) changed.

GEOG 122  Geography of Hawai'i (3)
This 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 Hawai'i's volcanic land forms, coastal features, climate, and vegetation. Geographic aspects of population, settlement, agriculture economics, and land use are also investigated. (3 hrs. lect.)
WCC: DS
The student learning outcomes are:
• Describe the physical, biological and cultural elements and processes responsible for Hawai'i's current environment applying theories and concepts of geography.
• Compare and contrast the Hawaiian environment with that of a middle latitude region, such as the US mainland, Europe and East Asia.
• Evaluate the Hawaiian environment in terms of how the student would survive on a pre-human Hawaiian island.

GEOG 151  Geography and Contemporary Society (3)
Elements of population geography and urban studies, economic geography and resource management; application to current problems of developed and underdeveloped countries. (3 hrs. lect.)
WCC: DS
The student learning outcomes are:
• Describe and map major themes in human society and culture: population, economy, politics, language, religion, customs, and conflict.
• Apply scientific method, and theories and concepts of geography to explain the nature, history, and diffusion of the major themes.
• Synthesize cross-cultural perspectives on current issues in the major themes.
• Communicate the achievement in written form and/or in other artistic expressions such as photograph.

Geology and Geophysics (GG)

GG 101  Introduction to Geology (4)
Man's natural physical environment; the landscape, rocks and minerals, rivers and oceans, volcanism, earthquakes, and other processes inside the earth; effects of man's use of the earth and its resources. Laboratory study of minerals, rocks, and topographic and geologic maps. Lecture/laboratory/field trip course. (3 hrs. lect.; 3 hrs. lab.)
WCC: DP & DY
The student learning outcomes are:
• Understand the importance of plate tectonics in creating, modifying and recycling the surface of the earth.
• Understand the structure of the earth and how that is known, and its relationship to geophysical, geological, atmospheric and oceanographic processes.
• Comprehend the vastness of geological time and how time is measured thus the time-scale known, in addition to the history recorded in rocks of geological/atmospheric/oceanographic processes in conjunction with those that influenced the organic evolution of life.
• Realize geological hazards and the mitigation of those hazards, as well as the politics of managing a changing landscape.
• Describe the formation of mineral deposits and hydrocarbon accumulations, with an appreciation of their impermanence as resources.
• Know formational processes, types and uses of soils, minerals, fossils and rocks.
• Understand the rock cycle, its driving mechanisms, rates of cyclicity, and consequent products for interpreting the 15 billion years of earth history, and applying that knowledge towards predicting the planet's future.

GG 103  Geology of the Hawaiian Islands (3)
Hawaiian geology and geologic processes: origin of Hawaiian Islands, volcanism, rocks and minerals, land forms, stream and coastal processes, landslides, earthquakes and tsunamis, ground water, geologic and environmental hazards. Field trips arranged. (3 hrs. lect.)
WCC: DP
The student learning outcomes are:
• Understand formational and evolutionary processes, as well as time-scales for these processes in the construction, modification and destruction of a Hawaiian island and its landscape.
• Relate Hawaiian volcanism to other types of volcanism in terms of plate tectonics, magma/rock types, magmatic plumbing systems, edifice construction/destruction, eruption types, and eruptive products.
• Describe how volcanoes are monitored and eruptions predicted.
• Realize the significance of volcanism in the rock cycle.
• Appreciate the benefits of volcanism to Hawaii as in geothermal energy, ground water, soils, and more.
• Appreciate volcanic hazards and mitigation of those hazards with a focus on Hawaii.
• Comprehend the vastness of geological time and how time is measured thus the time-scale known.

GG 166  Planetary Geology (3)
Study of the geology and geophysics of earthlike planets and satellites in the solar system, with emphasis on understanding terrestrial geology in a broader, astronomical context. Topics covered: major processes determining structure and surface features of planets and techniques for remote sensing. (3 hrs. lect.)
Prerequisite: ASTR 110 and GG 101 or consent of instructor.
WCC: DP
The student learning outcomes are:
• Discuss the general characteristics of objects in the solar system and discuss the nature of the sun and its influence planetary systems.
• Outline evolution of planetary surfaces and discuss comparative planetology from a geological perspective.
• Assess the effects and implications of collisional impacts on planetary surfaces.
• Compare and contrast terrestrial and jovian planets and their moons.
• Classify meteorite and discuss their mineral contents; and compare and contrast comets and asteroids.
• Summarize the findings of manned and unmanned space flight.
• Identify the appropriate instruments, detectors and space probes used by astronomers and space scientists to explore the solar system, especially the techniques of remote sensing in planetary exploration.
• Discuss the evidence for extraterrestrial life in the solar system.

Note to Students: Any one of the following courses meets the laboratory/field trip requirement for GG 103. Each lecture and laboratory/field trip course requires a separate registration. In addition to tuition, field costs are approximately $250.

GG 210  O'ahu Field Geology (1)
10 half-day Saturday field trip and laboratory sessions relating to the Geology of O'ahu.
Prerequisite: Completion of or concurrent registration in GG 101, GG 103, or consent of instructor.
WCC: DY
The student learning outcomes are:
• Understand through field observation, with field and laboratory exercises, geological processes that construct, modify, and destroy the Hawaiian landscape.
• Realize the hazards, mitigation of these hazards and benefits of Hawaiian volcanism, and its relationship to island culture(s).
• Appreciate current research and studies of Hawaiian volcanism through visits to appropriate museums and research laboratories.
• Understand the vastness of geological time applied to Hawaii, and how time is measured thus the time-scale known.

GG 211  Big Island Field Geology (1)
A four-day field trip on the island of Hawai‘i. A survey of Hawaiian volcanic processes is illustrated by studying Kilauea, Mauna Kea, Mauna Loa, Hualalai, and Kohala volcanoes. Students are responsible for air and ground transportation, meals, and lodging. (Offered fall semester only.)
Prerequisite: Completion of or concurrent registration in GG 101, GG 103, or consent of instructor. Must have medical clearance.
WCC: DY
The student learning outcomes are:
• Understand through field observation, with field and laboratory exercises, geological processes that construct, modify, and destroy the Hawaiian landscape.
• Realize the hazards, mitigation of these hazards and benefits of Hawaiian volcanism, and its relationship to island culture(s).
• Appreciate current research and studies of Hawaiian volcanism through visits to appropriate museums and research laboratories.
• Understand the vastness of geological time applied to Hawaii, and how time is measured thus the time-scale known.

GG 212  Maui Field Geology (1)
A four-day field trip on the island of Maui. A survey of Hawaiian volcanology and geomorphology illustrated by field studies of Haleakala and West Maui volcanoes. Students are responsible for air and ground transportation, meals, and lodging. (Offered alternate years.)
Prerequisite: Completion of or concurrent registration in GG 101, GG 103, or consent of instructor. Must have medical clearance.
WCC: DY
The student learning outcomes are:
• Understand through field observation, with field and laboratory exercises, geological processes that construct, modify, and destroy the Hawaiian landscape.
• Realize the hazards, mitigation of these hazards and benefits of Hawaiian volcanism, and its relationship to island culture(s).
• Appreciate current research and studies of Hawaiian volcanism through visits to appropriate museums and research laboratories.
• Understand the vastness of geological time applied to Hawaii, and how time is measured thus the time-scale known.

GG 213  Moloka‘i, Lana‘i, and Kaho‘olawe Field Geology (1)
A four-day field trip on the islands of Moloka‘i and Lana‘i. Field studies of East Moloka‘i, West Moloka‘i, Makanalua (Kalaupapa) and Lana‘i volcanoes, and directed reading on Kaho‘olawe volcano. Students are responsible for air and ground transportation, meals, and lodging. (Offered alternate years.)
Prerequisite: Completion of or concurrent registration in GG 101, GG 103, or consent of instructor. Must have medical clearance.
WCC: DY
The student learning outcomes are:
• Understand through field observation, with field and laboratory exercises, geological processes that construct, modify, and destroy the Hawaiian landscape.
• Realize the hazards, mitigation of these hazards and benefits of Hawaiian volcanism, and its relationship to island culture(s).
• Appreciate current research and studies of Hawaiian volcanism through visits to appropriate museums and research laboratories.
• Understand the vastness of geological time applied to Hawaii, and how time is measured thus the time-scale known.

GG 214  Kaua‘i and Ni‘ihau Field Geology (1)
A four-day field trip on the island of Kaua‘i to study the volcanological evolution and continuing geological history of Kaua‘i and Ni‘ihau volcanoes. Students are responsible for air and ground transportation, meals, and lodging. (Offered alternate years.)
Prerequisite: Completion of or concurrent registration in GG 101, GG 103, or consent of instructor.
WCC: DY
The student learning outcomes are:
• Understand through field observation, with field and laboratory exercises, geological processes that construct, modify, and destroy the Hawaiian landscape.
• Realize the hazards, mitigation of these hazards and benefits of Hawaiian volcanism, and its relationship to island culture(s).
• Appreciate current research and studies of Hawaiian volcanism through visits to appropriate museums and research laboratories.
• Understand the vastness of geological time applied to Hawaii, and how time is measured thus the time-scale known.
HAWAIIAN (HAW)

HAW 50 Basic Conversational Hawaiian (3)
An introductory course to the Hawaiian language which covers the basics of pronunciation, vocabulary, idioms and fundamental sentence patterns to enable the student to understand and engage in everyday Hawaiian conversation, to appreciate and understand Hawaiian music, songs and chants, and to enhance the student’s understanding of the Hawaiian heritage and Hawai‘i. (3 hrs. lect.)
Prerequisite: Placement in ENG 21 or higher.
The student learning outcomes are:
• Demonstrate the ability to comprehend and respond to sentence structures of greater length and complexity on a variety of topics,
• Demonstrate the ability to comprehend, speak, read and write at the intermediate level with a working vocabulary of some 1,500 words, plus idiomatic expressions.
• Write original expositions and communicate on a variety of topics within the student’s experience.

HAW 202 Intermediate Hawaiian II (4)
Continuation of HAW 201. Further refinement of basic language skills including vocabulary development beyond the 201 level. Increased control over structures and idioms. Includes readings about history, culture, and diverse forms of literature. (5 hrs. lect./lab.)
Prerequisite: HAW 201 or consent of instructor.
The student learning outcomes are:
• Listen and sustain comprehension of connected discourse on a variety of topics,
• Demonstrate oral and written proficiency in grammatical patterns of greater complexity, with a working vocabulary of some 2,000 words, plus idiomatic expressions,
• Demonstrate the ability to initiate, sustain and close a general conversation with a number of strategies appropriate to a range of circumstances and topics,
• Demonstrate a basic familiarity with Hawaiian verbal art forms; ‘ōlelo no’eau, mele, oli, pule, mo’olelo, and ka’a‘o.

HAWAIIAN STUDIES (HWST)

HWST 107 Hawai‘i: Center of the Pacific (3)
An introduction to Hawai‘i and Hawaiian culture in the context of the larger Pacific, including Hawaiian origins, settlement, language, land, history, society, religion and the arts. (3 hrs. lect.)
WCC: DH

HWST 270 Hawaiian Mythology (3)
A survey of gods, ‘aumakua, kupua, mythical heroes, heroines and their kinolau as the basis of traditional Hawaiian metaphor. (3 hrs. lect.)
Prerequisite: HWST 107 or HAW 102.
WCC: DH

HEALTH, PHYSICAL EDUCATION, AND RECREATION (HPER)

HPER 124 Dances of Hawai‘i I (1)
Beginning course in hula covering fundamental steps and movements of the dance without instruments. (2 hrs. lab.)
WCC: DA

HPER 125 Dances of Hawai‘i II (1)
Second-level course in hula focusing on more complex steps and dances. Dances using instruments will be stressed. (2 hrs. lab.)
Prerequisite: HPER 124 or consent of instructor.
WCC: DA
History (HIST)

HIST 151 World Civilization I (3)
A survey course focusing on significant historical events and patterns of development in world civilizations from the prehistoric period to the 1500’s. (3 hrs. lect.)
WCC: FG

The student learning outcomes are:
• Identify important individuals, events, places, organizations and concepts in pre-modern world history.
• Arrange, in chronological order, significant events in world history.
• Describe and analyze global processes from prehistory to 1500 C.E. (e.g. human migration, ecological forces, spread of world religions, creation of empires).
• Explain cause and effect relationships in history.
• Compare and contrast historical experiences across cultures and time.
• Relate historical events to contemporary issues and events.

HIST 152 World Civilization II (3)
A survey course focusing on the historical development of selected areas of the world from the 16th century to the present. Emphasis placed on analysis of the impact of industrialization, East-West interaction, and the rise of nationalism. (3 hrs. lect.)
WCC: FG

The student learning outcomes are:
• Identify important individuals, events, places, organizations and concepts in modern world history.
• Arrange, in chronological order, significant events in world history.
• Describe and analyze global processes from 1500 C.E. to the present (e.g. human migration, ecological forces, imperialism, decolonialism, industrialism, nationalism, globalization).
• Explain cause and effect relationships in history.
• Compare and contrast historical experiences across cultures and time.
• Relate historical events to contemporary issues and events.

HIST 224 History of Hawai`i (3)
A general study of the social, political and economic development of Hawai`i from the ancient Hawaiians to the present. (3 hrs. lect.)
WCC: DH

The student learning outcomes are:
• Describe, analyze and interpret the major themes in history of Hawai`i from the pre-contact period to the present.
• Critically analyze primary sources.
• Identify important individuals and events in the history of Hawai`i.
• Make connections between contemporary events and Hawai`i’s history.

HIST 241 Civilizations of Asia I (3)
A survey course covering the development of the major civilizations of East Asia, South and Southeast Asia, and historical personages and events from the earliest periods to the 1500’s. (3 hrs. lect.)
WCC: DH

The student learning outcomes are:
• Identify important individuals and events in premodern Asian history, i.e. demonstrate historical literacy.
• Describe cause and effect relationships in Asian history.
• Order chronologically significant events in Asian history.
• Describe major Asian historical processes (e.g. the agricultural revolution, the rise and spread of religions, the development of political institutions, etc.)
• Acquire a sense of historical perspective.
• Demonstrate an understanding of historical concepts as they relate to premodern Asian historical issues and events.

HIST 242 Civilizations of Asia II (3)
A survey course focusing on the changes/development of the major civilizations of East Asia, South and Southeast Asia from the Sixteenth Century to the present. Particular emphasis placed on an analysis of representative Asian societies, the Asian response to the West, and Asian nationalism. (3 hrs. lect.)
WCC: DH

The student learning outcomes are:
• Identify important individuals and events in modern Asian history, i.e. demonstrate historical literacy.
• Describe cause and effect relationships in history.
• Order chronologically significant events in modern Asian history.
• Describe modern Asian historical processes (e.g. human migration, disease, ecological imperialism, de-colonization, industrialization, nationalism, etc.).
• Acquire a sense of historical perspective.
• Demonstrate an understanding of historical concepts as they relate to historical issues and events in Asia during the past five centuries.

HIST 281 Introduction to American History I (3)
An introduction to American history covering significant events in U.S. history from the colonial to Civil War period. (3 hrs. lect.)
WCC: DH

The student learning outcomes are:
• Describe, analyze and interpret the major themes in American history from the pre-Columbian period, through the colonial era, the American Revolution, early 19th century and the Civil War period.
• Identify important individuals and events in American history through the Civil War.
• Critically analyze primary sources.
• Make connections between contemporary events and American history.

HIST 282 Introduction to American History II (3)
Continuation of HIST 281 focusing on significant events in American history from Reconstruction (1865) to the present. (3 hrs. lect.)
WCC: DH

The student learning outcomes are:
• Describe, analyze and interpret the major themes in American history from Reconstruction through the 20th century to the present.
• Identify important individuals and events in American history from Reconstruction to the present.
• Critically analyze primary sources.
• Make connections between contemporary events and American history.
**Humanities (HUM)**

**HUM 100 Introduction to Humanities (3)**
HUM 100 is for students seeking a multicultural integration of the arts. It is a global, historical and comparative exploration of music, art, literature, drama, philosophy, religion, architecture and related artistic expressions. It is designed to deepen awareness of how human beings symbolize essential ideas. (3 hrs. lect.)
WCC: DA

**HUM 197 Themes in the Humanities: The Common Book (1)**
The Common Book Program encourages students, faculty and staff at the College to read a single book and participate in a semester-long discussion of different themes that are raised. HUM 197: The Common Book will offer a sustained engagement with the Common Book program. Additional readings and course assignments will be designed to enrich the appreciation of the book. (1 hr. lect.)
The student learning outcomes are:
- Identify and describe several important themes in the common book.
- Clearly explain and evaluate how one important theme in the common book is addressed by different academic disciplines.
- Examine and interpret social, political and moral issues through the common book.
- Relate at least three diverse academic disciplines to themes in the common book.
- Carefully justify one’s own interpretation of the common book.

**HUM 269V Study Abroad (Designated Region, Variable Credit) (1-6)**
An on-site study of designated society’s values, arts and culture. (30 hrs. lect./lab per credit trip total)
Prerequisite: Meet with instructor for approval.
WCC: DA

**Independent Studies**

---, 99, 199, 299 Independent Studies (1-3)
Independent study courses offer the student an opportunity to create and participate in academic learning experiences geared to individual needs, interests, aptitudes, and desired outcomes. 199, 299—any combination repeatable up to 12 credits; 12 credits applicable toward A.A. degree. No more than 12 credits in any combination of Independent Studies or Cooperative Education may apply to the degree requirements.
Exception: English 199, 299, any combination repeatable up to 6 credits; 6 credits applicable to the A.A. degree.

**Information and Computer Sciences (ICS)**

**ICS 100 Computing Literacy and Applications (3)**
This course is an introduction to information technology. Upon completion of the course, the student should be able to:
- Describe the process of changing data into information.
- Identify the benefits of being computing literate and how computing competency will affect their future.
- Describe how computers have affected society.
- Discuss computer ethics.
- Demonstrate an understanding of computer terminology.
- Identify hardware components.
- Identify and describe a variety of software programs.
- Produce word processing, spreadsheet and database documents.
- Manipulate graphical objects in the above.
- Demonstrate an understanding of online and multimedia communication.
- Manage assignments using the World Wide Web and the Internet.
(3 hrs. lect.)
Recommended Preparation: Keyboarding skills or OAT 20B, English 100 skills, Math 24 skills.
WCC: DS
The student learning outcomes are:
- Utilize the basic features of computer applications to communicate effectively (major content area).
- Utilize operating system interfaces to manage computer resources effectively.
- Utilize online resources for research and communication.
- Define, explain, and demonstrate proper computer terminology usage in areas such as hardware, software, and communications.
- Describe ethical issues involved in the use of computer technology.

**ICS 101 Digital Tools for the Information World (3)**
Hands-on computer class with emphasis on producing professional-level documents, presentations, database, and web pages for problem solving. Includes concepts, terminology, and a contemporary operating system. Meets requirement for College of Business (UHM and UHH) and UHM’s Biology program and botany department. (3 hr. lect.)
Prerequisite: ENG 100; MATH 25 or 1 yr. high school algebra.
The student learning outcomes are:
- Utilize the appropriate computer applications to produce professional-level documents, spreadsheets, presentations, databases, and web pages for effective communication (major content area).
a. Produce documents in a variety of formats.
b. Create, edit, and format electronic spreadsheets using formulas, functions, and charts.
c. Utilize a database with queries and reports that display required data.
d. Create and organize a variety of electronic slides using templates, background styles, graphics, photos, and animation effects.
e. Create web pages that contain hyperlinks and images that are suitable for publication.
- Utilize operating system interfaces to manage computer resources effectively.
- Extract and synthesize information from available Internet resources using intelligent search and discrimination.
- Define, explain, and demonstrate proper computer terminology usage in areas such as hardware, software, and communications to effectively interact with other computer users and to prepare for higher-level computer courses.
- Describe ethical issues involved in the use of computer technology.
ICS 105  Computer and Information Literacy Exam Preparation (3)
By the end of the course, the student will be able to:
• Use and understand computer and information literacy terminology.
• Manage computer files.
• Send, receive, and reply to e-mails, including attachments.
• Find information using appropriate search tools.
• Evaluate information sources.
• Create, save, edit, and print documents such as e-mails, word processing, and one of the following: a spreadsheet, a database report, or a Web site.

The four parts of the Computer and Information Literacy exam are administered during this course. Students may earn elective credit for ICS 105 OR for ICS 105C and ICS 105E. Credit may NOT be earned for both ICS 105 and ICS 105 C and E courses. (3 hrs. lect.)
Recommended Preparation: Placement into ENG 22 and MATH 24; basic keyboarding & mouse skills.

The student learning outcomes are:
• Pass the Computer and Information Literacy Exam required for the AA degree at WCC.
• Use email to send and receive messages with attachments.
• Navigate a computer’s file management system and perform basic file management tasks.
• Create, edit and format word processing documents such as a college research paper.
• Identify what information is needed for a given situation, and find, evaluate and use information ethically.
• Use a spreadsheet to make simple computations and create a graphical display of data.

