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The College

Message from the Chancellor

Mai ka hikina a i ke komohana, mai uka a i kai, welina mai i ke kahua kulanui o ke Koʻolau!
From the east to the west, from mountains to ocean, welcome to Windward Community College!

As you open this catalog and explore our courses, degrees, and services, you take the first step in joining our ʻohana of learners. Consider what studies will engage your interest, grow your skills, and advance you on your career and life path. Our counselors, faculty, staff, and administration are here to help you on this journey. Your success is our success.

Aʻohe hana nui ke alu ʻia. “No task is too hard when we work together.”

You are challenged to work hard, study hard, and try your hardest. Utilize our learning labs, tutoring, supplemental instruction, advising and other services to reach your goals.

Kūlia i ka nuʻu! “Strive for the highest.”

We are an amazing community of students, staff, faculty, and community members. WCC’s beauty is immediately apparent in our lush physical surroundings, but our true beauty comes from the people who make this a great place to learn. Come, grow and thrive with us.

Wishing you a fulfilling journey,

Ardis Eschenberg, PhD
Chancellor

He pūnawai kahe wale ke aloha. “Serving and supporting with aloha.”
Mission, Vision, Values

Windward Community College is the youngest of seven public community colleges in Hawai‘i governed by the Board of Regents of the University of Hawai‘i. The campus is located at the foot of the majestic Ko‘olau range in Kāne‘ohe on the island of O‘ahu. It opened in the fall of 1972 with 525 students and had a Fall 2020 enrollment of 2,300 students. The College offers both liberal arts and career and technical education programs.

Mission of Windward Community College

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai‘i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide the Ko‘olau region of O‘ahu and beyond with liberal arts, career, and lifelong learning in a supportive and challenging environment—inspiring students to excellence.

Vision for Windward Community College

Ka Mālamalama o ke Ko‘olau – “Enlightening Ko‘olau”

Students and community members will be enriched by “the light of knowledge” through quality programs and be able to lead full, productive lives in a rapidly changing world.

Core Values of Windward Community College

The College and its mission, goals and actions are guided by core values that reflect the Hawaiian culture:

Ka lama kū o ka na‘auao
Creating meaningful curricula and diverse learning experiences

‘A ‘ohe hana nui ke ‘alu ‘ia
Working collaboratively and inclusively

He pūnūwai kabe wale ke aloha
Serving and supporting with aloha

Kūlia i ka nu‘u
Striving for excellence

He ali‘i ka ‘ūīna, he kanū ke kanaka
Caring for Hawai‘i and the planet

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

- To broaden access to post-secondary education in Hawai‘i regionally and internationally 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, the region, and internationally, by offering occupational, technical, and professional courses and programs that prepare students for immediate employment and career advancement.
- To provide opportunities for personal enrichment, occupational upgrading, and career mobility through credit and non-credit 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.
- By building upon Hawai‘i’s unique multi-cultural environment and geographic location through efforts in curriculum development and productive relationships with international counterparts in Asia and the Pacific, UHCC students’ learning experiences will prepare them for the global workplace. (University of Hawai‘i Community Colleges, Policy UHCCP #4.101).

Accreditation

Windward Community College is accredited by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges (ACCJC). ACCJC is a regional accrediting body recognized by the Council for Higher Education and the U.S. Department of Education.

The programs in Veterinary Technology are accredited by the American Veterinary Medical Association (AVMA).
Windward Community College Security

Windward Community College is firmly committed to providing a safe and secure environment. Our institution’s policies, procedures, and programs related to safety and security are designed to ensure that best practices are followed to protect persons and property. Our Campus Security workforce operates 24 hours a day, 7 days a week, year-round including holidays.

Campus Security is responsible for a variety of functions to include patrols, enforcement of institutional policies, response to campus emergencies and incidents, management of lost and found property, and providing services such as security escorts and courtesy transports. To ensure workforce readiness, security officers receive training in areas such as emergency first-aid and cardiopulmonary resuscitation, investigation and report writing, defensive measures, and crowd control (training delivered by experts from the federal, state, and local law enforcement agencies). As needed, contract security services are secured to ensure additional security presence.

The Campus Security office is located in Hale Alaka‘i 113 (next to the main entrance of the building). Campus Security can be contacted by phone at 808-235-7355 (or extension 355 if calling from an internal campus phone unit). We highly recommend that you call Campus Security in advance of arriving at the office to report an incident or for lost and found inquiries. At any given time, our security officers may be on a service call or responding to an emergency. The Safety and Security Manager is available Monday-Friday during day hours in Hale Alaka‘i 125; and, can be reached at 808-235-7343 (or extension 343 if calling from an internal campus phone unit). Like Campus Security, we recommend that you call in advance if visiting the office as the manager may be temporarily out of the office.

If you require the police, fire, or medical services or are reporting an emergency or crime in progress, please call 911 immediately. We ask that you take an additional 10 seconds to call Campus Security so that they can guide the first responders to the emergency scene as quickly as possible. For other security needs, you can call Campus Security directly. Our security officers will assess the situation and summon the first responders as required.

For your safety, the University of Hawai‘i System utilizes the UH Alert System which offers students, faculty, and staff a means to receive warnings and emergency notifications through smartphone technology. You can elect to receive a text or email or both. Additionally, the UH Alert System will also post similar warnings and emergency notifications to the institution’s Facebook and Twitter pages. We highly encourage you to sign up to receive notifications through the UH Alert System. This can be done by visiting https://www.hawaii.edu/alert.

Windward Community College utilizes an outdoor public announcement system (loudspeakers) as another means to provide warnings and emergency notifications. Upon receiving a report of an incident, the Campus Crisis Management Team will convene and assess the best means of delivering a warning or emergency notification. The team may use one or both of the systems available.

We advocate awareness on the part of each and every one of our campus community members. Personal awareness of your surroundings in addition to receiving warnings and emergency notifications can effectively reduce your chances of becoming a victim. The Office of Safety and Security encourages you to sign up for UH Alert System notifications, follow our campus Facebook and Twitter pages, and utilize the information provided to make sound decisions for your own personal safety. Also, be mindful that campus safety begins with YOU; so, “If You See Something, Say Something.”

Additional security information and emergency procedures as well as information on lost and found, security escorts, and courtesy transport procedures can be found on the Windward Community College’s website at https://windward.hawaii.edu/campus-life/safety-security/security-services/.


Office of International Programs and Services

Windward Community College participates in a variety of international programs. The Vice Chancellor for Academic Affairs may be contacted for information concerning specific programs. The chairperson of the International Education Committee and the director of the Study Abroad Center serve as the liaison with foreign higher education institutions and with the UH and UHCC International Education Committees, which provide information on study abroad programs, and supports and recruits international students. The Study Abroad Center in Hale Manaleo 108 offers a variety of study abroad programs and scholarship opportunities. Study abroad program durations range from one week to three years and are offered in many different countries, such as Japan, China, England, Czech Republic, Aotearoa, and more. For more information about our programs, please visit https://windward.hawaii.edu/study_abroad/.

Articulated Transfer Programs

Windward Community College (Windward CC) has a program-to-program articulation with UH Hilo for Astronomy and Geology, which spells out the requirements for Windward CC students who wish to earn a BS degree in either discipline from UH Hilo. For more information on which Windward CC classes will transfer directly into the Astronomy BS degree program at UH Hilo contact Dr. Joseph Ciotti at 808-236-9111 or the Office of Academic Affairs at 808-235-7422. For more information on which Windward CC classes will transfer directly into the Geology BA and BS degree programs at UH Hilo contact Dr. Floyd McCoy at 808-236-9115 or the Office of Academic Affairs at 808-235-7422. For other articulated programs, such as Creative Media or Hawaiian-Pacific Studies at UH West O‘ahu, please see a counselor.
Windward CC has two agreements with UH West O'ahu, in which, upon completion of the Associate of Arts degree in Hawaiian Studies, a student can be accepted and enter as a junior into either the Bachelor in Applied Science with a concentration in Sustainable Community Food Systems (SCFS) or the Bachelor of Arts in Humanities with a concentration in Hawaiian-Pacific Studies. The Sustainable Community Food Systems (SCFS) is a degree program that prepares students for jobs in the sustainable food and agriculture sector in Hawai'i and beyond. It is a multi-disciplinary, experiential and applied education program about key ecological and social issues in food and agricultural systems created to develop food system professionals capable of solving real-world problems and transitioning Hawai'i agriculture toward greater ecological sustainability and social equity. The Bachelor of Arts degree in Humanities with a concentration in Hawaiian-Pacific Studies offers a wide array of courses on Hawai'i and the Pacific Islands, enabling students to gain an overview of Pacific Island peoples and an in-depth knowledge of specific aspects of the cultures of Hawai'i and the Pacific. For more information on these and other articulated programs, please see a counselor.

**Career & Community Education**

Windward Community College seeks to improve the quality of life and provide direct educational assistance to individuals, businesses, and special interest groups. Career & Community Education provides services for individual communities and the general public by making available a variety of instructional, cultural, recreational, and career/workforce services in which the institution has special competence or the community has special needs. Career & Community Education also coordinates campus and off-campus programs.

The College offers professional development and continuing education opportunities on and off-campus in Windward O'ahu. Persons who are interested in courses should contact the Career & Community Education office at 808-235-7433.

**Academic Calendar**

The academic calendar includes holidays, non-instructional days, and key deadlines for students and the college. Dates are subject to change without notice.

**2020 Fall Semester**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 6</td>
<td>Fall Registration Begins</td>
</tr>
<tr>
<td>August 1</td>
<td>Deadline for Fall 2020 Admissions Application</td>
</tr>
<tr>
<td>August 20</td>
<td>Payment Deadline for Fall Tuition/Fee by 4:00 p.m.</td>
</tr>
<tr>
<td>August 17</td>
<td>Faculty Duty Day</td>
</tr>
<tr>
<td>August 21</td>
<td>Holiday: Statehood Day</td>
</tr>
<tr>
<td>August 24</td>
<td>Fall Semester Begins: First day of Instruction</td>
</tr>
<tr>
<td>Aug. 24–Sept. 1</td>
<td>Late Registration ($30 late fee) and Add/Drop Period ($5 in-person fee)</td>
</tr>
<tr>
<td>September 1</td>
<td>Last Day for 100% Tuition Refund¹</td>
</tr>
<tr>
<td>September 1</td>
<td>Last Day for 100% Student Fees Refund¹ (complete withdrawal from ALL classes)</td>
</tr>
<tr>
<td>September 7</td>
<td>Holiday: Labor Day</td>
</tr>
<tr>
<td>September 15</td>
<td>Last Day to Withdraw without “W” grade and 50% Refund¹</td>
</tr>
<tr>
<td>November 2</td>
<td>Last Day to Withdraw with “W” grade¹</td>
</tr>
<tr>
<td>November 2</td>
<td>Last Day to Change to CR/NC Option or select Audit¹</td>
</tr>
<tr>
<td>November 2</td>
<td>Last Day to make-up Spring/Summer “I” Grade¹</td>
</tr>
<tr>
<td>November 11</td>
<td>Holiday: Veterans Day</td>
</tr>
<tr>
<td>November 26</td>
<td>Holiday: Thanksgiving Day</td>
</tr>
<tr>
<td>November 27</td>
<td>Non-Instructional: Thanksgiving Recess</td>
</tr>
<tr>
<td>December 10</td>
<td>Last Day of Instruction</td>
</tr>
<tr>
<td>December 10</td>
<td>Last Day to Certify/Apply for Fall Graduation</td>
</tr>
</tbody>
</table>
December 12–18  Exam Period
December 18  End of Fall Semester
December 22  Grades Due by 4 p.m.

2021 Spring Semester

November 9  Spring Registration Begins

January 8  Payment Deadline for Spring Tuition/Fee by 4 p.m.
December 15  Deadline for Spring 2021 Admissions Application (extended to Dec. 29)
January 1  Holiday: New Year’s Day
January 11  Spring Semester Begins: First day of Instruction
January 11–19  Late Registration ($30 late fee) and Add/Drop Period ($5 in-person fee)
January 18  Holiday: Martin Luther King Jr. Day
January 19  Last Day for 100% Tuition Refund¹
January 19  Last Day for 100% Student Fees Refund¹ (complete withdrawal from ALL classes)
February 3  Last Day for 50% Tuition Refund¹ (complete withdrawal from ALL classes)
February 3  Last Day to Withdraw without “W” grade and 50% Refund¹
February 15  Holiday: Presidents' Day
March 5  Non-Instructional: Excellence in Education
March 15–19  Non-Instructional: Spring Recess
March 29  Last Day to Withdraw with “W” grade¹
March 29  Last Day to Change to Credit/Noncredit Option or select Audit¹
March 29  Last Day to make-up Fall “I” Grade¹
March 26  Holiday: Prince Kuhio Day
April 2  Holiday: Good Friday
April 15  Commencement Program Deadline
May 5  Last Day of Instruction
May 5  Last Day to Certify/Apply for Spring Graduation
May 8–14  Exam Period
May 14  End of Spring Semester
May 14  Commencement
May 17  Last Faculty Duty Day
May 18  Grades Due (by 4 p.m.)
2021 Summer Sessions
May 24–July 2  Summer Session I
July 6–August 13  Summer Session II
¹drop, withdrawal, and refund dates are based on semester-length classes. For non-semester length dates, refer to online Class Availability via MyUH.

Campus Map

Campus Statistics
Graduation and Persistence Rates
UH GRADUATION RATE - 150% of normal time to completion, Fall 2015 Cohort, First-time, Full-time degree or certificate-seeking undergraduates

Graduation Rate
<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23%</td>
<td>26%</td>
<td>20%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>15%</td>
<td>15%</td>
<td>31%</td>
</tr>
<tr>
<td>Women</td>
<td>15%</td>
<td>15%</td>
<td>31%</td>
</tr>
</tbody>
</table>

IPEDS Race / Ethnicity

| Nonresident Alien | R | R | 42% |
| Hispanic / Latino | 16% | 11% | 15% |
| American Indian or Alaska Native | R | R | R | R |
| Asian | 28% | 45% | 19% | 3% |
| Black or African American | 7% | R | R | R | R |
| Native Hawaiian or Other Pacific Islander | 14% | 27% | 4% | 17% |
| White | 24% | 28% | 19% | 19% |
| Two or more races | 20% | 27% | 13% | 15% |
| Race and ethnicity unknown | R | R | R | R | R |

Federal Grant / Loan Recipient

| Recipient of a Federal Pell Grant | 23% | 26% | 22% | 14% |
| Recipient of a subsidized Stafford Loan who did not receive a Pell Grant | 26% | 26% | 29% | 12% |
UH GRADUATION RATE - 150% of normal time to completion, Fall 2015 Cohort, First-time, Full-time degree or certificate-seeking undergraduates

Student who did not receive either a Pell Grant or subsidized Stafford Loan

<table>
<thead>
<tr>
<th>UHCC Avg Hawai‘i Honolulu Kapi‘olani Kaua‘i Leeward Maui Windward</th>
</tr>
</thead>
<tbody>
<tr>
<td>20% 28% 17% 21% 34% 16% 24% 13%</td>
</tr>
</tbody>
</table>

UH GRADUATION RATE - 150% of normal time to completion, Fall 2015 Cohort, First-time, Full-time degree or certificate-seeking undergraduates

UHCC Hawai‘i Honolulu Kapi‘olani Kaua‘i Leeward Maui Windward

Avg

Loan

R denotes any cohort / subcohort with fewer than ten students

UH PERSISTENCE RATE - Still enrolled after 150% of normal time to completion, First-time, Full-time degree or certificate-seeking undergraduates

<table>
<thead>
<tr>
<th>Mānoa</th>
<th>Fall 2012 Cohort</th>
<th>Fall 2015 Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawai‘i</td>
<td>West O‘ahu</td>
<td>UHCC Avg</td>
</tr>
<tr>
<td>Persistence Rate</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>

UH TRANSFER OUT RATE, First-time, Full-time degree or certificate-seeking undergraduates

<table>
<thead>
<tr>
<th>Mānoa</th>
<th>Fall 2012 Cohort</th>
<th>Fall 2015 Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawai‘i</td>
<td>West O‘ahu</td>
<td>UHCC Avg</td>
</tr>
<tr>
<td>Transfer Out Rate</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

This information is provided for the Student Right to Know Act, Public Law 101-542. It provides a partial description of the graduation and enrollment patterns of students. It should not be used to infer or predict individual behaviour.
Institutional Research and Analysis Office, University of Hawai‘i, February 2019

Annual Crime Statistics

<table>
<thead>
<tr>
<th>OFFENSE</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murder and Non-Negligent Manslaughter</td>
<td>0 On-campus property</td>
<td>0 Non-campus property</td>
<td>0 On-campus property</td>
</tr>
<tr>
<td></td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
</tr>
<tr>
<td></td>
<td>0 Public property</td>
<td>0 Public property</td>
<td>0 Public property</td>
</tr>
<tr>
<td>Manslaughter by Negligence</td>
<td>0 On-campus property</td>
<td>0 Non-campus property</td>
<td>0 On-campus property</td>
</tr>
<tr>
<td></td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
</tr>
<tr>
<td></td>
<td>0 Public property</td>
<td>0 Public property</td>
<td>0 Public property</td>
</tr>
<tr>
<td>Sexual Assault-Rape</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
</tr>
<tr>
<td></td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
</tr>
<tr>
<td></td>
<td>0 Public property</td>
<td>1 Public property</td>
<td>0 Public property</td>
</tr>
<tr>
<td></td>
<td>1 On-campus property</td>
<td>0 Non-campus property</td>
<td>0 On-campus property</td>
</tr>
<tr>
<td>Sexual Assault-Fondling</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
</tr>
<tr>
<td></td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
</tr>
<tr>
<td></td>
<td>0 Public property</td>
<td>0 Public property</td>
<td>0 Public property</td>
</tr>
<tr>
<td>Sexual Assault-Incest</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
</tr>
<tr>
<td></td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
</tr>
<tr>
<td></td>
<td>0 Public property</td>
<td>0 Public property</td>
<td>0 Public property</td>
</tr>
<tr>
<td>Statutory Rape</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
</tr>
<tr>
<td></td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
</tr>
<tr>
<td></td>
<td>0 Public property</td>
<td>0 Public property</td>
<td>0 Public property</td>
</tr>
<tr>
<td>Robbery</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
</tr>
<tr>
<td></td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
<td>0 Non-campus property</td>
</tr>
<tr>
<td></td>
<td>0 Public property</td>
<td>0 Public property</td>
<td>0 Public property</td>
</tr>
</tbody>
</table>
**Vice Chair**

Benjamin Asa Kudo  
*Chair*

Randolph G. Moore  
*Vice Chair*

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**Faculty, Staff, and Administration**  
**University of Hawai‘i Board of Regents**

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**NOTE ON HATE CRIMES:** There were no hate crimes reported in any of the above categories for all above years reported.

All statistical information above are being provided in compliance with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (2008 Act 20, USC 1092(f); as amended; also known as the “Clery Act”). The Honolulu Police Department and the State Department of Public Safety, Sheriffs Division, separately retain crime statistics for their respective jurisdictions. Both agencies are not able to provide a statistical breakdown by the exact geographical campus boundaries determined for Windward Community College as determined in accordance with the Clery Act implementing regulations in the U.S. Code of Federal Regulations at 34 C.F.R. 668.46. This campus, however, has made good faith effort in determining duplication of reports for the same crime (example-when victims report a crime to both law enforcement and campus security separately on different dates/times).

For questions or additional information, contact the Office of the Vice Chancellor of Administrative Services in Hale Alakai 120, or call 235-7405.

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**ARRESTS**  
<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
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<tbody>
<tr>
<td>Aggravated Assault</td>
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<td>Arson</td>
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**DISCIPLINARY REFERRALS**  
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<th>Year</th>
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<th>2019</th>
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<td>Drug Law Violations</td>
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**VAWA OFFENSES**  
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<th>Year</th>
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<th>2018</th>
<th>2019</th>
</tr>
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<tbody>
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<td>Domestic Violence</td>
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<td>Dating Violence</td>
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<tr>
<td>Stalking</td>
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*Note: Prior year catalog listed 1 Burglary and 1 Motor Vehicle Theft in 2017; and, 2 Motor Vehicle Thefts in 2018. These figures were incorrect and should be "0" based on a complete audit of the 2018 and 2019 Annual Security Reports and the corresponding case reports from which crime statistics were counted.*
Alapaki Nahale-a  
_Vice Chair_

Wayne Higaki, _Hawaii County_  
Simeon Acoba, _Honolulu County_  
Jan Naoe Sullivan, _Honolulu County_  
Michelle Tagorda, _Honolulu County_  
Robert Frank Westerman, _Kaua'i County_  
Eugene Bal III, _Maui County_  
Ernest Wilson, _Maui County_  
Kelli K.K. Acopan, _Student Regent_

**University of Hawai‘i Administration**

David Lassner  
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Nainoa Thompson  
_Special Advisor to the President on Hawaiian Affairs_

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_Vice President for Academic Planning and Policy_

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_Vice President for Community Colleges_

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_Vice President for Legal Affairs/University General Counsel_

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_Vice President for Research and Innovation_

Tim Dolan  
_Vice President for Advancement, UH Foundation_

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_UH Mānoa Provost_

Bonnie D. Irwin  
_UH Hilo Chancellor_

Maenette Benham  
_UH West O‘ahu Chancellor_

**Windward Community College Administration**

Ardis Eschenberg, PhD  
_Chancellor_

Charles S. Sasaki  
_Vice Chancellor for Academic Affairs_

Colette Higgins  
_Dean for Academic Affairs, Division I and Academic Support_
Advisory Boards
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 boards are formed as new needs and programs are identified.

Windward Community College Ambassadors
Josie Bidgood
Ann Cosson
Claire Durham
Hallett H. Hammatt, PhD
Diane Harding
Ian Y. Kitajima
Waynella McNeil
Janice Nielsen
Terry Savage
Betsy Takesono
Geal F. Talbert
Nancy T. Taylor
Jill Trigg-Smith
Sally White

Agriculture Advisory Committee
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Robert Lillie
Al Kakazu
Andy Kaufman
Kevin Eckert
Ross Shiroma

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Roy Fujimoto
Mark Hamasaki
Dennis Kauahi
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Veterinary Studies Advisory Committee
Eric Ako, DVM
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Sam Geiling, RVT
Jackie Gravener
Joseph Herzog, DVM
Manny Himenes, DVM
Geri Imai
Maki Imoto-Eakin
John Kaya, DVM
Jenny Kelly, DVM
Stacie Kissel, RVT
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Shannon Nakamura, LVT
Jenee Odani, DVM
Mindi Peralta
Michael Wong, DVM
Peggy Regentine, Emeritus Faculty
Charles Sasaki
Wendy Simmons, RVT, CCRP
Whitney Watanabe, CVT

Administration and Faculty Listing
Sarah Akina
Instructor, CC, Counselor, Paipai o Ko'olau
MSW, University of Hawai‘i;
BA, University of Hawai‘i

Ka'ahu Alo
Instructor, CC, Counselor, Student Life Coordinator
MA, Hawai‘i Pacific University;
BA, Hawai‘i Pacific University;
AA, Windward Community College

Audrey Badua
Assistant Professor, CC, Speech
MA, University of Hawai‘i;
BA, University of Hawai‘i

Robert Barclay
Professor, CC, English
PhD, University of Hawai‘i;
MA, University of Hawai‘i;
BA, University of Hawai‘i;
AA, Honolulu Community College

Kimberlee Bassford
Instructor, CC, Journalism
MA, University of California, Berkley;
BA, Harvard University

Lisamarie Bensman
Instructor, CC, Psychology
PhD, University of Hawai‘i;
MA, John Jay College of Criminal Justice;
BS, Fordham University

Jamie Boyd
Professor, CC, CCE Health Programs Coordinator
PhD, University of Hawai‘i;
FNP-C, University of Hawai‘i;
MSN, University of Hawai‘i
Kelli Brandvold  
Interim Vice Chancellor for Administrative Services  
BA, University of Hawai‘i

Paul Briggs  
Professor, CC, Economics  
MS, University of California, Santa Cruz;  
MS, University of California, Santa Barbara;  
BS, San Francisco State University

Patricia Anne Chong  
Professor, CC, Counselor, Academic Advisor  
MEd, University of Hawai‘i;  
BEd, University of Hawai‘i

Joseph Ciotti  
Professor, CC, Physics, Astronomy, Math; Director, Aerospace Exploration Lab and Hōkūlani Imaginarium  
PhD, University of Hawai‘i;  
MEd, University of Hawai‘i;  
MS, University of Hawai‘i;  
BS, Georgetown University

Vanessa Cole  
Instructor, CC, Curriculum Developer  
MS, University of Southern California;  
BS, Chaminade College

Leticia Colmenares  
Professor, CC, Chemistry  
PhD, University of Hawai‘i;  
MS, University of the Philippines;  
BS, Mindanao State University

Ashley-Michelle Day  
Instructor, CC, Counselor  
MSW, University of Hawai‘i;  
BA, University of Hawai‘i;  
AA, Windward Community College

Ardis Eschenberg  
Chancellor  
PhD, University at Buffalo, The State University of New York;  
MA, University at Buffalo, The State University of New York;  
BS, Tulane University

Brian Faria  
Instructor, CC, Hawaiian Language  
MA, University of Hawai‘i;  
BA, University of Hawai‘i

Koren Fiefia  
Instructor, CC, Counselor, Director of Educational Talent Search  
MA, University of Phoenix;  
BA, University of San Diego

Kathleen French  
Professor, CC, Sociology  
MA, University of Hawai‘i;  
BA, California State University, Sacramento
Roy Fujimoto  
Professor, CC, Political Science  
MA, University of Hawai‘i;  
BA, University of Santa Clara

Katherine Geiling  
Assistant Professor, CC, Animal Science  
AAS, Central Carolina Community College

Sarah Gray  
Instructor, CC, Collection Management/Reference Librarian  
MLIS, University of Hawai‘i;  
BA, University of Washington

Sarah Hadmack  
Associate Professor, CC, Religion  
MA, University of Hawai‘i;  
BA, University of Massachusetts at Amherst

Deacon Hanson  
Assistant Professor, CC, Accounting and Business  
M.Acc, University of Hawai‘i;  
BBA, University of Hawai‘i

Colette Higgins  
Dean of Academic Affairs, Division I and Academic Support  
MA, University of Hawai‘i;  
BA, University of Hawai‘i;  
AA, Kapi‘olani Community College

Jeffrey Ho  
Instructor, CC, Speech  
MA, Colorado State University;  
BA, Colorado State University