ICS 105B  Information Retrieval Course-Operating System Skills (1)
This one-credit course is an introduction to operating skills literacy and is designed to help students master prerequisite skills for IRT intensive courses. The course will help students master the National Education Technology Standards (NETS) which are aligned with the University of Hawai’i General Education Requirements. NETS standards are (1) Basic operations and concepts, (2) Social, ethical, and human issues, (3) Technology productivity tools, (4) Technology communications tools, (5) Technology research tools, and (6) Technology problem-solving and decision-making tools. Students completing ICS 105B will be able to:
• Identify basic hardware components.
• Boot the computer and use a GUI interface.
• Use scroll bars.
• Manipulate a window object.
• Demonstrate basic file management skills.
• Identify GUI (Graphics User Interface) objects.
• Demonstrate familiarity with the Operating Systems’ Accessories.
• Install a simple program.
• Perform simple computer maintenance.
• Demonstrate understanding of principles of operating a computer.
(1 hr. lect.)
Prerequisite: Keyboarding, completion of OAT 20B or equivalent, or instructor consent.

The student learning outcomes are:
• Identify basic hardware components.
• Boot the computer and identify basic hardware/software components.

ICS 105C  Professional Employment Preparation (1)
Facilitates employment search by emphasizing professional techniques and standards in the preparation of application forms, resumes, cover letters, and employment interviews. (1 hr. lect.)
Recommended Preparation: ENG 22, keyboarding skills, and knowledge of word processing.

The student learning outcomes are:
• Use the computer’s operating system to manage documents and folders.
• Produce documents using Microsoft® Word software: correspondence, reports, tables, and works cited.
• Apply basic formatting techniques to enhance the appearance of a document.

ICS 105D  Information Retrieval Course-On Line Communication Skills (1)
The one-credit course is an introduction to on line communication skills literacy and is designed to help students master prerequisite skills for IRT intensive courses. The course will help students master the National Education Technology Standards (NETS) which are aligned with the University of Hawai’i General Education Requirements. NETS standards are (1) Basic operations and concepts, (2) Social, ethical, and human issues, (3) Technology productivity tools, (4) Technology communications tools, (5) Technology research tools, and (6) Technology problem-solving and decision-making tools. Students completing ICS 105D will be able to:
• Demonstrate basic use and knowledge of Electronic Mail terminology.
• Use E-mail Etiquette, Ethics, and Safety.
• Use expanded E-mail.
• Work with Alternative Interfaces.
• Know the Tips and Tools of an E-mail package.
• Understand the requirements for E-mail home usage.
• Use Bulletin Board Systems.
• Use Chat Systems.
• Use Audio and Video Conferencing. (1 hr. lect.)
Prerequisite: Keyboarding, completion of OAT 20B or equivalent, or instructor consent.

The student learning outcomes are:
• Demonstrate basic use of e-mail, including attachments.
• Practice e-mail etiquette.
• Develop awareness of other forms of online communications such as chats and bulletin boards.
• Develop awareness of risks associated with online communications.

ICS 105E  Information Literacy (1)
This web-enhanced* course is designed to prepare students for the Computer and Information Literacy Exam. Students in this course will learn to:
• Recognize when information is needed.
ICS 105G  Microsoft PowerPoint (1)
Students who take this web-enhanced* course will learn to create slide presentations using Microsoft PowerPoint. The following skills will be included:
- Creating, editing, viewing, and saving slide presentations.
- Using wizards and templates.
- Adding transitions and effects.
- Choosing appropriate clipart and graphics.
- Editing clipart.
- Printing handouts.
*WebCT is used as a course management tool. (1 hr. lect.)

ICS 105H  Microsoft Word (3)
Students in this web-enhanced* course will learn Microsoft Word. Competencies included in the Microsoft Office User Specialist (MOUS) Word exam** at the Core level are covered:
- Working with text, paragraphs, and long documents.
- Adding page numbering, headers, and footers.
- Using the Office Assistant and Wizards.
- Saving a document as a web page and creating hyperlinks.
- Creating, formatting, and modifying tables.
- Enhancing documents with graphics, borders and shading.
- Using Mail merge.
*This course uses WebCT as a course management tool.
**An additional fee will be required for the MOUS exam. MOUS exam is optional. (3 hrs. lect.)

ICS 107  Web Site Development (3)
This course presents concepts for creating web sites from design through publishing. Hands-on activities will include working with graphics and other multimedia elements, and developing professional web sites. Web pages will be designed for marketing, providing news, showing information, and sharing opinions. A variety of Internet resources will be demonstrated and subsequently explored by students. Design, usability, accessibility, web markup language, and integrating other elements will be emphasized. (3 hrs. lect.)

ICS 111  Introduction to Computer Science (4)
This is an introductory course for students intending to major in computer science and requiring a computer programming course. Emphasis will be on problem solving, algorithm/pseudocode development, structured programming, computer language coding, implementation and debugging/testing. Students will develop application programs in an IBM microcomputer/DOS/Windows operating system environment. Students will be taught to develop appropriate programs using accepted standards and methodologies. Actual programming is a part of this course. (3 hrs. lect./1 hr. lab.)

ICS 113  Database Fundamentals (3)
This course examines file organization and the use of computer databases. It also examines the handling of information through its organization, management and control. A substantial part of the course develops an understanding of the data processing building blocks: files, records and fields. Techniques to report and maintain data are also covered. (Offered spring semester only.) (3 hrs. lect.)

ICS 120  Spreadsheet Fundamentals (3)
Students who complete this course will be able to accomplish the following:
- Simulate “what if” scenarios.
- Create spreadsheet templates.
- Design worksheets to solve complex tasks.
- Develop spreadsheet workbooks composed of several related worksheets.
- Minimize redundant data by linking information among worksheets.
- Utilize complex spreadsheet functions to solve problems.
- Utilize spreadsheet tools to analyze data.
- Create macros to complete repetitive tasks.
- Integrate spreadsheet data with a word processor.
- Publish spreadsheet data to the World Wide Web or a corporate Intranet.

ICS 121V  Microcomputer Topics (1-4)
This course covers current microcomputer topics. The course is designed to have variable credits to coincide with the rigor of the topic. A student may enroll and receive credit for this course more than one time (for different topics). A course description will be on record to designate the various topics for a student’s transcript. (1-4 lect. hrs.)

Prerequisite: ICS 100 or ICS 101 or consent of instructor.
for specific courses will be announced. (See department chair or instructor.)

ICS 140  Elementary Operating Systems (3)
This course examines and compares several operating systems used on computers. Comparisons of graphics user interface and command user interface operating systems will be made. Students will work with the Windows and Unix systems. Other systems will be researched. (3 hrs. lect.)
Prerequisite: Placement into ENG 22 or MATH 24 and completion of OAT 20B or equivalent.

ICS 163  Desktop Publishing (3)
Upon completion of this introductory desktop publishing course, the student will be able to do the following:
- Demonstrate an understanding of the relationship between typography, text and space.
- Describe the concepts of color theory.
- Demonstrate the ability to operate a desktop publishing software program to layout business cards, fliers, ads, brochures, and multi-page documents.
- Demonstrate the ability to operate a graphic program to edit clipart and photos.
- Demonstrate the steps to scan a photo or line drawing.
- Analyze and design a project for a target group.
- Demonstrate the ability to create a file to take to a printer.
(3 hrs. lect.)
Recommended Preparation: Basic computing skills.
The student learning outcomes are:
- Produce documents and other projects for a target audience, using desktop publishing software and applying creative and aesthetic elements.
- Use the computer’s operating system to manage document and folders, print hard copies, and scan graphics.

ICS 193V  Cooperative Education/Internship/Practicum (1-3)
Cooperative program between the student, an employer, and the College that integrates classroom learning with supervised practical experience. Reflects the student's major interest area and availability of job assignments. Offers the opportunity to develop workplace employability skills dependent on job assignments and course of study. (1-3 hrs. lect.)
Prerequisite: Various as determined by the particular course of study and placement of the cooperative education/internship practicum in the sequence of courses.

INTERDISCIPLINARY STUDIES (IS)

IS 103  Introduction to College (3)
This course is designed to orient first-time students to a college setting. Students will learn (1) the tools, techniques, methods, procedures, processes, skills, resources, and attitudes for success; (2) the programs and services of a postsecondary institution of higher education; and (3) to design a personal, comprehensive, postsecondary academic plan. (3 hrs. lect.)
Prerequisite: Placement in ENG 22 or consent of instructor.
The student learning outcomes are:
- Use the tools, techniques, methods, procedures, processes, skills, and resources for academic success.
- Describe the various programs and services of a post-high school institution.
- Identify short and long-term goals post WCC, and prepare an educational plan to meet those goals.
- Use college-level note taking, critical reading, test taking, memory, and concentration techniques.
- Use time-management, personal organization, stress management and study skills.
- Communicate effectively in writing and in speech.
- Find information from library, Internet, and other sources.
- Use strategies to complete out of class work efficiently and effectively.

IS 105B  Career Decision Making (2)
An introductory course designed to prepare students to make more focused career/life decisions through self-analysis and world of work examinations. (2 hrs. lect.)
Recommended Preparation: Placement in ENG 22.
The student learning outcomes are:
- Describe the career development process, current labor market trends, and issues related to economic self-sufficiency.
- Identify personal, family, cultural, and financial influences that relate to their career and educational decisions.
- Apply career knowledge by exploring their interests, skills, values, personality traits.
- Illustrate how their career search relates to job shadowing and service learning activities choices.
- Evaluate the effectiveness of the career decision making process by keep a journal and responding to evaluations of the instructor.

IS 105C  Professional Employment Preparation (1)
Facilitates employment search by emphasizing professional techniques and standards in the preparation of application forms, resumes, cover letters, and employment interviews. (1 hr. lect.)
Recommended Preparation: ENG 22, keyboarding skills, and knowledge of word processing.
The student learning outcomes are:
- Integrate job interview preparation techniques into a live interview.
- Utilize resources needed to find a job.
- Assemble a career portfolio for ongoing career development.

IS 160A  Polynesian Voyaging and Seamanship (3)
This course focuses on the fundamentals of voyaging and seamanship by blending the traditions of Polynesian culture, history and skills with modern science and technology. An interdisciplinary approach is used in treating topics in Hawaiian studies, astronomy, geology, oceanography, meteorology, marine biology, ethnobotany and archaeology of Polynesia and Hawai‘i. (3 hrs. lect.)
WCC: DH
The student learning outcomes are:
- Describe the basic geography of Polynesia.
- Apply the fundamental concepts in positional astronomy (including the seasons) and identify of two of the four recognized star lines used for navigation.
- Explain the basic principals in wayfinding (non-instrument navigation).
- Discuss Polynesian migration as gleaned from archaeological findings.
- Discuss Polynesian mythology and cosmology, especially as related to voyaging.
• Apply the basic concepts in geology, especially of the Pacific area.
• Discuss fundamentals of weather forecasting as related to the Pacific Ocean.
• Identify native and Hawaiian plants, especially those used in voyaging.

**IS 160B Polynesian Voyaging and Seamanship (3)**
This course focuses on the fundamentals of voyaging and seamanship by blending the traditions of Polynesian culture, history and skills with modern science and technology. An interdisciplinary approach is used in treating topics in Hawaiian studies, astronomy, geology, oceanography, meteorology, marine biology, ethnobotany and archaeology of Polynesia and Hawai`i. (3 hrs. lect.)

**Prerequisite:**
1. **Minimum water skills and survival requirements:** Pass the following water survival tests, which will be administered during the lab corequisite for this course.
   - ability to swim a minimum of 500 yards in the open ocean using any strokes
   - ability to tread water for 30 minutes in the open ocean
2. **Health clearance:** A written statement must be signed by a medical physician certifying that the student is physically capable of participating in the sailing activities scheduled for the lab corequisite for this course.

**Co-requisite:** Concurrent enrollment in IS 160L: Polynesian Voyaging and Seamanship Lab.

**WCC: DH**

The student learning outcomes are:
• Describe the basic geography of Polynesia.
• Apply the fundamental concepts in positional astronomy (including the seasons) and identify of two of the four recognized star lines used for navigation.
• Explain the basic principals in wayfinding (non-instrument navigation).
• Discuss Polynesian migration as gleaned from archaeological findings.
• Discuss Polynesian mythology and cosmology, especially as related to voyaging.
• Apply the basic concepts in geology, especially of the Pacific area.
• Discuss fundamentals of weather forecasting as related to the Pacific Ocean.
• Identify native and Hawaiian plants, especially those used in voyaging.

**IS 160L Polynesian Voyaging and Seamanship Lab (1)**
Laboratory/field trip course designed to acquire seamanship skills and apply knowledge of astronomy, geology, oceanography, meteorology, marine biology, ethnobotany and archaeology through sailing and environmental exploring activities. Optional coastal and/or inter-island voyaging field trips may be offered. (Students will be responsible for fees for each activity.) (3 hrs. lab.)

**Prerequisite:**
1. **Minimum water skills and survival requirements:** Pass the following water survival tests, which will be administered by the second lab:
   - ability to swim a minimum of 500 yards in the open ocean using any strokes
   - ability to tread water for 30 minutes in the open ocean
2. **Health clearance:** A written statement must be signed by a medical physician certifying that the student is physically capable of participating in the sailing activities scheduled for the lab. Health clearance must be submitted by the date of the first sailing lab.

**Co-requisite:** Concurrent enrollment in IS 160B: Polynesian Voyaging and Seamanship.

**WCC: DH**

**IS 201 The Ahupua`a (a) (3)**
Study of the traditional Hawaiian approaches to natural resources development, utilization, exploitation, and management. The ahupua`a, as the traditional Hawaiian unit of land and sea subdivision, beginning in the upland forests, stretching across lower elevations, past the shoreline to the edge of the reef, will be evaluated as a microcosm of an integrated ecosystem and as a model for natural resource management and sustainability. (2 hrs. lect./3 hrs. lab.)

**Recommended Preparation:** BIOL 101 or BIOL 124 or similar preparation.

The student learning outcomes are:
• Describe how the Hawai`i’s unique geological formation affects its sustainable natural resources.
• Describe how the ancient migration begins to affect the management of its natural resources and the socio-political fabric of the “new land.”
• Describe the agri-spiritual relationship between plant and mahi`a; and the fish and the lawai`a.
• Discuss the ancient and present management value of water.
• Describe and assist in the reconstruction of lo`i kalo and loko i`a.
• Describe and discuss the current resources management practices, which augment or negate ancient practices.
• Research and replicate an artifact of his or her choice.

**IS 205 Advanced Career Seminar (3)**
This course is designed to serve the needs of the adult learner and worker with life and/or work experience. Topics such as career assessment and planning, career transition, work alternatives and personal marketing will be covered. The course will be taught using a combination of seminar style group meetings and independent studies. (3 hrs. lect.)

**Prerequisite:** Placement into ENG 100.

The student learning outcomes are:
• Describe the career development process for adults and returning students, concerns of dislocated workers, current labor market trends affecting career transition, and issues related to economic self-sufficiency.
• Identify cultural influences, personal values, relevance of life stages, and financial factors influencing career needs of adults in transition.
• Apply information related to concerns and needs of adults in transition by exploring their interests, skills, values, personality traits, and in participating in relevant service learning activities.
• Illustrate how their career exploration is part of an on-going and life-long process
• Evaluate the effectiveness of their career decision making process by keep a journal and responding to evaluations of the instructor.

**IS 260A Polynesian Voyaging and Stewardship (3)**
This course focuses on the fundamentals of voyaging and the impact of human activity on the environment of Hawai`i, with emphasis on Kāne`ohe Bay and the Windward coast. An interdisciplinary approach is used in blending the traditions of Polynesian culture, history and skills with modern science and technology. Topics covered include Hawaiian studies, astronomy, geology, oceanography, meteorology, marine biology, ethnobotany and archaeology of Polynesia and Hawai`i. (3 hrs. lect.)
Prerequisite: Credit in IS 160A or IS 160B (Polynesian Voyaging & Seamanship) or consent of instructor.
WCC: DH

The student learning outcomes are:

• Identify the remaining two of the four recognized star lines used for navigation
• Contrast and compare wayfinding, celestial navigation and GPS.
• Discuss and explain the lunar phases and the causes and effects of tides
• Explain and apply the physics of sailing, as related to Bernoulli’s principle and Newtonian physics.
• Discuss the settlement of Hawai’i with emphasis on the Kane’ohe Bay area, including place names and voyaging chiefs.
• Apply the basic concepts in oceanography and meteorology, especially of the Pacific area.
• Apply basic sailing and navigational skills to prepare and carry out a sail plan.

IS 260B Polynesian Voyaging and Stewardship (3)
This course focuses on the fundamentals of voyaging and the impact of human activity on the environment of Hawai’i, with emphasis on Kane’ohe Bay and the Windward coast. An interdisciplinary approach is used in blending the traditions of Polynesian culture, history and skills with modern science and technology. Topics covered include Hawaiian studies, astronomy, geology, oceanography, meteorology, marine biology, ethnobotany and archaeology of Polynesia and Hawai’i. (3 hrs. lect.)
Prerequisite:
1. IS 160B (Polynesian Voyaging & Seamanship) or consent of instructor.
2. Minimum water skills and survival requirements:
   Students must demonstrate an:
   - ability to swim a minimum of 500 yards in the open ocean using any strokes except back stroke.
   - ability to tread water for 30 minutes in the open ocean
   (Note: Accredited water skill and survival tests passed within the past year are acceptable upon instructor approval. The ‘swim test’ must be completed by the date of the first sailing lab.)
3. Health clearance: from a licensed physician must be provided.
   (Note: Health clearance submitted within the past year is acceptable upon instructor approval. Health clearance must be submitted by the date of the first sailing lab.)
WCC: DH

IS 260L Polynesian Voyaging and Stewardship Lab (1)
Laboratory/field trip course designed to apply knowledge of Polynesian skills and modern science to the impact on the environment due to human settlement, especially in Hawai’i. Laboratory activities will further develop student skills in sailing, soil planning and navigation.

Students are expected to undertake mentorship roles in disseminating their newly acquired knowledge and skills to the community. Optional coastal and/or inter-island voyaging field trips may be offered. (Students will be responsible for fees for each activity.) (3 hrs. lab.)
Prerequisite:
1. Credit in IS 160L (Polynesian Voyaging & Seamanship Lab) or consent of instructor.
2. Minimum water skills and survival requirements:
   Students must demonstrate an:
   - ability to swim a minimum of 500 yards in the open ocean using any strokes
   - ability to tread water for 30 minutes in the open ocean
   (Note: Accredited water skill and survival tests passed within the past year are acceptable upon instructor approval. The ‘swim test’ must be completed by the date of the first sailing lab.)
3. Health clearance: from a licensed physician must be provided.
   (Note: Health clearance submitted within the past year is acceptable upon instructor approval. Health clearance must be submitted by the date of the first sailing lab.)
WCC: DH

IS 261 People, the Ocean, and the Environmental Crisis (3)
People’s impact on the quality of coastal and ocean environments, especially Hawaiian; scientific, legal, and socioeconomic aspects. Ocean pollution; ocean technology. (3 hrs. lect.)
Recommended Preparation: Credit or concurrent registration in OCN 201, ZOOL 200, SCI 124, or consent of instructor.

JAPANESE (JPNS)

JPNS 50 Basic Spoken Japanese (3)
Course intended for students wanting to learn conversational Japanese at a basic and workable level. Cultural information is provided as part of given language situations. (3 hrs. lect.)

JPNS 101 Elementary Japanese I (4)
Covers rules of grammar, vocabulary sufficient to maintain conversation and understanding at an elementary level. Provides for recognition and writing of kana. (5 hrs. lect./lab.)

The student learning outcomes are:

• Understand learned phrases and sentences in various social and academic contexts.
• Read and understand learned materials written in hiragana, katakana and approximately 50 kanji with references.
• Write short phrases and sentences using the three learned writing systems with one reference. Compose short notes and memos.

JPNS 102 Elementary Japanese II (4)
Continuation of JPNS 101. (5 hrs. lect./lab.)
Prerequisite: JPNS 101 or consent of instructor.

The student learning outcomes are:

• Understand sentences in combinations of learned and new vocabulary and grammatical structures in various contexts.
• Perform basic communication and exchanges in the context of learned material.
• Read material in hiragana, katakana and learned kanji, such as menus, short memos and messages and postcards. Have a functional command of approximately 125 essential kanji.
• Write sentences and paragraphs integrating new and learned material and structures, with master of hiragana, katakana, and a good grasp of kanji.

**JPNS 201 Intermediate Japanese I (4)**
Continuation of JPNS 102. Emphasis on increasing proficiency in reading, speaking and writing. (5 hrs. lect./lab.)
Prerequisite: JPNS 102 or consent of instructor.
The student learning outcomes are:
• Understand written material previously learned and new vocabulary and kanji in the context of various experiences.
• Understand and write paragraphs on topics grounded in personal experience or from learned material.
• Handle basic communicative tasks and social situations within given contexts.
• Read with increasing understanding longer material based on learned contexts. Material is written in the three writing systems with approximately 225 kanji, including 100 new ones learned each semester.