Jeffrey Hunt  
Professor, CC, Director of Institutional Research  
MS, Whittier College;  
BA, Whittier College

Hollister Kehau Iwashita  
Instructor, CC, Coordinator, Early College  
M.Ed, University of Hawai‘i;  
BA, University of Hawai‘i West O‘ahu;  
AA, Windward Community College;  
AAS, Honolulu Community College

Desrae Kahale  
Instructor, CC, Counselor, Mental Health  
MS, Chaminade University

Heipua Ka‘ōpua  
Professor, CC, Counselor  
PhD, University of Hawai‘i;  
MSW, University of Hawai‘i;  
BA, University of Hawai‘i

Michael Kato  
Instructor, CC, Information and Computer Science  
M.Ed, University of Hawai‘i;  
BA, University of Hawai‘i;  
AA, Windward Community College
Jenny Kelly
Assistant Professor, CC, Animal Science; Veterinary Technician Program Director
DVM, Purdue University;
MA, University of Saskatchewan;
BS, University of Hawai‘i

Kamuela Kimokeo
Instructor, CC, Music
MEd, University of Hawai‘i;
BA, Brigham Young University

Stacie Kissel
Instructor, CC, Animal Science
AS, Windward Community College

Ryan Koo
Assistant Professor, CC, History
MA, University of Hawai‘i;
BA, University of Hawai‘i

David Krupp
Interim Dean for Academic Affairs, Division II
PhD, University of Hawai‘i;
BA, University of California, Los Angeles

Serena Lakalaka
Instructor, CC, Counselor, TRiO Student Support Services
MS, Chaminade University

Ross Langston
Professor, CC, Biological Sciences
PhD, University of Hawai‘i;
BS, College of Charleston;
AAS, San Juan College

Malia Lau Kong
Associate Professor, CC, History
MA, University of Hawai‘i;
BA, University of Hawai‘i

Ann Lemke
Assistant Professor, CC, Counselor
PhD, New Mexico State University;
MA, Texas Tech University;
BA, Louisiana Tech University

Hongwei Li
Assistant Professor, CC, Microbiology and Botany
PhD, National University of Singapore

Nicolas Logue
Assistant Professor, CC, Theatre
MFA, University of Hawai‘i;
BA, University at Buffalo, The State University of New York

Jan Lubin
Assistant Professor, CC, Planning and Program Evaluation
MA, University of Hawai‘i;
BA, Monterey Institute of International Studies

Antoinette Martin
Professor, CC, Art
MFA, University of Hawai‘i;
BFA, University of Hawai‘i;  
BA, University of Hawai‘i;  
BA, Michigan State University

Cyndy Masatsugu  
Instructor, CC, Counselor, Outreach  
MA, Chaminade University;  
BA, University of Hawai‘i

Floyd McCoy  
Professor, CC, Geology, Geophysics and Oceanography  
PhD, Harvard University;  
MS, University of Hawai‘i;  
BS, University of Hawai‘i

Teena Michael  
Instructor, CC, Botany  
PhD, University of Hawai‘i;  
BA, Sonoma State University

Chelsea Ku‘ulei Miranda  
Instructor, CC, Counselor, Native Hawaiian  
MEd, University of Hawai‘i;  
BA, University of Hawai‘i West O‘ahu;  
AA, Windward Community College

Peter Kalawai‘a Moore  
Associate Professor, CC, Hawaiian Studies  
PhD, University of Hawai‘i;  
MA, University of Hawai‘i;  
BA, University of Hawai‘i;  
AA, Borough of Manhattan Community College

Bryce Myers  
Instructor, CC, Art  
MFA, California State University, Fullerton;  
BFA, Laguna College of Art and Design

Paul Nash  
Professor, CC, Art  
MAT, Rhode Island School of Design;  
BFA, Chouinard Art Institute

Jean Okumura  
Professor, CC, Mathematics  
MS, Oregon State University;  
MEd, University of Hawai‘i;  
BEd, University of Hawai‘i

Judy Ann Oliveira  
Interim Vice Chancellor for Student Affairs  
PhD, University of Hawai‘i;  
EdD, University of Southern California;  
MEd, Gonzaga University;  
BEd, University of Hawai‘i

Justin Ha’aheo Pagan  
Instructor, CC, Counselor  
MSW, University of Hawai‘i;  
BA, University of Hawai‘i

Nicole Pagan  
Instructor, CC, Counselor, Early College
MSW, University of Hawai‘i;  
BA, University of Hawai‘i;  
AA, Windward Community College

Francis Palacat  
Professor, CC, Psychology  
DEd, Argosy University;  
MS, Chaminade University;  
BA, University of Hawai‘i West O‘ahu;  
AA, Windward Community College

Christian Palmer  
Assistant Professor, CC, Anthropology  
PhD, University of California, Santa Cruz;  
MESc, Yale School of Forestry and Environmental Studies;  
BS, Brigham Young University - Hawai‘i

Desiree Potect  
Assistant Professor, CC, English  
MA, University of Hawai‘i;  
BA, University of Hawai‘i

Annette Priesman  
Instructor, CC, English  
MA, University of Hawai‘i;  
BA, University of Hawai‘i

Elizabeth Ratliff  
Associate Professor, CC, Media Specialist  
MS, Indiana University;  
BS, Memorial University of Newfoundland

Carla Rogers  
Associate Professor, CC, Counselor, Student Parent Counselor  
MA, Hawai‘i Pacific University;  
BA, Hawai‘i Pacific University;  
AA, Windward Community College

Carly Makanani Salā  
Instructor, CC, Hawaiian Studies  
MA, University of Hawai‘i;  
BA, University of Hawai‘i

Tatiana Santiago  
Instructor, CC, Counselor, Early College  
MEd, University of Hawai‘i;  
BS University of Nevada, Reno

Charles Sasaki  
Vice Chancellor for Academic Affairs  
MA, University of California, Irvine;  
BA, University of California, Riverside

Elizabeth Seaton  
Instructor, CC, Technical Services Librarian  
MLIS, University of Hawai‘i;  
BA, Smith College

Tara Severns  
Professor, CC, Public Services Librarian  
MLS, University of Illinois;  
BA, Southern Illinois University;  
AA, McHenry County College
Navtej Singh
Associate Professor, CC, Mathematics
MA, California State University, Fresno;
BA, California State University, Fresno

Pavica Srsen
Instructor, CC, Oceanography
MS, University of Hawai‘i;
BS, University of Zagreb

Susan St. John
Instructor, CC, English
MFA, University of Oregon;
BA, University of Oregon

Jody-Lynn Storm
Assistant Professor, CC, Mathematics
MA, University of Hawai‘i;
BA, University of Hawai‘i

Laura Sue
Assistant Professor, CC, Information and Computer Sciences
MS, University of Hawai‘i;
BS, University of Hawai‘i

Sarah Sur
Associate Professor, CC, Head Librarian
MA, San Jose State University;
MA, Pepperdine University;
BA, Pepperdine University

Scott Sutherland
Instructor, CC, Ka Piko Coordinator
MPA, University of Hawai‘i;
BA, University of Hawai‘i;
AA, Windward Community College

Daniel Swift
Instructor, CC, Coordinator, Workforce Development
PhD, University of La Verne;
MEd, University of Hawai‘i;
BS, Johnson & Wales University;
AAS, Boise State University

Kevin Takayama
Instructor, CC, Mathematics
MA, University of Hawai‘i;
BA, Willamette University

Cynthia Texeira
Instructor, CC, Hawaiian Specialist Librarian
MLIS, University of Hawai‘i

Michael Tom
Professor, CC, Computing Services Coordinator
MBA, Santa Clara University;
BS, University of Hawai‘i

Alysa Tomasa
Instructor, CC, Director of TRiO Upward Bound
MA, University of Phoenix;
BEd, Oregon State University
Michelle Tupou
Instructor, CC, Hawaiian Studies
MA, University of Hawai‘i;
BA, University of Hawai‘i;
AA, Kapiʻolani Community College

Lance Uyeda
Associate Professor, CC, English
MFA, University of California, Irvine;
BA, Rice University

Jenny Webster
Assistant Professor, CC, English
MA, California State University, Long Beach;
BA, California State University, Long Beach

Kathleen Zane
Associate Professor, CC, Counselor
PhD, The City University of New York;
MSW, Smith College;
MA, New York University;
BA, Barnard College, Columbia University

Amanda Zerr
Instructor, CC, Mathematics
MA, Lewis & Clark College;
BA, University of California, Santa Cruz

Disclaimer
This catalog provides general information about Windward Community College, its programs and services, and summarizes those major policies and procedures relevant 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.

Hearing impaired individuals desiring information may contact The College by using the Telecommunication Device for the Deaf (TTY) relay service at 808-643-8833.

Windward Community College does not discriminate on the basis of age, race, sex, color, religion, national origin, or disability in its programs and activities. For more information or inquiries regarding these policies, please contact Karla Silva-Park, Title IX coordinator, at 808-235-7468 or karlas@hawaii.edu, and/or Karen Cho, EEO/AA coordinator, at 808-235-7404 or kcho@hawaii.edu.

Definition of Terms
Cancelled Classes
Courses are subject to cancellation (e.g. low enrollment). There is a 100% tuition/fees refund for cancelled classes. Students are notified via mail, email, phone call, or posted on classroom door.

Change In Registration
All changes in registration (adds, drops, withdrawals) must be officially recorded by the deadlines. If drops and withdrawals are not officially recorded, students are subject to receiving a failing grade. Changes can be made via MyUH Services, or by visiting the academic counselor, or the Admissions & Records Office. Once the semester begins, there is a fee for in-person add/drop transaction charged to students. Additional tuition and fees may be applicable when adding a class.

Change of Home Institution
Students that want to change institution after submitting an admissions application or enrolled at a CC campus must complete a Change of Home Institution form instead of a UH System-wide application (excluding 4-year UH campuses).

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.
Classified Students
Students who are enrolled for credit in an officially declared prescribed program leading to a degree or certificate (AA, AS, CA, CO).

Commencement
A public ceremony and celebration held at the end of the academic year at which students’ degrees and certificates are recognized.

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.

Credit Hours (also referred to as semester hours, credits, units)
The value assigned to each class of each 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. No student may register for more than 18 credits without obtaining approval from a counselor at registration.

Continuing Student
After admission, students must be enrolled each semester (Fall/Spring) for at least 1 credit hour of course work. Students who are not enrolled will need to submit the system application form for readmission with the established regulations. Students who are readmitted will be subject to the degree requirements in effect at the time of readmission.

Distance Learning (DL)
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.

Erase Period
During this time students dropping a course will have the class erased from their registration file. See current Academic Calendar or Schedule of Classes for deadlines.

Full-time Student
A student carrying twelve (12) or more credit hours in a semester. A third party sponsor may have a different definition of full-time status used in determining their benefits (e.g. VA, financial aid).

Part-time Student
A student carrying 11 or fewer credit hours in a semester.

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

Returning Students
Students who have missed (stopped-out) a semester (Fall/Spring) must reapply for admissions if they wish to return to the college.

Semester
A time span of fifteen weeks within a four and one-half month period during which courses are offered and completed. Some courses are also scheduled for 13-week. There are usually two semesters in one academic year: fall semester and spring semester. There may be several “accelerated terms” within each semester (e.g. 8-week, 5-week).

Summer Session
The college usually offers two sessions during the summer. Tuition and fees for the summer session differ from those of the Fall/Spring. Students who are enrolled for the Spring semester may register for the summer session without applying for summer. New/Returning summer students are required to apply for the Fall semester if the students want to continue for the upcoming semester.

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

Quick Telephone Reference
Academic Counseling and Advising
808-235-7413
Hale ‘Ākoakoa 212
windward.hawaii.edu/services-for-students/counseling-advising/
Admissions & Records Office
808-235-7432
Hale Alaka'i 112
windward.hawaii.edu/how-to-apply/admissions-records/

Bookstore
808-235-7418
Hale 'Ākoakoa 160
windward.hawaii.edu/services-for-students/bookstore/

Business Office (Cashier)
808-235-7411
Hale Alaka'i 114
windward.hawaii.edu/about-wcc/leadership-administration/chancellor/administrative-services/business-office/

Disability Services
808-235-7448
Hale 'Ākoakoa 213
windward.hawaii.edu/services-for-students/disabilities-services/

Financial Aid Office
808-235-7449
Hale Alaka'i 107
windward.hawaii.edu/paying-for-college/financial-aid/

Library Learning Commons
808-235-7436
Hale La'akea
library.wcc.hawaii.edu/home

Testing Center (Placement Testing)
808-235-7498
Hale La'akea 228
windward.hawaii.edu/services-for-students/testing-center/

TRiO Student Support Services
808-235-7487
Hale Kako'o 116
windward.hawaii.edu/services-for-students/tutoring/trio-sss/

Admissions Information

Admission Eligibility
Windward Community College is an open-door college that welcomes all students who desire to attend college and can benefit from the educational courses and programs offered. Any U.S. high school graduate or equivalent (e.g. GED), or person 18 years of age (prior to the start of the semester) or older may attend Windward Community College. There are special requirements for International students and certain selective programs (e.g. Veterinary Assisting, Veterinary Technology).

Admissions & Records Office
Hale Alaka'i 112
808-235-7432
https://windward.hawaii.edu/admissions-records/

Special Early Admissions Programs
Windward CC also provides educational opportunities for high school students through our special Early Admissions Programs. These programs encourage high school students to get a jump start on their college studies while attending high school.

- Running Start, a partnership between the Department of Education and the University of Hawai'i, allows Hawai'i public high school (and charter schools) students to attend college classes while earning credits toward their high school graduation and college degree.
- Early College allows high school students to obtain high school and college credits simultaneously at designated high school campuses.
• Early Admit allows high school and homeschool students attend college classes on campus while still enrolled in high school.

Early Admissions Counselor
Hale 'Akoakoa 212
808-235-7413
https://windward.hawaii.edu/student-affairs/

Early College
Hale Alaka'i 121
808-235-7465
https://windward.hawaii.edu/programs-of-study/pre-college-programs/early-college-high-school/

Application
All applicants must complete the University of Hawai'i System Application online by the application deadline. Applicants are encouraged to file their admissions application as early as possible. Completed applications and all supporting and requested documents must be received by the deadline. For application deadline dates, refer to the Admissions and Records office webpage at https://windward.hawaii.edu/admissions-records/

• Students who have missed at least one semester of enrollment must re-apply for admission. However, students who stopped out within two years, may contact the Admissions & Records Office to re-activate their application if their home campus was Windward CC.

The enrollment of non-residents and international students is governed by the Board of Regents policy. Non-Residents are assessed a non-refundable non-resident application fee.

Any and all documents received by the college are the property of the college and will not be returned to the applicant.

Early Admissions Programs
In addition to the completion of the University of Hawai'i System Application, the following is also required:

• For Running Start and Early College - complete the UH Dual Credit Application with approval from the high school and parent/legal guardian to attend college classes while earning credits toward their high school graduation and college degree.
• Early Admit - complete the Windward CC Early Admit Application with approval from the high school and parent/legal guardian to attend campus college classes while still enrolled in high school.
• Homeschool - complete the Windward CC Early Admit Application with approval from the parent/legal guardian and the Department of Education Exceptions to Compulsory Education (4140) form.

High school students continuing their Early Admissions Programs for the following semester must re-submit the appropriate early admissions application to continue their status. If graduating from high school and continuing for the following semester, students must submit a Change of Major form to Admissions & Records office to declare a degree program.

Auditing
Refer to Auditing in the Academic Regulations section.

Senior Citizen Visitor Pass
The Senior Citizen Visitor Pass (SCVP) allows seniors to “visit” courses that are offered at Windward Community College free of charge if applicable seats are available (maximum of three classes). Senior Citizen Visitors are exempt from tuition/fee payments, no credit is awarded, no name will appear on the instructor’s class roster via MyUH, and no permanent academic records are retained in the Admissions & Records office. The Senior Citizen Visitor status cannot provide an active UHID, access to MyUH or Laulima, or full library privileges.

Senior Citizens may apply during Late Registration Period at the Admissions & Records office meeting the following conditions:

• Be a Hawai'i resident for tuition purposes
• At least 60 years of age prior to the first day of the semester
• Clear of any University of Hawai'i financial obligations
• Meet the course prerequisites
• Meet State of Hawai'i Department of Health health clearance requirements
• Senior Citizen Visitor Pass Application is required each semester (Fall and Spring only)

If the Senior Citizen wishes to enroll in courses to receive credit, the Senior Citizen is required to follow the same procedure and deadline as other students. Once this Senior Citizen Visitor Pass is issued, the Senior Citizen Visitor cannot request credit for the visited class(es).
Faculty/Staff Tuition Waiver

Faculty and staff may be eligible for tuition waivers. Employees must be employed on a half-time basis or more to be eligible for tuition waivers at any campus for a maximum of six credits per semester. Faculty/staff tuition waiver applicants must follow the same admissions requirements, procedures and deadline as other students. Once accepted, registration is only during the Late Registration period. Refer to Human Resources department.

Academic Records

The Admissions & Records office is the custodian of students’ academic records. Requests for a transcript, change of major/program, change of home campus, change of address or name, preferred first name, request for transcript evaluation, enrollment verification, VA Educational Benefit certification are processed at this office.

Admissions & Records Office
Hale Alaka’i 112
808-235-7432
https://windward.hawaii.edu/admissions-records/

Transcript Request

To request an official transcript, students must complete and sign a Transcript Request form at the Admissions & Records Office or via online. Transcript requests will not be accepted by telephone or from persons other than the student without the student’s written permission.

A transcript request is no longer required within the University of Hawai’i System. Students should contact their home UH campus for transferring credits from the other UH campuses.

A transcript is processed within seven (7) working days for a fee of $5.00 per copy. A rush request is processed within 24 business hours for a fee of $15.00 per copy. Payment is required before the transcript request can be processed and student must be cleared of all UH financial obligations.

Veterans Administration

Windward Community College is a state-approved school for veteran’s educational benefits. Information regarding eligibility, entitlement, and types of training authorized may be obtained from the Veterans Administration Regional Office.

The Admissions & Records office is responsible for VA enrollment certification. VA enrollment certification will not be processed if the student has a financial obligation to the University of Hawai’i.

VA students must have their prior credits from colleges previously attended and military training evaluated for possible transferring of credits into the college to avoid delay in VA enrollment certification.

Any individual who is entitled to educational assistance under Chapter 31, Vocational Rehabilitation and Employment, or Chapter 33, Post-9/11 GI Bill® benefits.

- College policy permits any covered individual to attend or participate in the course of education during the period beginning on the date on which the individual provides to the educational institution a certificate of eligibility for entitlement to educational assistance under Chapter 31 or 33 (a “certificate of eligibility” can also include a “Statement of Benefits” obtained from the Department of Veterans Affairs’ (VA) website – eBenefits, or a VA Form 28-1905 for Chapter 31 authorization purposes) and ending on the earlier of the following dates:
  1. The date on which payment from VA is made to the institution.
  2. 90 days after the date the institution certified tuition and fees following the receipt of the certificate of eligibility.

- College policy ensures that the educational institution will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual’s inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under Chapter 31 or 33.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at http://www.benefits.va.gov/gibill.

Verification of Enrollment

The Admissions & Records office is responsible for verifying or confirming students’ enrollment and degree conferral. To request a verification of enrollment, students must complete and sign a Verification of Enrollment form at the Admissions & Records office. Verification of enrollment requests will not be accepted by telephone or from persons other than the student without the student’s written permission.
Change of Address

Students are responsible for keeping the Admissions & Records office informed of their current mailing and permanent address. Mailing address can be changed via MyUH. International students permanent addresses must be their home country.

Change of Major

Students who wish to change their major must submit a Change of Major form to the Admissions & Records office. The new major/program is effective the following semester once school begins.

Change of Name/Preferred First Name Request

Students may request a change of name with official documentation to the Admissions & Records office. Students may request a preferred first name. This is to support students who have a preferred name, such as a Hawaiian name, an international name, or a name that is concurrent with their gender identity.

Change of Home Institution

Home campus is the school from which the student is seeking a degree, and it is where the student may apply for and receive financial aid or veteran education benefits.

To change home campus to Windward Community College, the Change of Home Institution form should be submitted to the Admissions & Records office. Windward Community College is declared as the new home institution effective the following semester once school begins.

Request for Transcript Evaluation

For any previous coursework outside the UH system (and military training) to be evaluated for transfer to Windward Community College (WCC), a student’s home institution must be WCC, he or she must also be in a declared program and currently enrolled or registered/accepted. The official transcript from the previous institution must be sent directly to WCC Admissions & Records office for evaluation. A Request for Transcript Evaluation form may be submitted to inform the Admissions & Records office of the incoming transcript. For records not sent for evaluation due to student’s status, the transcript is maintained for one year.

Credits earned from other UH System campuses will be evaluated at the end of each semester and can be viewed via STAR. A Request for Transcript Evaluation may be submitted to inform the Admissions & Records office of the UH credits.

Kingdom of Hawaii Declaration

Students who would like the UH System to designate their affiliation with the Kingdom of Hawai‘i in the student information system, please complete the Kingdom of Hawai‘i Declaration form at Admissions & Records office.

Admission of International Students

Windward Community College is authorized under federal law to enroll non-immigrant students in approved SEVIS programs via student visa status (F1 or M1). International students must comply with all regulations of U.S. Department of Homeland Security and the University of Hawai‘i policies and procedures. The application process should start as early as possible to successfully complete the application by the deadline. Contact the Admissions & Records office for eligible programs approved by SEVIS.

Admissions & Records Office
Hale Alaka‘i 112
808-235-7432
https://windward.hawaii.edu/international-students/

1. Fulfill English Proficiency Requirement

- Score must be within two years prior to the start of the semester
- Score must be sent directly to Windward Community College Admissions & Records office (#4976)
- Minimum score TOEFL 500 (paper-base), 173 (computer-base), or 61 (internet-base); IELTS academic section 5.5; or EIKEN = Step 2A

Note: If a student’s native language is English (Australia, Canada except Quebec, Ireland, New Zealand, United Kingdom), they are exempt from English Proficiency Requirement.

2. Submit University of Hawai‘i System Application
• Apply online
• Pay the non-refundable non-resident application fee
• Select an approved SEVIS degree program

3. Submit University of Hawai‘i Supplementary Information Form for Undergraduate International Applicants

• Form includes an affidavit of financial support that shows sponsorship and/or financial support in US dollars (USD) for tuition, books/supplies, and living costs for the duration of study (refer to supplementary application for estimated cost of attendance)
• Include Sponsor’s bank statement in US dollars (must be within the last 6 months)

4. Submit Transcripts

• Official high school (secondary) transcripts showing evidence of successful completion of schooling equivalent to 12 years of U.S. education sent directly by the high school to Windward Community College Admissions & Records office (must include graduation date)
• Official college (post-secondary) transcripts sent directly by college to Windward Community College Admissions & Records office
• All transcripts must be in English or accompanied by an English translation that has been certified by either a school official or a U.S. consular official

5. Submit Signed International Student Health Insurance Acknowledgement Form

• To protect international students against the high cost of unanticipated health care expenses resulting from accidents or illness
• During the first week of the semester, provide proof of valid up-to-date medical health insurance

6. Meet the Deadline (including all documents to complete application)

• Fall Semester (starts in August) deadline is June 1
• Spring Semester (starts in January) deadline is November 1
• Summer not accepting application

7. Upon Acceptance to the College

• I-20 will be issued with acceptance letter via mail
  ◦ With I-20, apply for a student visa through the U.S. Embassy or Consulate of the country
  ◦ For Transfer Student (currently enrolled in college in the United States), submit Transfer International Student form
• Pay SEVIS fee via www.ice.gov/sevis/i901
• Submit Health Clearances
• Required to register resident (on-campus) classes at Windward Community College at least full-time status (12 credits)

8. During the First Week of the Semester at Windward Community College

• Provide proof of valid up-to-date medical health insurance
• Submit copy of current passport
• Submit local mailing address

Steps to Registering for Classes
Before an applicant can register for classes, the applicant must apply for admissions and be accepted into the college. Applicants will be notified via email regarding their acceptance. Upon receipt of an acceptance letter, students must complete the following:

Health Clearances

The State of Hawai‘i Department of Health Administrative Rules, Title 11 Chapter 157 and 164.2 require certain health requirements to be met for attendance to a post-secondary institution. Submit the Windward CC Health Clearance form to the Admissions & Records office in Hale Alaka‘i.

Placement Testing

The placement tests are for placement purposes only and are not admission tests. A picture ID and UH ID number are required to take a Windward CC-sponsored placement test. There is no charge for initial placement testing. The Testing Center can also provide guidance for distance learning students who require placement testing at other sites. Contact the Testing Center at 808-235-7498 or wccdet@hawaii.edu.

Placement into math and English is accomplished through a variety of ways including information from high school transcripts, ACT/SAT scores, Smarter Balanced Assessment scores, GED scores, transfer coursework from another college, and Windward CC-sponsored placement test (currently ACCUPLACER test). Results will indicate the level at which to start coursework at Windward Community College.
Please discuss placement options at your New Student Orientation or with your counselor prior to registration. Transfer students who have completed college-level courses in math and English are not required to take the placement tests. Proof of completed courses (e.g. copy of transcript or grade report) must be provided to the counselor prior to registration.

**MyUH Account**

The student creates or re-activates a MyUH account upon acceptance via myuh.hawaii.edu. MyUH Services is where students register for classes, add/drop classes, make tuition/fee payments, and view grades using STAR GPS. Student's UH email account (username@hawaii.edu) is the official form of UH communication. Students must check their hawaii.edu email regularly for important messages.

**New Student Orientation**

All first-year college students are required to attend a New Student Orientation session. At this meeting, students receive information about registration, campus resources, and college success. Accommodations for distance learning (online) students can be made when signing up for orientation. Contact Student Affairs Peer Mentors at 808-235-7454.

**Register for Classes**

First-year college students must see a counselor before registering for classes. The counselor assists the students with academic advising, class scheduling, and registration. Returning and transfer students in good academic standing may register independently online through STAR GPS. Students should confirm their official class schedule via STAR GPS. Contact Student Affairs Counseling and Advising at 808-235-7413.

**Tuition/Fees Payment**

Students can pay online or in-person at any UH Cashier’s Office by the deadline. Students can also sign up for the UH Payment Plan. Contact the Business Office at 808-235-7411.