**JPNS 202 Intermediate Japanese II (4)**
Continuation of JPNS 201. (5 hrs. lect./lab.)
Prerequisite: JPNS 201 or consent of instructor.
The student learning outcomes are:
• Sustain understanding on topics, such as automobiles and its parts; houses and household furnishings and appliances; the body, its parts, health and medicine; education, careers and the workplace.
• Handle most communicative tasks and social situations.
• Initiate, sustain and close most communicative tasks or general conversation, in given and learned contexts.
• Read written material in the three writing systems in learned and new contexts with an additional number of kanji now totaling approximately 325.
• Write simple letters, paragraphs on personal experiences, summaries, and paraphrases of written materials.

**JOUR 205 News Writing (3)**
An introductory course in news writing, news gathering and journalistic values, news and feature story structures and issues relating to communication law and ethics. (3 hrs. lect.)
Prerequisite: ENG 100.
The student learning outcomes are:
• Analyze the quality of coverage in stories produced by the mass media and other students to become a more informed consumer of news.
• Identify basic journalistic concepts and principles, including news values, news and feature story structures and issues relating to communication law and ethics.
• Apply basic journalistic concepts and principles to produce a range of articles (press release, short news, profile, timed deadline pieces, news story and in-depth news or feature) that meet standards for readability, accuracy, news style and mechanics.
• Conduct background research and interviews to gather information accurately and comprehensively.
• Edit and proofread their own and others’ stories for readability, clarity, accuracy, news value, conciseness and mechanics.

**JOUR 205L News Writing (Grammar) Laboratory (1)**
A course to help students improve language skills such as word usage, grammar, punctuation, syntax and spelling. Required for journalism majors. Also open to non-majors. (1 hr. lect.)
Prerequisite: ENG 100. To be taken concurrently with JOUR 205 or with consent of instructor.

**JOUR 285V Newspaper Laboratory (1-3)**
Complete production of the student newspaper, including fact gathering, writing, layout, editing, and photography. Repeatable up to 6 credits, 6 credits applicable toward A.A. degree.
Prerequisite: ENG 100. Completion of or concurrent enrollment in JOUR 205 or consent of instructor.
The student learning outcomes are:
• Apply basic journalistic concepts and principles to produce a range of articles that meet standards for publication, including readability, accuracy, news style and mechanics.
• Demonstrate a working knowledge of page design principles and software to produce pages for a tabloid publication.
• Apply knowledge of photography to take pictures using a digital camera, crop photos and adjust them using PhotoShop software.
• As part of a team, produce a monthly publication that meets journalistic standards for news value, readability, accuracy, objectivity, clarity, balance and fairness.
• Demonstrate an ability to generate story ideas, meet deadlines, gather and organize information, and follow through on assignments.

**LEARNING SKILLS (LSK)**

**LSK 35 Learning Skills for College Success (4)**
An integrated reading, writing, and study skills course designed to improve vocabulary, strengthen reading comprehension, and improve writing skills with an emphasis on sentence structure and patterns to ensure student success in college. (4 hrs. lect.)
Prerequisite: Placement into LSK 35 or consent of instructor.
The student learning outcomes are:
• Incorporate newly learned vocabulary in reading and writing assignments.
• Apply literal, interpretative, and critical reading skills to comprehend and analyze various types of reading material.
• Use various study skills strategies, such as an appropriate reading-study system to understand and retain information in informative material, time management, and notetaking.
• Select and recode relevant key ideas in linear or visual form.
• Use a writing process and produce clear, concise, credible, and grammatically correct paragraphs.

**LSK 110 College Study Skills (3)**
This course assists students to deal more effectively with the rigors of the academic expectations of college. Students will carefully assess their work habits, attitudes, and learning styles and will learn specific strategies to achieve academic success. (3 hrs. lect.)
Prerequisite: Placement at the ENG 21 level or above or consent of instructor.
The student learning outcomes are:
• Analyze and evaluate one’s own academic strengths and weaknesses in processing information, preparing for learning, textbook and lecture note taking techniques and strategies, and test taking skills.
• Apply various study skills strategies and techniques.
• Complete the required library research units in order to write a short research paper involving strategies that include finding, evaluating, and documenting information from various sources.

LINGUISTICS (LING)

LING 102 Introduction to Language (3)
An investigation of the nature and function of language, its sounds, structures and semantics, oral and written expression, acquisition and change. General linguistic principles applicable to all languages will be covered. We will learn ways of talking about language that will enable us to discuss language and understand what linguists do and say. (3 hrs. lect.)
Prerequisite: ENG 22 or consent of instructor.
WCC: DH
The student learning outcomes are:
• Examine and appreciate humanity’s supreme achievement—human language—and its repercussions.
• Articulate an appreciation of human languages and how they work.
• Articulate the diversity of communication systems in daily lives.
• Examine and assess one’s own language beliefs, capabilities, and learning.

MANAGEMENT (MGT)

MGT 120 Principles of Management (3)
This course is a practical introduction to and study of management principles and practices. The student will learn the elements needed to manage effectively as well as better understand the decision making process in business. (3 hrs. lect.)
The student learning outcomes are:
• Understand and be able to apply the basic functions of management (i.e. planning, organizing, staffing, leading, and controlling).
• Demonstrate and understand the skills necessary to become a successful manager (i.e. technical, human relations, administrative, communications and problem-solving).
• Describe and recognize the changing nature of the supervisor’s environment including information availability, workforce demographics and managing diversity.
• Recognize the ethical dilemmas faced by managers and the social responsibilities of businesses.
• Understand why people resist change and how to develop strategies to reduce the resistance to change.

MATHEMATICS (MATH)

To be successful in math, students must register in courses for which they have met the stated prerequisites. Prerequisite courses and placement test scores are valid for two years. A placement test is provided which determines students’ entry course in the sequence of math courses.

Sequence of math courses for students majoring in mathematics, science, and related disciplines (i.e., business, engineering, agriculture, etc.):

Math Advisement Notes for MATH 24 and 25 Students
The community colleges in the University of Hawai‘i offer two courses, MATH 24 and MATH 25, to cover all the topics in Elementary Algebra. Beginning Fall 1998, only Leeward Community College will cover topics in MATH 24/25 in a different order compared to the other community colleges in Hawai‘i. Therefore, MATH 24 from Leeward Community College is NOT equivalent to MATH 24 at the other community colleges. Similarly, MATH 25 from Leeward Community College is NOT equivalent to MATH 25 at the other community colleges. Students successfully completing MATH 25 from any campus in the University of Hawai‘i will be able to take the next course, MATH 27 or 103 (Intermediate or College Algebra) or MATH 100 (Survey of Math).
To avoid problems, students who need to or want to take both Elementary Algebra courses are strongly advised to complete their two Elementary Algebra courses at one campus. A student who took MATH 24 at Leeward Community College needs to see a math instructor for special clearance to be able to take MATH 25 at Windward. Otherwise, the student will be required to take Windward’s MATH 24 class.

MATH 21A Basic College Mathematics I (2)
This course is designed to help students review and master the basics of mathematics. Emphasis will be placed on numeration, whole numbers, fractions, mixed numbers, decimals, and ratios and proportions. (2 hrs. lect.)
Prerequisite: Satisfactory math placement test score or consent of instructor.
The student learning outcomes are:
• Utilize precise mathematical language and symbols in written and/or oral form.
• Demonstrate proficiency in performing operations with whole numbers, fractions, mixed numbers, and decimal numbers.
• Utilize fundamental properties to solve simple equations.
• Use algebraic techniques to analyze and solve applied problems.

MATH 21B Basic College Mathematics II (2)
This course prepares students who want to strengthen computation and problem-solving skills before proceeding to an elementary algebra course. Includes the concept of variables, using rational numbers, solving simple equations in one variable, percent, and word problems. (2 hrs. lect.)
Prerequisite: Grade of "C" or better in MATH 21A, satisfactory math placement test score or consent of instructor.
The student learning outcomes are:
• Utilize precise mathematical language and symbols in written and/or oral form.
• Demonstrate proficiency in performing operations with integers, rational numbers, real numbers, and variable expressions.
• Utilize fundamental properties to solve equations.
• Use algebraic techniques to analyze and solve applied problems.
• Employ mathematical formulas to determine measurements in geometric figures.
• Apply concepts and principles of percents to solve applied problems.

MATH 22 Pre-Algebra Mathematics (3)
This course prepares students who want to strengthen computation and problem solving skills before proceeding to an elementary algebra course. Includes a brief review of arithmetic, the concept of variables, using rational numbers, solving simple equations in one variable, percent, measure, ratio and proportion, geometry formulas, square roots and word problems. (3 hrs. lect.)
Prerequisite: Grade of "C" or better in MATH 21A or equivalent, satisfactory math placement test score, or consent of instructor.
The student learning outcomes are:
• Utilize precise mathematical language and symbols in written and/or oral form.
• Demonstrate proficiency in performing operations with integers, rational numbers, real numbers, and variable expressions.
• Utilize fundamental properties to solve equations.
• Use algebraic techniques to analyze and solve applied problems.
• Employ mathematical formulas to determine measurements in geometric figures.
• Apply concepts and principles of percents to solve applied problems.

MATH 24 Elementary Algebra I (3)
This course represents approximately half of a typical year algebra course. Topics include real numbers and their properties, linear equations and inequalities in one variable, the coordinate plane, linear systems in two variables, and exponents. (3 hrs. lect.)
Prerequisite: Grade of "C" or better in MATH 22 or MATH 21B or equivalent, satisfactory math placement test score, or consent of instructor.
The student learning outcomes are:
• Utilize precise mathematical language and symbols in written and/or oral form.
• Demonstrate proficiency in performing operations with rational numbers, and variable expressions.
• Interpret equations/inequalities geometrically and find solutions to equations/inequalities algebraically.
• Use algebraic techniques to analyze and solve applied problems.
• Find slope and apply it to finding the equation of a line.
• Utilize introductory function concepts.
• Demonstrate proficiency in the use of the rules of exponents and its applications.

MATH 100 Survey of Mathematics (3)
An introduction to quantitative and logical reasoning for the nonscience/nonmathematics major. The question, "What is mathematics?" is explored, while focusing on mathematical systems or models, cultivating an appreciation for mathematics as an aesthetic art, and developing skills in problem solving and analysis. (3 hrs. lect.)
Prerequisite: Grade of "C" or better in MATH 25 or equivalent, satisfactory math placement test score, or consent of instructor.
WCC: FS
The student learning outcomes are:
• Construct diagrams that will facilitate the visual conception of a phenomenon or problem.
• Utilize basic properties and/or operations related to Set Theory, Logic, Statistics, Linear and Quadratic functions and Counting methods.
• Employ symbolic/mathematical techniques to solve applied problems.
• Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 103 College Algebra (4)
Linear equations, inequalities, systems of equations, polynomials, functions, fractional expressions and equations, exponents, powers, roots, quadratic equations and functions; rational, exponential and
MATH 111 Mathematics for Elementary Teachers I (3)
Math 111 is the first of a two-course sequence designed to give prospective elementary education majors the depth of understanding necessary to teach mathematics in the elementary classroom. Topics include number (natural numbers, integers, fractions, and real numbers) and operations, sets, patterns, functions and algebra. Emphasis will be on communication, connections and problem solving, representations, and reasoning. (3 hrs. lab.)
Prerequisite: Grade of “C” or better in MATH 25 or placement into MATH 100 or equivalent, and “C” or better in ENG 200 or placement in ENG 100.

WCC: FS

The student learning outcomes are:
• Demonstrate proficiency in writing math expressions into different forms.
• Demonstrate proficiency in graphing, statistical data, calculating measures of central tendency, measures of variation, percentiles, and correlation coefficients, and regression line.
• Interpret statistical information provided in graphs, in summary measures (central tendency, dispersion, percentile), and in the correlation coefficient.
• Solve probability problems involving compound events, independent events, mutually exclusive events, and conditional probability.
• Calculate and interpret probabilities for normal or binomial distributions, including the use of the Central Limit Theorem.
• Demonstrate the use of inferential statistics.
• Utilize appropriate statistical terminology and mathematical symbols to effectively communicate mathematics in written and/or oral form.

MATH 112 Mathematics for Elementary Teachers II (3)
Math 112 is the second of a two-course sequence designed to give prospective elementary education majors the depth of understanding necessary to teach mathematics in the elementary classroom. Topics include geometry, measurement, data analysis, statistics, and probability. Emphasis will be on communication, connections and problem solving, representations and reasoning. (3 hrs. lab.)
Prerequisite: Grade of “C” or better in MATH 111.

WCC: FS

The student learning outcomes are:
• Demonstrate proficiency in solving systems of linear and second degree equations and inequalities.
• Utilize the definition of a logarithm and the properties of logarithms to simplify logarithmic expressions or to solve logarithmic and exponential equations.
• Utilize introductory function concepts and draw the graphs of selected functions.
• Explain and utilize numbers, ways of representing numbers, including number (natural numbers, integers, fractions, and real numbers) and operations, sets, patterns, functions and algebra. Emphasis will be on communication, connections and problem solving, representations, and reasoning and proof. (3 hrs. lab.)

MATH 115 Statistics (3)
An introduction to topics in statistics, with a brief look at elementary probability. This is a valuable course for business, natural science, social science, health science and computer science majors. (3 hrs. lect.)
Prerequisite: Grade of “C” or better in MATH 25 or equivalent, satisfactory math placement test score, placement into MATH 100 or higher, or consent of instructor.

WCC: FS

The student learning outcomes are:
• Demonstrate proficiency in writing math expressions into different forms.
• Demonstrate proficiency in graphing, statistical data, calculating measures of central tendency, measures of variation, percentiles, and correlation coefficients, and regression line.
• Interpret statistical information provided in graphs, in summary measures (central tendency, dispersion, percentile), and in the correlation coefficient.
• Solve probability problems involving compound events, independent events, mutually exclusive events, and conditional probability.
• Calculate and interpret probabilities for normal or binomial distributions, including the use of the Central Limit Theorem.
• Demonstrate the use of inferential statistics.
• Utilize appropriate statistical terminology and mathematical symbols to effectively communicate mathematics in written and/or oral form.

MATH 135 PreCalculus: Elementary Functions (4)
An analysis of elementary functions. A study of polynomial, rational, exponential and logarithmic functions. Topics also include graphing techniques, transformations, applications, systems of equations and inequalities, linear programming, partial fractions and related topics. Emphasis is placed on topics which will prove useful to students planning to take calculus and also to those who are interested in pursuing math-related careers. (4 hrs. lect.)
Prerequisite: Grade of “C” or better in MATH 103, MATH 27 or equivalent, satisfactory math placement test score, or consent of instructor.

WCC: FS

The student learning outcomes are:
• Demonstrate proficiency in writing math expressions into different forms.
• Find the solutions to an equation, inequality, and system of linear and nonlinear equations and inequalities using complex numbers where appropriate.
• Use algebraic techniques to analyze and solve applied problems.
• Interpret equations geometrically and use geometrical information to obtain the equation of lines and circles.
• Utilize function concepts.
• Draw the graphs of functions utilizing behavior information and/or transformations.
• Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.
• Demonstrate proficiency in working with polynomial functions and using important theorems related to polynomial functions.
• Apply concepts and properties of the logarithm function.

MATH 140 Pre-Calculus: Trigonometry and Analytic Geometry (4)
Study of the elements of trigonometry and analytic geometry including functions and their inverses; trigonometric functions, relations, graphs, and applications; conic sections; vector applications; cartesian and polar coordinate systems; parametric equations and applications; sequences, series, either math induction or binomial theorem and related topics. (4 hrs. lect.)
Prerequisite: Grade of "C" or better in MATH 140 or equivalent, satisfactory math placement test score, or consent of instructor.
WCC: FS
The student learning outcomes are:
• Utilize precise mathematical language and symbols and effectively communicate mathematics in written and/or oral form.
• Apply concepts and properties of trigonometry, vectors, and complex numbers to solve problems.
• Apply concepts and properties of sequences and series to solve problems.
• Analyze and graph trigonometric functions, inverse trigonometric functions, conics, polar equations, and parametric equations.
• Demonstrate proficiency in performing operations with trigonometric expressions, identities, and equations.
• Analyze and solve application problems requiring the use of trigonometry and analytical geometry.

MATH 203 Calculus for Business and the Social Sciences (3)
Basic mathematical concepts, topics in differentiation and introductory integration of algebraic, exponential and logarithmic functions. Related applications to management, finance, economics and social science will be considered. (Usually offered fall semester only.) (3 hrs. lect.)
Prerequisite: Grade of "C" or better in MATH 135 or equivalent, satisfactory math placement test score, or consent of instructor.
WCC: FS
The student learning outcomes are:
• Understand and use the intuitive definitions of limits and apply them in limit calculations and in determining continuity.
• Demonstrate proficiency in determining derivatives and apply different interpretations of the derivative.
• Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.
• Use calculus techniques to analyze and solve applied problems.
• Use derivatives to analyze and sketch graphs and/or to solve related problems.
• Demonstrate proficiency in determining antiderivatives and integrals.
• Utilize integration in applied problems.

MATH 205 Calculus I (4)
Basic mathematical concepts, topics in differentiation, and introductory integration of algebraic and trigonometric functions. Applications of differentiation and integration will be demonstrated. (4 hrs. lect.)
Prerequisite: Grade of "C" or better in MATH 140 or equivalent, satisfactory math placement test score, or consent of instructor.
WCC: FS
The student learning outcomes are:
• Understand and use the formal and intuitive definitions of limits and apply them in limit calculations and in determining continuity.
• Demonstrate proficiency in determining derivatives and apply different interpretations of the derivative.
• Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.
• Use calculus techniques to analyze and solve applied problems.
• Use derivatives to analyze and sketch graphs and/or to solve related problems.
• Demonstrate proficiency in determining antiderivatives and integrals.
• Utilize integration in applied problems.

MATH 206 Calculus II (4)
Differentiation and integration concepts of trigonometric, exponential, logarithmic and hyperbolic functions. Integration implements, infinite series, and applications of derivatives and integrals are also featured. (Usually offered spring semester only.) (4 hrs. lect.)
Prerequisite: Grade of "C" or better in MATH 205 or equivalent, satisfactory math placement test score, or consent of instructor.
WCC: FS
The student learning outcomes are:
• Apply limits, derivatives, and integrals to inverse functions, logarithmic, exponential, hyperbolic, and inverse trigonometric functions.
• Utilize various techniques of integration.
• Determine whether a sequence or series converges.
• Use concepts from the course to solve problems.
• Solve differential equations.
• Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 206L Calculus Computer Lab (1)
Introduction to symbolic computer software for solving calculus problems, graphic functions and experimenting with calculus concepts. No knowledge of computer required. (2 hrs. lect./lab.)
Prerequisite: Grade of "C" or better in MATH 205, satisfactory math placement test score, or consent of instructor.
Co-requisite: MATH 206.
The student learning outcomes are:
• Graph a function and solve an equation or inequality, and system of equations by using DERIVE.
• Utilize the geometric significance of the derivative by using DERIVE.
• Analyze and apply curve fitting methods by using DERIVE.
• Utilize DERIVE to solve problems and effectively communicate mathematics in written and/or oral form.

MATH 231 Calculus III (3)
Vector-oriented study of functions of several variables; partial differentiation and line integrals; multiple integrals. (3 hrs. lect.)
Prerequisite: Grade of "C" or better in MATH 206 or equivalent, satisfactory math placement test score, or consent of instructor.
WCC: FS
The student learning outcomes are:
• Analyze and apply principles, concepts, and properties from algebra, geometry, trigonometry, and calculus to solve
problems.
• Apply concepts and calculus properties of Cartesian space coordinates and vectors.
• Apply principles and concepts from calculus to multivariable functions.
• Use various strategies from this course to solve problems.
• Utilize precise mathematical language and symbols and effectively communicate in written and/or oral form.

**Meteorology (MET)**

**MET 101 Introduction to Meteorology (3)**
Introduction to Meteorology (MET 101) studies basic atmospheric physics, Sun-Earth-atmosphere-ocean-human interrelationships, major weather systems and forecasting, with special emphasis on Hawai‘i.
For both science and non-science majors and prospective science teachers. (3 hrs. lect.)
WCC: DP

The student learning outcomes are:
• Describe the components, processes and resulting weather patterns in the atmosphere.
• Interpret the components of weather maps, and forecast weather.
• Apply the scientific method and theories and concepts of meteorology (atmospheric physics) to explain major weather systems.
• Explain critically the relationship between humans and the atmospheric environment.