**Frosh Camp**

All incoming freshman (first time to college) are required to attend Frosh Camp. Frosh Camp is an interactive program that will give you a head start on your first semester at Windward Community College, providing success strategies, access to campus resources, increased awareness of college expectations, and improved transitioning to college. Frosh Camp is provided to students in Fall and Spring. Contact Student Affairs Peer Mentors at 808-235-7454 or wccpeers@hawaii.edu.

**Tuition and Fees**

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<tr>
<th>Tuition and Fee Information</th>
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<tr>
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<td>Resident: $131 per credit</td>
<td>Resident: $248 per credit</td>
<td>Publication Fee: $1 per credit, $10 max. Activity Fee: $15 flat fee</td>
<td>Veterinary Assisting Professional Fee: $100/semester</td>
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<tr>
<td>Non-Resident Tuition</td>
<td>Non-Resident Tuition: $345 per credit</td>
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<td>Publication Fee: $1 per credit, $10 max. Activity Fee: $15 flat fee</td>
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<tr>
<td>Professional Fees</td>
<td>Veterinary Assisting Professional Fee: $100/semester</td>
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Visit the Windward Community College website for most current information about tuition and fees.

**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.

**Noncredit Courses**

Tuition and fees vary, depending on the length of the course. Contact the Office of Career & Community Education for detailed information, 808-235-7433.

**Dishonored Check Fee**

A $25 service charge is assessed for checks which were made out to the University of Hawai‘i and returned for any cause.

**Late Registration Fee**

A $30 fee will be assessed for the Fall/Spring semester for registration during or after the late registration period.
Add/Drop Fee
A $5 fee is charged for every schedule change made in person during or after the late registration period. Additional tuition and fees may be applicable when adding a class. There is no fee charged for adding/dropping courses online.

Diploma Fee
A $15 fee is payable at the time of application for graduation. Diplomas and certificates will not be mailed without this payment.

Transcript Fee
A $5 fee is charged for each transcript that is sent outside of the University of Hawai‘i system within seven (7) working days, for student copies, or for UH non-admission purposes. Rush requests are $15 per copy for processing within 24 work hours. Additional postage fees are charged for a transcript that is sent outside of the United States.

Non-Resident Application Fee
A $25 nonrefundable, nontransferable fee is charged for all non-resident applicants (except a member or authorized dependent of a member of the U.S. Armed Forces, on active duty, stationed in Hawai‘i or a veteran discharged within three years of enrollment and eligible for GI Bill® Educational Benefits, and Hawaiian or part-Hawaiian and a resident of another state).

Educational Record Fee
A $2 fee is charged for a copy of each educational record (e.g. fee statement).

Printing Fee
A minimum fee of $0.09 per page for black & white printing and $0.25 per page for color printing is charged to print on the public printers in the Library Learning Commons.

Credit by Institutional Exam (CBIE) Fee
An assessment fee equivalent to 50% of the tuition of the course. This is a nonrefundable fee regardless of how many credits are petitioned and/or how many are awarded.

Portfolio-based Assessment (PBA) Fee
An assessment fee equivalent to 60% of the tuition of the course. This is a nonrefundable fee regardless of how many credits are petitioned and/or how many are awarded.

Residency for Tuition Purposes
The University of Hawai‘i Windward Community College, like all public institutions of higher learning, has residency requirements for payment of resident tuition. These requirements, similar to those of other states, are complex. Detailed information is available at Hawai‘i Administrative Rules on Determination of Residency as Applied to Tuition Payments and Admissions. Residency rules may change as a result of legislation or administrative action.

A student who does not qualify as bona fide resident of the State of Hawai‘i must pay the nonresident tuition. A non-refundable nonresident application is also assessed. Applicants may be required to provide documentation to verify residency status. An official determination of residency status will be made prior to enrollment. Once classified as a nonresident, a student continues to be so classified during his/her term at the college until he/she can present clear and convincing evidence to the residency officer that proves otherwise. This request must be submitted prior to the start of the term of the change.

For complete rules and regulations or interpretation, contact the residency officer in the Admissions & Records office.

Some of the more pertinent University residency regulations follow.

Definition of Hawai‘i Residency
Hawai‘i state law has determined residency to be established by an independent adult, an emancipated minor, or a minor's parents/legal guardian who:

- Demonstrated intent to permanently reside in Hawai‘i (see below for evidences);
- 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 residency; and
The student, whether adult or minor, has not been claimed as a dependent for tax purposes for at least 12 consecutive months prior to the first day of instruction by his/her parents or legal guardians who are not legal residents of Hawai‘i.

To demonstrate the intent to make Hawai‘i the student’s legal residency, the following evidence apply:

- Filing Hawai‘i resident personal income tax return
- Voting/registering to vote in the State of Hawai‘i

Other evidence, such as permanent employment and ownership or continuous 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 in making a residency determination include:

- The 12 months of continuous residence in Hawai‘i shall begin on the date upon which the first overt action (see evidences) is taken to make Hawai‘i the permanent residence. Residency will be lost if it is interrupted during the 12 months immediately preceding the first day of instruction.
- Residency in Hawai‘i and residency in another place cannot be held simultaneously.
- Presence in Hawai‘i primarily to attend an institution of higher learning does not create resident status. A nonresident student enrolled for 6 credits or more during any term within the 12-month period is presumed to be in Hawai‘i primarily to attend college. Such periods of enrollment cannot be applied toward the physical presence requirement.
- The residency of unmarried students who are minors follows that of the parents or legal guardian. Marriage emancipates a minor.
- 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, provided that Hawai‘i is claimed and maintained as the person's legal residence.

**Board of Regents Exemptions**

Non-residents may be allowed to pay resident tuition if they qualify as one of the following:

- United States military personnel and their authorized dependents during the period such personnel are stationed in Hawai‘i on active duty
- Members of the Hawai‘i National Guard and Hawai‘i-based Reserves
- Full-time employees of the University of Hawai‘i and their spouses and legal dependents
- East-West Center student grantees pursuing baccalaureate or advanced degrees
- Hawaiians, descendants of the aboriginal peoples who inhabited the Hawaiian Islands and exercised sovereignty in the Hawaiian Islands in 1778
- Veterans eligible to use Post 9/11 GI Bill® or Montgomery GI Bill® Active Duty education benefits OR individuals eligible to use transferred Post 9/11 GI Bill® education benefits, who live in Hawai‘i, and enroll at the University within three years of the discharge from a period of active duty service of 90 days or more
- Individuals eligible to use transferred Post 9/11 GI Bill® education benefits, who live in Hawai‘i, and whose transferor is a member of the uniformed service who is serving on active duty
- Individuals eligible to use Post 9/11 GI Bill® education benefits under the Marine Gunnery Sergeant John Fry Scholarship who live in Hawai‘i
- Individuals eligible to use Vocational Rehabilitation and Employment (VR&E) education benefits, who live in Hawai‘i

Citizens of an eligible Pacific island district, commonwealth, territory, or insular jurisdiction, state or nation which does not provide public institutions that grant baccalaureate degrees may be allowed to pay 150% of the resident tuition. At the time of publication, these included the following:

- American Samoa
- Commonwealth of the Northern Mariana Islands
- Cook Islands
- Federated States of Micronesia
- Futuna
- Kiribati
- Nauru
- New Caledonia
- Niue
- Rapa Nui (Easter Island)
- Republic of Palau
- Republic of the Marshall Islands
- Solomon Islands
- Tokelau
- Tonga
- Tuvalu
- Vanuatu
This list is subject to change. For a current list, eligibility and documentation requirements. Contact the Admissions & Records office.

Misrepresentation

A student or prospective student who provides incorrect information on any form or document intended for use in determination of residency status for tuition purposes will be subject to the requirements and/or disciplinary measures provided for in the rules and regulations governing residency status.

Appeal Process

Residency decisions may be appealed by contacting the residency officer in the Admissions & Records office for information on how to initiate an appeal and appeal deadline. Appeal is heard by the University of Hawai‘i Residency Appeal Board only after the non-resident tuition is paid or on the payment plan.

Paying for Tuition

Login to MyUH Services, click on the Pay Tuition and Fees box. The home page will display the current amount you owe. An E-Statement will be sent to your hawaii.edu email address monthly to provide current account information. Only full payments are accepted. If you are receiving a tuition waiver or scholarship, check with your home campus financial aid office or the awarding department before making payment.

Tuition and fee payments can be made by:

- MyUH Online: Pay by MasterCard, VISA or any credit card accepted by the Discover Network such as Discover, Diners, and JCB, pinless debit card or web check (checking or savings account).

Registered students may sign up for an installment payment plan for the Fall and Spring terms. Log on to MyUH for more details. The payment plan is not available during the summer terms.

For detailed information on payments and the payment plan, please visit https://www.hawaii.edu/myuhinfo/payment/

- Mail: Make checks payable to “University of Hawai‘i” and mail to the following address:
  Windward Community College – Business Office
  45-720 Kea'ahala Rd.
  Kāne‘ohe, HI 96744

Mailed payments must be received by the appropriate payment deadline. You should allow a minimum of 5 days for delivery prior to the deadline. Do not use Campus Mail. To ensure proper crediting to your account, write your UH number on the bottom left corner of the check.

- In-Person: Pay by cash, check, money order, debit card, or cashier’s check at any campus business office (no in-person credit card payment).
- Parents and Other Authorized Users: If you have been set up as an Authorized User, you may logon to the Authorized User site with your email address and password provided to you.

It is the responsibility of students to pay their tuition/fees or drop their courses by the deadline that may cause a financial obligation. Not doing so will lead to a financial debt that if not paid, will be sent to a collection agency. Refer to Financial Obligations to the University policy.

Refunds

You must first formally withdraw from your class(es) online or in person. If you are eligible for a tuition refund, allow a minimum of 6 weeks to process. Refer to the Academic Calendar or Schedule of Classes for refund dates.

eRefunds (Direct Deposit)

eRefunds are a quick, secure and convenient way to get your credit balance refunds. eRefunds can be deposited directly into your checking or savings account, and you don't have to worry about a check getting lost in the mail, or make a trip to your bank. In addition, the use of eRefunds means fewer paper checks and the conservation of valuable resources.

To enroll in eRefunds:

1. Go to MyUH
2. Type in your UH username and UH password.
3. Click on the "View My Student Account" box.
4. Click on the “Refund” tab at the top of the page.

After a refund is posted to your account, you will receive an email confirming the amount of the refund and the date the refund was processed by the cashier's office. Please allow 3-5 business days after the email for the funds to be credited to your bank account. Be sure to check with your bank that your funds are available in your account before you begin to write checks, pay bills or withdraw money.

Answers to frequently asked questions about eRefunds are available at the University of Hawai'i FAQs for Student eCommerce Services.

Note: If your financial aid is reduced for any reason (i.e. your full-time or half-time status has changed, you receive additional resources, etc), you may owe a portion or all of the credit balance refund back to the University.

Tuition
If you withdraw from the College or any of your courses, you may be eligible for a tuition refund. The amount of refund is determined by the date of official withdrawal.

Student Fees
If a complete withdrawal from all courses is made before the end of the late registration period, you will receive a 100% refund.

Canceled Classes
A 100% tuition/fees refund is made available to a student if classes are canceled by the College and the student does not re-enroll in other classes.

Financial Obligations to the University
Students who have not satisfactorily addressed their financial obligations to any part of the University of Hawai'i 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 transcripts, diplomas, and registration, including adds/drops and other entitlement services (e.g. Enrollment Verification, VA Enrollment Certification).

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 Vice Chancellor for Student Affairs.

Financial Aid

Financial Aid and Eligibility Requirements
Windward Community College offers financial aid to students who seek help in funding their cost of education. These expenses may include tuition charges, student fees, books, supplies, living expenses, personal expenses and childcare costs. The Windward CC Financial Aid Office administers federal, state and institutional aid programs in the form of grants, student loans, scholarships, and employment opportunities. Students applying for financial aid at Windward CC should submit a FAFSA (Free Application for Federal Student Aid) each year. Additional financial aid information and forms are available on the Financial Aid Office homepage https://windward.hawaii.edu/paying-for-college/financial-aid/

Eligibility
- Enrolled in an eligible degree or certificate program at Windward CC. The programs eligible for financial aid at Windward CC are all Associate Degree Programs, as well as the Certificate of Achievement in Agripharmatech (Ethnopharmacognosy and Plant Biotechnology), and Certificate of Achievement in Veterinary Assisting
- Have a high school diploma or a GED
- Be either a U.S. citizen or an eligible non-citizen (i.e. permanent resident alien)
- Continuing Windward CC students must be meeting satisfactory academic progress requirements towards their degree objective
- Males between the ages of 18 and 25 years old must register with the Selective Service or prove exemption from registering
- Must not owe a repayment on a federal grant or be in default on a student loan

Federal Financial Aid Programs
The Federal Pell Grant
The Federal Pell Grant is based on demonstrated need and is awarded to students who have not earned a bachelor's degree. This grant does not have to be repaid.
The Federal Supplemental Educational Opportunity Grant (SEOG)
The Federal Supplemental Educational Opportunity Grant (SEOG) is based on exceptional financial need and is awarded to students who are enrolled at least halftime. This grant does not have to be repaid and funds are limited.

The Federal Work-Study Program
The Federal Work-Study Program is based on financial need and offers students the opportunity to earn their financial aid award through part-time employment on campus. Work hours are scheduled around a student’s class hours and it’s a great opportunity to gain valuable work experience while attending school.

The Federal Direct Stafford Loan Programs
The Federal Direct Subsidized Stafford Loan is made to the student and is based on financial need. There is no interest accrual while the student is enrolled in school at least halftime. The maximum award is based on a student’s class standing - $3,500 per year for a first-year student and $4,500 per year for a second-year student. Repayment begins six (6) months after the student ceases to be enrolled at least halftime.

The Federal Direct Unsubsidized Stafford Loan is made to the student. The maximum award is based on a student’s dependency, status, level of need, and class standing. The maximum award is $9,500 per year for a first-year student and $10,500 per year for a second-year student. Repayment begins 6 months after the student ceases to be enrolled at least halftime.

The Federal Direct Parent Loan for Undergraduate Students (PLUS loan)
The Federal Direct Parent Loan for Undergraduate Students (PLUS loan) has a fixed interest rate and is made to a parent of dependent undergraduate students. The loan amount is based on the student’s cost of attendance minus any aid awarded to the student. Repayment of this loan begins 60 days after the funds are disbursed.

State Financial Aid Programs
The UH Opportunity Grant
The UH Opportunity Grant is based on financial need and at least half-time enrollment. Funds are limited.

The Native Hawaiian Tuition Waiver and Second Century Scholars Grant
The Native Hawaiian Tuition Waiver and Second Century Scholars Grant awards are based on Native Hawaiian ancestry, financial need and at least half-time enrollment. Funds are limited.

Scholarships
The UH Centennial Scholarship
The UH Centennial Scholarship is for incoming full-time freshmen who will graduate from a Hawai‘i high school. The student must have a cumulative high school GPA of at least 3.8 or higher or a combined score of 1800 on the three-part SAT Reasoning Test (or ACT equivalent).

The State of Hawai‘i B Plus Scholarship
The State of Hawai‘i B Plus Scholarship is for students who demonstrate financial need and graduated from a public Hawai‘i high school. The student must have a cumulative high school GPA of at least 3.0 or higher, completion of certain high school courses and a senior project.

Hawai‘i Promise Scholarship
The Hawai‘i Promise Scholarship is a last dollar, need-based award toward the unmet direct cost need of qualified students enrolled at any community college campus of the University of Hawai‘i. Direct cost for the purposes of awarding Hawai‘i Promise Scholarships consists of tuition, fees, books and supplies, and transportation ($225/semester). Recipients must qualify for Hawai‘i resident tuition, complete the FAFSA and accept all federal and state grants, scholarships, and other funding sources that do not require repayment. Recipients must also maintain satisfactory academic progress. Award amounts are contingent upon funding and the individual student’s FAFSA information.

Other scholarships available through the Windward CC Financial Aid Office are noted on the Windward CC Financial Aid office homepage at https://windward.hawaii.edu/scholarships/
UH Foundation Scholarships at Windward CC

Through the generous support of individuals and private organizations in the community, a variety of scholarships are available exclusively for Windward Community College students each year. The scholarships listed below range in value from $250 to $1,000 per year. The online application is typically available from October through March.

- Charles Hemenway Scholarship
- Hawaii Veterans Memorial Scholarship
- Minami Community Foundation Scholarship
- Barbara Kahana Scholarship
- Windward Community College Scholarship Fund
- Paul & Jane Field Scholarship
- Gary Stice Excellence in Geoscience Scholarship
- Garden Club of Honolulu Scholarship
- Phil Hagstrom Scholarship
- Lani-Kailua Outdoor Circle Scholarship
- Kitty Lagareta Student Fund Scholarship
- Patrick & Janet Bullard Scholarship
- Kaneohe Rotary Club Scholarship
- Pete Dyer Memorial Scholarship
- Joseph Rothstein & Ann Yoklavich Scholarship
- Frances & Anthony Oliver Scholarship
- Jacquie & Ted Maly Scholarship
- Isamu Shinshiro Scholarship for Sustainable Technology Education & Training Scholarship

The Isamu Shinshiro Scholarship for Sustainable Technology Education and Training helps UHCC students who aspire to obtain a certificate in a sustainable technology program at Windward Community College (Windward CC). It was the desire of the late Isamu Shinshiro to help lower financial barriers that prevent students from accessing a good education and training in industries that sustain Hawai‘i’s natural environment, ecosystems and resources.

- Completed at least one semester at a UHCC campus
- Hawai‘i resident and U.S. citizen
- Enrolled full-time (at least 12 credits)
- Major in a Windward CC credit program focusing on sustainable technology as follows:
  - Bio-Resources & Technology: Bio-Resources Development & Management (ASC)
  - Bio-Resources & Technology: Plant Biotechnology (ASC)
- Minimum cumulative 2.5 GPA at Windward CC
- Demonstrated Need based on most recent FAFSA

Windward CC Achievement Scholarship

The Windward Community College Achievement Scholarship is for continuing Windward CC students who enroll full-time, have a previous semester and cumulative GPA of at least 3.5 and have completed a minimum of 24 credits at Windward Community College. Funds are limited and applications are available at the Windward CC Financial Aid Office from April through February.

The My Career Advancement Account (MyCAA) Scholarship Program

For Military Spouses Only!
MyCAA Military Spouse Scholarships are available for up to $4,000 toward career training at Windward Community College for high-demand jobs in Agripharmatech, Business, Veterinary Technology, Cyber Security, Psych-Social Development, and more! Click here to go to the MyCAA website for application and information or call a Windward Community College counselor at 808-235-7413.

FAFSA Application Process

Students applying for financial aid at Windward Community College (Windward CC) should submit a FAFSA (Free Application for Federal Student Aid) online each year.

To apply, please follow the steps below:
You (and possibly your parent – if you are dependent for FAFSA purposes) will need to create a Federal Student Aid (FSA) ID at [http://fsaid.ed.gov](http://fsaid.ed.gov). The FSA ID will allow you to file the FAFSA electronically.

File your FAFSA electronically at [https://fafsa.gov](https://fafsa.gov). Please be sure to list Windward CC on your FAFSA, otherwise, we will not receive your results. Windward CC’s FAFSA Federal School Code is 010390. You may need financial data (tax return and asset information) to complete the FAFSA.

Upon receipt of your FAFSA results, the Windward CC Financial Aid Office will inform you through your UH email via [MyUH Services](https://myuh.neu.edu) if additional information is required to complete your application for financial aid packaging.

Upon determination of your financial aid eligibility, the Windward CC Financial Aid Office will inform you of your Financial Aid status and any additional information regarding your financial aid package through your UH email.

**Financial Aid Satisfactory Academic Progress Policy**

Federal regulations require that financial aid recipients at Windward Community College maintain satisfactory academic progress toward the achievement of an eligible degree or certificate. A student’s academic progress is evaluated at the conclusion of each spring term.

**Satisfactory Academic Progress**

Students must be enrolled in an eligible degree or certificate program at Windward Community College.

- Students must maintain a cumulative grade point average (GPA) of at least 2.0.
- Students must successfully complete (pass) at least 67% of all credits attempted. Example: A student attempts 48 credits to date at Windward CC and successfully completes 36 credits with a 2.5 cumulative GPA. This student is making satisfactory academic progress by meeting both the minimum 2.0 GPA requirement and the 67% credit completion requirement. By completing 36 of 48 credits, the student has a 75% credit completion rate (36 divided by 48).

**Timeframe of Eligibility**

Students must complete their educational objectives within a reasonable period of time. Financial aid recipients will be allowed to attempt 150% of the number of credit hours required to complete their degree or certificate. (Example: An Associate in Arts (AA) degree at Windward CC requires the completion of 60 credit hours. A student is eligible to receive financial aid for a maximum of 90 (60 x 150%) credit hours attempted while pursuing an AA degree at Windward CC.)

The following Windward CC grades will be considered as credits attempted but not successfully completed: F, W, N, NC, I/F, I/N, I/NC.

A student’s entire academic history will be taken into account, including periods of enrollment at Windward CC in which financial aid was not received.

Applicable credit(s) accepted in transfer from another institution will be counted towards the maximum timeframe.

Students may receive funding for repeating a course that has been successfully completed with a “C” grade or higher only once.

A student is allowed 30 remedial English and math credits that are not counted towards the maximum timeframe.

**Financial Aid Suspension**

Students who do not meet the cumulative 2.0 GPA or the 67% completion rate of total credits attempted (pace) will be suspended from financial aid eligibility at Windward CC. Financial aid suspension means that the student is not eligible to receive financial aid at Windward CC until minimum satisfactory academic progress standards are met. It will be the student’s responsibility to secure other financial resources during this suspension period. Students on Financial Aid Suspension will be notified in writing of their status.

**Reinstatement**

Students on financial aid suspension may regain their aid eligibility at their own expense by earning sufficient grade points and credits to meet minimum satisfactory academic progress standards of a cumulative GPA of 2.0 and a 67% credit completion rate (pace).

**Appeal of Financial Aid Suspension**

Students who are suspended from financial aid at Windward CC may appeal their suspension if they have experienced mitigating circumstances that prevented them from meeting the minimum satisfactory academic progress standards. A Satisfactory Academic Progress Appeal Form (available at or from the Financial Aid Office) must be submitted to the Financial Aid Office explaining the specific reasons which contributed to the student’s lack of progress (accident, illness, death of an immediate family member, etc.) and the measures being taken to ensure future satisfactory academic progress. An appointment must be scheduled with the Windward CC Financial Aid Office to complete and file a satisfactory academic progress appeal.
The Financial Aid Office will review the appeal to determine whether or not the appeal is approved, and if approved, the student will be placed on financial aid probation and help to form an academic plan with the student that is necessary for continued aid eligibility. Students will be notified in writing of their appeal status.

Financial Aid Probation
When a satisfactory academic progress appeal is approved, an academic plan will be established with the student and the student will be placed on financial aid probation. While on financial aid probation, the student will be eligible for aid but must meet the specific minimum standards of their academic plan each term. Students who successfully attain a cumulative GPA of 2.0 and a cumulative credit completion rate of 67% of their attempted credits while on probation will be removed from probation status.

Students on financial aid probation who do not meet the specific minimum standards noted in their academic plan will be placed in financial aid suspension status and will not be eligible for financial aid at Windward CC.

Withdrawal and Refund Policy for Financial Aid Recipients
Financial aid recipients are advised to contact the Financial Aid Office prior to withdrawing from class(es) at the College for it may result in the repayment of all or part of the aid awarded to the student. 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 benefited. The order of financial aid programs to which the refund will be applied is available at the Financial Aid Office webpage.

For inquiries on financial aid, contact the Financial Aid Office at 808-235-7449, email wccfao@hawaii.edu, visit the Financial Aid Office in Hale Alaka‘i 107, or log on to our website at https://windward.hawaii.edu/scholarships/.

Academic Advising & Counseling

Academic Advising
The mission of Windward Community College counselors is to educate, challenge, and empower our diverse student population through respect, understanding, and advocacy.

This mission is reflected in our Student Learning Outcomes:

1. Students will access accurate and appropriate information with regard to their academic status, resource availability, and the next step in their educational path.
2. Counselors will foster student engagement through promoting a relationship based on trust (consistency and reliable information), respect and multiple contacts.
3. Students will develop critical thinking through Identifying Resources; Evaluating Options; Establishing Priorities; Designing Education Plans and Implementing Actions.

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 for both traditional and distance learning (online) students are conducted throughout the registration period and may be arranged on an appointment basis by calling the Counseling Office at 808-235-7413 or by scheduling an appointment via STAR Balance.

Mental Health Counseling
A mental health counselor is available to assist students with a variety of challenges such as stress, anxiety, grief, depression, as well as other challenging situations or scenarios. These issues can often make it difficult for students to stay focused while attending school. The campus mental health counselor provides personal counseling to support students on their academic journey by working with students to address various challenges so they are better equipped to be successful in their education. Counseling provided is free and confidential for all registered students. Appointments may be made by calling 808-235-7393 or by logging in to My Success resource network, via Mental Health & Wellness.

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 six (6) credits within the University of Hawai‘i System and a minimum GPA of 2.0. Call 808-235-7404 or stop by Hale Alaka‘i 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, note-taker, interpreter, and/or other academic support services as needed
- campus accessibility map
- specifically designed auxiliary equipment to meet the needs of students with disabilities

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 more information and assistance, call 808-235-7453.

For disability accommodations, please call 808-235-7453 or the TTY relay service at 1711 or 1511. Advance notice is 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.

Student Resources

TRiO Student Support Services
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 Kako’o 116, or call 808-235-7487 for further information.

Ka Piko Student Success Services at Hale ‘Ākoakoa
Peer Mentoring Center
The Peer Mentoring Center is open to all students and prospective students and is located in Hale ‘Ākoakoa 232 (Makai side). Here you can ask questions about campus services and classes, receive an orientation to campus, enjoy our quiet study lounge, and use computers with free printing. Call 808-235-7454 so we may help you.

Student Activities Center
The Student Activities Center (SAC), located in Hale ‘Ākoakoa 232 (Makai side), offers students some respite from a long day of studies, by enjoying recreational activities like pool, table tennis, and air hockey. Students can also relax on our comfortable couches and catch up on world news and events on our big screen televisions. Occasionally, the SAC will also host intramural sporting events, movie screenings, and other campus events. The SAC is also one of two locations where students, faculty, and staff can get their Windward Community College identification cards. Please call 808-235-7395 for more information.

Assistive Technologies
For more information regarding the availability of assistive technologies information and services, please contact Roy Inouye at 808-235-7453.

Ka Piko Student Success Services at Hale La‘akea, Library Learning Commons
Testing Center
The Testing Center provides testing services (e.g., placement testing, distance education testing, makeup testing, and retesting) to UH System students, and for a fee, to non-UH students and private organizations. The Testing Center is located in Hale La‘akea 228 and is open Monday through Friday. Please call 808-235-7498 for more information.
Math Lab
The Math Lab, located in Hale La‘akea 220, is open Monday through Friday. Services include drop-in tutorial assistance and access to Math Lab resources and math references. While in the Math Lab, students may checkout math textbooks for temporary use in the Math Lab.

Writing Center
The Writing Center invites Windward Community College on-campus students and distance education students to consult with them during any and all stages of the writing process. Students can receive assistance with brainstorming ideas, thesis development, citations and editing. Please visit Hale La‘akea 222, email wccwrite@hawaii.edu, or call 808-235-7473 for an appointment.

Supplemental Instruction
Supplemental Instruction (SI) provides academic assistance through peer-facilitated group study sessions. Aside from providing regularly scheduled, out-of-class study sessions, SI Leaders sit in on course lectures, and assist students during class. SI is attached to specific courses, so session locations and times vary. Stop by our office in Hale La‘akea 230 or call 808-235-7467 for more information.

Ho‘onui ‘Ike
The Ho‘onui ‘Ike program provides academic assistance and coaching support to specific courses on campus. Alaka‘i, or peer coaches, not only support students with course content through study sessions and workshops, but also by discussing campus resources, goal setting, time management, and other critical college success skills. Alaka‘i also work with students to create step-by-step success plans via MySuccess to help them work toward their goals. For more information, email scottjks@hawaii.edu or call 808-235-7467.

Speech Lab
The Speech Lab, located in Hale La‘akea 226, provides help with MLA and APA citations, finding credible sources, research (library and online), outlines, use of visual aids, verbal and non-verbal delivery, methods for reducing anxiety, debate practice, and group sessions related to communication. All students from any discipline are welcome. To make an appointment, email amendoza@hawaii.edu or call 808-236-9221.

Online Tutoring
Tutor.com is an online tutoring system which students access through their MyUH portal. It offers tutorial services in such subjects as English, ESL writing, math, statistics, anatomy and physiology, economics, accounting, finance, Spanish, biology, chemistry, nursing, and physics. For more information, please visit https://windward.hawaii.edu/tutor-com/

Fujio Matsuda Technology Training and Education Center (Matsuda Center)
The Office of Career & Community Education administers the Fujio Matsuda Technology Training and Education Center. The Matsuda Center offers a wide range of noncredit courses and workshops, and follow-up 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 808-235-7433.

Library Learning Commons
The Library Learning Commons (LLC) in Hale La‘akea provides the Windward CC community with a variety of services and resources. Professional librarians assist with all aspects of student research and offer customized class instruction and workshops. Study spaces in the LLC include group study rooms with whiteboards and monitors, lounge seating, quiet study carrels, and an open computer lab with 50 computers loaded with in-demand software. The library houses over 50,000 books and DVDs, including thousands of items in the beautiful Hawaiian Collection Room. Current University of Hawai‘i students and employees may borrow library materials with a photo ID. Non-UH community members may apply for a Community Borrower Card for a modest fee.

The Library’s website provides access to over 180,000 ebooks and videos and dozens of online reference and research databases.

The LLC also hosts historical and cultural exhibits and holds events in the fine and performing arts.

For more information, contact the library at 808-235-7436 or visit http://library.wcc.hawaii.edu/.
Science Resources
Center for Aerospace Education

The Center for Aerospace Education (CAE), which was piloted in 1985 and officially established in October 1986, supports Windward CC’s credit and community outreach programs in aerospace science. The mission of the CAE is to inspire students to actively engage in science activities through informal experience and formal education, to explore career options in aerospace science and industry, and to become informed, contributing citizens by becoming science-literate.

The following facilities and services are offered by the CAE:

- Aerospace Exploration Lab
- Hōkūlani Imaginarium
- NASA Flight Training Aerospace Education Laboratory
- Lanihuli Observatory
- Hawai‘i Space Grant Consortium—Windward

The CAE also sponsors teacher workshops and offers consultation to students and teachers on aerospace education and science projects.

The goals of the CAE are to:

- help students develop high-tech skills to succeed in a knowledge-based global economy;
- increase enrollment and success of K-12 students in science, mathematics and technology courses in pre-college grades;
- generate greater interest in careers in science and engineering, and help facilitate the successful transition of students from high school to post-secondary institutions;
- increase the number of underserved students entering college who choose to major in science, technology, engineering and mathematics (STEM) and have the skills necessary to successfully complete their higher education.

For more information, call 808-236-9111 or visit http://aerospace.wcc.hawaii.edu/.

Aerospace Exploration Lab

The Aerospace Exploration Lab (AEL), which is managed by the College’s Center for Aerospace Education, provides instructional materials and services in astronomy, aeronautics (rocketry), aeronautics (aviation), and atmospherology (weather and climate). Founded in 1989, this educational resource center acts as a “hands-on” science exploratorium, assisting K-12 students and teachers in discovering scientific principles through low-tech experiential activities.

The AEL also houses a library of aerospace books, magazines, videos, posters, curricular programs, and demonstration models. School tours of the Aerospace Exploration Lab are available 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 is located in Hale ‘Imiloa 135 (Science Building). All services are free of charge. For inquiries and reservations call 808-235-7321, 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 Consortium (HSGC), which promotes student involvement in space science education. Each semester, a limited number of stipends are available to college students engaged in space-related projects. Students choose a topic under the guidance of a faculty mentor with whom they work throughout the semester. Past projects have included space science curriculum development, astronomical observations, remote sensing of the earth, space art, and zero-g research through the NASA Reduced Gravity Student Flight Opportunities Program on-board its KC-135A aircraft. Windward CC Space Grant students are currently engaged in the design and construction of high-powered rockets and small payloads through Project Imua. To date, students have successfully launched three scientific payloads in outer space from NASA Wallops Flight Facility in Virginia. Other students are engaged in astronomy internships at the Lanihuli Observatory and Imaginarium. Each semester, students have the opportunity to present their work at the HSGC Fellowship Symposium. HSGC-Windward is located in Hale ‘Imiloa 112 and managed by the College’s Center for Aerospace Education (CAE). Call 808-236-9111 or visit http://aerospace.wcc.hawaii.edu/HSGC.html.

For info on Project Imua, visit http://imua.wcc.hawaii.edu/.

Hōkūlani Imaginarium

The Hōkūlani Imaginarium is a high-tech, multimedia planetarium and scientific visualization theater under the management of the College’s Center for Aerospace Education. Opened in the summer of 2000 and officially dedicated in October 2001, the Imaginarium supports the College’s astronomy and Polynesian navigation curricula and community outreach efforts. The Imaginarium consists of a fulldome, high-definition (4k) projector system with 5.1 digital surround-sound audio. Its 84 seats are equipped with interactive buttons for audience participation. This facility is available for K-12
visits as well as group and public shows. For school tours, call 808-235-7321. For public shows contact the Office of Career & Community Education at 808-235-7433. An admission fee is charged for shows. For general information, call the Imaginarium manager at 808-236-7350 or visit http://aerospace.wcc.hawaii.edu/imaginarium.html.

A 32" bronze armillary sundial with a Polynesian theme is situated on the northeast lawn of the Imaginarium.

**Lanihuli Observatory**

Lanihuli Observatory is an astronomical and meteorological observatory under the management of the College’s Center for Aerospace Education (CAE). Dedicated in Oct 2007, Lanihuli Observatory supports the College’s astronomy labs, HSGC student projects, K-12 outreach, and the general public. This facility includes:

- NOAA weather satellite tracking station providing real-time images of the weather and ocean conditions surrounding Hawai‘i as well as an on-site weather station.
- Radio telescope operated in partnership with NASA Goddard Space Flight Center’s Radio Jove Project. Radio observations of Jupiter and the sun are streamed to students around the world via the Internet.
- Solar telescope (heliostat) consisting of a 6-inch refractor capable of white light projection and direct H-alpha viewing.
- 16-inch optical Schmidt-Cassegrain telescope under an automated 16-foot dome.
- A 5-inch refractor is mounted on the main telescope.
- Cosmic ray telescope operated in affiliation with Fermilab’s QuarkNet project.
- Visitor's Gallery with library and earth/space science kiosks including a 24-inch Magic Planet display.

The Lanihuli Observatory is available to the general public after evening Imaginarium shows. There is no charge to visit this facility. To schedule a tour, contact 808-235-7321. Jovian and solar radio data collected through NASA’s Radio Jove project are archived at http://jupiter.wcc.hawaii.edu/newradiojove/lanihuli.html.

**NASA Flight Training Aerospace Education Laboratory**

NASA Flight Training Aerospace Education Laboratory (AEL) was dedicated in 2002 in partnership with NASA’s Glenn Research Center. Managed by the Center for Aerospace Education (CAE), this facility houses computer simulators designed for exploring careers in aerospace. Included are a research-grade wind tunnel, a zero-gravity drop tower, and a flight simulator. Located in Hale ‘Imiloa 112, the NASA Flight Training AEL supports the College’s astronomy curriculum, ASNS engineering concentration, other STEM-related programs, and Hawai‘i Space Grant Consortium students, and serves as a community outreach resource for students in grades six and above. There is no charge for this venue. For school tours, contact 808-235-7321. For general information, call 808-236-9111 or visit http://aerospace.wcc.hawaii.edu/nasael.html.

**Bioprocessing Medicinal Garden Complex**

The Bioprocessing Medicinal Garden Complex is located across from Hale ‘Imiloa. It was dedicated on June 18, 2007 and consists of three facilities: the medicinal garden (collections of plants from Asia, the Pacific, and America), the aquaponic system, and the bioprocessing facility. The complex is supported through the grants from USDA-NIFA (National Institute of Food and Agriculture) and USDA-SPEC (U.S. Department of Agriculture - Secondary and Two-Year Post secondary Agriculture Education Challenge). The medicinal plants grown organically in the garden and in the aquaponic system are processed into nutraceutical products in the bioprocessing facility.

**Climate-Controlled Greenhouse**

The climate-controlled greenhouse is located next to Hale ‘Imiloa. It was acquired through a grant from the Pacific Center for Advanced Technology Training (PCATT), and was dedicated on October 3, 2001. The greenhouse provides a controlled atmosphere for mericlones and seedlings to thrive out of their post-in-vitro culture. It also houses orchid species for identification purposes.

**Kuhi La‘au**

The Kuhi La‘au – Tropical Plant and Orchid Identification Facility: Inouye and Rifai Collection is located in Hale ‘Imiloa 112-A. It was dedicated on February 9, 2000. The facility provides a free plant identification service, focusing on plants of Hawai‘i, tropical plants of Asia and the Pacific, and orchids. Fresh samples of branches, flowers or fruits can be sent to the facility for identification. Information regarding plant names and ethnobotanical uses will be mailed to the sender within a week.

**Tissue Culture and Plant Biotechnology Laboratory**

The laboratory is located in Hale ‘Imiloa 101-A. It is supported through the grants from USDA-NIFA (National Institute of Food and Agriculture), and was dedicated on February 5, 2003. The Tissue Culture and Plant Biotechnology Laboratory is an aseptic room used for in vitro culture and gene transformation operations.
Coral Disease Laboratory
The Coral Disease Lab, a Windward Community College facility operated in partnership with the Hawai‘i Institute of Marine Biology and the Pāpahānaumokuākea Marine National Refuge, is managed by the Pacific Center for Environmental Studies (PaCES). Located in Hale ‘Imiloa, the Lab conducts collaborative research and education projects whose goals are to understand the occurrence of disease in coral reef organisms. Students may participate in these projects for credit by enrolling in undergraduate Independent study courses through the Marine Option Program or through PaCES. Paid internships may be available (pending funding) from the Pacific Center for Environmental Studies. For more information, call 808-236-9115 or 808-236-9121.

Pacific Center for Environmental Studies (PaCES)
Housed within the Department of Natural Sciences, the Pacific Center for Environmental Studies (PaCES) encourages and supports environmental science education, research, and stewardship at Windward Community College through the following activities: undergraduate environmental science enrichment through classroom instruction and research; workforce training; K-12 environmental science enrichment; teacher training; and community environmental science awareness.

PaCES is guided by the following themes:

- Understanding the functioning of ecosystems and human influences on them;
- Viewing humans as functional components of ecosystems from historical, cultural, and social, as well as scientific, perspectives;
- Recognizing that the quality of human life is dependent upon the quality of our environment and our ability to sustain our humanity within this environment;
- Promoting stewardship through wise and thoughtful management of our environment and natural resources, looking to traditional practices and promising technologies of the future; and
- Embracing ahupua‘a as a symbol for sustainability and positive human interaction with the environment.

Along with providing support for the College’s environmental studies courses, PaCES also integrates and coordinates Windward CC’s Academic Subject Certificate in Bio-Resources Development and Management, the Marine Option Program, and Coral Disease Laboratory. For more information, visit http://windward.hawaii.edu/paces/.

Performing and Visual Arts Resources

Gallery ‘Iolani
Gallery ‘Iolani 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 ‘Iolani to promote exhibitions of cultural and educational significance. The gallery also serves as a classroom for students studying gallery design and management at Windward Community College. Gallery ‘Iolani is located adjacent to Palikū Theatre in the Hale Pālānakila complex. For more information about the gallery and/or opportunity to study in the gallery design class, contact Art Professor and Gallery Director Toni Martin at 808-236-9150, or visit http://gallery.windward.hawaii.edu/.

Palikū Theatre
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 in drama, music, and dance. The theatre is home to the College’s theatre study program and student productions like Massie / Kahahawai, Burning Memory and The Epic Voyage of Kane‘apua, and has successfully staged such popular musicals as South Pacific, Miss Saigon, Oklahoma!, Phantom of the Opera, Les Miserables and Hairspray!. The facility is also used as a venue for lectures, seminars, concerts, music and hula ho‘ike, and special speaking engagements as part of the College’s educational and community service programs. For more information, call 808-235-7330, email Paliku2@hawaii.edu, or visit http://palikutheatre.com/.

Student Organizations

The Associated Students of the University of Hawai‘i at Windward Community College (ASUH-WCC) have an organized student government to develop a program of activities for students and members of the community. Last year ASUH-WCC sponsored the College newspaper, Ka‘Ohana, the College literary magazine, Pueo, and other educational, cultural, and social activities.

Elections for ASUH-WCC 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 policymaking and in implementing the program of activities offered.
A number of College committees invite student participation in policymaking. Students may also serve as instructors for noncredit courses, lab assistants, and assistants in the development of a public services program. Students interested in these activities should contact a member of the ASUH-WCC or the Student Affairs Office staff. To contact the ASUH-WCC, email them at wccasuh@hawaii.edu or call 808-235-7395. 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. Check the Windward CC website for a listing of active clubs.

Food Services
The Uala Leaf Cafe located in Hale 'Ākoakoa offers affordable and delicious hot meals, sandwiches and snacks to students and community members. The Hub Coffee Shop in Hale La'akea (Library Learning Commons) offers coffee and specialty drinks, pastries and grab-and-go food items. The campus Bookstore offers microwaveable lunch items, snacks and drinks. Several campus buildings are equipped with vending machines. There are a variety of 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. Microwaveable lunches, snacks and drinks are also available.

The Bookstore is located in Hale 'Ākoakoa and is open Monday-Friday, 8:00 a.m. to 3:30 p.m. Phone 808-235-7418.

Health Services
The College provides no health services. Students are eligible to participate in a group health insurance program.

Affordable Care Act
On March 23, 2010, President Obama signed the Patient Protection and Affordable Care Act (ACA). Along with the Health Care and Education Reconciliation Act of 2010, the law put in place comprehensive health insurance reforms. The law makes preventive care—including family planning and related care—more accessible and affordable for many Americans. The information and resources provided here are intended to assist Title X-funded family planning centers and other safety net providers in implementing the new law. [http://www.hhs.gov/opa/affordable-care-act/index.html](http://www.hhs.gov/opa/affordable-care-act/index.html)

Low cost Health care is available through Hawaii Health Care Connection.

Lost and Found
Articles which are lost and found are taken to/or held at the Security Office in Hale Alaka'i 113, phone 808-235-7355.

Housing
The College has no dormitories and does not assist students in locating housing.
Academic Regulations

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, UH West O‘ahu, and UH Hilo may be transferred to Windward Community 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 Vice Chancellor for Student Affairs.

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.

Prior Learning Credits
Students with life and work experience can shorten the road to attaining a college degree by applying for Prior Learning Assessment (PLA). PLA is a process through which students can earn college credit by identifying and documenting college-level learning that has been acquired through life experiences. Students with such life experiences may choose to validate their expertise through a number of evaluation procedures. Awarding of credits at Windward Community College applies ONLY to degrees and/or certificates student is enrolled in at this institution. Other colleges and community colleges, even within the University of Hawai‘i System, may have slightly different policies for accepting transfer credits. The granting of credits at Windward CC in no way obligates another institution to accept the same credits or apply those credits in the same manner.

There are many forms of Prior Learning Assessment (PLA). Please work with your PLA representative in the counseling office to determine what options best fit your experience.

Credit by Examination/Course Challenge
Windward Community College students who present evidence of having achieved student learning outcomes through prior experience may apply for credit by exam or course challenge. These options are not available for all courses so students are advised to check with individual instructors and the department chairperson on a course-by-course basis. Assessment could include a competency-based exam or project, as determined by the academic experts. Students must be officially enrolled in at least one course (other than the course the student is attempting to receive credit by exam for) during the semester in which credit by exam/course challenge is attempted. Credit by examination forms must be filed with the Admissions & Records Office prior to the end of the late registration period. Students will be charged 50% of the tuition for the course credit.

Equivalency Examinations
Students may apply for credits by having official transcripts from examination institutions sent to Windward Community College. Students must meet qualifying scores set by the campus to be awarded credit. These examination programs include the following:

- Advanced Placement (AP) Examinations: The Advanced Placement Examinations are administered at 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 program details, see https://apcentral.collegeboard.org. For the University’s credit policy, students should consult the Student Affairs Office.
- College Level Examination Program (CLEP): The College Board also offers tests of basic entry-level college material through its College Level Examination Program (CLEP). For program details, see http://www.collegeboard.com/highered/clep/index.html. Students must achieve CLEP examination scores at or above specified levels of achievement in order to be awarded credits.
- DANTES Subject Standardized Tests (DSST): Student is advised to discuss test scores with their counselor for consideration of transferring in credits.
- Excelsior College Equivalency Exams (ECE or UExcel): Administered by PearsonVue. The student is advised to discuss test scores with their counselor for consideration of transferring in credits.
- International Baccalaureate (IB): Credits earned from institutions of higher education outside the U.S. may be transferred in some cases. Transcripts and related documents are to include course descriptions and MUST have certified English translations attached. The College will grant credits and/or waivers on the basis of IB higher-level examinations.
Non-Collegiate-Sponsored Education Credit
This option evaluates learning from courses completed in non-collegiate settings (e.g. professional license, labor union courses, agency training programs, professional workshops, and military courses). Examples of such education credit include Army ACE Registry Transcript System (AARTS), Sailor Marine ACE Registry Transcript (SMART), American Council on Education (ACE), College Credit Recommendation Service, and Professional Licenses or Industry Certifications (nationally- or state-certified professionals). Documentation of non-collegiate training must be provided to the program that would be accepting credit in transfer. Course credit recommendations provided by the ACE in the National Guide to Educational Credit for Training Programs may be used by programs in deciding on the type and amount of credit that may be granted. AARTS/SMARTS transcripts sent directly to the College will be evaluated and appropriate credits granted toward a specific degree and/or certificate. Windward Community College reserves the right to reject recommendations made by the American Council on Education (ACE) guidelines. For questions on awarding credits for various licensing, please see the PLA representative in the Counseling office.

Portfolio-Based Assessment
A portfolio-based review is one of the newest options for awarding Prior Learning (PL) credits. Using portfolio-based assessments, students prepare documentation and provide evidence of learning from outside the traditional classroom. The documentation and evidence are reviewed by a panel of subject matter experts who use course Student Learning Outcomes (SLOs) as the basis to compare the portfolio documentation and evidence. Based on this review process, recommendations will be made to award the appropriate number of college credits and a grade of “PBA,” Portfolio Based Assessment, which does not give grade points but only course credits. Students pay equal to 60% of tuition for the course credit requested portfolio assessment fee. More information can be obtained from the PLA representative. Portfolio-based assessment is recommended for students who have substantial professional or community experience and college-level writing skills (i.e. qualify for ENG 100).

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>Grade</th>
<th>Description</th>
<th>Grade Points</th>
<th>Credit Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent achievement</td>
<td>4</td>
<td>(course credits awarded)</td>
</tr>
<tr>
<td>B</td>
<td>Above average achievement</td>
<td>3</td>
<td>(course credits awarded)</td>
</tr>
<tr>
<td>C</td>
<td>Average achievement</td>
<td>2</td>
<td>(course credits awarded)</td>
</tr>
<tr>
<td>D</td>
<td>Minimal passing achievement</td>
<td>1</td>
<td>(course credits awarded)</td>
</tr>
<tr>
<td>F</td>
<td>Less than minimal passing achievement</td>
<td>0</td>
<td>(no course credits awarded)</td>
</tr>
<tr>
<td>CR</td>
<td>Achievement of objectives of course at C level or higher</td>
<td>No grade points given</td>
<td>(course credits awarded)</td>
</tr>
<tr>
<td>NC</td>
<td>Used to denote achievement of objectives of the course at less than C level under the CR/NC option</td>
<td>No grade points given</td>
<td>(no course credits awarded)</td>
</tr>
<tr>
<td>N*</td>
<td>Refer to footnote</td>
<td>No grade points given</td>
<td>(no course credits awarded)</td>
</tr>
<tr>
<td>I**</td>
<td>Incomplete</td>
<td>No grade points given</td>
<td>(no course credits awarded until student completes course)</td>
</tr>
<tr>
<td>W***</td>
<td>Official withdrawal from course</td>
<td>No grade points given</td>
<td>(no course credits awarded)</td>
</tr>
<tr>
<td>L</td>
<td>Audited Course</td>
<td>No grade points given</td>
<td>(no course credits awarded)</td>
</tr>
<tr>
<td>CE</td>
<td>Credit by exam</td>
<td>No grade points given</td>
<td>(course credits awarded)</td>
</tr>
<tr>
<td>NCE</td>
<td>No Credit by exam</td>
<td>No grade points given</td>
<td>(no course credits awarded)</td>
</tr>
<tr>
<td>PBA</td>
<td>Portfolio Based Assessment</td>
<td>No grade points given</td>
<td>(course credits awarded)</td>
</tr>
</tbody>
</table>

*N 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.

**I grade (Incomplete) is a temporary grade given at the instructor’s option when a student has failed to complete a small part of a course because of circumstances beyond his or her control. The student is expected to complete the course by the designated deadline in the succeeding semester. If this is not done, the “I” will revert to the contingency grade identified by the instructor.

***W grade indicates that the student officially dropped/withdrew from the class. If the student dropped/withdrew during the erase period, the record of the registration does not appear on the transcript. Refer to the Academic Calendar or Schedule of Classes for drop/withdrawal deadlines.

Grade Point Average
A student’s 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.

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. In cases where a student earns multiple F grades for the same course, only the most recent course shall be used to calculate the grade point average (GPA) and prior F grades shall be excluded.

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, which is noted on their transcript.

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 submit the completed CR/NC Option form to the Admissions & Records Office by the deadline. Once the CR/NC Option is submitted, the CR/NC cannot be changed. Refer to the Academic Calendar or Schedule of Classes for deadline date.

Auditing

No credit is given for an audited course. The grade of “L” will be recorded for the course on the student’s transcript.

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 Audit Request Form to the Admissions & Records Office by the deadline. Refer to the Academic Calendar or Schedule of Classes for deadline date.

Grade Reports

Grade reports may be viewed online at the end of each semester. Students must report any errors on their grade report to the Admissions & Records Office within 7 calendar days following the end of term.

Academic Probation Policy

Further details of the policy are available in the Office of the Vice Chancellor for Student Affairs, Hale ‘Ākoakoa 202, 808-235-7466.

A cumulative GPA of 2.0 is required to remain on satisfactory academic progress at Windward Community College. Students who do not meet this minimum GPA at the end of any semester will receive a warning of unsatisfactory academic progress. 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.

All students notified of unsatisfactory academic progress are required to meet with an academic counselor prior to registration.

Warning

Students will be placed on academic warning at the end of any semester in which their cumulative GPA falls below 2.0. A warning is not notated on the permanent academic record. Warned students may continue to attend Windward Community College but must raise their cumulative GPA to 2.0 or higher. Failure to do so will result in academic probation.

Probation

If students on warning fail to raise their cumulative GPA to 2.0 or higher, they will be placed on academic probation. Notation of probation is made on the students’ permanent academic record. Probationary students may continue to attend Windward Community College under the following terms:

- they will be allowed to enroll only in courses approved by an academic counselor
- they will meet regularly thereafter with that counselor to review progress
- they must earn a semester GPA of 2.0 in each probationary semester
- they will remain on probation until their cumulative GPA is raised to 2.0 or higher
- Failure to meet these conditions will result in academic suspension.
Suspension
A student will be suspended for failing to meet the terms of probation. Notation of academic suspension is made on the student’s permanent academic record. A suspended student is eligible to apply and return to Windward Community College after a wait period of at least one semester (not including summer session). A student returning after suspension will be placed on probation during the semester of re-entry. Under extenuating circumstances a waiver of the wait period may be granted, allowing a student to enroll. Failure to meet the terms of probation after returning from suspension will result in dismissal.

Dismissal
A student returning after suspension will be dismissed for failing to meet the terms of probation. A dismissed student may be readmitted only in unusual circumstances, and only after the passage of at least two semesters (not including summer session). Note that readmission after dismissal occurs only rarely.

Removal from Probation
A student will be removed from probation once the cumulative GPA is raised to 2.0 or higher.

Appeals
A student may appeal a decision regarding academic probation, suspension, or dismissal by filing a formal petition with the Office of the Vice Chancellor for Student Affairs in Hale ‘Ākoakoa 202 in person or via U.S. Postal Service mail. It is recommended that receipt of appeals sent by mail be confirmed via a phone call to the Vice Chancellor for Student Affairs at 235-7446. Appeals must be filed as soon as notification is received, and prior to the first day of instruction of the following semester.