**Microbiology (MICR)**

**MICR 130 General Microbiology (3)**
Fundamentals of microbiology, growth, development, and classification of bacteria, viruses, protozoa, fungi and algae; roles of microorganisms in the environment and human affairs: medical microbiology, immunology, and applied microbiology for food sanitation and public health. (3 hrs. lect.)
WCC: DB

The student learning outcomes are:
• Describe the main morphological characteristics, growth, reproduction and classification of algae, bacteria, fungi, protozoa, viruses and helminthes.
• Discuss etiologies, reservoirs of infection, modes of transmission, signs, symptoms, and treatments and/or methods of prevention of common infectious diseases of humans.
• Describe the basic principles of molecular genetics as they relate to cell division, mutation, genetic engineering, protein synthesis, bacterial virulence, and antibiotic resistance.
• Describe pathogenicity, immunity and allergies.

**MICR 140 General Microbiology Laboratory (2)**
Laboratory course illustrating fundamental techniques and concepts of microbiology, such as microscopy, aseptic culture methods, microorganism classification and identification, environmental factors influencing microorganisms, biochemistry of microorganisms, ecological microbiology, and medical microbiology. This course is designed to complement MICR 130. Primarily for students in nursing, dental hygiene and nutrition. Science laboratory course. (4 hrs. lab.)

Prerequisite: Credit or concurrent registration in MICR 130; eligibility for placement into MATH 24.
WCC: DY

The student learning outcomes are:
• Operate equipment used in microbiology laboratory.
• Prepare growth media.
• Perform aseptic transfer.
• Identify microorganisms using morphological and physiological tests.
• Follow biosafety procedures.
• Produce lab reports using the standard scientific format.

**Military Science, (MSCI)**

**MSCI 105 Introduction to Military Science I (2)**
Introduction to the Army ROTC program providing instruction in military-related subjects of general student interest. Topics covered include the organization and role of the Army, customs, and courtesies of the Army, the Army writing style, and an introduction to military briefings. Basic skills including map reading, orienteering, rifle marksmanship, first aid, and tactics are also emphasized. (2 hrs. lect.)

**MSCI 105L Introduction to Military Science I (1)**
Practical application of classroom instruction. Activities emphasized include drill and ceremony, first aid, rifle marksmanship, physical fitness, and small unit tactics. (2 hrs. lab.)

**MSCI 106 Introduction to Military Science II (2)**
Continuation of MSCI 105. Topics covered previously are explored in more detail. In addition, instruction is given in military leadership, professional ethics, developing a physical fitness program, and the role of officers in the Army. Students have the opportunity to participate in adventure training activities including rappelling, helicopter operations, water operations, water survival, construction of one-rope bridges, and field training exercises. (2 hrs. lect.)

**MSCI 106L Introduction to Military Science II (1)**
Practical application of classroom instruction. Activities emphasized include drill and ceremony, first aid, rifle marksmanship, physical fitness, and small unit tactics. (2 hrs. lab.)

**MSCI 205 Intermediate Military Science I (2)**
Instruction which emphasizes the basic concepts of military leadership to include the military decision making process and the types and styles of leadership. Basic skills including map reading, first aid, and rifle marksmanship are further developed. Students are given the opportunity to experience a variety of leadership positions within the ROTC battalion and are encouraged to participate in field training exercises and other extracurricular activities. (2 hrs. lect.; 2 hrs. lab.)

**MSCI 206 Intermediate Military Science II (3)**
Continuation of MSCI 205. Topics introduced include military operations orders, wilderness survival skills, individual and squad level tactics, and the key jobs and responsibilities of Army officers. Further expertise in basic skills is developed. Students are encouraged to improve their physical conditioning, to seek a leadership position in the ROTC battalion, and to participate in field exercises and other extracurricular activities. (2 hrs. lect.; 2 hrs. lab.)
Music (MUS)

MUS 101  Rhythmic Sightreading (1)
Individualized instruction in rhythmic sightreading. Student may progress through four levels successively in four semesters with TAP Master system. May be repeated for a total of four credits, 1 each level. Repeatable up to 4 credits, 4 credits applicable toward A.A. degree. (2 hrs. lect./studio.)
WCC: DA

The student learning outcomes are:
• Identify pitches played within an octave.
• Identify notated pitches and match pitch names with sounded pitches.
• Accurately repeat rhythms as played.
• Play and sing from sight notated rhythms and melodic phrases.

MUS 106  Music Appreciation (3)
Music as an aural form which exists in time. Recognition and understanding basic elements, styles, genres, and forms; music as a reflection of the social, cultural, economic and political events of each historical period. Understanding the value of music to the individual and society. Concert attendance required for two live performances during the semester with written critique. (3 hrs. lect.)
WCC: DH

The student learning outcomes are:
• Identify masterpieces of classical music repertoire.
• Distinguish the essential compositional characteristics of the several stylistic periods in music/art history and representative composers from each period, which help place unfamiliar repertoire into familiar periods.
• Contrast/compare music of any type (i.e., classical, popular, ethnic, seasonal) for texture, form, melodic contour, harmonic orientation and time of composition.
• Compare/contrast the live performances seen during the semester.
• Define the elements that make up classical performance tradition and etiquette.

MUS 107  Music in World Culture (3)
The student learning outcomes are:
• Describe the role of music in different cultures.
• Describe the distinctive aural features and music aesthetics of a music culture.
• Describe the historical, religious, social, and political aspects of a society that contribute to the development of a music culture.
• Affirm the validity of other music traditions.
• Contrast/compare one’s own music within the broader context of other music traditions.

MUS 108  Fundamentals of Western Music (3)
A music theory course. Emphasis on learning basic concepts involved in reading and writing music. Application of concepts in learning simple skills necessary for playing three musical instruments. Student will complete one level of TAP (MUS 101) and may take MUS 101 for credit. (3 hrs. lect.) WCC: DA

The student learning outcomes are:
• Identify and write the basic components of Western music notation.
• Notate and read basic melodic and rhythmic patterns in both simple and compound meters.
• Use the components of music in both the performance and creation of music.

MUS 114  College Chorus (1)
Rehearsal and performance of classical, popular, and Polynesian/ethnic choral literature. Elementary Polynesian dance may be included as part of performance. Open to all students. No previous choral experience required. Extra curricular concert attendance required. Student will complete 5 tapes in the Pitch Master Diatonic Series or the complete Tune Up series. May be repeated any number of times; 7 credits applicable toward A.A. degree. (3 hrs. rehearsal.)
WCC: DA

The student learning outcomes are:
• Read pitch and rhythmic notation in simple choral parts.
• Learn choral parts using basic music elements.
• Demonstrate the importance of ensemble singing in terms of musicianship and performance practice by learning all choral parts thoroughly and attending all rehearsals and performances.
• Experience the transformative nature of choral performance in the human experience.

MUS 121B  Voice 1 (2)
Performance class designed for students with little or no vocal experience. Deals with vocal production and literature for voice. Student will complete tapes 1-5 of the Pitch Master Diatonic Series or the complete Tune Up series. Recital or concert attendance required. Repeatable up to 4 credits; 2 credits applicable toward A.A. degree. (3 hrs. lect./studio.) WCC: DA

The student learning outcomes are:
• Demonstrate basic vocal techniques of physical alignment, breath support, breath control, and tone production in performances of several songs.
• Apply basic concepts of rhythm and pitch accuracy in performances.
• Employ basic concepts of sight reading in learning music for performance.
• Perform in class and the semester recital with some confidence.

MUS 121C  Piano 1 (2)
Basic principles of performance. Relevant problems in piano literature at elementary level. MUS 121C, 122C must be taken in sequence. Student will complete one level of TAP (MUS 101 and may take MUS 101 for credit). Repeatable up to 6 credits; 2 credits applicable toward A.A. degree. (3 hrs. lect./studio.) WCC: DA

The student learning outcomes are:
• Identify and write the basic concepts of music notation.
• Demonstrate knowledge of basic concepts in accurate performances.
• Demonstrate knowledge of the history of piano development.
• Perform in class and the semester recital with some confidence.

**MUS 121D Beginning Classical Guitar (1)**
Basic principles of classical guitar performance; relevant problems in literature. Repeatability up to 2 credits, 2 credits applicable toward A.A. degree. (4 hrs. studio–8 wk. term) WCC: DA
The student learning outcomes are:
• Identify and write the basic concepts of music notation.
• Apply knowledge of basic concepts in accurate performances.
• Demonstrate knowledge of the history of classical guitar development.
• Perform with growing confidence in class performances.

**MUS 121F Beginning Slack Key Guitar (1)**
Basic principles of performance; relevant problems in literature. Student learns to play two G tunings. This course is intended for students with little or no background in this style of guitar playing. Ability to read music is not required. (4 hrs. studio–8 wk. term) WCC: DA
The student learning outcomes are:
• Demonstrate knowledge of the history of slack key guitar development.
• Apply knowledge of basic concepts in accurate performances.
• Use knowledge of slack key techniques and music concepts (music theory) to complete in-class recitals.
• Perform with growing confidence in class performances.

**MUS 121Z Beginning Ukulele (1)**
Introductory course in ukulele. Focus on principles of performance. Ability to read music is not required. (4 hrs. studio–8 wk. term) WCC: DA
The student learning outcomes are:
• Identify and write the basic concepts of music notation.
• Apply knowledge of basic concepts in accurate performances.
• Demonstrate knowledge of the history of ukulele development.
• Perform with growing confidence in class performances.

**MUS 122F Intermediate Slack Key Guitar I (1)**
Intermediate slack key guitar: level I. Student learns to play solos in C tunings and intermediate solos at level I in tunings learned in the elementary class. (4 hrs. studio–8 wk. term) WCC: DA
Prerequisite: MUS 121F or consent of instructor.
MUS 121D and 122D must be taken in sequence. Student will complete one level of TAP (MUS 101 and may take MUS 101 for credit). (3 hrs. lect./studio)
Prerequisite: MUS 121C.
WCC: DA
The student learning outcomes are:
• Incorporate additional theoretical concepts in the performance of classical guitar music.
• Demonstrate knowledge of intermediate level concepts in performances.
• Sight read music with increasing accuracy and musicianship.
• Exhibit greater confidence in performing level-two repertoire.

**MUS 122C Piano 2 (2)**
Designed for further study of principles and basic skills of piano performance established in first semester piano. Continues the group participation chord approach with greater emphasis on ensemble playing and improvisation. MUS 121C and 122C must be taken in sequence. Student will complete one level of TAP (MUS 101 and may take MUS 101 for credit). (3 hrs. lect./studio)
Prerequisite: MUS 121C.
WCC: DA
The student learning outcomes are:
• Incorporate additional theoretical concepts in the performance of piano music.
• Display intermediate level concepts in performances.
• Sight read music with increasing accuracy and musicianship.
• Exhibit greater confidence in performing level-two repertoire.

**MUS 122B Voice 2 (2)**
Performance class designed for students with previous vocal experience. Deals with vocal production and literature for voice. Student will complete tapes 6-10 of the Pitch Master Diatonic Series. Recital or concert attendance required. Repeatable up to 4 credits; 2 credits applicable toward A.A. degree. (3 hrs. lect./studio.)
Prerequisite: MUS 121B or consent of instructor.
WCC: DA
The student learning outcomes are:
• Discuss the origin and development of vocal music.
• Demonstrate intermediate level vocal techniques of diction, tone production, and breath control in performance situations.
• Sight read and learn music at an intermediate level.
• Perform with greater confidence in public performances.

**MUS 130F Slack Key Guitar Ensemble (1)**
Continuation of Music 122F. Increased emphasis on slack key literature, techniques, and tunings. Advanced intermediate techniques of slack key guitar as applied to ensemble playing. (4 hrs. studio–8 wk. term)
Prerequisite: MUS 121F and MUS 122F.
WCC: DA
The student learning outcomes are:
• Analyze repertoire for articulation, phrasing and fingering difficulties.
• Incorporate intermediate level theoretical and technical concepts in the performance of chosen repertoire.
• Sight read tablature notation with greater accuracy and musicianship.
• Exhibit confidence in performing intermediate-level repertoire.
MUS 166  Popular Music in America (3)
A survey of Pop Music (including Blues, Jazz, Rock and Folk), in the United States in the twentieth century. Activities will include listening to recordings, writing lyrics and tunes and learning various aspects of the business of music. Field trips and concert attendance required. (3 hrs. lect.) WCC: DH
The student learning outcomes are:
• Perform with poise and confidence in front of an audience.
• Apply advanced theoretical and technical concepts to performance repertoire.
• Analyze and discuss the form, articulation, harmonic rhythm, and phrasing of performance on various instruments.
• Analyze repertoire for articulation, phrasing and fingering difficulties.
• Compare/contrast different styles of popular music.

MUS 177  Introduction to Hawaiian Music (3)
A survey of Hawaiian music from Polynesian origins and pre-contact traditional forms to acculturated and contemporary forms and expressions including vocal, instrumental and dance music in their social, cultural and religious contexts. (3 hrs. lect.)

MUS 221C  Piano 3 (2)
Continuation of MUS 122C. Increased emphasis on piano/literature up to the intermediate level. MUS 221C and MUS 222C must be taken in sequence. Student will complete one level of TAP (MUS 101) and may take MUS 101 for credit. (Offered every fall semester.) (3 hrs. lect./studio)
Prerequisite: MUS 122C or consent of instructor.
WCC: DA
The student learning outcomes are:
• Exhibit confidence in performing intermediate-level repertoire.
• Sight read music with greater accuracy and musicianship.
• Incorporate intermediate level theoretical and technical concepts in the performance of chosen repertoire.
• Analyze repertoire for articulation, phrasing and fingering difficulties.

MUS 222C  Piano 4 (2)
Continuation of MUS 221C. Increased emphasis on piano/literature up to the intermediate level. Introduction to accompanying. MUS 221C and MUS 222C must be taken in sequence. Student will complete one level of TAP (MUS 101) and may take MUS 101 for credit. (Offered every spring semester.) (3 hrs. lect./studio)
Prerequisite: MUS 221C or consent of instructor.
WCC: DA
The student learning outcomes are:
• Analyze and discuss the form, articulation, harmonic rhythm, and phrasing of performance repertoire.
• Provide logical fingering for repertoire pieces when needed.
• Apply advanced theoretical and technical concepts to performance of chosen repertoire.
• Perform with poise and confidence in front of an audience.

MUS 253  Basic Experiences of Music (3)
This course will introduce you to nearly everything you need to know about the basics of music (time, pitch, musical expression and form) as preparation for teaching in an elementary school. These elements will be explored through singing and playing simple musical instruments, such as the recorder, ‘ukulele, bells, autoharp, piano and percussion instruments. Additional activities include practice in reading and notating music, performing from notation, aural analysis, analysis of music from a score and the creative use of musical components. Computer programs are available for assisted learning. (3 hrs. lect.)
WCC: DA
The student learning outcomes are:
• Apply basic theoretical components of Western music notation to written examples of music.
• Notate and read basic rhythm and melodic patterns, both in simple and compound meters.
• Harmonize simple melodies.
• Apply basic knowledge of basic theoretical concepts to performance on various instruments.
• Teach a mini model lesson, demonstrating a grade-appropriate musical concept.

NATURAL RESOURCES AND ENVIRONMENTAL MANAGEMENT (NREM)

NREM 250 GIS Application in Environmental Science and Natural Resource Management (2)
An overview of geographic information system (GIS) applications in environmental science and natural resource management by examining case histories and completion of a GIS project. Students are also introduced to the basics of integrating the global position system (GPS) and remote sensing (RS) into a GIS to solve problems in environmental science and natural resource management. (4 hrs. lect./lab.)
Prerequisite: GIS 150, equivalent coursework, working knowledge of GIS, or consent of the instructor.
Recommended Preparation: BIOL 124, GEOG 101, or similar environmental science coursework.
WCC: NREM

OCEANOGRAPHY (OCN)

OCN 101  Introduction to the Marine Option Program (1)
This course provides an overview of statewide issues and organizations involved with ocean and freshwater activities, including management, education, research and business. It also provides an orientation to the Marine Option Program (MOP) and reviews the requirements of the MOP certificate. The course explores opportunities for internships, projects and careers related to water environments. The course will present guidelines on proposal writing, project implementation, data collection and interpretation, and final report preparation and presentation. This course is taught via HITS interactive television with participation of students and faculty throughout the UH system. (1 hr. lect.)
Recommended Preparation: “C” or higher in ENG 21 or 22, and MATH 24.

OCN 201  Science of the Sea (3)
An introductory course to oceanography covering the dimensions of the science of oceanography, the physical and chemical properties of sea water, waves, tides, currents, life in the ocean, and the geologic structure of the ocean floor, environmental concerns, and human use of the oceans. Field trips are scheduled concurrently with OCN 202. (3 hrs. lect.) WCC: OCN
The student learning outcomes are:
- Describe and understand formational processes of major physiographic features on the seafloor.
- Understand the origin and destruction of oceanic crust and basins in plate tectonics theory.
- Describe sediments on the seafloor, their biology, sedimentology, dispersal, distribution and significance as a record of paleo-oceanographic history.
- Realize the influence of physical, chemical and geological factors in life processes, and the control of these factors in the distribution of life in the global ocean.
- Appreciate the significance of hydrothermal vents for biology and in the cleansing of seawater.
- Understand the physical and chemical properties of water.
- Realize the significance of density in atmospheric and thermohaline circulation.
- Understand the role of climate and Coriolis Effect in oceanic mixing, and the significance of this to global climate.
- Understand wave types, formation, propagation, interaction, as well as ultimate effects on the coastal zone and nearshore processes.
- Comprehend the ecology, politics, legislative concerns, pollution, hazards and use of the oceans.

**OCN 201L Science of the Sea Laboratory (1)**
Experiments, computer exercises and field trips demonstrating the geological, physical, chemical and biological principles, and equipment, of earth and ocean sciences. (3 hrs. lab.)
Prerequisite: Completion or concurrent registration in OCN 201 or equivalent preparation or consent of instructor. Recommended Preparation: High school algebra and chemistry; ability to use a computer.
WCC: DY

**OCN 220 Hawai’i Fisheries (3)**
Description and examination of Hawai’i’s commercial and recreational fisheries in terms of their biological basis in marine and fresh water food chains, their current size and importance in Hawai’i, and their future prospects. (3 hrs. lect.)
Recommended Preparation: An introductory course in oceanography or zoology, reading, math, and study skills appropriate for 100 and 200 level courses.
WCC: DB

**OCN 260 Pacific Surf Science and Technology (3)**
Pacific Surf Science and Technology is a lecture-based course that showcases scientific and industry aspects of the surfing world for surfers and non-surfers. The course takes a scientific approach to understanding the natural processes that create and influence waves and surf conditions, while also introducing many ocean safety concepts relating to the environment and the popularity of ocean recreation. A weather and surf journal along with weekly campus field excursions dedicated to studying weather phenomena adds an essential experiential component to the course. (3 hrs. lect.)
Recommended Preparation: Ability to access information from the Internet.
The student learning outcomes are:
- Discuss the basic principles of meteorology, oceanography, and geology as they apply to the creation and shaping of waves and surf.
- Predict surf conditions using Internet web sites and local weather station reports.
- Compare and contrast past and present surfboard technology and production.
- Apply the principles of design, production, and retail marketing within surfing related industries.
- Assess the various multimedia applications related to surfing.
- Demonstrate water safety issues related to surfing.
- Apply the basic techniques of surfing.
- Maintain logs of weather and surf observations to use in future forecasts.

**OCN 260L O‘ahu Surf Science and Technology Lab (3)**
OCN 260L is a field lab designed to run concurrently with OCN 260, Pacific Surf Science and Technology. The course presents the surfing world through laboratory and field activities, including surfing demonstrations and instruction, learning water safety techniques, studying board design at surfboard manufacturing shops, and speaking with local industry professionals. Meteorology and surf forecasting techniques are covered through onsite weather observation activities, and physical processes involved in shaping waves as they approach a shoreline will be examined through several coastal studies. (3 hrs. lect.)
Prerequisite: Concurrent or credit in OCN 260.
The student learning outcomes are:
- Distinguish between pre-historic, traditionally built papa he`e nalu, historic-era, and modern surfboards.
- Outline the procedures involved in surfboard production.
- Operate safely a surfboard using the basic techniques of surfing.
- Access information on and identify local weather phenomena and ocean/surf conditions around O‘ahu.
- Describe at least five ocean and surf industries.
- Identify wave-generating facilities.
- Maintain a journal of surfing experiences.

**Pharmacology (PHRM)**

**PHRM 203 General Pharmacology (3)**
Covers a wide range of drugs with emphasis on sites and mechanism of action, toxicity, fate and uses of major therapeutic agents. This course is intended for students in nursing and allied health fields. (3 hrs. lect.) WCC: DB
Prerequisites: “C” or better in ZOOL 141 and ZOOL 142 and CHEM 152 or equivalents.

**Philosophy (PHIL)**

**PHIL 100 Introduction to Philosophy: Survey of Problems (3)**
Great philosophical issues, theories, and controversies. Course will focus on issues such as the problem of determinism, the problem of induction, the problem of distributive justice, the problem of the highest good, and the problem of the function of government. (3 hrs. lect.) WCC: DH
The student learning outcomes are:
- Analyze contemporary issues and events using philosophical concepts and theories.
- Defend a position on a philosophical problem in philosophy.
- Identify important individuals, events, theories, and concepts in Western philosophy.
• Apply critical thinking skills (i.e. clarify concepts, raise normative questions, evaluate ideas presented in the text and handouts, and identify philosophical issues and concerns.