Student Rights & Responsibilities

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, including distance learning (online) students, who must regularly log in to the course laulima site and complete tasks and assignments in a timely manner. Students who stop attending classes or never attended classes are likely to receive an F grade and are responsible for any tuition/fees. To avoid this, official withdrawal must be made by the deadline. Refer to the Academic Calendar or Schedule of Classes for drop/withdrawal dates.

Electronic Communications
UH email is the official means of communication within the university/college. Students are responsible for checking their email account frequently and consistently to remain current with the university/college communications. Students are expected to monitor and manage their email storage quota to ensure that their mailboxes are not saturated and are able to receive new messages.

Student Conduct
Windward Community College follows the University of Hawai‘i 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 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 Office of the Vice Chancellor for Student Affairs. Copies of the Student Conduct Code are available at the Office of the Vice Chancellor for Student Affairs or online at http://www.hawaii.edu/policy/?action=viewPolicy&policySection=ep&policyChapter=7&policyNumber=208&menuView=closed

Impermissible Behavior
The University of Hawai‘i Code of Student Conduct defines impermissible behavior. Students alleged to have violated this policy are subject to the disciplinary procedures of the College. Copies of the hearing procedures are available in the Office of the Vice Chancellor for Student Affairs.
**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; or drylabbing, which includes (a) obtaining and using experimental data from other students without the express consent of the instructor, (b) utilizing experimental data and laboratory write-ups 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.

**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 Vice Chancellor for Student Affairs. 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:

**Vice Chancellor for Student Affairs**

Windward Community College
Hale 'Ākoakoa 202
45-720 Kea'ahala Road
Kāne'ohe, Hawai'i 96744
Phone: 808-235-7466

**Student Grievance Procedures**

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 Windward CC Policy Guidelines Manual, No. 4-6. The manual is available in the Office of the Vice Chancellor for Student Affairs, the Office of the Vice Chancellor for Academic Affairs, 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 Windward CC 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 calendar 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 Dean. This must be done within 7 calendar days after the last scheduled meeting with the faculty member. The Dean has 7 calendar 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 Vice Chancellor for Academic Affairs. This must be done within 7 calendar days after notification by the Dean. The Vice Chancellor for Academic Affairs has 14 calendar days to resolve the matter.
Step 4. If the matter is not satisfactorily resolved by the Vice Chancellor for Academic Affairs, the student may file a written grievance with the Chairperson of the Academic Grievance Committee. This must be done within 7 calendar days after notification by the Vice Chancellor for Academic Affairs.

Within 10 calendar 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 calendar days after the close of the hearing. The chancellor's decision is final within the University.

The process of addressing allegations 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 Office of the Vice Chancellor for Student Affairs.

Complaints associated with the institution’s compliance with academic program quality and accrediting standards can be addressed through our accrediting body, the Accrediting Commission for Community and Junior Colleges (ACCJC). Their complaint process is found at http://www.accjc.org/complaint-process.

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.

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 FERPA), 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 FERPA, which protect the privacy rights of students.

2. The Family Educational Rights and Privacy Act (FERPA) affords eligible students certain rights with respect to their education records. These rights include:

• The right to inspect and review the student’s education records within 45 days after the day Windward Community College receives a request for access. A student should submit to the registrar, dean, head of the academic department, or other appropriate official, a written request that identifies the record(s) the student wishes to inspect. The school official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the school official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

• The right to request the amendment of the student’s education records that the student believes is inaccurate, misleading, or otherwise in violation of the student’s privacy rights under FERPA. A student who wishes to ask the school to amend a record should write the school official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed. If the school decides not to amend the record as requested, the school will notify the student in writing of the decision and the student’s right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

• The right to provide written consent before the school discloses personally identifiable information (PII) from the student’s education records, except to the extent that FERPA authorizes disclosure without consent. The school discloses education records without a student’s prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person employed by Windward Community College in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person serving on the board of regents; or a student serving on an official committee, such as a disciplinary or grievance committee. A school official also may include a volunteer or contractor outside of Windward Community College who performs an institutional service or function for which the school would otherwise use its own employees and who is under the direct control of the school with respect to the use and maintenance of PII from education records, such as an attorney, auditor, or collection agent. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for Windward Community College.

• Parents and spouses of students are advised that information contained in education records, with the exception of directory information, will not be disclosed to them without the prior written consent of the student.

• Students are advised that institutional policy and procedures required under FERPA have been published as Administrative Procedure AP 7.022, Procedures Relating to Protection of the Educational Rights and Privacy of Students. Copies of Administrative Procedure AP 7.022 may be obtained from the Office of the Vice Chancellor for Students.

• The right to file a complaint with the U.S. Department of Education concerning alleged failures by Windward Community College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW Washington, DC 20202
Directory Information

The University has designated the following information from a student’s education record as "directory information":

1. Name of student;
2. Major field of study;
3. Class (i.e., freshman, sophomore, etc.);
4. Past and present participation in officially recognized activities (including positions held and official statistics related to such participation and performance);
5. Past and present participation in officially recognized sports (including positions held and official statistics related to such participation and performance);
6. Weight and height of members of athletic teams;
7. Dates of attendance;
8. Previous institution(s) attended;
9. Full or part-time status;
10. Degree(s) conferred (including dates);
11. Honors and awards (including Dean’s List).

At its discretion and in conformance with applicable state law, the University may disclose directory information to the public without obtaining a student’s prior consent, so long as certain conditions regarding general notification of disclosure of directory information have been followed. Specific directory information about an individual student will not be released to the public if the student has affirmatively informed the University that he or she does not want any or all of those types of information about himself or herself designated as directory information. The procedures for an individual student to “opt” out of disclosure is set forth in UH administrative policy A7.022.

Note: Submission of this FERPA nondisclosure of directory information request does not automatically remove students from the UH Online Directory of email addresses, which is accessible only to those with a valid UH email address.

To remove yourself from the UH Online Directory:

1. Login to MyUH
2. Select the My Profile Tab
3. Look for UH Online Directory, Options for Students, select Opt-out

Lists of directory information will not be made publicly available to third parties.

The school may provide the UH Foundation with lists of students with the following information: name, school/college/division/department. Degree, major and minor fields of study, UH email address, home address, and telephone number for the purpose of University and alumni relations.

FERPA Annual Notice Addendum:

As of January 3, 2012, the U.S. Department of Education’s FERPA regulations expand the circumstances under which your education records and personally identifiable information (PII) contained in such records—including your Social Security Number, grades, or other private information—may be accessed without your consent. First, the U.S. Comptroller General, the U.S. Attorney General, the U.S. Secretary of Education, or state and local education authorities ("Federal and State Authorities") may allow access to your records and PII without your consent to any third party designated by a Federal or State Authority to evaluate a federal- or state-supported education program. The evaluation may relate to any program that is “principally engaged in the provision of education” such as early childhood education and job training, as well as any program that is administered by an education agency or institution. Second, Federal and State Authorities may allow access to your education records and PII without your consent to researchers performing certain types of studies, in certain cases even when we object to or do not request such research. Federal and State Authorities must obtain certain use-restriction and data security promises from the entities that they authorize to receive your PII, but the Authorities need not maintain direct control over such entities. In addition, in connection with Statewide Longitudinal Data Systems, State Authorities may collect, compile, permanently retain, and share without your consent PII from your education records, and they may track your participation in education and other programs by linking such PII to other personal information about you that they obtain from other Federal or State data sources, including workforce development, unemployment insurance, child welfare, juvenile justice, military service, and migrant student records systems.

Use of Social Security Number

The University of Hawai’i (“University”) is committed to safeguarding the privacy of personal and confidential information of its students, employees, alumni, and other individuals associated with the University. In the normal practice of conducting official University business, the University collects and maintains confidential information relating to its students, including a student’s Social Security Number (“SSN”). The University requests that a student provide a SSN at the time of application to the University. The SSN is not required for enrollment; however, the University is required by federal law to report to the Internal Revenue Service (“IRS”) the SSN and other information for tuition-paying students. Federal law also requires the University to obtain and report to the IRS the SSN for any person to whom compensation is paid. Due to the practical administrative difficulties which
the University would encounter in maintaining adequate student records and processing financial transactions without the SSN, the University will continue to collect SSNs as permitted by law for official use within the University system. Providing the University with your SSN ensures that University programs and services are available with the least delay.

Students will be assigned a University generated student identification number upon enrollment, which will be used as the primary identifier. The SSN will not be used as the primary identifier of students associated with the University. The SSN will be used in activities, including but not limited to, matching and reconciling documents in order to determine eligibility for admission and financial aid, to determine residency for tuition purposes, to comply with federal and/or state law reporting requirements (e.g., for financial aid, Internal Revenue Service mandates, Taxpayer’s Relief Act of 1997, Immigration and Naturalization Service), and in accordance with the Family Educational Rights and Privacy Act. The SSN will not be disclosed to any persons outside the University system, except as allowed by law or with permission from the individual. This policy does not preclude, if a primary means of identification is unavailable, the University from using the SSN as needed to conduct official University business.

College Policies

Nondiscrimination and Affirmative Action
The University of Hawaiʻi is committed to a policy of nondiscrimination on the basis of race, sex, gender identity and expression, age, religion, color, national origin, ancestry, citizenship, disability, genetic information, marital status, breastfeeding, income assignment for child support, arrest, and court record (except as permissible under State law), sexual orientation, national guard absence, or status as a covered veteran. This policy covers admission and access to participation, treatment, and employment in the University’s programs and activities. Discriminatory harassment, including sexual harassment, is prohibited under this policy. The University shall promote the full realization of equal opportunity through a positive, continuing program of nondiscrimination and affirmative action on each campus.

It is the policy of the University of Hawaiʻi 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 40-70); 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).

Moreover, the UH Community Colleges strive to promote the 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.

Title IX of the Education Amendments of 1972 prohibits discrimination on the basis of sex in education programs and activities that receive federal financial assistance. The conduct prohibited under Title IX includes all forms of sex discrimination: the failure to provide equal opportunity in any program or service, discrimination based on pregnancy, sex harassment, gender-based harassment (including intimidation or hostility based on sex-stereotyping), and sexual violence such as sexual assault, sexual coercion, and rape.

UH Policy and Procedure on Sex Discrimination and Gender-Based Violence—Title IX
The University of Hawai’i is committed to maintaining and promoting safe and respectful campus environments that are free from sex discrimination and gender-based violence. This includes: sex discrimination; sexual harassment; gender-based harassment, including harassment based on actual or perceived sex, gender, sexual orientation, gender identity, or gender expression; sexual exploitation; sexual assault; domestic violence; dating violence; and stalking.

This policy and procedure establishes an integrated and consistent approach to preventing, reporting, and promptly responding to these forms of sex discrimination and gender-based violence across all campuses and centers at the University of Hawai’i. A copy of the policy may be found online at https://hawaii.edu/titleix/ or requested through your campus Title IX Coordinator.

Any person believing that they have been subjected to sex discrimination; sexual harassment; gender-based harassment, including harassment based on actual or perceived sex, gender, sexual orientation, gender identity, or gender expression; sexual exploitation; sexual assault; domestic violence; dating violence; or stalking should report the prohibited behavior immediately to the respective campus Title IX Coordinator.
If you wish to remain anonymous, speak with someone confidentially, or would like to receive information and support in a confidential setting to discuss an incident or obtain information regarding sex discrimination and/or gender-based violence, please contact a campus Confidential Resource.

Confidential Resources:
Desrae Kahale, Mental Health Counselor
Hale Kako’o 101
Phone: 808-235-7393
Email: dkahale3@hawaii.edu

Madoka (Doka) Kumagai
Confidential Advocate
UH Confidential Advocacy
Work cell: 808-348-0663
Email: kumagaim@hawaii.edu

Windward Community College also provides short-term mental health counseling to assist students in managing personal life challenges. Our mental health counseling service provider is also considered a Confidential Resource where students can seek assistance related to sex discrimination and gender-based violence. Confidential resources of the campus will not share information about or received from a student, without the student’s informed consent, unless imminent threat to life or of bodily injury exists, or there is a legal obligation to reveal such information, e.g., in an employment context or suspected abuse or neglect of a minor. To make an appointment for assistance, please contact:

Desrae Kahale, Mental Health Counselor
Hale Kako’o 101
808-235-7393
Email: dkahale3@hawaii.edu

Students seeking confidential assistance may contact our on-campus Confidential Advocate:

Madoka (Doka) Kumagai
Confidential Advocate
UH Confidential Advocacy
808-348-0663 (cell)
808-956-6084 (office)
Email: kumagaim@hawaii.edu

To formally report an incident of sex or gender-based discrimination contact the Title IX Coordinator or Deputy Title IX Coordinators who oversee Windward Community College's centralized complaint, review, investigation, and resolution process.

Karla Silva-Park, Title IX Coordinator
Hale Alaka‘i 106A
45-720 Kea‘ahala Road, Kāne‘ohe, HI 96744
808-235-7468
Email: karlas@hawaii.edu

Karen Cho, Deputy Title IX Coordinator for Employees
Hale Alaka‘i 120
45-720 Kea‘ahala Road, Kāne‘ohe, HI 96744
808-235-7404
Email: kcho@hawaii.edu

For more information about the interim policy on Title IX sexual harassment, go to https://www.hawaii.edu/policy/docs/temp/ep1.204.pdf.

You may also contact or file a complaint with the Office for Civil Rights, Seattle Office, US Department of Education, 915 Second Avenue, Room 3310, Seattle, WA 98174-1099.

Phone: 206-607-1600, Email: OCR.Seattle@ed.gov

For more information regarding your rights under Title IX, please visit: https://windward.hawaii.edu/title-ix.
Discrimination Complaints

Students, employees, or applicants for admission or employment who believe that they have been discriminated against on the basis of race, age, religion, color, ancestry, national origin, disability, marital status, veteran's status or arrest and court record may file a complaint with Karen Cho, 808-235-7404, Hale Alaka'i 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.

Students may also file complaints of discrimination with the Office for Civil Rights, Seattle Office, US Department of Education, 915 Second Avenue, Room 3310, Seattle, WA 98174-1099.

Phone: (206) 607-1600, Email: OCR.Seattle@ed.gov

Federal Campus Sex Crimes Prevention Act

Also referred to as the Wetterling Act, this act requires states to establish programs that require current address registration by residents of the state who have been convicted of sexually violent offenses or offenses involving sexual abuse or exploitation of minors, as described in the Act. The Wetterling Act is an amendment to the Family Educational Rights and Privacy Act of 1974 (FERPA) that also allows educational institutions the ability to disclose information concerning sex offenders that they receive under State sex offender registration and community notification programs. The Campus Sex Crimes Prevention Act requires colleges and universities to provide the campus community with clear guidance as to where this information can be found and to clarify that Federal laws governing the privacy of educational records do not prevent campus security agencies or other administrators from disclosing such information.

For the State of Hawai'i information regarding registered sex offenders is available through the Hawai'i Criminal Justice Data Center and can be found at:


No Smoking Policy

It is the policy of Windward Community College to provide a safe and healthy learning and working environment for students and employees.

On July 10, 2018 all University of Hawai‘i campuses and facilities became tobacco-free, joining more than 2,000 U.S. universities and colleges in an effort to provide a healthy environment for all students, faculty and staff. Hawai‘i state law (SB 134, Act 160, SLH 2018) now prohibits the use of tobacco products on all 10 UH campuses and university-owned facilities. We encourage everyone to refrain from using tobacco products while on the Windward Community College campus. Tobacco products include, but are not limited to, cigarettes, cigars, pipes, smoking tobacco, electronic cigarettes, vapes and chewing tobacco.

No Illegal Drugs, Alcohol and Weapons Policy

In conformance with the existing law, University of Hawai‘i 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 the 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 that 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 online and in the Office of the Vice Chancellor for Student Affairs.
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 Windward Community College campus are available in the Office of Student Affairs.

**Weapons**

The possession or the carrying of any weapon by any person, except a law enforcement officer, is strictly prohibited on Windward Community College property.

Hawai‘i Revised Statutes definition of a deadly weapon is any dirk, dagger, blackjack, slug shot, metal knuckles, pistol, or any other deadly or dangerous weapon. HRS §134-51, Deadly Weapons: prohibitions. The offense is a Misdemeanor unless used in a commission of a crime when it will be classified as a C Felony.

Hawai‘i Revised Statutes, Section 134

Windward Community College Security in conjunction with the Honolulu Police Department will forbid entry on or remaining on Windward CC property while possessing or carrying weapons in violation of Hawai‘i Revised Statutes.

§134-31, Restriction on possession, sale, gift, or delivery of electric guns. It shall be unlawful for any person, including a licensed manufacturer, licensed importer, or license dealer, to possess, offer for sale, hold for sale, sell, give, lend, or deliver any electric gun.

§134-25, Place to keep pistol or revolver. Firearms shall be confined to the possessor’s place of business, residence, or sojourn and can be transported between these locations unloaded and in an enclosed container. Other places firearm can be carried is to a place of repair, target range, licensed dealer’s place of business, organized firearms show, police station, sanctioned hunting or firearm use training or instruction. The offense if a Class B Felony.

§134-24, Place to keep unloaded firearms other than pistols and revolvers. The offense is a Class C Felony.

§134-26, Carrying or possessing a loaded firearm on a public highway. The offense is a Class B Felony.

§134-27, Place to keep ammunition, the offense is a Misdemeanor.

Windward Community College security in conjunction with the Honolulu Police Department will forbid entry on or remaining on Windward CC property while possessing or carrying weapons in violation of Hawai‘i Revised Statutes.

## Degrees & Certificate Information

### Degrees and Certificates

#### Degrees

- Associate in Arts in Liberal Arts
- Associate in Arts in Hawaiian Studies
- Associate in Science in Natural Science
- Associate in Science in Veterinary Technology

#### Academic Subject Certificates (ASC)

- Ahupua‘a Systems
- Art: Drawing and Painting
- Bio-Resources and Technology
- Business
- Creative Media
- General Music
- Hawaiian Music
- Hawaiian Studies
- MOP Marine Option Program (through UH Mānoa)
- Psycho-Social Developmental Studies
- Sustainability
Professional, Occupational and Technical Certificates

Certificates of Achievement
- Agripharmatech
- Veterinary Assisting

Certificates of Competence
- Web Support
- Information Security Specialist
- Plant Food Production and Technology
- Sustainable Agriculture

Noncredit Workforce Training
- Certified Nurse's Aide
- CPR, First Aid and AED
- Foodservice
- Ocean Education and Safety
- Office Worker Pathway

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;
- intending to earn an Associate in Science degree;
- intending to earn a Certificate of Achievement in a vocational program;
- intending to earn a Certificate of Competence 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, note taking, memory skills;
- interested in updating skills and knowledge for employment in certain vocational fields

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

Learning communities are also offered. Here, instructors offering courses integrate their courses together.

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. (Pre-tests are not used in grading students.)

General Education Mission Statement
Windward Community College provides an open door to a comprehensive general education through which students enhance basic tools of inquiry for understanding themselves and the world around them, develop their capacity to expand and apply knowledge, and cultivate more creative and meaningful lives. With an orientation to Hawai’i and its unique heritage, general education at Windward Community College includes Global and Cultural Awareness, Critical Thinking and Creativity, Communication, and Information Literacy.

General Education Student Learning Outcomes
Global and Cultural Awareness
Develop the ability to perceive how people interact with their cultural and natural environments, through their own worldview and through the worldviews of others, in order to analyze how individuals and groups function in local and global contexts.

Specific outcomes in Global and Cultural Awareness may include:

- Analyze and empathize with the attitudes and beliefs of other cultures
• Identify instances where cultural norms affect cross-cultural communication
• Explore how various factors shape a culture’s development and values and one’s sense of place

**Critical Thinking and Creativity**

Make judgments, solve problems, and reach decisions using analytical, critical, and creative thinking skills.

Specific outcomes in Critical Thinking and Creativity may include:

• Identify challenges and problems and find solutions through creative exploration, scientific and quantitative reasoning, and other forms of inquiry
• Analyze complex ideas to arrive at reasoned conclusions
• Use creative processes to discover potential and to express ideas and beliefs

**Communication**

Use written, visual, and oral communication to discover, develop, and communicate meaning, and to respond respectfully to the ideas of others in multiple environments.

Specific outcomes in Communication may include:

• Listen to, comprehend, interpret, analyze, synthesize and evaluate ideas
• Present ideas in a variety of formats, including written, oral and visual
• Convey ideas and facts to a variety of audiences in various contexts

**Information Literacy**

Identify information needed in a variety of situations, and access, evaluate, and use relevant information effectively and responsibly.

Specific outcomes in Information Literacy may include:

• Determine the nature and extent of information needed in order to accomplish a goal
• Use appropriate resources and methods to access and acquire relevant information
• Critically evaluate information and its sources
• Organize, synthesize, and communicate information to achieve a specific purpose
• Apply ethical, legal and social standards when using information and information technology

**Transfer of General Education Core Requirements**

Students who complete the general education core requirements at one University of Hawai‘i campus before transferring will be considered upon transfer to have satisfied the general education core requirements at any other University of Hawai‘i campus (as of Fall 2011).

**Associate in Arts Degree (AA)**

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 AA degree are also applicable at their next campus.

**Associate in Science Degree (AS)**

The Associate in Science degree is designed to prepare students for employment in career and technical fields, and/or transfer to a baccalaureate granting institution in a science technology, engineering, mathematics, or other articulated baccalaureate-level programs of study.

**Certificate Programs**

The College offers certificate-level programs within the Associate in Arts degree (Academic Subject Certificate) and certificate-level programs (Certificate of Achievement and Certificate of Competence), 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 Agripharmatech, Veterinary Assisting, and Web Support.

In the Associate in Arts degree, most credits completed in certificate-level programs (Academic Subject Certificate) may be applied to meet the Associate in Arts degree program requirements.
Certificate of Achievement (CA)
The Certificate of Achievement is a college credential for students who have successfully completed designated medium-term technical-occupational-professional education credit course sequences, providing them with entry-level or job upgrading skills. These course sequences shall be at least 24 credits hours but may not exceed 45 credit hours (unless external employment requirements exceed this number). The issuance of a Certificate of Achievement requires that the student must earn a GPA of 2.0 or better for all courses required in the certificate.

Certificate of Competence (CO)
The Certificate of Competence is a college credential for students who successfully complete designated short-term credit or noncredit courses, providing them with job upgrading or entry-level skills. The issuance of a Certificate of Competence requires that the student's work has been evaluated and determined to be satisfactory. Credit course sequences shall be at least four (4) but less than 24 credits. In a credit course sequence, the student must earn a GPA of 2.0 or better of all courses required in the certificate.

Academic Subject Certificate (ASC)
The Academic Subject Certificate is a college credential for students who have successfully completed a specific sequence of credit courses, from the Associate in Arts curriculum. The sequence must fit within the structure of the AA degree, may not extend the credits required for the AA 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.

Additional Offerings
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.

Distance Learning
Distance Learning provides classes to students outside of the classroom through cable, interactive television, and the internet.

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 fieldwork 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 Office of the Vice Chancellor for Academic Affairs. The deadline for registration in an independent study course is October 10 for the Fall semester and March 1 for the Spring semester. If these dates should fall on a weekend, the deadline is the following Monday. Students who request an Independent Study must meet the admission deadline. If students who request Independent Study are not enrolled in other classes, a late fee will apply.

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 UH Mānoa campus.

Online Learning
Online learning takes place primarily on the internet, although students may be required to do outside activities and to take tests at official proctoring sites. To take an online class, a student must have access to a computer, the internet, and a UH email account. Online courses require the use of Laulima,
University of Hawai‘i’s online course system (http://laulima.hawaii.edu). The instructor will provide students with a list of software that will be needed, which should be purchased and/or downloaded before the first day of class. Students should actively participate in the online discussion forums, chats, and other forms of online interaction in their course to maximize learning. Communication, time management, and other skills crucial to success in the online learning environment are discussed at Windward CC’s online information page https://windward.hawaii.edu/evening-online-education/. Here, one can also find useful web pages and other relevant information.

Service-Learning
Service-learning is a learning option in designated courses at Windward Community College. Students who opt for service-learning earn partial course credit by actively applying the skills and perspectives taught in academic courses in ways that benefit the community. Students work with instructors and the Service-Learning office to select approved community sites. Service-learning enhances the academic experience by incorporating a real-world component to the curriculum, as well as fostering civic responsibility, career exploration, and community connections in students.

Sustainability or S-designated courses
Sustainability (S) designated courses are designed to teach students about sustainability across a variety of academic disciplines. They are part of a growing systemwide effort to teach students ecological literacy and make the University of Hawai‘i system a leader in sustainability. These courses are not a graduation requirement, but the designation can steer students towards courses that address environmental issues. Sustainability designated courses encourage students to learn about the social, cultural, economic, political, scientific, and artistic approaches to sustainability, recognizing the valuable contributions from each academic discipline to thinking about the health of the planet and local communities. Sustainability designated courses may be either S-focused or S-related.

S-focused – these courses focus primarily on sustainability from within a given academic discipline and/or the course will examine an issue or topic using sustainability as a lens.

S-related – these courses include some assignments and course content that addresses issues of sustainability.

S-Designation Hallmarks

- A significant component of readings, assignments, and other course materials address environmental topics.
- The course teaches students to think critically and examine environmental challenges and debates on an international, national, and local level.

Students learn the underlying causes of environmental challenges and explore ways to address these challenges.

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.

Generally speaking, students earn 60 credits of courses with numbers of 100 and above before transferring to another institution. (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 to Apply for a Transfer
Students should plan to apply at least one semester before they plan to enroll at a new school. Some colleges have early deadlines; specific information can be found in college catalogs and websites. Deadline dates pertain to the admissions application form and require receipt of official transcripts from all colleges previously attended by that date.

Transferring Credits
The transfer school will evaluate transcripts and determine which credits will be accepted as part of the degree that you are seeking there. There is no physical transfer of actual credits; your permanent academic record at Windward Community College always remains here. 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).

Transferring to the UH Mānoa Campus
It’s important to observe deadlines when applying to UH Mānoa. Send for official transcripts from other colleges in plenty of time to reach UH Mānoa by the published application deadlines. UH Mānoa accepts credits that have been completed with a grade of D (not D–) or better.
Credit/No Credit grading options at Windward Community College need to be avoided if you expect to use the course in fulfillment of UH Mānoa core or major requirements. UH Mānoa will apply Credit/No Credit marks only to electives, but not to requirements (unless you had no choice because the course was offered for a mandatory Credit/No Credit grade).

UH Mānoa requires 60 or more credits of non-introductory courses for its bachelor's 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 specific requirements for a bachelor's degree at UH Mānoa. Students are encouraged to visit the UH Mānoa Advising Center for degree requirements and advising at UH Mānoa.