PHIL 101 Introduction to Philosophy: Morals and Society (3)
Social and individual values, obligations, rights, and responsibilities. Course will cover normative theories and their applications to business, medicine, ethics and sexual relations. (3 hrs. lect.)
Recommended Preparation: College level reading ability.
WCC: DH
The student learning outcomes are:
• Recognize the major views that have defined the Western debate on ethical matters to include: virtue ethics, teleological theory, and deontological theory.
• Use logical reasoning and ethical concepts to analyze contemporary ethical problems.
• Defend a position on a fundamental problem in ethics.
• Compare, contrast, and evaluate virtue ethics, teleological theory, and deontological ethics in terms of their respective views of (a) human nature, (b) the nature of goodness, (c) the good life.

PHIL 102 Introduction to Asian Philosophy: Asian Traditions (3)
Introductory course in selected schools of Asian thought. Universal issues/problems examined from Asian perspective. Focus will be on Indian, Chinese, and Japanese traditions. (3 hrs. lect.)
WCC: DH
The student learning outcomes are:
• Compare, contrast, and evaluate Indian, Chinese, Japanese, and European thought in terms of their respective views of (a) human nature, (b) the nature of goodness, (c) the good life.
• Identify and discuss contributions of schools of Asian philosophy and the influence of each on the other through a historical perspective.
• Discuss terms and concepts like “satori”, “anatta”, “jen” and evaluate their relevance (significance) for the West.
• Analyze Indian, Chinese, and Japanese thought in terms of (a) methodology, metaphysics, and ethics in order to better understand Asian concerns.

PHIL 104 Introduction to Logic (3)
A study of the foundations and development of rational thought and communication and their applications. Includes analysis of deductive reasoning, formal and informal fallacies, and the use of symbolic systems. (3 hrs. lect.)
WCC: FS
The student learning outcomes are:
• Recognize fallacies of relevance, presumption, and ambiguity.
• Employ rules of logic in deductive analysis.
• Construct truth tables for deductive analysis.
• Use symbolic systems for deductive analysis.

PHIL 200 History of Philosophy I (3)
Focuses on significant aspects and personalities representing selected schools of philosophy in the West from the period of the early Greek thinkers to the Renaissance. (3 hrs. lect.)
Prerequisite: PHIL 100 or consent of instructor.
WCC: DH
The student learning outcomes are:
• Discuss terms and concepts like the “doctrine of homo mensura” and the “doctrine of ideas or forms” and evaluate their relevance (significance) for modern times.
• Identify and discuss contributions of selected philosophers and the influence of each on the other through a historical perspective.
• Trace some of the roots of present day thought through the application of concepts and points of view forwarded in this class.
• Discuss the major tenets of the “classical mind” as well as those that made up the “medieval mind” in order to characterize these periods of time in an orderly and meaningful pattern.

PHIL 213 Modern Philosophy (3)
Introduction to the history of philosophy based on texts or translations of “modern” works, that is works originally written in a modern European language. (3 hrs. lect.)
WCC: DH
The student learning outcomes are:
• Describe the nature and significance of major controversies in epistemology, ethics, metaphysics, aesthetics, and method that define the period of modernity.
• Clearly explain, synthesize, and compare the arguments put forward by the modern philosophers studied in the course.
• Carefully evaluate the positions of the philosophers studied by employing the methods of philosophical inquiry such as critical thinking, critical reading, and critical writing.
• Clearly, concisely, and convincingly articulate reasons that support personal judgments about major controversies in epistemology, metaphysics, ethics, aesthetics, and method.

PHYSICS (PHYS)

PHYS 122 Introduction to Science: Physical (3)
Characteristics of science, historical development of scientific concepts, and interactions with society illustrated by topics from physical sciences, with emphasis in physics and chemistry. Designed for non-science majors. (3 hrs. lect.)
Prerequisite: MATH 25 or equivalent or consent of instructor.
Co-requisite: PHYS 122L.
WCC: DP
The student learning outcomes are:
• Recognize the fundamental principles and philosophy upon which the scientific method is based.
• Apply the basic concepts of physics and chemistry.
• Apply the concept of conservation laws in problem solving.
• Apply basic mathematics to problems in physics and chemistry.
• Define the common terms used in the physical sciences.
• Assess the limitations of the scientific method and apply error analysis.
• Recognize the physical science principles as applied to everyday situations.

PHYS 122L Introduction to Physical Science Lab (1)
Lab experiments illustrating topics and methods in the Physical Sciences with emphasis in Physics and Chemistry. Designed for non-science majors. (3 hrs. lab.)
Prerequisite: Credit or concurrent registration in PHYS 122 or consent of instructor.
WCC: DY
The student learning outcomes are:
• Apply the scientific method to a selected group of topics in physics and chemistry.
• Collect, report and analyze data obtained in a laboratory setting in a manner exhibiting organization, proper documentation and critical thinking.
• Manipulate data and apply quantitative techniques, such as graphing and statistical analysis.
• Demonstrate a basic understanding of the standard instruments used in physics and chemistry.
• Identify environmental factors, which affect the outcome of an experiment or observation and apply basic error analyses techniques.

PHYS 151 College Physics I (3)
A noncalculus one semester course for preprofessional or nonengineering majors. Study of the basic concepts of physics, including the fundamental principles and theories in mechanics, energy, and waves. (3 hrs. lect.)
Prerequisite: Credit or concurrent registration in MATH 140, or consent of instructor.
Co-requisite: PHYS 151L.
WCC: DP
The student learning outcomes are:
• Demonstrate a general understanding of the underlying philosophy of the physics, including the scientific method.
• Apply the basic concepts of physics, including mechanics, energy, simple oscillatory systems, gas laws and fluid dynamics.
• Apply the concept of conservation laws in problem solving.
• Apply basic algebraic and graphical analysis techniques to physics problems.
• Compare and contrast macroscopic and microscopic systems in physics.
• Define quantitatively and qualitatively the common terms used in physics.
• Assess the limitations of the scientific method and apply error analysis.
• Determine when to apply physics principles to everyday situations.

PHYS 151L College Physics Laboratory I (1)
Experiments in statics, mechanics, energy, waves, and friction. (3 hrs. lab.)
Prerequisite: Credit or concurrent registration in PHYS 151.
WCC: DY
The student learning outcomes are:
• Apply the scientific method to physical science systems involving mechanics, energy, simple oscillatory systems, gas laws and fluid dynamics.
• Collect, report and analyze data obtained in a laboratory setting in a manner exhibiting organization, proper documentation and critical thinking.
• Manipulate data and apply quantitative techniques, such as graphing and statistical analysis.
• Demonstrate a basic understanding of the standard instruments used in physics.
• Identify environmental factors, which affect the outcome of an experiment or observation and apply basic error analyses techniques.

PHYS 152 College Physics II (3)
A noncalculus, one-semester course for pre-professional or nonengineering majors. Study of the basic concepts of physics, including the fundamental principles and theories in electricity, magnetism, optics, and modern physics. (3 hrs. lect.)
Prerequisite: PHYS 151 or equivalent, or consent of instructor.
Co-requisite: PHYS 152L.
WCC: DP
The student learning outcomes are:
• Demonstrate a general understanding of the underlying philosophy of the physics, including the scientific method.
• Apply the basic concepts of physics, including thermodynamics, static and dynamic laws of electricity and magnetism, circuit analysis, electromagnetic radiation, optical systems, and the fundamentals of atomic and nuclear physics.
• Apply the concept of conservation laws in problem solving.
• Apply basic algebraic and graphical analysis techniques to physics problems.
• Compare and contrast macroscopic and microscopic systems in physics.
• Define quantitatively and qualitatively the common terms used in physics.
• Assess the limitations of the scientific method and apply error analysis.
• Recognize the physical science principles as applied to everyday situations.

PHYS 152L College Physics Laboratory II (1)
Experiments in electricity, magnetism, optics, and modern physics. (3 hrs. lab.)
Prerequisite: Credit or concurrent registration in PHYS 152.
WCC: DY
The student learning outcomes are:
• Apply the scientific method to physical science systems involving thermodynamics, static and dynamic laws of electricity and magnetism, electrical and electronic circuit analysis, electromagnetic radiation, optical systems, and the fundamentals of atomic and nuclear physics.
• Collect, report and analyze data obtained in a laboratory setting in a manner exhibiting organization, proper documentation and critical thinking.
• Manipulate data and apply quantitative techniques, such as graphing and statistical analysis.
• Demonstrate a basic understanding of the standard instruments used in physics.
• Identify environmental factors, which affect the outcome of an experiment or observation and apply basic error analyses techniques.

PHYS 170 General Physics I (4)
This is the first of a rigorous, calculus-based course in physics for the professional or engineering majors. The study of the concepts of physics including the fundamental principles and theories of mechanics, energy, waves and thermodynamics. (4 hrs. lect.)
Prerequisite: Credit for MATH 205 or MATH 241 or equivalent.
Co-requisite: PHYS 170L and credit for, or concurrent registration in MATH 206, MATH 242, or MATH 252. MATH 216 may be substituted with consent.
WCC: DP
The student learning outcomes are:
• Demonstrate a solid conceptual understanding of kinematics, dynamics, wave phenomena, and thermodynamics.
• Solve applicable problems using differential calculus and vector analysis.
• Apply the laws of physics to computational problems in kinematics, dynamics, wave phenomena, and thermodynamics.
**PHYS 170L  General Physics I Laboratory (1)**
This laboratory course is a rigorous, calculus-based study for professional or engineering majors. Laboratory exercises are designed to reinforce the fundamental concepts of kinematics, mechanics, energy, waves and thermodynamics. (3 hrs. lab.)

Co-requisite: PHYS 170.

WCC: DY

The student learning outcomes are:
- Demonstrate an experimental understanding of some basic physical concepts and theories.
- Demonstrate familiarity with various instruments and their use in making reliable and precise measurements.
- Calculate a result with the appropriate number of significant figures.
- Analyze data using calculation and graphical methods.
- Organize an accurate and complete laboratory notebook.

**PHYS 272  General Physics II (3)**
This is the second in a rigorous, calculus-based physics course for the professional or engineering major. The study of the concepts of physics including the fundamental principles and theories of electricity, magnetism, light, and optical theory.

Prerequisite: MATH 206 or equivalent. A grade of "C" or better in PHYS 170.

Co-requisite: PHYS 272L.

WCC: DP

The student learning outcomes are:
- Demonstrate a solid conceptual understanding of electricity, magnetism, light, and optical theory.
- Solve applicable problems using calculus and vector analysis.
- Apply the laws of physics to computational problems in electricity, magnetism, and wave phenomena.

**PHYS 272L  General Physics II Laboratory (1)**
This laboratory course is a rigorous, calculus-based study for professional or engineering majors. Laboratory exercises are designed to reinforce the fundamental concepts of electricity, magnetism, light and optical theory. (3 hrs. lab.)

Co-requisite: PHYS 272.

WCC: DY

The student learning outcomes are:
- Demonstrate experimental understanding of some basic physical concepts and theories.
- Demonstrate familiarity with various instruments and learn to make reliable measurements.
- Calculate a result with the appropriate number of significant figures.
- Analyze data using calculation and graphical methods.
- Organize an accurate and complete laboratory notebook.

**Political Science (POLS)**

**POLS 110  Introduction to Political Science (3)**
Introduction to politics as a human activity. Discusses theories, ideologies, systems, and processes of politics. (3 hrs. lect.)

WCC: DS

The student learning outcomes are:
- Clearly explain and evaluate complex political thought and the positions of several thinkers in political theory.
- Demonstrate an understanding of some basic political concepts and theories.
- Demonstrate familiarity with various instruments and their use in making reliable and precise measurements.
- Calculate a result with the appropriate number of significant figures.
- Analyze data using calculation and graphical methods.
- Organize an accurate and complete laboratory notebook.

**POLS 120  Introduction to World Politics (3)**
Power economics and world politics from cross-national perspectives. Discussion of U.S. foreign policy since 1945. (3 hrs. lect.)

WCC: DS

The student learning outcomes are:
- Explain basic terms, concepts, and principles of international relations.
- Analyze political processes, institutions, and issues in the foreign policy environment.
- Apply basic terms, concepts, and principles to everyday life.
- Assess his or her personal effectiveness in the political process.

**POLS 130  Introduction to American Government (3)**
Focus on American politics and government on the basis of tradition and continuity. Covers: overview of constitutional development, institutions, processes, and participants of the American political system and alternative interpretations. (3 hrs. lect.)

WCC: DS

The student learning outcomes are:
- Explain basic terms, concepts, and principles of politics.
- Analyze political processes, institutions, and issues.
- Apply basic terms, concepts, and principles to everyday life.
- Assess his or her personal effectiveness in the American political process.

**POLS 180  Introduction to Hawaiian Politics (3)**
Introduction to the study of political institutions, processes, and issues in Hawai`i. (3 hrs. lect.)

WCC: DS

The student learning outcomes are:
- Explain basic terms, concepts, and principles of politics.
- Analyze political processes, institutions, and issues in Hawai`i.
- Apply basic terms, concepts, and principles to everyday life.
- Assess his or her personal effectiveness in the political process.

**Psychology (PSY)**

**PSY 100  Survey of Psychology (3)**
An introductory course with emphasis on principles of human behavior. Topics covered include motivation, learning, perception, emotion, development, personality, states of consciousness, group processes, problem solving and thinking, and methods of inquiry. (3 hrs. lect.)

WCC: DS

The student learning outcomes are:
- Recognize the study of psychology as a science.
- Discuss the biological and environmental basis of human behavior.
- Integrate the basic perspectives, concepts, principles, and general information comprising the field of psychology.

**PSY 170  Psychology of Adjustment (3)**
Focus is on understanding, evaluating and improving adjustment.
Includes study of theories, concepts and techniques concerning personal growth and behavior change. (3 hrs. lect.)
WCC: DS
The student learning outcomes are:
• Identify and evaluate important issues in her or his own past and present.
• Integrate the basic perspectives, concepts, principles, and general information comprising the field psychology.
• Utilize the various psychology adjustment models and concepts in understanding his or her life.

PSY 202 Psychology of Women (3)
Study of theories, concepts and issues relevant to the psychological development of women. Topics include: gender differences, personality, achievement motivation, moral development, autonomy, mental health, domestic violence. (3 hrs. lect.) (Cross-listed as WS 202.)
Prerequisite: PSY 100 or consent of instructor.
WCC: DS
The student learning outcomes are:
• Articulate and illustrate an understanding that psychological gender differences are typically small.
• Identify and discuss important areas of culture where women are less visible than men.
• Demonstrate understanding that people react differently to men and women.
• Compare and contrast the wide variations among women.

PSY 224 Abnormal Psychology (3)
Concepts and principles used in clinical practice: dynamics, diagnosis, and treatment of abnormal behavior. Compares and contrasts the different patterns of abnormal behavior. Examines the differences in theoretical models for understanding maladaptive behavior. (3 hrs. lect.)
Recommended Preparation: PSY 100.
WCC: DS
The student learning outcomes are:
• Compare and contrast historical and current theories of abnormal behavior.
• Identify and describe different types of abnormal behavior and the “best practice” therapies associated with each type.
• Apply the principles of psychology to their own thoughts and feelings.
• Illustrate understanding of the role of culture, ethnicity, and socio-economic factors in defining abnormal behavior.

PSY 240 Developmental Psychology (3)
This course examines the emotional, mental, physical, and social development of individuals from infancy to adulthood with special attention to interests abilities and critical issues at successive developmental stages. (3 hrs. lect.)
Prerequisite: PSY 100 or consent of instructor.
WCC: DS
The student learning outcomes:
• Recognize the study of psychology as a science.
• Discuss the biological and environmental basis of human behavior.
• Integrate the basic perspectives, concepts, principles, and general information comprising the field of developmental psychology.
• Utilize the various developmental psychology models and concepts in explaining human behaviors.

PSY 250 Social Psychology (3)
This course will provide students with an understanding of:
• The relationship of social roles on human behaviors.
• How interpersonal relationships, attribution theories, attitudes, group behaviors, and stereotypes affect human behaviors.
(3 hrs. lect.)
Prerequisite: PSY 100 with a grade of "C" or better.
WCC: DS
The student learning outcomes are:
• Recognize the study of social psychology as a science.
• Integrate the basic perspectives, concepts, principles, and general information comprising the field of social psychology.
• Utilize the various social psychology models and concepts in explaining human behaviors.

PSY 260 Psychology of Personality (3)
An introduction to the basic theoretical approaches to personality, how they are developed, changed and analyzed. (3 hrs. lect.)
Prerequisite: PSY 100.
WCC: DS
The student learning outcomes are:
• Recognize the study of personality psychology as a science.
• Discuss the basic perspectives, concepts, principles, and general information comprising the field of personality psychology.
• Utilize the various personality psychology models and concepts in explaining human behaviors.

PSY 270 Introduction to Clinical Psychology (3)
This course will provide students with an understanding of:
• The history, theories and current developments in clinical psychology.
• Different methods of assessment, forms of intervention and types of psychological problems.
(3 hrs. lect.)
Prerequisite: PSY 100 with a grade of "C" or better.
WCC: DS
The student learning outcomes are:
• Critique the foundation of knowledge, skills, professional attitudes and values associated with clinical psychology.
• Integrate the basic perspectives, concepts, principles, practices and general information comprising the field of clinical psychology.
• Utilize the various clinical psychology models and concepts in explaining human behaviors.

Religion (REL)
REL 150 Introduction to World’s Major Religions (3)
Introduction to the world’s major religions: Primitive, Hinduism, Buddhism, Shinto, Confucianism, Taoism, Judaism, Christianity, and Islam. Field trips may be required outside class time. (3 hrs. lect.)
WCC: DH
The student learning outcomes are:
• Identify the following elements or dimensions: origin, doctrines, ethics, sacred literature, important figures/founders, rituals, worship, and institutions for each of the world’s major religious traditions.
• Identify the similarities and differences between two or more religions on the basis of the aforementioned dimensions.
• Examine the relationship between religion and culture/society.
• Question and think critically.
REL 151 Religion and the Meaning of Existence (3)
Introduction to basic issues of the question of the meaning of human existence. Emphasis is placed upon the student analyzing his/her own beliefs and exploring alternative answers. (3 hrs. lect.)
WCC: DH
The student learning outcomes are:
• Identify the various understandings of experience, existence, and/or the Ultimate/Absolute Reality in the world’s religious traditions.
• Compare and contrast the similarities and differences between these meanings of existence in two or more religions.
• Identify the rituals, myths, and symbols/art that shape these worldviews.
• Analyze their belief systems.

REL 201 Understanding the New Testament (3)
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. (3 hrs. lect.)
WCC: DH
The student learning outcomes are:
• Demonstrate awareness of the historical and literary context of the New Testament.
• Show knowledge of modern Biblical interpretation and criticism.
• Show an understanding of the major parts and types of literature contained in the New Testament.
• Demonstrate recognition of how New Testament teachings have shaped modern society and human understanding of self.

REL 205 Understanding Hawaiian Religion (3)
Major Hawaiian religious teachings and practices from ancient times to the present. Investigation of cultural influence of Hawaiian religious beliefs; analysis of religious texts and relation to other traditions. This course may be applied to the B.A. language/culture core requirements at UH at Mānoa. (3 hrs. lect.)
WCC: DH

Science (SCI)

SCI 123 Introduction to Science: Hawaiian Perspectives (4)
Characteristics of science and its interaction with society, illustrated by topics in geology, archaeology, astronomy, oceanography and biology of the Hawaiian Islands. Lecture/laboratory/field trip course designed for non-science majors. (3 hrs. lect.; 3 hrs. lab.)
Recommended Preparation: High school biology or earth science.
WCC: DB & DY

Social Sciences (SSCI)

SSCI 193V Cooperative Arts and Science Education (CASE) (1-4)
A work-study course providing opportunities to upgrade and diversify knowledge and skills learned in the behavioral and social sciences, and to apply these in job situations. (Practicum) Prerequisite: SSCI 193V.
The student learning outcomes are:
• Integrate the foundations of knowledge, skills, professional attitudes and values associated with research design and application.
• Analyze and apply specific sociological theories and perspectives to human behavior and social issues.
• Express and communicate ideas and opinions clearly in writing.