To enter the UH Mānoa campus as a transfer student, at least 24 credits of college-level work (courses numbered 100 and above), with a grade point average of 2.0 or better are required. Students may have more than 24 credits, but they still need to have a 2.0 or better grade point average. If a student wishes to enter the UH Mānoa campus with fewer than 24 credits, she or he will need to provide SAT (or ACT) test scores and their high school grades.

**Ka'ie'ie Program Supporting Transfer to UH Mānoa**

The Ka'ie'ie Transfer Program is a dual-admission, dual-enrollment program between Windward Community College and the University of Hawai'i at Mānoa. This program is for students who plan to transfer to UH Mānoa to obtain a four-year degree, but choose to begin their degree at Windward CC. It is designed to facilitate a smooth and successful transfer experience from Windward CC to UH Mānoa. For more information, please contact the Ka'ie'ie counselor at 808-235-7464.

**Transferring to Institutions Other than UH Mānoa**

Students planning to transfer to a college outside the UH System are urged to review college catalogs and website information 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 accurate information from any college or university that is being considered for transfer.

**Auto Admission and Reverse Transfer**

Automatic admission and reverse transfer are two University of Hawai'i System initiatives designed to better serve students who transfer between the two-year and four-year campuses.

The admissions standards at UH remain unchanged, but these procedural changes will expedite a student’s ability to enroll and to finish a degree program. Automatic admission will admit a student that meets 97% of the graduation requirements from one of the seven community colleges to one of the three baccalaureate campuses in Hawai'i.

For community college students who transferred to a four-year college before receiving a degree, reverse transfer will lead to a credit review to determine if they have earned their associate's degree. See a counselor for more information.

**Graduation Requirements**

**Graduation Certification**

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 will follow the program requirements stated in the course catalog at the time of their initial enrollment, providing that the student has been continually enrolled. Continual enrollment is defined as attending each semester (excluding summer session) for at least one credit hour of coursework. Students who have a break in enrollment will be subject to the degree requirements in effect at the time of re-enrollment.

Students who intend to purchase a diploma must have a graduation certification completed by a counselor and submitted by the deadline with the Admissions & Records Office. If you are granted the diploma and continue your enrollment at Windward Community College, you are advised to submit a change of major or your status will be Unclassified.

**Auto Notation of Academic Credentials**

A student will be notified via email of the potential to earn a credential when enrolled in coursework that will fulfill requirements to complete a certificate or degree. Upon successful completion of requirements, academic credential will be notated on the student's official transcript, unless the awarding institution is informed not to notate the completed credential at the request of the student. Notation of the academic credential will be completed at no cost to the student.
Scholastic Standards
A cumulative 2.0 grade point average is required for graduation with the associate’s degree. At least 12 of the credits for the associate’s degree must be earned at Windward Community College. Students completing certificate program requirements must successfully complete credits in specified fields and maintain a cumulative grade point average of 2.0. At least 20% of the required courses for the certificate must be earned at the College. Under certain circumstances, this requirement may be waived upon a request made to the Vice Chancellor for Academic Affairs.

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

To earn an AA 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 AA 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 AA degree requirements.

At least 12 of the credits for the AA 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.

Program Learning Outcomes

Global and Cultural Awareness
Develop the ability to perceive how people interact with their cultural and natural environments, through their own worldview and through the worldviews of others, in order to analyze how individuals and groups function in local and global contexts. Specific outcomes in Global and Cultural Awareness may include:

- Analyze and empathize with the attitudes and beliefs of other cultures
- Identify instances where cultural norms affect crosscultural communication
- Explore how various factors shape a culture’s development and values and one’s sense of place
- Take an active role in the community (work, service, co-curricular activities)

Critical Thinking and Creativity
Make judgments, solve problems, and reach decisions using analytical, critical, and creative thinking skills. Specific outcomes in Critical Thinking and Creativity may include:

- Identify challenges and problems and find solutions through creative exploration, scientific and quantitative reasoning, and other forms of inquiry
- Analyze complex ideas to arrive at reasoned conclusions
- Use creative processes to discover potential and to express ideas and beliefs

Communication
Use written, visual, and oral communication to discover, develop, and communicate meaning, and to respond respectfully to the ideas of others in multiple environments. Specific outcomes in Communication may include:

- Listen to, comprehend, interpret, analyze, synthesize, and evaluate ideas
- Present ideas in a variety of formats, including written, oral, and visual
- Convey ideas and facts to a variety of audiences in various contexts

Information Literacy
Identify information needed in a variety of situations, and access, evaluate, and use relevant information effectively and responsibly. Specific outcomes in Information Literacy may include:

- Determine the nature and extent of information needed in order to accomplish a goal
- Use appropriate resources and methods to access and acquire relevant information
- Critically evaluate information and its sources
- Organize, synthesize, and communicate information to achieve a specific purpose
- Apply ethical, legal, and social standards when using information and information technology

General Education Core Requirements

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.

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REQUIREMENT: Three (3) credits in English 100 and three (3) credits selected from SP 151, 181, 231, 251, 253 or THEA 222.

Quantitative Reasoning
Effective Fall 2018, Quantitative Reasoning (FQ) replaces Symbolic Reasoning (FS) as a General Education Core requirement. To ensure there is adequate time for students who entered the UH System prior to Fall 2018 to complete their FS requirements, FS and FS-FQ courses will be offered through 2020 at UH community colleges.

The primary goal of FQ courses is to develop mathematical reasoning skills at the college level. Students apply mathematical concepts to the interpretation and analysis of quantifiable information in order to solve a wide range of problems arising in pure and applied research in specific disciplines, professional settings, and/or daily life.

Students entering the UH System in Fall 2018 and beyond may select courses from either the FS-FQ or FQ categories. Students who entered the UH System prior to Fall 2018 and have been continuously enrolled should refer to their original catalog year requirements. Students should contact their designated School/College academic or faculty advisor for more information.

REQUIREMENT: Three (3) credits from FQ designated courses

Global and Multicultural Perspectives
Global and multicultural perspectives courses provide thematic treatments of global processes and cross-cultural interactions from a variety of perspectives. Students will gain a sense of human development from prehistory to modern times through consideration of narratives and artifacts of and from diverse cultures. At least one component of each of these courses will involve the indigenous cultures of Hawai‘i, the Pacific, or Asia.

REQUIREMENT: Six (6) credits must come from two of three Global & Multicultural Perspectives groups: FGA, FGB, or FGC

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 six (6) credits selected from two of three groups: Arts, Humanities or Literature

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 six (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 six (6) credits made up of two or more courses from two different subject areas

Writing Intensive Courses
Writing Intensive (WI) Courses are part of a University of Hawai‘i 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:

- Writing promotes learning of course content
- Writing is considered to be a process in which multiple drafts are encouraged
- Writing contributes significantly to each student's course grade
- 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
To allow for meaningful teacher-student interaction on each student’s writing, the class is restricted to 20 students.

REQUIREMENT: Two Writing Intensive (WI) courses are required

Degrees

Associate in Arts in Liberal Arts

Associate in Arts Degree

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

To earn an AA 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 AA 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 AA degree requirements.

At least 12 of the credits for the AA 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.

Program Learning Outcomes

Global and Cultural Awareness

Develop the ability to perceive how people interact with their cultural and natural environments, through their own worldview and through the worldviews of others, in order to analyze how individuals and groups function in local and global contexts. Specific outcomes in Global and Cultural Awareness may include:

- Analyze and empathize with the attitudes and beliefs of other cultures
- Identify instances where cultural norms affect crosscultural communication
- Explore how various factors shape a culture’s development and values and one’s sense of place
- Take an active role in the community (work, service, co-curricular activities)

Critical Thinking and Creativity

Make judgments, solve problems, and reach decisions using analytical, critical, and creative thinking skills. Specific outcomes in Critical Thinking and Creativity may include:

- Identify challenges and problems and find solutions through creative exploration, scientific and quantitative reasoning, and other forms of inquiry
- Analyze complex ideas to arrive at reasoned conclusions
- Use creative processes to discover potential and to express ideas and beliefs

Communication

Use written, visual, and oral communication to discover, develop, and communicate meaning, and to respond respectfully to the ideas of others in multiple environments. Specific outcomes in Communication may include:

- Listen to, comprehend, interpret, analyze, synthesize, and evaluate ideas
- Present ideas in a variety of formats, including written, oral, and visual
- Convey ideas and facts to a variety of audiences in various contexts

Information Literacy

Identify information needed in a variety of situations, and access, evaluate, and use relevant information effectively and responsibly. Specific outcomes in Information Literacy may include:

- Determine the nature and extent of information needed in order to accomplish a goal
- Use appropriate resources and methods to access and acquire relevant information
- Critically evaluate information and its sources
- Organize, synthesize, and communicate information to achieve a specific purpose
- Apply ethical, legal, and social standards when using information and information technology
General Education Core Requirements

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 (3) credits in English 100 and three credits selected from SP 151, 181, 251, 253 or THEA 222.

Quantitative Reasoning
Effective Fall 2018, Quantitative Reasoning (FQ) replaces Symbolic Reasoning (FS) as a General Education Core requirement. To ensure there is adequate time for students who entered the UH System prior to Fall 2018 to complete their FS requirements, FS and FS-FQ courses will be offered through 2020 at UH community colleges.

The primary goal of FQ courses is to develop mathematical reasoning skills at the college level. Students apply mathematical concepts to the interpretation and analysis of quantifiable information in order to solve a wide range of problems arising in pure and applied research in specific disciplines, professional settings, and/or daily life.

Students entering the UH System in Fall 2018 and beyond may select courses from either the FS-FQ or FQ categories. Students who entered the UH System prior to Fall 2018 and have been continuously enrolled should refer to their original catalog year requirements. Students should contact their designated School/College academic or faculty advisor for more information.

REQUIREMENT: Three (3) credits from FQ designated courses

Global and Multicultural Perspectives
Global and multicultural perspectives courses provide thematic treatments of global processes and cross-cultural interactions from a variety of perspectives. Students will gain a sense of human development from prehistory to modern times through consideration of narratives and artifacts of and from diverse cultures. At least one component of each of these courses will involve the indigenous cultures of Hawai‘i, the Pacific, or Asia.

REQUIREMENT: Six (6) credits must come from two of three Global & Multicultural Perspectives groups: FGA, FGB, or FGC.

Arts and Humanities
Through the 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 six (6) credits selected from two of three groups: Arts, Humanities, or Literature.

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 six (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 six (6) credits made up of two or more courses from two different subject areas.

Writing Intensive Courses
Writing Intensive (WI) Courses are part of a University of Hawai‘i system-wide 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:

- Writing promotes learning of course content.
• Writing is considered to be a process in which multiple drafts are encouraged.
• Writing contributes significantly to each student’s course grade.
• 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.

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

REQUIREMENT: Two Writing Intensive (WI) courses are required.

**Associate in Arts in Liberal Arts**

Windward Community College offers three Associate in Arts degrees: Liberal Arts, Concentration in Art, and Concentration in Theatre.

**NOTE**

* Generally, any one course can fulfill only one area, e.g., SP 151, SP 251 can fulfill either OC or DA, but not both.

**Type:** Associate in Arts

**Graduation Requirements**

**Writing Intensive (WI)**

Required: A total of two courses

**Oral Communication (OC)**

Required: A total of three (3) credits

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<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
<td>Writing Intensive (WI)</td>
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<tr>
<td></td>
<td>Oral Communication (OC)</td>
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</tbody>
</table>

**Foundations Requirements**

**Written Communication (FW)**

Required: A total of three (3) credits

**Global & Multicultural Perspectives (FG)**

Required: A total of six (6) credits from two different groups (A, B or C)

**Quantitative Reasoning (FQ)**

Required: A total of three (3) credits

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<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENG 100</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td></td>
<td>Global and Multicultural Perspectives (FG): Groups A, B &amp; C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quantitative Reasoning (FQ)</td>
<td></td>
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</tbody>
</table>
Diversification Requirements
Arts, Humanities and Literature

Required: A total of six (6) credits from two different groups (DA, DH or DL)

Natural Sciences (DB, DP and DY)

Required: A minimum of six (6) credits with three (3) credits from the biological science area (DB) and three (3) credits from the physical science area (DP). In addition, the student must take a science laboratory/field trip course (DY).

Social Sciences (DS)

Required: A total of six (6) credits from two different subject areas

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<th>Item #</th>
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<tbody>
<tr>
<td></td>
<td>Diversification: Arts (DA)</td>
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<td></td>
<td>Diversification: Humanities (DH)</td>
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<td></td>
<td>Diversification: Literature (DL)</td>
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<td></td>
<td>Diversification: Biological Sciences (DB)</td>
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<tr>
<td></td>
<td>Diversification: Physical Sciences (DP)</td>
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<td></td>
<td>Diversification: Natural Sciences (DY)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diversification: Social Sciences (DS)</td>
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</tbody>
</table>

Electives
Required: 27 credits in courses numbered 100 or above.

Art Concentration: Required Courses
The Associate in Arts Degree in Liberal Arts with a Concentration in Art provides students with a strong studio art experience and art history curriculum that integrates conceptual and technical artistic skills with personal and creative exploration.

ART 113 and 116:

- Course articulates with UH Mānoa Art department course.
- Course cannot be used to fulfill AA Liberal Arts Diversification in Arts (DA) requirement when used to fulfill the Art Concentration requirement.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ART 113</td>
<td>Introduction to Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 116</td>
<td>Introduction to Three-Dimensional Composition</td>
<td>3</td>
</tr>
</tbody>
</table>
Art Concentration: Art Electives (12 credits)
Select four additional art studio lab courses from the list below. For any courses listed below which may be repeatable, only three (3) credits may be applied to the Art Concentration Elective (ACE) Requirement. When a course has fulfilled the ACE Requirement and is then repeated, the additional three (3) credits may be applied to either the Diversification in Arts (DA) or General Elective Requirements.

- Course articulates with UH Mānoa Art department course.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ART 105B</td>
<td>Introduction to Ceramics–handbuilding</td>
<td>3</td>
</tr>
<tr>
<td>ART 105C</td>
<td>Introduction to Ceramics–wheelthrowing</td>
<td>3</td>
</tr>
<tr>
<td>ART 243</td>
<td>Intermediate Ceramics–handbuilding</td>
<td>3</td>
</tr>
<tr>
<td>ART 244</td>
<td>Intermediate Ceramics–wheelthrowing</td>
<td>3</td>
</tr>
<tr>
<td>ART 253</td>
<td>Sculpture–figure Modeling</td>
<td>3</td>
</tr>
<tr>
<td>ART 107</td>
<td>Introduction to Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 207</td>
<td>Intermediate Photography: Techniques and Aesthetics of Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 111</td>
<td>Introduction to Watercolor Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 114</td>
<td>Introduction to Color</td>
<td>3</td>
</tr>
<tr>
<td>ART 115</td>
<td>Introduction to 2d Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 123</td>
<td>Introduction to Oil Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 223</td>
<td>Intermediate Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 213</td>
<td>Intermediate Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 214</td>
<td>Introduction to Life Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 224</td>
<td>Painting from Life</td>
<td>3</td>
</tr>
<tr>
<td>ART 189</td>
<td>Introduction to Hawai'iian Art</td>
<td>3</td>
</tr>
<tr>
<td>ART 260</td>
<td>Gallery Design and Management</td>
<td>3</td>
</tr>
<tr>
<td>ART 202</td>
<td>Introduction to Digital Imaging</td>
<td>3</td>
</tr>
<tr>
<td>ART 104D</td>
<td>Introduction to Printmaking/Screen Printing</td>
<td>3</td>
</tr>
</tbody>
</table>

Art Concentration: General Electives
Any 12 credits numbered 100 or higher.

Theatre Concentration: Required Courses
The Associate in Arts degree in Liberal Arts with a Concentration in Theatre provides students with a strong performing arts experience and integrates conceptual and practical performance skills with personal and creative exploration. Upon completion of this 60-credit program, which satisfies all the requirements for the AA degree in Liberal Arts, students will be prepared to transfer to a four-year institution to further their study (BA/BFA) in the various areas of theatre arts, including acting, musical theatre, playwriting, stage combat, and theatre production, or continue on their journey of becoming a professional artist.

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<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>THEA 101</td>
<td>Introduction to Drama and Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEA 260</td>
<td>Dramatic Production</td>
<td>3</td>
</tr>
</tbody>
</table>

Any 2: THEA 200 B, C or D
Theatre Concentration Electives (9 credits)

Choose 9 credits from the following list.

*Note: THEA 221 Acting I must be taken to fulfill AA Liberal Arts Diversification in Arts (DA) requirement for the Theatre Concentration.

<table>
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<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>THEA 131</td>
<td>Beginning Unarmed Stage Combat</td>
<td>3</td>
</tr>
<tr>
<td>THEA 132</td>
<td>Beginning Sword Stage Combat</td>
<td>3</td>
</tr>
<tr>
<td>THEA 133</td>
<td>Stage Combat Workshop Level I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 177</td>
<td>Introduction to Theatre of Hawai’i</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>THEA 200 B, C or D</td>
<td>1</td>
</tr>
<tr>
<td>THEA 220</td>
<td>Beginning Voice and Movement</td>
<td>3</td>
</tr>
<tr>
<td>THEA 222</td>
<td>Acting II</td>
<td>3</td>
</tr>
<tr>
<td>THEA 231</td>
<td>Intermediate Unarmed and Staff Stage Combat</td>
<td>3</td>
</tr>
<tr>
<td>THEA 232</td>
<td>Intermediate Rapier and Dagger Stage Combat</td>
<td>3</td>
</tr>
<tr>
<td>THEA 233</td>
<td>Stage Combat Workshop Level II</td>
<td>3</td>
</tr>
<tr>
<td>THEA 240</td>
<td>Introduction to Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>THEA 241</td>
<td>Advanced Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>THEA 260</td>
<td>Dramatic Production</td>
<td>3</td>
</tr>
<tr>
<td>THEA 280</td>
<td>Beginning Playwriting</td>
<td>3</td>
</tr>
<tr>
<td>THEA 296</td>
<td>Special Topics in Theatre</td>
<td>3</td>
</tr>
</tbody>
</table>

Theatre Concentration: General Electives

Electives: Any 10 credits numbered 100 or higher

Exploratory Majors

Exploratory majors are designed to use the students’ interests as a starting point and to help provide structure and narrow choices for student success. At UHCCs, Exploratory Majors are designed primarily for Liberal Arts students who are unclear as to what they want to do, but have some idea of the general area they want to study. Currently, Windward CC has two exploratory majors: Exploratory Business and Exploratory Social Sciences. Exploratory majors will have a defined set of courses that are applicable to the students’ terminal or transfer degrees. Within a well-defined set timeframe, students are counseled into a specific major or concentration.

Associate in Arts in Hawaiian Studies

The Associate in Arts in Hawaiian Studies is a 60-credit degree that is a foundational degree in Hawaiian knowledge and culture. The AA degree is patterned after Windward CC’s current liberal arts AA degree and is an option for students seeking an associate degree and subsequent entry into most baccalaureate programs at UH Mānoa, UH Hilo, and UH West O’ahu. The degree is also a pathway for entrance into either UH Mānoa or UH Hilo Hawaiian Studies programs. The AAHS also provides students with qualifications that will be useful in the workforce where an understanding of the host culture or application of Hawaiian knowledge is desired.

Program Outcomes

Upon successful completion of the Associate in Arts degree in Hawaiian studies, the student will be able to:

- Describe aboriginal Hawaiian linguistic, cultural, historical, and political concepts
- Apply aboriginal Hawaiian concepts, knowledge, and methods to the areas of science, humanities, arts, and social sciences—in academics and in other professional endeavors
- Engage, articulate, and analyze topics relevant to the aboriginal Hawaiian community using college-level research and writing methods

Type: Associate in Arts

Graduation Requirements: Oral Communication

Choose three (3) credits from the courses listed under OC on the Graduation Requirements page.
Graduation Requirements: Writing Intensive (WI)
Required: A total of two courses. See Graduation Requirements page

Graduation Requirements: Hawaiian Studies Requirements
- Hawaiian Studies Core Requirements (6 credits)
- Hawaiian Language Requirements (8 credits)

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<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HWST 107</td>
<td>Hawai'i: Center of the Pacific</td>
<td>3</td>
</tr>
<tr>
<td>HWST 270</td>
<td>Hawai'i Mythology</td>
<td>3</td>
</tr>
<tr>
<td>HAW 101</td>
<td>Elementary Hawai'i I</td>
<td>4</td>
</tr>
<tr>
<td>HAW 102</td>
<td>Elementary Hawai'i II</td>
<td>4</td>
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</table>

Foundation Requirements: Written Communication (FW)

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<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENG 100</td>
<td>Composition I</td>
<td>3</td>
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</table>

Foundation Requirements: Global and Multicultural Perspectives (FG)
Required: A total of six (6) credits; from two different groups

Note: GEOG 102 if taken at Windward CC Fall 2015 or later

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<th>Title</th>
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<tr>
<td></td>
<td>Global and Multicultural Perspectives (FG): Group A</td>
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<td></td>
<td>Global and Multicultural Perspectives (FG): Group B</td>
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<td></td>
<td>Global and Multicultural Perspectives (FG): Group C</td>
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</tbody>
</table>

Foundation Requirements: Quantitative Reasoning (FQ)
Required: A total of three (3) credits

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<tbody>
<tr>
<td></td>
<td>Quantitative Reasoning (FQ)</td>
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</tbody>
</table>
Diversification Requirements (18 credits)
Arts, Humanities and Literature (DA, DH, DL)

Required: A total of 6 credits selected from 2 groups

Natural Sciences (DB, DP, DY)

Required: A minimum of 6 credits with 3 credits from the biological science area (DB) and 3 credits from the physical science area (DP). In addition, the student must take a science laboratory/field trip course (DY).

Note: BIOL 101(4), BOT 205(4), 210(4), EE 211(4), and IS 201(2) fulfill both a lecture (DB or DP) and lab (DY) requirement simultaneously.

Social Sciences (DS)

Required: A total of 6 credits selected from 2 different subject areas.

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<tr>
<td></td>
<td>Diversification: HWST Arts (DA)</td>
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<td></td>
<td>Diversification: HWST Humanities (DH)</td>
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<td></td>
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<td>Diversification: Natural Sciences (DY)</td>
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<td></td>
<td>Diversification: Social Sciences (DS)</td>
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</tbody>
</table>

Electives
Required: A total of 13 credits numbered 100 or above

Associate in Science in Natural Science

The Associate in Science in Natural Science is a transfer degree designed for students pursuing STEM-related educational and career goals. The courses are designed to prepare students to transfer into science programs at UH Mānoa, UH Hilo, and UH West O'ahu.

The Associate in Science in Natural Science degree has four concentrations: Biological Science, Engineering, Physical Science, and Information and Communication Technology.

Program Learning Outcomes

Upon successful completion of Associate in Science in Natural Science, students will be able to:

- Analyze data effectively using the most currently available technology
- Communicate scientific ideas and principles clearly and effectively
- Analyze and apply fundamental mathematical, physical, and chemical concepts and techniques to scientific issues
- Apply fundamental concepts and techniques in their chosen field of study, such as biology, chemistry, geology, engineering, etc.

Type: Associate in Science

Graduation Requirements

The issuance of an AS degree requires that the student earn a grade point average (GPA) of 2.0 or higher for all courses applied towards the degree.

Foundation Requirements: Written Communication (FW)

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<tbody>
<tr>
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</table>
Foundation Requirements: Global and Multicultural Perspectives (FG)
Required: Six (6) credits from two different groups

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Global and Multicultural Perspectives (FG): Group A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Global and Multicultural Perspectives (FG): Group B</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Global and Multicultural Perspectives (FG): Group C</td>
<td></td>
</tr>
</tbody>
</table>

Foundation Requirements: Quantitative Reasoning (FQ)
The requirement will be fulfilled by the MATH requirement in the concentration.

Diversification Requirements
Arts, Humanities and Literature (DA, DH, DL)
Required: Three (3) credits

Social Sciences (DS)
Required: Three (3) credits

Biological or Physical Sciences (DB, DP)
Required for Physical Science, and Information and Communication Technology Concentrations: Three (3) credits

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Diversification: Arts (DA)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diversification: Humanities (DH)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diversification: Literature (DL)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diversification: Social Sciences (DS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diversification: Biological Sciences (DB)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diversification: Physical Sciences (DP)</td>
<td></td>
</tr>
</tbody>
</table>
**Elective Requirements: Natural Science Electives**

Required for Biological Science and Physical Science Concentrations. Natural Science Electives are required in addition to the required Concentration courses (not required for Engineering, and Information and Communication Technology Concentrations).

Required: Six (6) credits of transfer-level Natural Sciences courses (DB, DP, DY) and/or:

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 202</td>
<td>Agriculture, Environment, and Society</td>
<td>3</td>
</tr>
<tr>
<td>AG 202L</td>
<td>Agriculture, Environment, and Society Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 275L</td>
<td>Cell and Molecular Biology Lab</td>
<td>1</td>
</tr>
<tr>
<td>EE 160</td>
<td>Programming for Engineers</td>
<td>4</td>
</tr>
<tr>
<td>GG 101</td>
<td>Introduction to Geology</td>
<td>3</td>
</tr>
<tr>
<td>GG 101L</td>
<td>Introduction to Geology Lab</td>
<td>1</td>
</tr>
<tr>
<td>GG 103</td>
<td>Geology of Hawaiian Islands</td>
<td>3</td>
</tr>
<tr>
<td>GG 210</td>
<td>O’ahu Field Geology</td>
<td>1</td>
</tr>
<tr>
<td>GG 211</td>
<td>Big Island Field Geology</td>
<td>1</td>
</tr>
<tr>
<td>GG 212</td>
<td>Maui Field Geology</td>
<td>1</td>
</tr>
<tr>
<td>GG 213</td>
<td>Moloka’i, Lana’i, and Kahoolawe Field Geology</td>
<td>1</td>
</tr>
<tr>
<td>GG 214</td>
<td>Kaua’i and Ni’ihau Field Geology</td>
<td>1</td>
</tr>
<tr>
<td>ICS 111</td>
<td>Introduction to Computer Science I</td>
<td>3</td>
</tr>
<tr>
<td>ICS 141</td>
<td>Discrete Mathematics for Computer Science I</td>
<td>3</td>
</tr>
<tr>
<td>ICS 211</td>
<td>Introduction to Computer Science II</td>
<td>3</td>
</tr>
<tr>
<td>ICS 241</td>
<td>Discrete Mathematics for Computer Science II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 100</td>
<td>Survey of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 103</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 115 or higher</td>
<td>3</td>
</tr>
<tr>
<td>SCI 210</td>
<td>Polynesian Voyaging: Seamanship and Stewardship</td>
<td>3</td>
</tr>
<tr>
<td>SCI 210L</td>
<td>Polynesian Voyaging: Seamanship and Stewardship Lab</td>
<td>1</td>
</tr>
<tr>
<td>SCI 295V</td>
<td>Introduction to Stem Research</td>
<td>1-3</td>
</tr>
</tbody>
</table>

**Elective Requirements: General Electives**

Transfer-level courses (100 and 200-level courses) in any field to achieve a total of 60 credits.

**Biological Science Concentration (24 credits)**

For students pursuing the Biological Science Concentration, CHEM 161 fulfills the DP (Physical Science Diversification) for the Biological or Physical Sciences Diversification Requirements.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 171</td>
<td>Introduction to Biology I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 171L</td>
<td>Introduction to Biology I Lab</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 172</td>
<td>Introduction to Biology II</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 172L</td>
<td>Introduction to Biology II Lab</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 161</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 161L</td>
<td>General Chemistry I Lab</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 162</td>
<td>General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 162L</td>
<td>General Chemistry II Lab</td>
<td>1</td>
</tr>
<tr>
<td>MATH 241</td>
<td>(Formerly Math 205) Calculus I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BIOL 265/L or BIOL 275/L or CHEM 272/L or PHYS 151/L</td>
<td>4</td>
</tr>
</tbody>
</table>
Engineering Concentration (33 credits)
The Engineering Concentration is designed for students entering into engineering fields.

Students pursuing the Engineering Concentration do not have a Biological and Physical Sciences Diversification Requirement.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 161</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 161L</td>
<td>General Chemistry I Lab</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 162</td>
<td>General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 241</td>
<td>(Formerly Math 205) Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 242</td>
<td>(Formerly Math 206) Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 243</td>
<td>(Formerly Math 231) Calculus III</td>
<td>3</td>
</tr>
<tr>
<td>MATH 244</td>
<td>(Formerly Math 232) Calculus IV</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 170</td>
<td>General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 170L</td>
<td>General Physics I Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 272</td>
<td>General Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 272L</td>
<td>General Physics II Lab</td>
<td>1</td>
</tr>
<tr>
<td>CE 270 or EE 160 or EE 211 or PHYS 274 or SCI 295V</td>
<td></td>
<td>1-4</td>
</tr>
</tbody>
</table>

Physical Science Concentration (24 credits)
Students pursuing the Physical Sciences concentration must take at least one Biological Science course (DB) as one of the Biological or Physical Sciences Diversification Requirements.

NOTE: On the Physics options, choose the lab courses that correspond to your chosen lecture courses.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 161</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 161L</td>
<td>General Chemistry I Lab</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 162</td>
<td>General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 162L</td>
<td>General Chemistry II Lab</td>
<td>1</td>
</tr>
<tr>
<td>MATH 241</td>
<td>(Formerly Math 205) Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 242</td>
<td>(Formerly Math 206) Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 151 or PHYS 170</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>PHYS 151L or PHYS 170L</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>PHYS 152 or PHYS 272</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PHYS 152L or PHYS 272L</td>
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<td>1</td>
</tr>
</tbody>
</table>

Information and Communication Technology Concentration (31 credits)
An Associate in Science in Natural Science with a Concentration in Information and Communication Technology is a transfer degree designed for students interested in pursuing an academic study and career in fields related to computer science, including database design, website creation, and mobile applications.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ICT Natural Science Electives</td>
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<td>8-9</td>
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<tr>
<td>MATH 241</td>
<td>(Formerly Math 205) Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 242</td>
<td>(Formerly Math 206) Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>ICS 111</td>
<td>Introduction to Computer Science I</td>
<td>3</td>
</tr>
<tr>
<td>ICS 141</td>
<td>Discrete Mathematics for Computer Science I</td>
<td>3</td>
</tr>
<tr>
<td>ICS 211</td>
<td>Introduction to Computer Science II</td>
<td>3</td>
</tr>
<tr>
<td>ICS 212 or ICS 215</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ICS 241</td>
<td>Discrete Mathematics for Computer Science II</td>
<td>3</td>
</tr>
</tbody>
</table>

Associate in Science in Veterinary Technology
The Associate in Science in Veterinary Technology degree combines traditional classroom instruction with intensive hands-on laboratory and practical experience utilizing live animals in a clinical setting. Students enrolled in the program will receive didactic and practical training in pharmacology,
radiology, anesthesiology, surgical assisting, dentistry, nutrition, and veterinary office procedures and will learn how to perform over 200 skill sets deemed essential by the American Veterinary Medical Association (AVMA). During the final year of the program, students will intern at some of the over 20 preceptor clinics and shelters associated with Windward CC where their skills will be evaluated and critiqued by industry professionals. Not only does this experience allow students to hone and apply their skills in a real-world setting, but it will also serve as a bridge to future employment. The program is accredited by the AVMA.

There is a $100 professional fee each semester for the first year and a $300 professional fee each semester for the second year (subject to increase based on program cost and institutional approval).

After completing the program, students will be able to:

- Effectively communicate with clients and veterinary staff
- Perform routine business transactions and maintain patient and facility records
- Ensure the safety of patients, clients, and staff and maintain compliance with regulatory agencies
- Identify common breeds of companion animals, list their nutritional requirements and husbandry needs, and describe the anatomy and functions of major body systems
- Assist with physical exams and obtain patient histories
- Perform routine nursing procedures including first-aid, wound-management, and administration of medications and vaccines
- Develop a working knowledge of common companion animal diseases and their medical treatments
- Collect biological samples and perform diagnostic laboratory tests
- Assist with surgical procedures and dental cleaning

**Curriculum**

An AS in Veterinary Technology is awarded to students who complete the required 73 credits. Students in the program must attain and maintain a grade of “C” or better in all classes and maintain a cumulative GPA of 2.0 or higher. If a student withdraws or makes below a grade of “C” in a class, the student may not progress in the program until the course has been repeated successfully. Core classes may only be repeated once; students failing to make a grade “C” or better in a course that has been repeated may be dismissed from the program. Course repetition will be based on instructor approval and program resources.

It is anticipated that students will complete the degree in two years. Students are eligible for the Certificate of Achievement in Veterinary Assisting after the first year. Below are the degree requirements with current course descriptions:

**Type:** Associate in Science

**Year One: General Education and Preparatory Classes (9 credits)**

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 100</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td>PSY 100</td>
<td>Survey of Psychology</td>
<td>3</td>
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<tr>
<td></td>
<td>Speech or Theater Elective</td>
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</table>

**Veterinary Assisting Core Classes (22 credits)**

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 140</td>
<td>Introduction to Veterinary Technology</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 142</td>
<td>Anatomy and Physiology of Domestic Animals</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 142L</td>
<td>Anatomy of Domestic Animals Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 151</td>
<td>Clinical Laboratory Techniques</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 151L</td>
<td>Clinical Laboratory Techniques Lab</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 153</td>
<td>Companion Animal Nursing and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 153L</td>
<td>Companion Animal Nursing Lab</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 191</td>
<td>Veterinary Office and Computer Skills</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 125</td>
<td>Survey of Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td>MATH 101</td>
<td>Mathematics for Veterinary Assistants &amp; Technicians</td>
<td>3</td>
</tr>
</tbody>
</table>
Year Two: Associate in Science in Veterinary Technology

Humanities: Three (3) credits

*Includes:

ART 175  Survey of Global Art (3)

ART 176  Survey of Global Art II (3)

Year Two: Veterinary Technology Core Classes (39 credits)

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 152</td>
<td>Companion Animal Diseases and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 190</td>
<td>Veterinary Clinical Practices and Internship I</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 252</td>
<td>Diagnostic Imaging for Veterinary Technicians</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 252L</td>
<td>Diagnostic Imaging for Veterinary Technicians Lab</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 253</td>
<td>Applied Pharmacology for Veterinary Technicians</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 258</td>
<td>Clinical Laboratory Techniques II</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 258L</td>
<td>Clinical Laboratory Techniques II Lab</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 261</td>
<td>Anesthesiology and Dentistry for Veterinary Technicians</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 261L</td>
<td>Anesthesiology and Veterinary Dentistry for Veterinary Technicians Lab</td>
<td>2</td>
</tr>
<tr>
<td>ANSC 262</td>
<td>Clinical Procedures for Large Animals</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 262L</td>
<td>Clinical Procedures for Large Animals Lab</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 263</td>
<td>Exotic and Laboratory Animal Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 263L</td>
<td>Exotic and Laboratory Animal Procedures Lab</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 266</td>
<td>Veterinary Clinical Practices &amp; Internship II</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 271</td>
<td>Anesthesiology and Surgical Nursing for Veterinary Technicians</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 271L</td>
<td>Anesthesiology and Surgical Nursing for Veterinary Technicians Lab</td>
<td>2</td>
</tr>
<tr>
<td>ANSC 290</td>
<td>Veterinary Technician Exam Review</td>
<td>1</td>
</tr>
</tbody>
</table>

Academic Subject Certificates (ASC)

Ahupua‘a Systems: Indigenous Resource Management & Food Production

The Academic Subject Certificate in Ahupua‘a Systems: Indigenous Resource Management & Food Production is an academic internship program for students interested in ʻāina based work, carrying on cultural practices and traditions, and creating a sustainable food system, to gain hands-on experience, training, and education that ultimately provides a career in ahupua’a sustainability and community food systems. This ASC is geared to be a critical component of a Ko’olau poko district-wide collaborative internship/degree program with ʻāina based organizations and Windward Community College providing opportunities for interested youth to pursue career experience and higher education learning about traditional Hawaiian and contemporary community-based food sustainable systems and practices.

This certificate requires a total of 16-18 credits representing approximately one semester’s worth of coursework.

Upon successful completion of this certificate, students will be able to:

- Describe industrial farming practices with traditional based small scale, family, and community models
- Integrate basic environmental science concepts with traditional and modern resource management practices in recommending environmental, agricultural, and cultural management decisions
- Describe how traditional and indigenous perspectives inform practices of sustainable food production systems
- Describe the Konohiki system of land management as a means for modern-day natural resource management and food production
- Exhibit best management practices when participating in internship activities and utilizing natural resources

Type: Academic Subject Certificate
### Required Courses (10 credits)

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQUA 201</td>
<td>The Hawai'i Fishpond</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 201L</td>
<td>The Hawai'i Fishpond Lab</td>
<td>1</td>
</tr>
<tr>
<td>HWST 140</td>
<td>Mahi'ai I: Hawaiian Taro Culture</td>
<td>3</td>
</tr>
<tr>
<td>IS 201</td>
<td>The Ahupua'a</td>
<td>3</td>
</tr>
</tbody>
</table>

### Required Courses for Area of Emphasis: Natural Resources

*Choose 3-4 credits from the following:

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 120</td>
<td>Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 210</td>
<td>Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 200</td>
<td>Coral Reefs</td>
<td>3</td>
</tr>
<tr>
<td>BOT 105</td>
<td>Ethnobotany</td>
<td>3</td>
</tr>
<tr>
<td>BOT 130</td>
<td>Plants in the Hawaiian Environment</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 101</td>
<td>The Natural Environment</td>
<td>3</td>
</tr>
<tr>
<td>GG 103</td>
<td>Geology of Hawaiian Islands</td>
<td>3</td>
</tr>
<tr>
<td>HWST 107</td>
<td>Hawai'i: Center of the Pacific</td>
<td>3</td>
</tr>
<tr>
<td>HWST 275</td>
<td>Wahī Pana: Mythology of the Hawaiian Landscape</td>
<td>3</td>
</tr>
<tr>
<td>HWST 275L</td>
<td>Wahī Pana: Mythology of the Hawaiian Landscape Field Lab</td>
<td>1</td>
</tr>
<tr>
<td>OCN 102</td>
<td>Introduction to the Environment and Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>OCN 120</td>
<td>Global Environmental Challenges</td>
<td>3</td>
</tr>
</tbody>
</table>

### Required Courses for Area of Emphasis: Cultural Practice

*Choose 3-4 credits from the following:

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HWST 110</td>
<td>Huaka'i Wā'a: Introduction to Hawaiian Voyaging</td>
<td>3</td>
</tr>
<tr>
<td>HWST 135</td>
<td>Kālai Lā'au: Hawaiian Woodwork and Wood Carving</td>
<td>3</td>
</tr>
<tr>
<td>HWST 222</td>
<td>Ma'awe No'eau: Hawaiian Fiber Work</td>
<td>3</td>
</tr>
<tr>
<td>HWST 285</td>
<td>Lā'au Lapa'au I: Hawaiian Medicinal Herbs</td>
<td>4</td>
</tr>
<tr>
<td>ZOOL 105</td>
<td>Hawaiian Use of Fish and Aquatic Invertebrates</td>
<td>3</td>
</tr>
</tbody>
</table>

### Art: Drawing and Painting

The purpose of this Academic Subject Certificate in Art: 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 four-year institution to 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.

Upon successful completion of this certificate, students will be able to:

- Make accurate drawings and paintings from observation
- Apply the visual elements of line, shape, light and shadow, color, texture, and the design principles of balance, rhythm, focal points, implied movement, and unity in works of art
- Draw the human figure accurately and expressively

### 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.

The Academic Subject Certificate in Art: Drawing and Painting consists of 21 credits. At least half of the classes must be taken at Windward CC. See course descriptions for prerequisites.

Type: Academic Subject Certificate

### Required Courses

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 113</td>
<td>Introduction to Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 114</td>
<td>Introduction to Color</td>
<td>3</td>
</tr>
<tr>
<td>ART 115</td>
<td>Introduction to 2d Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 123</td>
<td>Introduction to Oil Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 213</td>
<td>Intermediate Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 214</td>
<td>Introduction to Life Drawing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ART 223 or ART 224</td>
<td>3</td>
</tr>
</tbody>
</table>

### Other Requirements

Approved Portfolio review required for graduation

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

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>Introduction to the Visual Arts</td>
<td>3</td>
</tr>
<tr>
<td>ART 111</td>
<td>Introduction to Watercolor Painting</td>
<td>3</td>
</tr>
</tbody>
</table>

---

### Bio-Resources and Technology: Bio-Resource Development and Management

The Academic Subject Certificate 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.

Upon successful completion of this certificate, students will be able to:

- Integrate basic environmental science concepts with traditional and modern resource management practices in recommending environmental management decisions
- Exhibit best management practices when extracting and utilizing natural resources
- Design and implement an environmental study
- Effectively use laboratory and field instrumentation to collect data
- Analyze and interpret environmental data
- Write an objective technical report involving the presentation and analysis of environmental data

Type: Academic Subject Certificate
Required Courses (14 credits)

*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; 3 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.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 101</td>
<td>Biology and Society</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 101</td>
<td>The Natural Environment</td>
<td>3</td>
</tr>
<tr>
<td>IS 201</td>
<td>The Ahupua'a</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 124</td>
<td>Environment and Ecology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 124L</td>
<td>Environment and Ecology Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

Elective Set 1 (6 credits)

Choose six (6) credits from the following:

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQUA 106</td>
<td>Small Scale Aquaculture</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 106L</td>
<td>Small Scale Aquaculture Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>AQUA 201</td>
<td>The Hawai'i Fishpond</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 201L</td>
<td>The Hawai'i Fishpond Lab</td>
<td>1</td>
</tr>
<tr>
<td>BOT 105</td>
<td>Ethnobotany</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEM 151 &amp; 151L</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ENVST 199 or 299</td>
<td>1-4</td>
</tr>
<tr>
<td>ZOOL 105</td>
<td>Hawai'Ian Use of Fish and Aquatic Invertebrates</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Set 2 (6 credits)

Environment and Ecology

Choose six (6) credits from the following:

*BIOL 265/265L and GEOG 101L are highly recommended for those students intending to enroll in a baccalaureate-level environmental science program.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Coral Reefs</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 200L</td>
<td>Coral Reef Laboratory and Field Studies</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>BIOL 265 &amp; 265L</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BOT 130 &amp; 130L</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ENVST 199 or 299</td>
<td>1-4</td>
</tr>
<tr>
<td>GEOG 101L</td>
<td>The Natural Environment Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>GG 103</td>
<td>Geology of Hawai'Ian Islands</td>
<td>3</td>
</tr>
<tr>
<td>HIST 285</td>
<td>Environmental History of Hawai'i</td>
<td>3</td>
</tr>
<tr>
<td>OCN 201</td>
<td>Science of the Sea</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 200</td>
<td>Marine Biology</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 200L</td>
<td>Marine Biology Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

Business

The Academic Subject Certificate 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 Academic Subject Certificate have specific prerequisite business skills.
Upon successful completion of this certificate, students will be able to:

- Utilize the appropriate computer applications to produce professional-level documents, including electronic spreadsheets, presentations, databases, and web pages to enhance effective communication.
- Understand and apply basic accounting skills such as recording, posting, summarizing, and interpreting financial data of an organization.
- Develop a working understanding of skills required for effective management of a business, including but not limited to communications, administrative, technical, human relations, and problem-solving.
- Develop a basic understanding of ethical and moral issues involved in and related to the use of computer technology, the misuse of accounting information, and employment issues of women and other minority groups.

This certificate consists of 24 credits. The sequence of courses required for the Academic Subject Certificate 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 into a four-year college program. There may be other required courses. See your Windward CC counselor, or check the four-year institution's applicable program requirements or current catalog.

**Type:** Academic Subject Certificate

### Required Courses (24 credits)

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 200 or ACC 201</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACC 202 or ACC 210</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 130</td>
<td>Principles of Microeconomics)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 131</td>
<td>Principles of MACRoeconomics)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 100</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 209</td>
<td>Business Writing</td>
<td>3</td>
</tr>
<tr>
<td>ICS 101</td>
<td>Digital Tools for the Information World</td>
<td>3</td>
</tr>
<tr>
<td>SP 151 or SP 251</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Creative Media**

Students in the Academic Subject Certificate in Creative Media focus on video game design or filmmaking, learn the foundational skills of their craft, and produce a final project with professional equipment which conforms to professional standards. Upon completion of this 24-credit certificate, students will be prepared to launch their own entrepreneurial careers, to seek industry jobs or to pursue advanced academic study of their craft.

Upon successful completion of this certificate, students will be able to:

- Understand and properly use the vocabulary of their industry (filmmaking or video game design)
- Apply the technical skills of their industry and creative problem solving to produce a creative media product (a documentary short film, a fictional short film, or a video game)
- Develop a plan to take their creative media product to market

This certificate consists of a minimum 24 total credits with three different tracks of emphasis: Video Game Design, Documentary Filmmaking, and Creative Filmmaking.

**Type:** Academic Subject Certificate

### Required Course

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 150</td>
<td>Media and Society</td>
<td>3</td>
</tr>
</tbody>
</table>
Required Courses for Video Game Design (21 credits)
* Take CM 242 twice.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ART/CM 126</td>
<td>3</td>
</tr>
<tr>
<td>CM 142</td>
<td>Introduction to Video Game Design</td>
<td>3</td>
</tr>
<tr>
<td>CM 242</td>
<td>Video Game Design II</td>
<td>3</td>
</tr>
<tr>
<td>CM 242</td>
<td>Video Game Design II</td>
<td>3</td>
</tr>
<tr>
<td>CM 271</td>
<td>Games and Gaming in Society</td>
<td>3</td>
</tr>
<tr>
<td>CM 272</td>
<td>Concepts in Game Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Required Courses for Documentary Filmmaking (21 credits)
* Take CM 220 twice.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM 120</td>
<td>Introduction to Digital Video</td>
<td>3</td>
</tr>
<tr>
<td>CM 220</td>
<td>Intermediate Digital Video</td>
<td>3</td>
</tr>
<tr>
<td>CM 220</td>
<td>Intermediate Digital Video</td>
<td>3</td>
</tr>
<tr>
<td>CM 235</td>
<td>Introduction to Cinema and Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 200</td>
<td>Introduction to Multimedia Journalism</td>
<td>3</td>
</tr>
</tbody>
</table>

Required Courses for Creative Filmmaking (21 credits)
*Take CM 220 twice

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM 120</td>
<td>Introduction to Digital Video</td>
<td>3</td>
</tr>
<tr>
<td>CM 220</td>
<td>Intermediate Digital Video</td>
<td>3</td>
</tr>
<tr>
<td>CM 220</td>
<td>Intermediate Digital Video</td>
<td>3</td>
</tr>
<tr>
<td>CM 255</td>
<td>Introduction to Cinema and Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>CM/THEA 223</td>
<td>Introduction to Cinema and Digital Media</td>
<td>3</td>
</tr>
</tbody>
</table>

Capstone Course

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM 295A</td>
<td>Careers in Video Game Design</td>
<td>3</td>
</tr>
<tr>
<td>CM 295B</td>
<td>Careers in Filmmaking</td>
<td>3</td>
</tr>
</tbody>
</table>

General Music

The Academic Subject Certificate in General Music prepares and encourages students to pursue a professional career in music performance, studio recording, or music academia.

Upon successful completion of this certificate students will be able to:

- Demonstrate basic elements of music theory and applications in areas such as notation, rhythm, and expression
- Demonstrate professional performance practices
- Analyze music history, literature, and culture
- Demonstrate proficiency on their instrument of choice

This certificate consists of a minimum of 25 credits.

**Type:** Academic Subject Certificate
**Required Courses (13 credits)**

* If piano is your primary instrument, you must choose a MUS 121(B, D, F, or Z) course to fulfill your core requirement.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 106</td>
<td>Intro to Music Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUS 107</td>
<td>Music in World Cultures</td>
<td>3</td>
</tr>
<tr>
<td>MUS 108</td>
<td>Music Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MUS 121C</td>
<td>Piano 1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Level 2 Primary Instrument OR MUS 211</td>
<td>2</td>
</tr>
</tbody>
</table>

**Elective Courses (12 Credits)**

Music Performance Course Electives: Minimum of six (6) credits.

Music Course Electives: Minimum of three (3) credits.

*As follows:

**Required Electives: Music Performance**

Elective Music Performance Courses: Minimum of six (6) credits.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 114</td>
<td>College Chorus</td>
<td>2</td>
</tr>
<tr>
<td>MUS 121B</td>
<td>Voice 1</td>
<td>2</td>
</tr>
<tr>
<td>MUS 122B</td>
<td>Voice 2</td>
<td>2</td>
</tr>
<tr>
<td>MUS 121D</td>
<td>Guitar 1</td>
<td>2</td>
</tr>
<tr>
<td>MUS 121F</td>
<td>Slack Key Guitar 1</td>
<td>2</td>
</tr>
<tr>
<td>MUS 122F</td>
<td>Slack Key Guitar 2</td>
<td>2</td>
</tr>
<tr>
<td>MUS 122C</td>
<td>Piano 2</td>
<td>2</td>
</tr>
<tr>
<td>MUS 221C</td>
<td>Piano 3</td>
<td>2</td>
</tr>
<tr>
<td>MUS 222C</td>
<td>Piano 4</td>
<td>2</td>
</tr>
<tr>
<td>MUS 121Z</td>
<td>'ukulele 1</td>
<td>2</td>
</tr>
<tr>
<td>MUS 122Z</td>
<td>'ukulele 2</td>
<td>2</td>
</tr>
<tr>
<td>MUS 211</td>
<td>Intro to Hawaiian Ensemble</td>
<td>2</td>
</tr>
<tr>
<td>MUS 212</td>
<td>Polynesian Music</td>
<td>2</td>
</tr>
<tr>
<td>MUS 231B</td>
<td>Applied Music, Western (Voice)</td>
<td>1</td>
</tr>
<tr>
<td>MUS 231C</td>
<td>Applied Music, Western (Piano)</td>
<td>1</td>
</tr>
</tbody>
</table>

**Required Electives: Music Elective Courses**

Minimum of three (3) credits:

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 140</td>
<td>Introduction to Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>MUS 166</td>
<td>Popular Music in America</td>
<td>3</td>
</tr>
<tr>
<td>MUS 177</td>
<td>Intro to Hawaiian Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 240</td>
<td>Introduction to Digital Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 241</td>
<td>Digital Music Production II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 253</td>
<td>Elementary Music in Action</td>
<td>3</td>
</tr>
<tr>
<td>MUS 296</td>
<td>Special Topics in Music</td>
<td>3</td>
</tr>
</tbody>
</table>

**Hawaiian Music**

The Academic Subject Certificate in Hawaiian Music prepares and encourages students to pursue a professional career in Hawaiian music performance or as a studio musician. In this certificate students will specialize in Hawaiian music and will help with perpetuating and preserving this art form.
Upon successful completion of this certificate, students will be able to:

- Demonstrate basic elements of music theory and applications in areas such as notation, rhythm, and expression in the Hawaiian context
- Demonstrate professional performance practices
- Analyze Hawaiian music history, literature, and culture and their applications to modern society
- Access the meanings to Hawaiian language songs, and correctly pronounce Hawaiian music lyrics

This certificate consists of a minimum 25 credits.