SOC 100 Survey of General Sociology (3)
Focuses on the question of “What is sociology?”, covering major topics of study and methods of analysis. Particular emphasis is placed on concepts related to analysis of social relationships, social structures, processes, and change. Application of these concepts; to analysis of social groups in Hawai‘i is included. (3 hrs. lect.)
WCC: DS
The student learning outcomes are:
• Summarize and distinguish the three main theoretical perspectives in sociology.
• Explain and evaluate how society and culture affect our beliefs, values, behavior, and thinking patterns.
• Discuss the dynamics and multiple causes of interpersonal, family, and organizational dysfunction.
• Discuss the dynamics and multiple causes of interpersonal, family, and organizational dysfunction.
• Apply the basic knowledge and practice of counseling and problem solving skills.
approaches are emphasized. Selected problems such as poverty or deviance are indepth studies for project reports. (3 hrs. lect.)
WCC: DS

SOC 231 Introduction to Juvenile Delinquency (3)
Study of types, conditions, processes, and theories relating to juvenile delinquency. Study of the development of alienation and deviance by youth and study of the juvenile correction systems in society. (3 hrs. lect.)
WCC: DS

SOC 250 Community Forces in Hawai’i (3)
This course is designed to acquaint the student with sociological principles and the application of these principles to aid in the awareness, understanding, and appreciation of the unique social environment of the State of Hawai’i. Fundamental concepts of sociology in the area of race relations are presented with emphasis on Hawai’i’s unique potential “melting pot” social environment and the development of an “unorthodox race doctrine” for Hawai’i. Sociological aspects of the various cultural contributions by the ethnic groups to Hawai’i including values, concepts, practices, history, and language are also investigated. (3 hrs. lect.)
WCC: DS

SOC 251 Introduction to Sociology of the Family (3)
Study of the social interaction processes of marriage and family, emphasizing current research findings, interaction theory, and evident patterns and changes. The theoretical and empirical bases are related to the students’ experiences and observations. Students have opportunities to explore available resources and agencies of the field and to do research projects on selected topics. (3 hrs. lect.)
WCC: DS

SPANISH (SPAN)

SPAN 101 Beginning Spanish I (4)
Introduces basic structures of the Spanish language emphasizing speaking, writing, listening and reading. Oral communication emphasized to provide students with the right pronunciation vocabulary and the control of basic grammar. Introduction to Hispanic culture. (4 hrs. lect.; 1 hr. lab.)

The student learning outcomes are:
• Use appropriate pronunciation, structure and vocabulary to communicate orally with speakers of Spanish, answering questions or making simple descriptions.
• Read and understand authentic documents in Spanish for cultural information.
• Write simple texts (shopping lists, descriptions, postcards, forms) using knowledge of vocabulary, culture and basic grammatical structures.
• Analyze oral, written and visual sources (phone messages, menus, advertisements, cartoons) of information about Hispanic culture and compare and contrast with what the students know of their own culture.

SPAN 102 Beginning Spanish II (4)
Continues SPAN 101 through reading, speaking, writing and listening. Oral communication emphasized. Utilizes videos, stories and songs. Deals with Hispanic culture and the basic knowledge of the history, geography, and the traditions of Spanish speaking countries. (4 hrs. lect.; 1 hr. lab.) Prerequisite: SPAN 101 or consent of instructor.

The student learning outcomes are:
• Use appropriate pronunciation, structure and vocabulary to communicate orally with speakers of Spanish with greater proficiency, using role playing to create dialogues based on real-life situations.
• Read and understand authentic documents in Spanish (simple articles, poems, newspaper articles) for cultural information with greater proficiency.
• Write simple texts (letters, diaries, simple essays) using knowledge of vocabulary, culture and basic grammatical structures with greater proficiency.
• Analyze oral, written and visual sources (dialogues, articles, film clips, Internet sites) of information about Hispanic culture and compare and contrast with what the students know of their own culture.

SPAN 201 Intermediate Spanish I (3)
Continuation of SPAN 102. Further refinement of basic language skills. Increased control over structures and idioms in written and oral expression. Reading about Hispanic culture, society, history and literature. (3 hrs. lect.) Prerequisite: SPAN 102 or consent of instructor.

SPAN 202 Intermediate Spanish II (3)
Continuation of SPAN 201. Further refinement of basic language skills including vocabulary development beyond the 201 level. Increased control over structures and idioms. Includes reading about literature, culture and society. (3 hrs. lect.)
Prerequisite: SPAN 201 or consent of instructor.

SPEECH (SP)

SP 151 Personal and Public Speech (3)
Introduction to major elements of speech. Enables students to acquire competence in two person, small group, and public situations. Models and concepts are used to explain the speech act. (3 hrs. lect.)
Prerequisite: Placement in ENG 21 or higher.
WCC: FO or DA

The student learning outcomes are:
• Choose and narrow a topic appropriately for the audience and occasion.
• Communicate the thesis/specific purpose in a manner appropriate for audience and occasion.
• Provide appropriate supporting material based on the audience and occasion.
• Use an organizational pattern appropriate to topic, audience, occasion, and purpose.
• Use language that is appropriate to the audience, occasion, and purpose.
• Use vocal variety in rate, pitch, and intensity to heighten and maintain interest.
• Use pronunciation, grammar, and articulation appropriate to the designated audience.
• Use physical behaviors that support the verbal message.

SP 231 Performance of Literature (3)
Introduction to the study of literature through performance. Practice in rhetorical and literary analysis culminating in and performance of literary selections for an audience. The nature of performance criticism. (3 hrs. lect.) Prerequisite: ENG 100 or SP 151.

WCC: FO or DA
WCC: FO or DA
The student learning outcomes are:
• Use an in-depth process of written literary analysis to understand and appreciate various selections from prose, poetry and dramatic literature.
• Utilize voice, speech and body to interpret and communicate effectively to an audience selections from prose, poetry and dramatic literature.
• Use emotion and imagination through recall and transference to bring the literary happenings alive in a creative experience.
• Listen critically and appreciatively to the oral presentation of various selections from prose, poetry and dramatic literature and give evaluation feedback to peers as well as analyze in writing one’s own performances.

SP 251 Principles of Effective Speaking (3)
Theory and practice of public speaking. Emphasizes practical skills in communicating with today’s audiences, planning, and delivering speeches. (Offered occasionally) (3 hrs. lect.)
Prerequisite: ENG 100 or SP 151.
WCC: FO or DA
The student learning outcomes are:
• Independently research some aspect of Aristotle’s life and times, contributing to a composite view.
• Apply the principles of Aristotle’s Rhetoric to contemporary speeches, evaluating the validity of those principles.
• Identify resources with the use of an annotated bibliography.
• Use group process to create evaluation formats for Public Speaking.
• Present speeches investigating the results or process of their research in the areas of Aristotle’s context and application of Rhetoric.
• Write and deliver a Special Occasion Speech, using Rhetoric as a guide.
• Participate in a group discussion using a symposium format.

THEATRE (THEA)

THEA 101 Introduction to Drama and Theatre (3)
An introduction to the art of drama and theatre. Students study selected plays that are representative of important playwrights and historical periods. These plays are studied in their historical context and provide a basis for understanding elements and styles of drama. Theatre production will also be explored by considering the functions of actors, audiences, designers, playwrights and technicians. (3 hrs. lect.)
WCC: DA
The student learning outcomes are:
• Discuss the origin and development of the theatre from its beginnings to the present.
• Discuss the theatre’s influence and importance in human culture.
• Compare and contrast plays and theatre practices from different time periods and cultures.
• Analyze the artistic choices and techniques used to transform a written dramatic script into a performed work presented to an audience.

THEA 211 Mask Making and Performance (3)
A hands-on course exploring several mask-making techniques, and the fundamentals of bringing a mask to life. The history and cultural significance of the mask will be surveyed. Students will make several masks and will perform for each other. (3 hrs. lect.)
WCC: DA
The student learning outcomes are:
• Discuss the importance of the mask in human culture.
• Demonstrate two or more mask-making techniques.
• Apply the basic process of bringing a mask to life to improvisations or rehearsed performances.
• Identify, analyze, and critically evaluate the technique in mask-making and mask performances.

THEA 221 Acting I (3)
Performance course concentrating on voice, relaxation, body awareness, and freedom from self-consciousness through theatre games, improvisation, and exercises. Emphasis on ensemble work. Students must see two plays and write about them or use the Service-Learning option. (3 hrs. lect.)
WCC: DA
The student learning outcomes are:
• Articulate and project the voice well.
• Devise and execute pantomimes and improvisations.
• Explore dramatic one- and two-person scenes.
• Identify, analyze and critically evaluate the technique and believability of dramatic performances.

THEA 222 Acting II (3)
Performance course concentrating on exploration of character creation; continued work on voice, relaxation, and self-realization. Students must see two plays and write about them or use the Service-Learning option. (3 hrs. lect.)
Recommended Preparation: THEA 221.
WCC: DA
The student learning outcomes are:
• Articulate and project the voice well.
• Devise and execute pantomimes unselfconsciously.
• Explore dramatic one- and two-person scenes.
• Identify, analyze and critically evaluate the technique and believability of dramatic performances.

THEA 240 Introduction to Stagecraft (3)
Introduction to the technical process of theatre including scenery, lighting, sound and stage management. Students will focus on the range of skills needed to work in theatrical space. Repeatable up to 6 credits. 6 credits applicable towards AA degree. (3 hrs. lect.)
WCC: DA
The student learning outcomes are:
• Demonstrate competence with the use of theatrical equipment.
• Identify key theatrical terms and concepts.
• Critically evaluate a theatrical event.
• Work effectively in a theatrical environment.
THEA 241  Advanced Stagecraft (3)
Advanced techniques of the technical process of theatre including lighting, sound, and rigging. Students will focus on the range of skills needed to work in convention, theatrical, concert, and dance applications. Repeatable up to 6 credits. (3 hrs. lect.)
Prerequisite: THEA 240 or consent of instructor.

THEA 260  Dramatic Production (3)
Introduction to the process of converting a play into a performance. Students are required to participate in at least two aspects of an actual production. Repeatable up to 6 credits. 6 credits applicable towards AA degree. (3 hrs. lect.)
WCC: DA

WOMEN’S STUDIES (WS)

WS 202  Psychology of Women (3)
Study of theories, concepts and issues relevant to the psychological development of women. Topics include: gender differences, personality, achievement, motivation, moral development, autonomy, mental health, and domestic violence. (3 hrs. lect.) (Cross-listed as PSY 202.)
Prerequisite: PSY 100 or consent of instructor.
WCC: DS

ZOOTOLOGY (ZOOL)

ZOOL 101  Principles of Zoology (4)
Introduction to zoology. Topics include living animals, physiology, anatomy, development, reproduction, ecology, and evolutionary relationships. Lecture/laboratory course. (3 hrs. lect.; 3 hrs. lab.)
Recommended Preparation: High school biology.
WCC: DB & DY

ZOOL 105 Hawaiian Use of Fish and Aquatic Invertebrates (3)
A study of fish and aquatic invertebrates used traditionally by Native Hawaiians. This class will examine the role of fish and aquatic invertebrates in Hawaiian culture and resource utilization and management. (3 hrs. lect.)
Recommended Preparation: High school biology.

ZOOL 106 Hawaiian Marine Invertebrates (3)
Survey of marine invertebrates, their structure, ecology, and evolutionary relationships. Emphasis will be placed on identification and uses of Hawaiian tidal and coral reef animals. Three field trips required. (3 hrs. lect.)
Recommended Preparation: Ability to swim.
WCC: DB

ZOOL 107 Identification of Hawaiian Fishes (3)
Identification of major groups and common species of fishes in Hawai‘i with emphasis on shore fishes. Topics include morphology, adaptation, physiology, phylogenetic relationships, feeding relationships, behavior, ecology, fishing methods and Hawaiian use of fishes. Lecture/laboratory/field trip course (two required field tips on Saturdays). (2 hrs. lect.; 3 hrs. lab.)
Recommended Preparation: Ability to swim.
WCC: DB & DY

ZOOL 141 Human Anatomy and Physiology I (3)
The first semester of a two-semester course in human anatomy and physiology which includes a study of human embryology, gross anatomy, microanatomy, physiology, pathology, and homeostatic relationships. This course is intended for students entering health care or medically related fields such as nursing, physical therapy and medical technology. (3 hrs. lect.)
Prerequisite: High school chemistry or equivalent preparation or consent of instructor.
Recommended Preparation: High school biology, BIOL 100, BIOL 101 or ZOOL 101; concurrent registration in ZOOL 141L.
WCC: DB

ZOOL 141L Human Anatomy and Physiology Lab I (1)
Laboratory to accompany ZOOL 141. Reinforces the facts and concepts of human anatomy and physiology discussed in ZOOL 141 through dissections, examination of models, laboratory activities, and other hands-on experiences. This course is intended for students entering health care or medically related fields such as nursing, physical therapy and medical technology. (3 hrs. lab.)
Prerequisite: Prior or concurrent registration in ZOOL 141 or equivalent preparation or consent of instructor.
WCC: DY

ZOOL 142 Human Anatomy and Physiology II (3)
The second semester of a two-semester course in human anatomy and physiology which includes a study of human embryology, gross anatomy, microanatomy, physiology, pathology, and homeostatic relationships. This course is intended for students entering health care or medically related fields such as nursing, physical therapy and medical technology. (3 hrs. lect.)
Prerequisite: ZOOL 141 or equivalent preparation or instructor’s consent.
Recommended Preparation: Concurrent registration in ZOOL 142L
WCC: DB

ZOOL 142L Human Anatomy and Physiology Lab II (1)
Laboratory to accompany ZOOL 142. Reinforces the facts and concepts of human anatomy and physiology discussed in ZOOL 142 through dissections, examination of models, laboratory activities, and other hands-on experiences. This course is intended for students entering health care or medically related fields such as nursing, physical therapy and medical technology. (3 hrs. lab.)
Prerequisite: Prior or concurrent registration in ZOOL 142 or equivalent preparation or consent of instructor.
WCC: DY

ZOOL 200  Marine Biology (3)
Biological, physical, and chemical characteristics, flora and fauna, and interactions of components of marine ecosystems; survey of marine environments; utilization, exploitation, and pollution of marine resources. Lecture/laboratory/field trip course. (2 hrs. lect.; 3 hrs. lab.)
Recommended Preparation: Ability to swim.
WCC: DB & DY
Addendum to Class Descriptions

ASTR 130 INTRODUCTION TO ARCHAEOASTRONOMY

The student learning outcomes are:
- Describe and explain the observable daily motions of celestial bodies.
- Identify the phases of the moon and explain what causes them.
- List some cultural associations of the planets.
- Identify and use measurement tools for determining astronomical alignments.
- Illustrate how astronomical knowledge can be used in navigation.
- Compare and contrast how different cultures used astronomical knowledge.
- Assess the strengths and weaknesses of an interpretation of evidence from an archaeoastronomy site.
- Explain how culture and science are interrelated.

HWST 107 HAWAI`I: CENTER OF THE PACIFIC

The student learning outcomes are:
- Compare and contrast cultures and histories of Pacific island peoples in relation to their languages religious traditions, artistic expressions, material culture, and political and economic development.
- Identify ways in which the environment has shaped Hawaiian and Pacific island culture.
- Describe the integration of land in Hawaiian culture and the historic changes in the relationship between people and land through written and oral communication.
- Describe aspects of Hawaiian relationship with other groups of people in and outside of Hawai'i. Identify implications of the relationships and develop proposals for possible ways to affect positive change.
- Identify ,access, and evaluate major Hawaiian studies sources.

HWST 270 HAWAIIAN MYTHOLOGY

The student learning outcomes are:
- Evaluate and analyze the relationship between Hawaiian mo'olelo, Hawaiian religion, and Hawaiian social structure.
- Analyze how Hawaiian mo'olelo illustrate and set precedents for Hawaiian cultural values.
- Compare and contrast Hawaiian and Western concepts of 'history' and 'myth'.
- Identify and access major written and oral sources for Hawaiian mo'olelo.
- Recount with details at least one Hawaiian mo'olelo and illustrate similarities with others.
• Describe and classify different characters from Hawaiian mo’olelo.

**REL 205 UNDERSTANDING HAWAIIAN RELIGION**

The student learning outcomes are:
- Identify and access major sources on Hawaiian religion.
- Express thoughts on Hawaiian religion in oral and written form.
- Compare and contrast elements of the Hawaiian religious experience with others or with their own.
- Identify ways in which Hawaiian religious thought and practice continues in the present.
- Interpret some symbolism of Hawaiian religious ritual and poetry.

**ICS 105E INFORMATION LITERACY**

The student learning outcomes are:
- Locate and evaluate credible information
- Accurately cite information
- Develop ethical awareness of Internet usage
- Produce an online Web published product (web folio) displaying skills

**ICS107 WEB SITE DEVELOPMENT**

The student learning outcomes are:
- Demonstrate the Web development cycle of defining, planning, building, testing, publishing, and maintenance
- Recognize the differences between browsers, monitor size and resolutions, and other aspects which effect web site design
- Evaluate and utilize Web development software tools
- Create an effective website incorporating usability and ADA accessibility standards and utilizing appropriate multimedia elements
- Describe ethical issues involved in the development and use of websites

**ICS 111 INTRODUCTION TO COMPUTER SCIENCE**

The student learning outcomes are:
- Use an appropriate programming environment to design, code, compile, run and debug computer programs
- Demonstrate basic problem solving skills: analyzing problems, modeling a problem as a system of objects, creating algorithms, and implementing models and algorithms in an object-oriented computer language (classes, objects, methods with parameters, abstract classes, interfaces, inheritance and polymorphism)
- Illustrate basic programming concepts such as program flow and syntax of a high-level general purpose language
• Identify relationships between computer systems, programming and programming languages.
• Demonstrate working with primitive data types, strings and arrays

ICS 113 DATABASE FUNDAMENTALS

The student learning outcomes are:
• Show conversion of computer files into a database system by creating a simple database
• Compare a relational database to a flat database
• Dissect a database into tables, records, fields, keys, views and relationships
• Demonstrate the normalization process
• Find records using Structured Query Language (SQL) in a database
• Create reports with specific records

ICS 120 SPREADSHEET FUNDAMENTALS

The student learning outcomes are:
• Create a spreadsheet to solve a complex problem.
• Link data in workbook worksheets to minimize redundant data.
• Solve mathematical, statistical, logical problems using built-in spreadsheet functions.
• Publish data to the WWW or an intranet to show a dynamic vs. static worksheet.

ICS 121V MICROCOMPUTER TOPICS (1-4)

The student learning outcomes are:
• Study a computer topic offered at WCC.
• Produce a final project to demonstrate knowledge of the computer topic.

ICS140 OPERATING SYSTEMS

The student learning outcomes are:
• Identify and utilize current popular operating systems and interactions.
• Describe and evaluate hardware, software and operating system in meeting user objective
• Describe the processes of installing, configuring and troubleshooting software problem
• Demonstrate effective file management and develop backup strategies.
• Illustrate network interconnectivity.

ICS 193V COOPERATIVE EDUCATION/INTERNSHIP/PRACTICUM (1-3)

The student learning outcomes are:
• Complete computer assignments in a job that is cooperatively supervised by the employer and College.
• Demonstrate the skills in the above assignments to both the College and the Employer.

MET 101L  INTRODUCTION TO METEOROLOGY LAB

The student learning outcomes for the course are:
• Apply the scientific method to study Earth’s atmosphere: Define a problem for a study, gather and record data, analyze the data, arrive at appropriate conclusions, and report the findings in written or other appropriate form.
• Use various meteorological data, such as satellite imagery, radar imagery, Stuve diagrams and surface pressure maps, to analyze the atmosphere and forecast weather.
• Use the metric system, scientific notation, graphs, and meteorological and basic statistical measurements.
• Write a lab report using the standard scientific format.

SPAN 201 INTERMEDIATE SPANISH

The student learning outcomes are:
• Use appropriate pronunciation, structure and vocabulary to communicate orally with speakers of Spanish.
• Read and understand authentic documents (menus, recipes, itineraries, articles) in Spanish for cultural information.
• Compose dialogues and do research on some aspect of Hispanic culture or history and present it orally.
• Analyze oral, written and visual sources of information about Hispanic culture and compare and contrast with what the students know of their own culture.
• Write descriptions, letters, diaries, showing knowledge of vocabulary, appropriate structures and knowledge of Hispanic culture.
• Use Spanish to communicate personal information and experience and narrate past events and future aspirations.

ZOOGOLOGY 141 HUMAN ANATOMY AND PHYSIOLOGY I

The student learning outcomes are:
• Discuss the major chemical elements found in the human body and describe the different ways in which these elements combine to form molecules and compounds.
• Understand the functions of cellular organelles, and be able to trace the path of protein manufacture in the cell.
• Compare and contrast the physical, chemical, and biological factors governing the transport of materials across the cell membrane.
• Discuss the link between cells and tissues and describe how tissue structure determines its suitability for secretion, absorption, support, or protection.
• Use standard medical terminology to describe body positions and the orientations.
• Describe the anatomy and function of the integumentary, skeletal, muscular, and nervous systems, and discuss how these systems maintain homeostasis in the human body.
• Discuss how negative feedback maintains homeostasis in each of the above body systems. Also, be able to explain how disease and disorders disrupt the homeostasis of each of the above body systems and discuss how common medical treatments and drugs are used to restore homeostasis.
• Write a research paper on a disease affecting one of the body systems using primary and secondary scientific literature.

ZOOLOGY 141L HUMAN ANATOMY AND PHYSIOLOGY LABORATORY I

The student learning outcomes are:
• Use the scientific method to design and conduct a clinical research study.
• Describe the anatomy of the integumentary, skeletal, muscular, and nervous systems from prepared slides, skeleton models, and real and virtual animal dissections.
• Use basic laboratory equipment (microscopes, slides, and dissecting tools) to observe and characterize human tissues.
• Use critical thinking to analyze and interpret clinical data.
• Prepare an oral presentation and written summary of lab activities using the scientific method.

ZOOLOGY 142 HUMAN ANATOMY AND PHYSIOLOGY II

The student learning outcomes are:
• Describe how lipids, carbohydrates, proteins and nucleic acids are digested, assimilated, and catabolized to obtain energy and raw materials.
• Describe the anatomy and function of the circulatory, lymphatic, endocrine, digestive, urinary, and reproductive systems and discuss how these systems maintain homeostasis in the human body.
• Describe the link between the anatomy of human tissues and organs and their functions within the human body.
• Discuss how negative feedback maintains homeostasis in the human body.
• Explain how disease and disorders disrupt the homeostasis of each of the above body systems and discuss how common medical treatments and drugs are used to restore homeostasis.
• Write a research paper on a disease affecting one of the body systems using primary and secondary scientific literature.

ZOOLOGY 142L HUMAN ANATOMY AND PHYSIOLOGY LABORATORY II
The student learning outcomes are:

- Use the scientific method to design and conduct a clinical research study.
- Describe the anatomy of the endocrine, circulatory, lymphatic, respiratory, digestive, urinary, and reproductive systems from prepared slides, models, and real and virtual animal dissections.
- Use basic laboratory and medical equipment (microscopes, sphygmomanometers, stethoscopes, ECG apparatus, & respiratory spirometers) to evaluate functions of the above body systems.
- Use critical thinking to analyze and interpret clinical data.
- Prepare an oral presentation and written summary of lab activities using the scientific method.
Transferring to Another College

Many Windward Community College students transfer to other colleges and universities to complete their studies. Each college or university sets its own rules concerning the credits that they will accept and the requirements for transferring students. Therefore, students should read the catalogs from prospective colleges carefully and consult with a counselor for full information. Here are some questions that are frequently asked of the counselors at Windward Community College.

How many credits should I take at Windward Community College before I transfer?
Generally speaking, sixty credits of courses with numbers of 100 and above. (Courses numbered below 100 are usually not accepted in transfer by four-year colleges.) The number of credits that you should take at the College depends on the rules of the institution that you want to transfer to, as well as the major field that you wish to study.

When should I begin the application process for transferring?
At least one semester before you hope to enroll at the new school. Some colleges have early deadlines. Find out about the deadline in the catalog and make sure that you meet it. Deadline dates pertain to your application form and receipt of official transcripts from all colleges that you have ever attended, so be sure that you order your transcript(s) early.

How does transferring credits actually work?
The new school receives a Windward Community College transcript and accepts all or some of the credits for recognition as part of the degree that you are seeking there. There is no physical transfer of actual credits, for your permanent academic record at Windward Community College always remains here. The other college decides which of your Windward Community College credits will be accepted. Normally, courses numbered 100 and above are transferable if you are going to a four-year college, but not all of the courses 100 and above will meet the basic requirements (some will be electives).

Does my grade-point average transfer?
No. Usually you will be given credits for completing the courses, but you start fresh in the new college as far as your grade point average is concerned. Then if you apply to graduate school or for a scholarship, a special computation will be made of your combined grade point average to show that you qualify for admission or scholarship award. For example, if you came from San Diego State University to Windward Community College, the College would accept most, if not all, of your San Diego State University credits, but not your grade point from San Diego State University.

Is there anything I need to know about transferring to the Mānoa campus of the UH?
Observe the deadlines. Send for official transcripts from other colleges in plenty of time to reach Mānoa by the published deadlines.

Mānoa will accept ‘D’ grades from the University of Hawai‘i community colleges. Although schools normally say that only ‘C’ or better grades are accepted in transfer, Mānoa will accept a grade of ‘D’ from a community college in the University of Hawai‘i system.

Credit/No Credit grading options at Windward Community College need to be avoided if you expect to use the course in fulfillment of Mānoa core or major requirements. Mānoa will apply Credit/No Credit marks only to electives and never to requirements (unless you had no choice because the course was offered for a mandatory Credit/No Credit).

Mānoa requires 60 or more credits of non-introductory courses for its bachelor degrees. Non-introductory courses are courses numbered 300 and above (or any other courses with explicit college-level prerequisites published in the catalog).

See a counselor at Windward Community College for help in planning to meet the requirements for the bachelor’s degree of your choice at Mānoa. Counselors have a file of degree requirement sheets for the University of Hawai‘i system.

To enter the Mānoa campus as a transfer student, you will need at least 24 credits of college-level work (courses numbered 100 and above), with a grade point average of 2.0 or better. You may have more than 24 credits, but you still need to have a 2.0 or better grade point average. If you wish to enter the Mānoa campus with fewer than 24 credits, you will need to take the SAT (or ACT) test and present your high school grades.

How do I transfer to institutions other than the Mānoa campus?
Students planning to transfer to a college other than the University of Hawai‘i at Mānoa or West O‘ahu are urged to write for the necessary college catalogs and to consult a counselor early in their college career so that a planned program can be arranged to meet the general education and admissions 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. The catalog from each college or university that is being considered for transfer is essential for proper planning.
The Associated Students of the University of Hawai‘i at Windward Community College (ASUHWCC) have an organized student government to develop a program of activities for students and members of the community. ASUHWCC administers the use of student activity fees. Last year ASUHWCC sponsored the College newspaper, Ka ʻOhana, the College literary magazine, Rain Bird, and other educational, cultural, and social activities.

Elections for ASUHWCC seats are held each semester. Interested students are invited to participate in these activities.

**Student Participation in College Governance**

Students at Windward Community College are encouraged to participate in institutional policy making and in implementing the program of activities offered.

A number of College committees invite student participation in policy making. Students may also serve as instructors for noncredit courses, lab assistants, and as assistants in the development of a public services program.

Students interested in these activities should contact a member of the ASUHWCC or the Student Services Office staff.

Students are also encouraged to participate in campus clubs and organizations.

**Honor Society**

Students who have earned 12 credits with a cumulative grade point average of 3.5 are invited to join the Phi Theta Kappa National Honor Society each semester. The campus chapter is actively involved in sponsoring events for intellectual and scholarly growth and provides opportunities for service, social activities, and developing friendships for its members.

**Clubs and Societies**

- Aerospace Club
- Botany Club
- Ceramics Club
- Chess and Backgammon Club
- Japanese Culture Society
- Ka ʻOhana
- Ke Kumau ʻŌlelo Hawai‘i (Hawaiian Language Club)
- Kupono Hawaiian Club
- Music Club
- Na Hokulele (STAAR Program)
- Na Hoʻo kele (Polynesian Voyaging Club)
- Palikū Players
- Phi Theta Kappa
- Psi Beta (Psychology Club)
DAYNE AHNEE, Educational Assistant, Culinary Arts at Windward Community College

CLAYTON AKATSUKA, Professor, CC, Mathematics
M.Ed., University of Hawai‘i
Fifth Year Teaching Certificate, University of Hawai‘i
B.Ed., University of Hawai‘i

RENEE ARAKAKI, Instructor, Counselor, CC
Ph.D., Northwestern University
M.S., University of Hawai‘i
B.S., University of Hawai‘i

ELIZABETH ASHLEY, Acting Asst. Dean of Instruction
M.A., Arizona State University
M.S., Florida State University
B.A., University of Florida

KAY BEACH, Professor, CC, ETC, Office Administration & Technology
B.S., California State University at Humboldt

BONNIE BEATSON, Multi Media Production Specialist
B.A., Hawai‘i Pacific University
A.A., Windward Community College

TERI LEE BETKER, Asst. Professor, CC, ETC, The Learning Center
M.A.T., Alaska Pacific University
B.A., Valparaiso University

MICHAEL BOWLES, Electronics Technician
A.S., Mt. San Antonio College

PAUL BRIGGS, Instructor, CC, Economics
M.S., University of California, Santa Cruz
M.S., University of California, Santa Barbara
B.S., San Francisco State University

RUSSELL CHAN, Registrar
M.B.A., Pepperdine University
B.A., University of California, Santa Barbara

STEVEN CHIGAWA, Financial Aid Officer
B.B.A., University of Hawai‘i

DANIEL CHO, Instructor, CC, ETC, OCET, Life Skills

KAREN CHO, Personnel Officer
B.A., University of Hawai‘i-West O‘ahu

PATRICIA ANNE R. I. CHONG, Counselor, Academic Advisor, Professor, CC
M.Ed., University of Hawai‘i
M.Ed., University of Hawai‘i
B.Ed., University of Hawai‘i

JOSEPH E. CIOTTI, Professor, CC, Physics, Astronomy, Math; Director, Aerospace Exploration Lab; Assoc. Director, Hawai‘i Space Grant Consortium Windward; Director, Hōkūlani Imaginarium
Ph.D., University of Hawai‘i
M.Ed., University of Hawai‘i
M.S., University of Hawai‘i
B.S., Georgetown University

MARGARET COBERLY, Instructor, CC, Psychology
Ph.D., University of Hawai‘i
M.A., University of Hawai‘i
B.S., State University of New York at Albany
R.N., St. Francis Hospital School of Nursing, San Francisco

K.C. COLLINS, Director of Development
B.A., San Jose State University

LETICIA COLMENARES, Asst. Professor, Chemistry
Ph.D., University of Hawai‘i
M.A., University of the Philippines
B.S., Mindanao State University

LINKA CORBIN-MULLIKIN, Acting Dean of Instruction
Ph.D., University of New Mexico
M.A., University of New Mexico
B.A., University of New Mexico

PAMELA DAGROSSA, Instructor, CC, Anthropology
Ph.D., University of Hawai‘i
M.A., University of Hawai‘i
B.A., Drew University

LISA GILLIS-DAVIS, Instructor, Counselor, CC
M.Ed., University of Missouri-St. Louis
B.Ed., University of Northern Iowa

ROBERT DELOACH, Professor Emeritus, Community Colleges

LEIMOMI DIERKS, Educational and Academic Support Specialist
B.A., Loyola Marymount University

THOMAS DOL, Asst. Professor/Counselor, CC, ETC, Student Services
M.Ed., University of Hawai‘i
B.Ed., University of Hawai‘i
A.A., Leeward Community College

TRICIA EJIMA, Bookstore Manager
B.S., University of Oregon

PAUL R. FIELD, Professor, CC, History
M.A., University of Hawai‘i
B.A., Muskingum College

JAN FOUTS, Coordinator, ETC, Office Administration & Technology, Trades Programs
MPA, University of Oklahoma
KATHLEEN FRENCH, Instructor, CC, Sociology
M.A., University of Hawai‘i
B.A., California State University, Sacramento

DONALD FROST, Asst. Instructor, CC, ETC, Trades, Auto Body Repair & Finishing
ASC Master Certified Technician—Auto Body
ICAR Trained

ROY FUJIMOTO, Professor, CC, Political Science
M.A., University of Hawai‘i
B.A., University of Santa Clara

LISA GILLIS-DAVIS, Instructor, Counselor, CC
M.Ed., University of Missouri-St. Louis
B.A., University of Northern Iowa

Diane GOO, Asst. Professor, CC, ETC, Office Administration & Technology, Office Skills
A.S., Kapiolani Community College

SARAH HADMACk, Instructor, CC, Religion
M.A., University of Hawai‘i
B.A., University of Hawai‘i

MARK HAMASAKI, Professor, CC, Art
M.F.A., (equiv.) Basel School of Design, Basel, Switzerland
B.F.A., Rochester Institute of Technology

NANCY A. HEU, Interim Asst. Dean, Head Librarian, Professor, CC
M.L.S., University of Hawai‘i
B.A., University of Hawai‘i

SARAH HODELL, Counselor, Academic Advisor, Instructor, CC
Ed.D., Northern Arizona University
M.A., Northern Arizona University
M.A., Northern Arizona University
B.A., School of International Service, American University

KELIKOKAUIKEKAI HOE, Instructor, CC
B.A., University of Hawai‘i

SNOWDEN HODGES, Professor, CC, Art
M.F.A., Maryland Institute College of Art
B.F.A., Maryland Institute College of Art

LUHOKOANA, Dean of Student Services
M.A., University of Hawai‘i
B.A., University of Hawai‘i at Hilo

THOMAS HOLOWACH, Theater Manager
B.A., State University of New York at Oneonta
A.A., Herkimer County Community College

JACOB HUDSON, JR., Imaginarium Technician
Ph.D., University of Hawai‘i
M.S., University of Hawai‘i
B.S., University of Hawai‘i

JACK HUFSYTELTER, Theater Technician
B.A., University of Hawai‘i

JEFFREY W. HUNT, Professor, CC
M.S., Whittier College
Fifth Year Teaching Certificate, Whittier College
B.A., Whittier College

TOSHIHIKO IKAGAWA, Instructor, CC, Geography
Ph.D., University of Hawai‘i
M.A., University of Hawai‘i
B.A., University of Hawai‘i

GERI IMAI, Registrar, ETC at HCC
B.B.A., University of Hawai‘i
A.S., Kapi‘olani Community College

ROY INOUYE, Director, TRIO
M.A., Ohio State University
B.S.Ed., Ohio State University
A.A., Windward Community College

DAYNA ISA, Financial Aid Officer
B.A., University of Hawai‘i - West O‘ahu

ELLEN ISHIDA-BABINEAU, Professor, CC, Reading/Learning Skills
M.Ed., University of Hawai‘i
B.Ed., University of Hawai‘i

JIM JOHNSON, Instructor, CC, ETC, Computer Support
M.A., Central Michigan University
B.A., University of Hawai‘i

GERRI KABEL, Professor, CC, ETC, Continuing Education & Special Programs
B.Ed., University of Hawai‘i

HEIPUA KAOPUa, Professor/Counselor, CC, ETC, Student Services
M.S.W., University of Hawai‘i
B.A., University of Hawai‘i

ELLEN (LOKELANI) KENOLIO, Instructor, Counselor, CC
M.Ed., University of Hawai‘i
B.Ed., University of Hawai‘i

LEAH KINNEY, Educational Assistant, Culinary Arts at Honolulu Community College

WINSTON N.A. KONG, Counselor, Academic Advisor, Asst. Professor, CC
B.A., University of Colorado

DAVID KRUPP, Professor, CC, Biological Sciences, Oceanography, Marine Option Program Coordinator
Ph.D., University of Hawai‘i
B.A., University of California, Los Angeles
YOKO KUDO, Instructor, Librarian, CC  
M.L.I.S., University of Hawai‘i  
Library Certificate, Kinki University  
B.A., Kwansei Gakuin University  

WEILING LANDERS, Assoc. Professor, CC, Mathematics  
M.A., University of Hawai‘i  
B.A., University of West Florida  

ROSS LANGSTON, Instructor, CC, Biological Sciences  
Ph.D., University of Hawai‘i  
B.S., College of Charleston  

KANOE LEANIO, Educational Assistant, ETC, Culinary Arts at Honolulu Community College  
A.S., Kapi‘olani Community College  

JORDAN LEDFORD-CASTRO, Educational Assistant, Culinary Arts at Windward Community College  

JERALD LEVINSON, Educational Specialist  
M.Ed., University of Hawai‘i  
B.A., California State University Northridge  

ZHİ (ANDY) LI, Information Technology Specialist  
A.A., Kapi‘olani Community College  

ERIN LOO, Asst. Professor, CC, ETC, Job Placement Counselor, Student Services  
B.B.A., University of Hawai‘i  

RONALD LOO, Professor, CC, Philosophy, Music  
M.A., University of Hawai‘i  
B.A., University of Hawai‘i  

LESLEİ LYUM, Assoc. Professor, CC, ETC, The Learning Center  
M.A., University of Hawai‘i  
B.A., University of Hawai‘i  

YVETTE MALAMA, Student Services Specialist  
M.Ed., University of Hawai‘i  
B.A., Hawai‘i Loa College  
A.A., Windward Community College  

JACQUELINE MALY, Professor Emeritus, Community Colleges  

ANTOINETTE MARTIN, Professor, CC, Art  
M.F.A., University of Hawai‘i  
B.A. & B.F.A., University of Hawai‘i  
B.A., Michigan State University  

SCOTT MASUNO, Computer Specialist  
M.S., University of Hawai‘i  
B.S., University of Hawai‘i  

FRANKMATTOS, Assoc. Professor, CC, English:Composition, Literature  
M.A., University of Hawai‘i  
B.A., Chaminade University of Honolulu  

DAVID MAXSON, Computer Specialist  
B.S., UH-Hilo  
A.G.S., Chaminade University  

FLOYD MCCOY, Professor, CC, Geology, Oceanography  
Ph.D., Harvard University  
M.Sc., University of Hawai‘i  
B.S., University of Hawai‘i  

WALTER MCGOLDRICK, Professor Emeritus, Community Colleges  

FRED KALANI MEINECKE, Asst. Professor, CC, Hawaiian Language and Culture  
A.B., University of California, Berkeley  

ANGELA MEIXELL, Chancellor  
Ed.D., University of Hawai‘i  
M.Ed., University of Hawai‘i  
B.S., Stetson University  

JOHN MEMERING, Instructor, CC, Culinary Arts at Windward Community College  

BENNETT MOFFAT, Professor, CC, Drama  
M.F.A., University of Hawai‘i  
B.A., Vassar College  

LORETTA MONROY, Instructor, CC, ETC Culinary Arts  

GLORIA MOORE, Assoc. Professor, CC, Music  
M.M., University of Hawai‘i  
B.A., University of Oklahoma  

HARRY STEVEN MOULDEN, Academic Support, CC  

OTOME MYERS, Professor Emeritus, Community Colleges  

ELLEN NAGAUE, Professor, CC, ETC, Office Administration & Technology  
B.Ed., University of Hawai‘i  

MARI NAKAMURA, Instructor, CC, ETC, Developmental/Remedial  
M.A., University of Chicago  
B.A., George Washington University  

STEVEN NAKASONE, Director for Administrative Services  
B.A., University of Hawai‘i  

PAUL L. NASH, Professor, CC, Ceramics  
M.A.T. Art Ed., Rhode Island School of Design  
B.F.A., Chouinard Art Institute, Los Angeles  

DIANE NAZARRO, Instructor, CC, ETC, Culinary Arts  

ALEXANDER NIKOLAYCHUK, Instructor, CC, Math  
M.S., Portland State University  
B.S., Portland State University  

JANICE NUCKOLS, Professor, CC, History  
M.A., University of Hawai‘i  
B.A., Marietta College  

CLAYTON NUEVA, Instructor, CC, ETC Facilities Maintenance  

JOSEPH O’BRIEN, Instructor, CC, ETC, Trades, Auto Body Repair & Painting  

JEAN OKUMURA, Professor, CC, Mathematics  
M.S., Oregon State University  
M.Ed., University of Hawai‘i  
B.Ed., University of Hawai‘i  

LESLEİ OPUŁAUOH, Instructor, Counselor, Student Life Coordinator, CC  
B.A., University of Hawai‘i
LETICIA OSHIRO, Instructor, CC, ETC, Student Services Coordinator
B.A.A., University of Hawai‘i

DENNIS PAJELA, Educational Specialist, ETC

FRANCIS PALACAT, Instructor, CC, Psychology
M.S., Chaminade University
B.A., University of Hawai‘i—West O‘ahu
A.A., Windward Community College

RYAN PERREIRA, Instructor/Counselor, CC, ETC, ABRP, ICA-W, CAN, TABE
M.S.W., University of Hawai‘i
A.A., University of Hawai‘i at Hilo

KAREN QUIMOYOG, Instructor, CC, ETC, OCET, Office Administration & Technology
A.A., Leeward Community College

ALAN C. RAGAINS, Professor, CC, Speech and Communication
M.A., Bradley University
B.S., Illinois State University

ELIZABETH RATLIFF, Asst. Professor, CC, Media Specialist, Media Center Coordinator
M.S., Indiana University
B.S., Memorial University of Newfoundland

PEGGY REGENTINE, Professor, CC, Information and Computer Sciences
M.Ed., Auburn University, Montgomery
B.G.S., Roosevelt University
B.S., Troy State University

BRIAN RICHARDSON, Instructor, CC, Librarian
Ph.D., University of Hawai‘i
M.L.I.S., University of Hawai‘i
M.A., University of Hawai‘i
B.A., University of Victoria

DAVID RINGUETTE, Professor, CC, Agriculture
M.S., California Polytechnic State University
B.S., Johnson State College, Vermont

BEATRIZ RODRIGUEZ, Instructor/Counselor, CC, ETC
M.A., Hawai‘i Pacific University
B.A., Hawai‘i Pacific University

CARLA ROGERS, Instructor, Counselor, CC
M.A., Hawai‘i Pacific University
B.A., Hawai‘i Pacific University

STACIE SATO, Personnel Officer
B.A., University of Hawai‘i

MARY BASS SEGURA, Asst. Professor, CC, ETC, The Learning Center
M.A., University of Hawai‘i
B.A., University of Hawai‘i

TARA SEVERNS, Public Services Librarian, Asst. Professor, CC
M.L.S., University of Illinois
B.A., Southern Illinois University
A.A., McHenry County College

JEAN MINAMI SHIBUYA, Professor, CC, English: Composition, Literature
M.A., University of Washington
Fifth Year Teaching Certificate, University of Hawai‘i
B.A., University of Hawai‘i

LEE SHINSATO, Instructor, CC, ETC, Culinary Arts at Honolulu Community College

GARY STICE, Professor Emeritus, Community Colleges

EVELYN SUGIHARA, Professor, CC, ETC, Office Administration & Technology
B.Ed., University of Hawai‘i

PAT TAMAYE, Acting Coordinator, ETC

BRYAN TOKUDA, Computer Specialist
B.S., University of Hawai‘i

MICHAEL TOM, Asst. Professor, CC, Academic Computing Coordinator
M.B.A., Santa Clara University
B.S., University of Hawai‘i

EMI TROEGER, Professor, CC, Business Technology, Information and Computer Science
M.Ed., University of Hawai‘i
B.Ed., University of Hawai‘i

JANE UYETAKE, Program Coordinator, OCE
B.S., University of Hawai‘i
A.A., Leeward Community College

INGELIA WHITE, Assoc. Professor, Botany, Microbiology, Agriculture, Art History; Director, Kuhi Lā‘au
Ph.D., University of Hawai‘i
M.A., University of Hawai‘i
M.S., Bogor Agricultural University
B.S., Bogor Agricultural University

CHARLES WHITTEN, Counselor, Academic Advisor, Professor, CC
M.Div., Southwestern Seminary
M.A., Baylor University
B.A., Baylor University

DEETTA WILSON, Professor Emeritus, Community Colleges

BRANDON YONEHARA, Educational Assistant, Culinary Arts at HCC

MARVIN YOSHIDA, Professor, CC, Accounting
CPA, Hawai‘i
B.B.A., University of Hawai‘i

ELIZABETH YOUNG, Professor, CC, English: Composition and Journalism
M.A., University of Hawai‘i
B.A., University of Michigan
Windward Community College

Clerical and Maintenance Staff

Christine Akiona, Clerk-Typist II, Student Services
Cresencia Antonio, Janitor
Edwin Bruno, Janitor, Operations and Maintenance
Frank Chang, General Maintenance Supervisor
Isaac Chang, Groundskeeper
Avelina Corpuz, Janitor, Working Supervisor
Carl Crowley, Janitor
Freddie Gamayo, General Laborer
Ida Hokama, Account Clerk, Business Office
Kim Kiyono, Secretary to the Dean of Instruction
Lara Kong, Secretary to the Assistant Dean of Instruction
Trudy Kurosaki, Secretary to the Dean of Student Services
Shannon Lono, Cashier, Business Office
Theresa Lum, Janitor
Dolores Malla, Clerk-Typist, Student Services, ETC
Elaine Manuel, Clerk, Bookstore
Lynne Masuyama, Cashier-Clerk, OCE
Erin Mattos, Clerk-Typist, Dean of Instruction
James McCumber, Building Maintenance Worker
Genevieve Mero, Library Technician
Gertrude Miyaji, Library Assistant
Leilani Moss, Private Secretary to the Chancellor
Arthur Okubo, Groundskeeper
Valerie Pedro, Secretary to the Director of Vocational & Community Education
Steven Pulawa, Janitor
Karen Puu, Clerk-Typist, Admissions and Records
Aileen Salvador, Clerk-Typist, Admissions and Records
Kawai Shapiro, Clerk, Business Office
Jamie Simao, Clerk, Business Office
Kahealani Tani, Secretary to the Director for Administrative Services
Derrick Teruya, Janitor
Maxwell Tom, Janitor
Colleen Watanabe, Clerk-Steno, Trades Department, ETC
INDEX

A

Academic Advising, 17
Academic Calendar, inside front cover
Academic Dishonesty, 16
Academic Probation, 21
Academic Probation Policy, 21
Academic Rights and Freedoms of Students, 16
Academic Subject Certificates, 20, 25
Academic Subject Certificate–Art, 33
Academic Subject Certificate–BioResources & Technology, 34-35
Academic Subject Certificate–Business, 36
Academic Subject Certificate–Hawaiian Studies, 37
Academic Subject Certificate–Psycho-Social Developmental Studies, 36
Accounting (ACC), 39
Accreditation, 2
Add, 20
Address, Change of, 17
Admission of International Students, 7
Advanced Placement Examination (AP), 22
Advisory Committees, 6
Aerospace Education Lab, NASA Flight Training, 15
Aerospace Exploration Lab, 14
Agriculture (AG), 39-41
Agriculture Advisory Committee, 6
Annual Friends Steering Committee, 6
Anthropology (ANTH), 42
Appeals, 22
Application Deadlines, 7
Application for Graduation, 28
Application Process, 7
Aquaculture (AQUA), 41
Art (ART), 42-46
Articulation Codes, 38
Arts and Humanities, 29
Associate Degree in Technical Studies, 26, 32
Associate in Arts Degree, 26, 28-31
Astronomy (ASTR), 46-47
Attendance, 16
Auditing, 24

B

Biology (BIOL), 47-48
Bio-Resource Development and Management, 34
Bookstore, 18
Botany (BOT), 48-49
Business Technology (BUSN), 49-50

C

Campus Building and Places, 94
Campus Map, 94
Cancelled Classes, 24
Certificate of Achievement, 20
Certificate of Completion, 20, 25
Certificate of Completion–Agricultural Technology, 32
Certificate Programs, 26
Cheating, 16

D

Chemistry (CHEM), 50-52
Class Size, 24
Classified Students, 20
Clubs and Societies, 85
College Level Examination Program (CLEP), 22
Commencement, 20
Communication (COM), 52
Computer and Information Literacy Requirement, 29
Computer Labs, 13
Concurrent Registration, 24
Cooperative Education, 27
Core Values of Windward Community College, 2
Course, 20
Course Change Fee, 9
Course Load, 24
Course Numbering, 38
Courses, Description of, 39-83
Credit, 38
Credit Courses, 9
Credit by Examination, 22
Credit/No Credit Option, 23

E

Dean of Student Services, 16
Dean’s List, 21
Definition of Hawai'i Residency, 8
Definition of Terms Used by WCC, 20
Degree, 20
Disabilities, Services to Students with, 18
Directory Information, 3
Discrimination Complaints, 5
Dishonored Check Fee, 9
Dismissal, 22
Distance Education, 24
Drops, 20
Duplicate Fee Slip, 9

F

Economics (ECON), 52-53
Educational Rights and Privacy of Students, 3
Eligibility, 7
Employment Training Center, 5
English (ENG), 53-55
Erase Period, 20
Evaluation of Transfer Credits, 22

G

Faculty and Staff, 86-90
Federal Campus Sex Crimes Prevention Act, 5
Federal Financial Aid Programs, 11
Federal Parent Loan, 11
Federal Pell Grants, 11
Federal Perkins Loan Program, 11
Federal Stafford Loan, 11
Federal Supplemental Educational Opportunity Grants, 11
Federal Work Study Program (FWSP), 11
Fees:
Course Change Fee, 9
Dishonored Check Fee, 9
Duplicate Fee Slip, 9
Graduation Fee, 9
Late Registration Fee, 9
Non-Resident Application Fee, 9
Printing Fee, 9
Student Activities Fee, 9
Transcript Fee, 9
Financial Aid Application Process, 12
Financial Aid Programs, 11
Financial Obligations to the University, 10
Food Science and Human Nutrition (FSHN), 55
Food Services, 18
Friends of Lanihuli, 6
Fujio Matsuda Technology Training & Education Center, 14
Full-time student, 20

G
Gallery 'Iolani, 14
General Admissions Requirements, 7-8
Geographic Information Systems (GIS), 55
Geography (GEOG), 55-56
Geology and Geophysics (GG), 56-58
Global and Multicultural Perspectives, 29
Grade Point Average, 23
Grade Reports, 21
Grading, 23
Graduation, 20, 28
Graduation Fee, 9
Graduation Requirements, A.A. degree, 28-31

H
Hawai‘i Space Grant Consortium—Windward, 14
Hawai‘i Student Incentive Grant (HSIG), 11
Hawaiian (HAW), 58
Hawaiian Studies (HWST), 58
Hawaiian Studies Advisory Committee, 6
Health Clearances, 7
Health, Physical Education, and Recreation (HPER), 58
Health Services, 18-19
History (HIST), 59
Hoo‘aina RS/GIS Center, 15
Hōkūlani Imaginarium, 15
Honor Society, 85
Housing, 19
Humanities (HUM), 60

I
Illicit Drugs and Alcohol, 19
Impermissible Behavior, 16
Independent Studies, 26-27, 60
Information and Computer Sciences (ICS), 60-63
Instructional Program, 25
Interdisciplinary Studies (IS), 63-65
International Students, 7-8

J
Japanese (JPNS), 65-66
Journalism (JOUR), 66

K
Kokua Palikū, 6
Kuhi Lā‘au, 15

L
Lanihuli Observatory, 15
Late Registration Fee, 9
Learning Center, The (TLC), 13
Learning Outcomes for the AA Degree, 29
Learning Skills (LSK), 66
Lethal Weapons, 19
Library, 13
Linguistics (LING), 67
Lost and Found, 19

M
Major, Change of, 17
Management (MGT), 67
Map of the Campus, 94
Marine Option Program (MOP), 27
Math Lab, 13
Math Placement Requirement, 29
Mathematics (MATH), 67-71
Media Center, 14
Meteorology (MET), 71
Microbiology (MICR), 71
Military Science (MSCI), 71
Military Science Courses, 26
Misrepresentation, 8
Mission of Windward Community College, 2
Music (MUS), 72-74

N
NASA Flight Training Aerospace Educational Lab, 15
Natural Resources and Environmental Management (NREM), 74
Natural Sciences, 29
Noncredit Courses, 5
Nondiscrimination and Affirmative Action, 4
Non-Resident Application Fee, 9

O
Oceanography (OCN), 74-75
Office of Continuing Education, 6
Office of International Programs and Services, 6
Official Withdrawal, 20, 24

P
Palikū Theatre, 15
Parking, 18
Part-time student, 20
## INDEX

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Purpose of Windward Community College</td>
</tr>
<tr>
<td>9</td>
<td>Payments, 9</td>
</tr>
<tr>
<td>16</td>
<td>Student Conduct, 16</td>
</tr>
<tr>
<td>18</td>
<td>Student Employment, 18</td>
</tr>
<tr>
<td>5</td>
<td>Student Misconduct Grievances, 5</td>
</tr>
<tr>
<td>85</td>
<td>Student Participation in College Governance, 85</td>
</tr>
<tr>
<td>17</td>
<td>Student Services, 17</td>
</tr>
<tr>
<td>18</td>
<td>Students with Disabilities, Services to, 18</td>
</tr>
<tr>
<td>25</td>
<td>Summary of Degrees and Certificates Offered, 25</td>
</tr>
<tr>
<td>24</td>
<td>Summer Session, 24</td>
</tr>
<tr>
<td>21</td>
<td>Suspension, 21</td>
</tr>
<tr>
<td>29</td>
<td>Symbolic Reasoning, 29</td>
</tr>
<tr>
<td>12</td>
<td>Refund Allocation Policy for Financial Aid Recipients, 12</td>
</tr>
<tr>
<td>9</td>
<td>Refunds, 9</td>
</tr>
<tr>
<td>10</td>
<td>Refunds for Cancelled Classes, 10</td>
</tr>
<tr>
<td>10</td>
<td>Refund Policy, Non-credit Courses or Workshops, 10</td>
</tr>
<tr>
<td>10</td>
<td>Refund Policy, Student Activity Fees, 10</td>
</tr>
<tr>
<td>9</td>
<td>Refund Policy, Tuition and Special Course Fees, 9</td>
</tr>
<tr>
<td>7</td>
<td>Registration, 7</td>
</tr>
<tr>
<td>80</td>
<td>Science (SCI), 80</td>
</tr>
<tr>
<td>83</td>
<td>Zoology (ZOOL), 83</td>
</tr>
<tr>
<td>29</td>
<td>Written and Oral Communications, 29</td>
</tr>
<tr>
<td>19</td>
<td>Social Sciences (SSCI), 80</td>
</tr>
<tr>
<td>83</td>
<td>Women’s Studies (WS), 83</td>
</tr>
<tr>
<td>22</td>
<td>Transfer of Credits from Other Institutions, 22</td>
</tr>
<tr>
<td>84</td>
<td>Transferring to Another College, 84</td>
</tr>
<tr>
<td>18</td>
<td>TRIO Student Support Services, 18</td>
</tr>
<tr>
<td>9</td>
<td>Tuition, 9</td>
</tr>
<tr>
<td>11</td>
<td>Tuition Waivers, 11</td>
</tr>
<tr>
<td>20</td>
<td>Unclassified Students, 20</td>
</tr>
<tr>
<td>1</td>
<td>University of Hawai’i Administration, 1</td>
</tr>
<tr>
<td>1</td>
<td>University of Hawai’i Board of Regents, 1</td>
</tr>
<tr>
<td>27</td>
<td>UH Average Graduation Persistence Rates, 27</td>
</tr>
<tr>
<td>12</td>
<td>Veterans Administration, 12</td>
</tr>
<tr>
<td>2</td>
<td>Vision for Windward Community College, 2</td>
</tr>
<tr>
<td>5</td>
<td>Vocational and Community Education, 5</td>
</tr>
<tr>
<td>24</td>
<td>Withdrawal from Classes, 24</td>
</tr>
<tr>
<td>6</td>
<td>Windward CC Ambassadors, 6</td>
</tr>
<tr>
<td>11</td>
<td>State Financial Aid Programs, 11</td>
</tr>
<tr>
<td>11</td>
<td>State Higher Education Loan (SHEL), 11</td>
</tr>
<tr>
<td>8</td>
<td>Statutory Exemptions to Residence, 8</td>
</tr>
<tr>
<td>16-17</td>
<td>Student Academic Grievance Procedures, 16-17</td>
</tr>
<tr>
<td>85</td>
<td>Student Activities and Organizations, 85</td>
</tr>
<tr>
<td>9</td>
<td>Student Activities Fee, 9</td>
</tr>
<tr>
<td>16</td>
<td>Student Affairs, 16</td>
</tr>
<tr>
<td>9</td>
<td>Student Conduct, 16</td>
</tr>
<tr>
<td>18</td>
<td>Student Employment, 18</td>
</tr>
<tr>
<td>5</td>
<td>Student Misconduct Grievances, 5</td>
</tr>
<tr>
<td>85</td>
<td>Student Participation in College Governance, 85</td>
</tr>
<tr>
<td>17</td>
<td>Student Services, 17</td>
</tr>
<tr>
<td>18</td>
<td>Students with Disabilities, Services to, 18</td>
</tr>
<tr>
<td>25</td>
<td>Summary of Degrees and Certificates Offered, 25</td>
</tr>
<tr>
<td>24</td>
<td>Summer Session, 24</td>
</tr>
<tr>
<td>21</td>
<td>Suspension, 21</td>
</tr>
<tr>
<td>29</td>
<td>Symbolic Reasoning, 29</td>
</tr>
</tbody>
</table>

**R**
- Refund Allocation Policy for Financial Aid Recipients, 12
- Refunds, 9
- Refunds for Cancelled Classes, 10
- Refund Policy, Non-credit Courses or Workshops, 10
- Refund Policy, Student Activity Fees, 10
- Refund Policy, Tuition and Special Course Fees, 9
- Registration, 7
- Religion (REL), 79-80
- Repeating Courses, 22
- Residency Appeal Process, 8
- Residency Reclassification, 8
- Residency Regulations for Tuition Purposes, 7-8
- Returning Students, 24

**S**
- Schedule of Classes, 20
- Scholastic Standards, 21
- Science (SCI), 80
- Selective Service Registration and Federal Student, 12
- Semester, 20
- Semester Hours, 20
- Service Learning, 27
- Sexual Assault Policy, 19
- Sexual Harassment Policy, 19
- Short Term Loans, 12
- Smoking, 19
- Social Sciences, 29
- Social Sciences (SSCI), 80
- Social Security Number, Use of, 4
- Sociology (SOC), 80-81
- Spanish (SPAN), 81
- Speech (SP), 81-82
- State Financial Aid Programs, 11
- State Higher Education Loan (SHEL), 11
- Statutory Exemptions to Residence, 8
- Student Academic Grievance Procedures, 16-17
- Student Activities and Organizations, 85
- Student Activities Fee, 9
- Student Affairs, 16

**T**
- Telephone Directory, inside back cover
- Terms and Semesters, 24
- The Learning Center (TLC), 13
- Theatre (THEA), 82-83
- Transcript Fee, 9
- Transfer of Credits from Other Institutions, 22
- Transferring to Another College, 84
- TRIO Student Support Services, 18
- Tuition, 9
- Tuition Waivers, 11

**U**
- Unclassified Students, 20
- University of Hawai’i Administration, 1
- University of Hawai’i Board of Regents, 1
- UH Average Graduation Persistence Rates, 27

**V**
- Vision for Windward Community College, 2
- Vocational and Community Education, 5

**W**
- Warning, 21
- Water Quality Lab, 15
- Windward Community College Administration, 1
- Windward CC Ambassadors, 6
- Withdrawing from Classes, 24
- Women’s Studies (WS), 83
- Writing Intensive (WI) Courses, 20
- Writing Intensive Courses, 29
- Written and Oral Communications, 29
Quick Telephone Reference

Absences
  Contact your instructor or the Office of the
  Dean of Instruction ...................................... 235-7422
Admissions ....................................................... 235-7432
Aerospace Exploration Lab ................................. 235-7321
Art Gallery
  Gallery 'Iolani ............................................. 236-9155
Audio/Visual Services
  Media Production Center ................................. 235-7302
Bookstore ......................................................... 235-7418
Career Information
  Career Center .............................................. 235-7413
Cashier ............................................................ 235-7410
Ceramics Lab .................................................... 235-7323
Continuing Education ......................................... 235-7433
Counseling Services
  Counseling/Academic Advising ........................ 235-7413
Director of Development ................................... 235-7460
  WCC Ambassadors
  Annual Friends Steering Committee
  Friends of Lanihuli
  Kokua Paliku
Disabilities, Services for Students with
  TRIO Program .............................................. 235-7487
Employment Training Center (ETC) ....................... 844-2365
  or 844-2364
Equal Opportunities Officer ................................ 235-7404
FAX .................................................................. 247-5362
Financial Aids/Loans ......................................... 235-7449
Foreign Students Information
  Office of the Registrar ................................... 235-7432
Fujio Matsuda Technology Training and
  Education Center ............................................ 235-7433
Hawai'i Backyard Aquaculture Program ................ 236-9121
Hawai'i Space Grant Consortium
  Windward ..................................................... 236-9111
Health Service/Medical Insurance Inquiries
  Student Services ........................................... 235-7466
Hokulani Imaginarium ....................................... 236-9111
Library Services ............................................... 235-7338
Literary Magazine (Student)
  Rainbird ....................................................... 236-9236
Lost and Found
  Business Office ............................................ 235-7410
Math Resource Center ........................................ 236-9275
Marine Options Program .................................... 236-9118
Marketing and Public Relations ......................... 235-7318
NASA Flight Training Aerospace Education
  Laboratory ..................................................... 236-9216
Newspaper (Student)
  Ka 'Ohana ................................................... 236-9187
No'eau 121 Computer Lab ................................... 235-7314
Pacific Center for Environmental Studies
  Dr. Dave Krupp ............................................ 236-9121
  Dr. Floyd McCoy .......................................... 236-9115
Pali'ki Theatre Box Office .................................. 235-7330
Photo Lab ......................................................... 236-9141
Noncredit Courses
  Office of Continuing Education
  & Training .................................................... 235-7433
Registration Information
  Office of the Registrar ................................... 235-7432
Residency Regulations
  Admissions Office ......................................... 235-7432
Scholarships
  Financial Aids Office ..................................... 235-7449
Science Lab ..................................................... 235-9108
Security
  Off-Campus .................................................. 235-7403
  On-Campus .................................................. 235-7355
Senior Citizen Program
  Continuing Education ..................................... 235-7433
Student Government
  Konohiki Council .......................................... 235-7485
Study Skills for Students
  The Learning Center ..................................... 235-7498
Switchboard ..................................................... 235-7400
Testing Information
  Office of the Registrar ................................... 235-7432
Transfer Information
  Academic Advising ........................................ 235-7413
Tuition Refunds
  Business Office ............................................ 235-7410
Tuition Waivers
  Financial Aids Office ..................................... 235-7449
Tutors/Tutoring
  The Learning Center ..................................... 235-7498
Veteran's Certification ...................................... 235-7432
Withdrawal, Classes, College
  Office of the Registrar ................................... 235-7432