**Type:** Academic Subject Certificate

**Required Courses (16 credits)**

* MUS 211 needs to be taken twice.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAW 101</td>
<td>Elementary Hawai'ian I</td>
<td>4</td>
</tr>
<tr>
<td>MUS 108</td>
<td>Music Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MUS 121Z or 121F</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUS 177</td>
<td>Intro to Hawai'ian Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 211</td>
<td>Intro to Hawai'ian Ensemble</td>
<td>2</td>
</tr>
<tr>
<td>MUS 211</td>
<td>Intro to Hawai'ian Ensemble</td>
<td>2</td>
</tr>
</tbody>
</table>

**Elective Credits**

Choose nine (9) credits from the following:

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAW 102</td>
<td>Elementary Hawai'ian II</td>
<td>4</td>
</tr>
<tr>
<td>HWST 130</td>
<td>Hula 'Olapa: Traditional Hawai'ian Dance</td>
<td>3</td>
</tr>
<tr>
<td>HWST 131</td>
<td>Hula 'Olapa 'elua: Traditional Hawai'ian Dance II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 114</td>
<td>College Chorus</td>
<td>2</td>
</tr>
<tr>
<td>MUS 121B</td>
<td>Voice 1</td>
<td>2</td>
</tr>
<tr>
<td>MUS 122B</td>
<td>Voice 2</td>
<td>2</td>
</tr>
<tr>
<td>MUS 121C</td>
<td>Piano 1</td>
<td>2</td>
</tr>
<tr>
<td>MUS 122C</td>
<td>Piano 2</td>
<td>2</td>
</tr>
<tr>
<td>MUS 221C</td>
<td>Piano 3</td>
<td>2</td>
</tr>
<tr>
<td>MUS 222C</td>
<td>Piano 4</td>
<td>2</td>
</tr>
<tr>
<td>MUS 121D</td>
<td>Guitar 1</td>
<td>2</td>
</tr>
<tr>
<td>MUS 121F</td>
<td>Slack Key Guitar 1</td>
<td>2</td>
</tr>
<tr>
<td>MUS 122F</td>
<td>Slack Key Guitar 2</td>
<td>2</td>
</tr>
<tr>
<td>MUS 121Z</td>
<td>'ukulele 1</td>
<td>2</td>
</tr>
<tr>
<td>MUS 122Z</td>
<td>'ukulele 2</td>
<td>2</td>
</tr>
<tr>
<td>MUS 140</td>
<td>Introduction to Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>MUS 166</td>
<td>Popular Music in America</td>
<td>3</td>
</tr>
<tr>
<td>MUS 212</td>
<td>Polynesian Music</td>
<td>2</td>
</tr>
<tr>
<td>MUS 231B</td>
<td>Applied Music, Western (Voice)</td>
<td>1</td>
</tr>
<tr>
<td>MUS 231C</td>
<td>Applied Music, Western (Piano)</td>
<td>1</td>
</tr>
<tr>
<td>MUS 240</td>
<td>Introduction to Digital Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 241</td>
<td>Digital Music Production II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 253</td>
<td>Elementary Music in Action</td>
<td>3</td>
</tr>
<tr>
<td>MUS 296</td>
<td>Special Topics in Music</td>
<td>3</td>
</tr>
</tbody>
</table>

**Hawaiian Studies**

The Academic Subject Certificate (ASC) in Hawaiian Studies prepares students for careers in education, healthcare, the visitor industry, or in fields requiring expertise in Hawaiian subject matter.

Upon successful completion of this certificate, students will be able to:
• Access sources of information about Hawai‘i and Hawaiian studies
• Critically analyze information about Hawai‘i and Hawaiian studies
• Communicate, applying correct Hawaiian pronunciation, spelling, basic phrase and sentence patterns
• Apply a firm foundation to continued Hawaiian language acquisition
• Demonstrate a basic understanding of Hawai‘i, its natural and social history, and its Hawaiian heritage
• Identify Hawaiian environmental and community issues and ways to contribute to Hawai‘i by applying information and understanding gained from the ASC in Hawaiian Studies
• Understand, appreciate, articulate, and safeguard Hawai‘i, its unique heritage and identity through having attained the ASC in Hawaiian Studies

This certificate consists of a minimum of 24 total credits with five different areas of emphasis: Language, History/Culture, Science, and Performing and Visual Arts. See course descriptions for prerequisites.

NOTE

Choose ONE Area of Concentration (8–9 credits) from the following:

• ‘Ōlelo Hawai‘i (Hawaiian Language) (8 credits)
• Mo‘olelo Hawai‘i (Hawaiian History and Traditions) (9 credits)
• Hawaiian Performing Arts (9 credits)
• Hawaiian Performing Arts (9 credits)
• Ahupua‘a (Hawaiian Land and Ocean Systems) (9 credits)

Type: Academic Subject Certificate

Ke Kahua - Core Courses (11 credits)

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>HWST 107</td>
<td>Hawai‘i: Center of the Pacific</td>
<td>3</td>
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<tr>
<td>HAW 101</td>
<td>Elementary Hawai‘ian I</td>
<td>4</td>
</tr>
<tr>
<td>HAW 102</td>
<td>Elementary Hawai‘ian II</td>
<td>4</td>
</tr>
</tbody>
</table>

‘Ōlelo Hawai‘i (Hawaiian Language) Concentration (8 credits)

<table>
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<th>Title</th>
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<tbody>
<tr>
<td>HAW 201</td>
<td>Intermediate Hawai‘ian I</td>
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<tr>
<td>HAW 202</td>
<td>Intermediate Hawai‘ian II</td>
<td>4</td>
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Mo‘olelo Hawai‘i (Hawaiian History and Traditions) (Any 9 credits from list below)

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HWST 110</td>
<td>Huaka‘i Wa‘a: Introduction to Hawaiian Voyaging</td>
<td>3</td>
</tr>
<tr>
<td>HWST 115</td>
<td>Mo‘okūauhau: Hawaiian Genealogies</td>
<td>3</td>
</tr>
<tr>
<td>HWST 217</td>
<td>Understanding Polynesian Religions</td>
<td>3</td>
</tr>
<tr>
<td>HWST 238</td>
<td>Native Voices through Contemporary Hawaiian and Indigenous Literature</td>
<td>3</td>
</tr>
<tr>
<td>HWST 253</td>
<td>Kamehameha I and the Hawaiian Kingdom</td>
<td>3</td>
</tr>
<tr>
<td>HWST 255</td>
<td>Introduction to the Hawaiian Kingdom</td>
<td>3</td>
</tr>
<tr>
<td>HWST 263</td>
<td>Hawaiian and Indigenous Film</td>
<td>3</td>
</tr>
<tr>
<td>HWST 270</td>
<td>Hawai‘ian Mythology</td>
<td>3</td>
</tr>
<tr>
<td>HIST 284</td>
<td>History of Hawai‘i</td>
<td>3</td>
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<tr>
<td>POLS 180</td>
<td>Introduction to Hawai‘ian Politics</td>
<td>3</td>
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<tr>
<td>REL 205</td>
<td>Understanding Hawai‘ian Religion</td>
<td>3</td>
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<td>REL 217</td>
<td>Understanding Polynesian Religions</td>
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</table>
## Hawaiian Performing Arts (Any 9 credits from list below)

<table>
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<tr>
<th>Item #</th>
<th>Title</th>
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<tbody>
<tr>
<td>HWST 130</td>
<td>Hula ʻOlapa: Traditional Hawaiian Dance</td>
<td>3</td>
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<tr>
<td>HWST 131</td>
<td>Hula ʻOlapa ʻelu: Traditional Hawaiian Dance II</td>
<td>0</td>
</tr>
<tr>
<td>MUS 121F</td>
<td>Slack Key Guitar 1</td>
<td>2</td>
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<tr>
<td>MUS 121Z</td>
<td>ʻukulele 1</td>
<td>2</td>
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<tr>
<td>MUS 122F</td>
<td>Slack Key Guitar 2</td>
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<td>ʻukulele 2</td>
<td>2</td>
</tr>
<tr>
<td>MUS 130F</td>
<td>Slack Key Guitar Ensemble</td>
<td>2</td>
</tr>
<tr>
<td>MUS 177</td>
<td>Intro to Hawaiian Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 211</td>
<td>Intro to Hawaiian Ensemble</td>
<td>2</td>
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## Hawaiian Visual Art and Design (Any 9 credits from list below)

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<thead>
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<th>Title</th>
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<tbody>
<tr>
<td>ART 113</td>
<td>Introduction to Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 189</td>
<td>Introduction to Hawaiian Art</td>
<td>3</td>
</tr>
<tr>
<td>HWST 135</td>
<td>Kālai Lā'au: Hawaiian Woodwork and Wood Carving</td>
<td>3</td>
</tr>
<tr>
<td>HWST 136</td>
<td>Kālai Lā'au II: Advanced Techniques in Hawaiian Carving</td>
<td>3</td>
</tr>
<tr>
<td>HWST 222</td>
<td>Ma'awe No'eau: Hawaiian Fiber Work</td>
<td>3</td>
</tr>
<tr>
<td>HWST 263</td>
<td>Hawaiian and Indigenous Film</td>
<td>3</td>
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<tr>
<td>HWST 273</td>
<td>Tattoo Traditions of Polynesia</td>
<td>3</td>
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## Ahupuaʻa (Hawaiian Land and Ocean Systems) (Any 9 credits from list below)

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<tr>
<th>Item #</th>
<th>Title</th>
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<tbody>
<tr>
<td>ANTH 175</td>
<td>Polynesian Surf Culture</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 201</td>
<td>The Hawaiʻi Fishpond</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 200</td>
<td>Coral Reefs</td>
<td>3</td>
</tr>
<tr>
<td>BOT 205</td>
<td>Ethnobotanical Pharmacognosy</td>
<td>4</td>
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<tr>
<td>BOT 105</td>
<td>Ethnobotany</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BOT 130 &amp; 130L</td>
<td>4</td>
</tr>
<tr>
<td>GG 103</td>
<td>Geology of Hawaiian Islands</td>
<td>3</td>
</tr>
<tr>
<td>HWST 110</td>
<td>Huakaʻi Waʻa: Introduction to Hawaiian Voyaging</td>
<td>3</td>
</tr>
<tr>
<td>HWST 140</td>
<td>Mahiʻai I: Hawaiian Taro Culture</td>
<td>3</td>
</tr>
<tr>
<td>HWST 142</td>
<td>Mahiʻai Kalo II: Traditional and Modern Techniques of Loʻi Kalo Production</td>
<td>3</td>
</tr>
<tr>
<td>HWST 275</td>
<td>Wahi Pana: Mythology of the Hawaiian Landscape</td>
<td>3</td>
</tr>
<tr>
<td>HWST 285</td>
<td>Lāʻau Lapaʻau I: Hawaiian Medicinal Herbs</td>
<td>4</td>
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<tr>
<td>IS 201</td>
<td>The Ahupua′a</td>
<td>3</td>
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<tr>
<td>SCI 210</td>
<td>Polynesian Voyaging; Seamanship and Stewardship</td>
<td>3</td>
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<tr>
<td>ZOOL 105</td>
<td>Hawaiian Use of Fish and Aquatic Invertebrates</td>
<td>3</td>
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</table>
### Electives (5–8 credits)

Any one course can be used only once in each Academic Subject Certificate.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ANTH 175</td>
<td>Polynesian SuRF Culture</td>
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<tr>
<td>ANTH 175L</td>
<td>SuRF Culture Field Lab</td>
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<tr>
<td>AQUA 201</td>
<td>The Hawai'i Fishpond</td>
<td>3</td>
</tr>
<tr>
<td>AQUA 201L</td>
<td>The Hawai'i Fishpond Lab</td>
<td>1</td>
</tr>
<tr>
<td>ART 113</td>
<td>Introduction to Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 189</td>
<td>Introduction to Hawaiian Art</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 110</td>
<td>Survey of Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 200</td>
<td>Coral Reefs</td>
<td>3</td>
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<tr>
<td>BOT 105</td>
<td>Ethnobotany</td>
<td>3</td>
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<tr>
<td>BOT 130</td>
<td>Plants in the Hawaiian Environment</td>
<td>3</td>
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<tr>
<td>BOT 130L</td>
<td>Plants in the Hawaiian Environment Lab</td>
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<tr>
<td>GG 103</td>
<td>Geology of Hawaiian Islands</td>
<td>3</td>
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<tr>
<td>GG 210</td>
<td>O'ahu Field Geology</td>
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<tr>
<td>GG 211</td>
<td>Big Island Field Geology</td>
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<tr>
<td>GG 212</td>
<td>Maui Field Geology</td>
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<tr>
<td>GG 213</td>
<td>Moloka'i, Lana'i, and Kaho'olawe Field Geology</td>
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<tr>
<td>GG 214</td>
<td>Ka'u and Ni'ihau Field Geology</td>
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<td>HAW 201</td>
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<td>4</td>
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<tr>
<td>HAW 202</td>
<td>Intermediate Hawaiian II</td>
<td>4</td>
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<tr>
<td>HWST 110</td>
<td>Huaka'i Wa'a: Introduction to Hawaiian Voyaging</td>
<td>3</td>
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<tr>
<td>HWST 115</td>
<td>Mo'okūlahau: Hawaiian Genealogies</td>
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<tr>
<td>HWST 130</td>
<td>Hula 'Olapa: Traditional Hawaiian Dance</td>
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<tr>
<td>HWST 131</td>
<td>Hula 'Olapa 'elu: Traditional Hawaiian Dance II</td>
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<tr>
<td>HWST 135</td>
<td>Kālai Lī'au: Hawaiian Woodwork and Wood Carving</td>
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<tr>
<td>HWST 136</td>
<td>Kālai Lī'au II: Advanced Techniques in Hawaiian Carving</td>
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<td>HWST 140</td>
<td>Mahi'ai I: Hawaiian Taro Culture</td>
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<td>HWST 142</td>
<td>Mahi'ai Kalo II - Traditional and Modern Techniques of Lo'i Kalo Production</td>
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<td>HWST 253</td>
<td>Kamehameha I and the Hawaiian Kingdom</td>
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<td>HWST 255</td>
<td>Introduction to the Hawaiian Kingdom</td>
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<tr>
<td>HWST 263</td>
<td>Hawaiian and Indigenous Film</td>
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<tr>
<td>HWST 270</td>
<td>Hawaiian Mythology</td>
<td>3</td>
</tr>
<tr>
<td>HWST 273</td>
<td>Tattoo Traditions of Polynesia</td>
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</tr>
<tr>
<td>HWST 275</td>
<td>Wahi Pana: Mythology of the Hawaiian Landscape</td>
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<td>HWST 275L</td>
<td>Wahi Pana: Mythology of the Hawaiian Landscape Field Lab</td>
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<tr>
<td>HWST 285</td>
<td>Lī'au Lapa'au I: Hawaiian Medicinal Herbs</td>
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<tr>
<td>HWST 296</td>
<td>Special Topics in Hawaiian Studies</td>
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<tr>
<td>HIST 284</td>
<td>History of Hawai'i</td>
<td>3</td>
</tr>
<tr>
<td>IS 201</td>
<td>The Ahupua'a</td>
<td>3</td>
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<tr>
<td>MUS 121F</td>
<td>Slack Key Guitar 1</td>
<td>2</td>
</tr>
<tr>
<td>MUS 121Z</td>
<td>'ukulele 1</td>
<td>2</td>
</tr>
<tr>
<td>MUS 122F</td>
<td>Slack Key Guitar 2</td>
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<tr>
<td>MUS 122Z</td>
<td>'ukulele 2</td>
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<tr>
<td>MUS 130F</td>
<td>Slack Key Guitar Ensemble</td>
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<tr>
<td>MUS 177</td>
<td>Intro to Hawaiian Music</td>
<td>3</td>
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<tr>
<td>OCN 201</td>
<td>Science of the Sea</td>
<td>3</td>
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<tr>
<td>OCN 260</td>
<td>Pacific SuRF Science and Technology</td>
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<td>OCN 260L</td>
<td>O'ahu SuRF Science and Technology Lab</td>
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<tr>
<td>PACS 108</td>
<td>Pacific Worlds: an Introduction to Pacific Islands Studies</td>
<td>3</td>
</tr>
<tr>
<td>POLS 180</td>
<td>Introduction to Hawaiian Politics</td>
<td>3</td>
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</tbody>
</table>
Psycho-Social Developmental Studies

The Academic Subject Certificate in Psycho-Social Developmental Studies 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).

Upon successful completion of this certificate, students will be able to:

- Communicate effectively via writing, speaking, and non-verbal cues
- Manage a group by supervising, negotiating, evaluating others, fostering teamwork and open communication
- Operate a computer to manage records, communicate, and gather information
- Interact effectively and ethically one-on-one or in a group, show good listening skills, empathy, and problem-solving

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.

Type: Academic Subject Certificate

**Required Courses (24 credits)**

<table>
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<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PSY 100</td>
<td>Survey of Psychology</td>
<td>3</td>
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<tr>
<td>PSY 170 or SOC 218 or SOC 231</td>
<td></td>
<td>3</td>
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<tr>
<td>PSY 224</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 240 or HDFS 230</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SOC 100</td>
<td>Survey of General Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 251</td>
<td>Introduction to Sociology of the Family</td>
<td>3</td>
</tr>
<tr>
<td>SSCI 193V or CHW 101 or SW 200</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SSCI 293V or PSY 260 or PSY 270</td>
<td></td>
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</tbody>
</table>

**Electives (3 credits)**

Any social science (DS) designated course or IS 103 Introduction to College (3)

**Sustainability**

The Academic Subject Certificate in Sustainability provides students with an interdisciplinary introduction to core concepts of sustainability. This certificate will prepare students to transfer to UHWO BAS in Sustainable Community Food Systems, UHMC BAS in Sustainability Science 101Management, or the UH Mānoa Interdisciplinary Studies BA in Sustainability, BA in Hawaiian Studies, Mālama ʻĀina “track”. Perhaps more importantly, it will help students to understand the interdisciplinary nature and relevance of sustainability in whatever major and career they choose.

Upon successful completion of this certificate, students will be able to:

- Define sustainability on local, national, and international levels
- Identify the personal values and attitudes that can facilitate sustainable living
- Describe how the individual relates to the wider issues of sustainability
- Measure one’s impact on the triple bottom line: People, Planet, Profit
- Identify the sociocultural values and attitudes that facilitate sustainable living at the local, regional and global levels
- Apply concepts of sustainability to local, regional, and/or global challenges
• Demonstrate how concepts of sustainability are connected to local, regional, and global issues
• Describe how traditional and indigenous perspectives inform practices of sustainability

This certificate consists of a minimum of 12 credits.

**Type:** Academic Subject Certificate

**Required Courses (9 credits)**

Three (3) credits must be taken in each of the following three categories:

- S-focused Course in the Natural Sciences
- S-focused Course in Social Sciences/Language Arts/Humanities/Math & Business
- S-Focused Course in Hawaiian Studies

**Independent Study or Special Topics Course in the discipline of choice (3 credits)**

- Any discipline independent study course (199 or 299) or Special Topics Course approved by Sustainability Curriculum Committee to receive an S-designation.

Please consult the following website for the most updated list of S-designated courses:

https://windward.hawaii.edu/class-availability/

**Certificates of Achievement (CA)**

**Agripharmatech**

The Certificate of Achievement in Agripharmatech is organized in two tracks: Plant Biotechnology and Ethnopharmacognosy. Each track consists of 30–32 credits, and requires a unique capstone class (see below).

The Plant Biotechnology track deals with developing and improving plant production in order to supply the world’s need for healthier (decreased use of pesticides) and more nutritious food crops, novel ornamentals, and plant-derived pharmaceuticals. Ethnopharmacognosy is the study of traditional medicines derived from natural sources (medicinal/nutritious plants).

Students will be able to complete the certificate in two to three semesters with coursework flexible enough to prepare them for employment in agricultural biotechnology or pharmacognosy, for entrepreneurship in agribusiness or plant-based product manufacturing, and for seamless credit transfer to higher degree institutions for the study of agriculture, pharmacy, and related disciplines.

After completing the program, students will be able to:

- Apply knowledge gained in plant sciences: identify plants, propagate/cultivate/maintain plants in vivo and in vitro
- Apply knowledge gained in microbial sciences: prepare/maintain bacterial cultures for genetic transformation and bioassay tests
- Conduct plant biotech and/or pharmacognosy research

In addition, students opting for the biotechnological track will focus on plant molecular genetics, and will:

- Operate specialized lab equipment such as autoclave, gel electrophoresis, PCR machine, Particle Deliver/1000 Helium System, spectrophotometer, fluorescent microscope, Gel Doc System
- Perform DNA/RNA extraction, electrophoresis, PCR reaction, DNA sequencing, gene transformation via bacteria, and particle bombardment, alignment and analyzing DA sequence results using Sequencher, PAUP, Finch TV software systems

Students opting for the ethnopharmacognosy track will focus on plant pharmacognostical study, and will:

- Operate laboratory equipment: autoclave, spectrophotometer, stereo microscope, anaerobic transfer chamber, rotary evaporator, distiller, Biacore Q system
- Conduct pharmaceutical and nutraceutical research
* Math 100 is recommended for those who seek certificates to enter the workforce or become agribusiness entrepreneurs. Otherwise, Math 103 is recommended.

* BOT 199/299 in Ethnopharmacognosy involves pharmaceutical/nutraceutical research.

* BOT 199/200 in Plant Biotechnology involves plant biotechnology research.

**Type:** Certificate of Achievement

### Required Courses (17-18 credits)

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<tr>
<th>Item #</th>
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<tbody>
<tr>
<td>AG 152</td>
<td>OrchID Culture</td>
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<td>BIOL 172/L or BOT 160 or BOT 101/L</td>
<td>3-4</td>
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<tr>
<td>ENG 100 or SP 151</td>
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<tr>
<td>MATH 100</td>
<td>Survey of Mathematics</td>
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<tr>
<td>MICR 130</td>
<td>General Microbiology</td>
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<td>MICR 140L</td>
<td>General Microbiology Lab</td>
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### Ethnopharmacognosy Track: Capstone

<table>
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<tr>
<th>Item #</th>
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<tbody>
<tr>
<td>BOT 205</td>
<td>Ethnobotanical Pharmacognosy</td>
<td>4</td>
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### Ethnopharmacognosy Track: Electives (8-9 credits)

Choose eight to nine (8-9) credits from the following

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AG 149</td>
<td>Plant Propagation</td>
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<tr>
<td>BOT 105</td>
<td>Ethnobotany</td>
<td>3</td>
</tr>
<tr>
<td>BOT 130 &amp; 130L</td>
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<td>4</td>
</tr>
<tr>
<td>BOT 192V</td>
<td>Special Topics in Plant Science</td>
<td>1-4</td>
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<tr>
<td>BOT 199/299</td>
<td></td>
<td>1-4</td>
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<tr>
<td>CHEM 161 &amp; 161L</td>
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<tr>
<td>FSHN 185</td>
<td>Human Nutrition</td>
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### Plant Biotechnology Track: Capstone

<table>
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<th>Item #</th>
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<tr>
<td>BIOL 275/L or BOT 210</td>
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### Plant Biotechnology Track: Electives (8-9 credits)

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<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 171 &amp; 171L</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>BOT 192V</td>
<td>Special Topics in Plant Science</td>
<td>1-4</td>
</tr>
<tr>
<td>BOT 199/299</td>
<td></td>
<td>1-4</td>
</tr>
<tr>
<td>CHEM 161 &amp; 161L</td>
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<tr>
<td>CHEM 162 &amp; 162L</td>
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<td>4</td>
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</table>

### Veterinary Assisting

The Certificate of Achievement in Veterinary Assisting is designed to provide students with the basic knowledge and skills required to perform effectively as an assistant in a veterinarian's office, animal shelter or animal research facility. The two-semester program includes coursework in life sciences as well as hands-on experience in live animal laboratories.

The Certificate of Achievement in Veterinary Assisting is also considered to be the first year of the Associate in Science in Veterinary Technology. Veterinary Assisting courses count towards advanced studies in Veterinary Technology.
Students in the program must attain and maintain a grade of “C” or better in each of the core classes and maintain a cumulative GPA of 2.0 or higher. If a student withdraws or make below a grade of “C” in a core class, the student may not progress in the program until the course has been repeated successfully. Core classes may only be repeated once; students failing to make a grade “C” or better in a course that has been repeated may be dismissed from the program. Course repetition will be based on instructor approval and program resources. There is a $100 professional fee each semester. Fees are subject to increase based on program cost and institutional approval.

Upon successful completion of this certificate, students will be able to:

- Effectively communicate with clients and veterinary staff
- Schedule appointments and generate invoices
- Identify common breeds of companion animals, list their nutritional requirements and husbandry needs, and describe the anatomy and functions of major body systems.
- Assist with physical exams and obtain patient histories.
- Demonstrate proper patient restraint and safety procedures
- Conduct routine physical exams and obtain patient histories
- Calculate dosages and administer medications
- Collect blood samples and perform diagnostic laboratory tests

**Type:** Certificate of Achievement

**Required Courses (31 credits)**

See course descriptions for prerequisites.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ANSC 140</td>
<td>Introduction to Veterinary Technology</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 142</td>
<td>Anatomy and Physiology of Domestic Animals</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 142L</td>
<td>Anatomy of Domestic Animals Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 151</td>
<td>Clinical Laboratory Techniques</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 151L</td>
<td>Clinical Laboratory Techniques Lab</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 153</td>
<td>Companion Animal Nursing and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 153L</td>
<td>Companion Animal Nursing Lab</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 191</td>
<td>Veterinary Office and Computer Skills</td>
<td>3</td>
</tr>
<tr>
<td>ENG 100</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 125</td>
<td>Survey of Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td>MATH 101</td>
<td>Mathematics for Veterinary Assistants &amp; Technicians</td>
<td>3</td>
</tr>
<tr>
<td>PSY 100</td>
<td>Survey of Psychology</td>
<td>3</td>
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<tr>
<td></td>
<td>Speech or Theater Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Certificates of Competence (CO)**

**Information Security Specialist**

The Certificate of Competence in Information Security will introduce students to the essentials of computer security. They will perform basic ethical (white hat) hacking, and learn about the moral and legal issues that are involved while performing the learned techniques. Students will learn how to perform basic computer forensics such as operating system diagnostics, as well as to use a forensic toolkit to examine and validate computer activity. Students will acquire knowledge about the proper techniques for data collection, examination and preservation of forensic data.

Upon successful completion of this certificate, students will be able to:

- Create and implement security policies and procedures to aid in security administration
- Apply techniques involved with Ethical Hacking
- Aid in the collection, examination and preservation of data using proper computer forensics

**Type:** Certificate of Competence
Required Courses
See course descriptions for prerequisites.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ICS 171</td>
<td>Introduction to Computer Security</td>
<td>3</td>
</tr>
<tr>
<td>ICS 184</td>
<td>Introduction to Networking</td>
<td>3</td>
</tr>
<tr>
<td>ICS 281</td>
<td>Ethical Hacking</td>
<td>3</td>
</tr>
<tr>
<td>ICS 282</td>
<td>Computer Forensics</td>
<td>3</td>
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</tbody>
</table>

Marine Option Program (through University of Hawai’i at Mānoa)

The Marine Option Program (MOP) is designed to assist undergraduate and other students interested in marine and freshwater systems. Through MOP, you can obtain a marine orientation to your own major while earning an official University of Hawai’i certificate, which is registered on your transcript. MOP emphasizes experiential, cross-disciplinary education, and provides opportunities to apply your traditional coursework to the real world while you obtain practical marine skills through a hands-on internship, research project, or employment.

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:

- OCN 101 – one (1) credit
- OCN 201 or ZOOL 200 – three (3) credits
- Marine electives – six (6) credits
- MOP skill project – Academic Independent Study 199 – two (2) or more credits

The unique MOP skill project allows students to design and conduct an independent aquatic project related to their academic field of interest or educational goals. At Windward CC, MOP is managed by the Pacific Center for Environmental Studies (PaCES).

For information about the program, contact the Windward CC MOP coordinator at 808-235-9118 or visit the MOP Office in Hale 'Imiloa 118, or email wccmop@hawaii.edu, or visit the website: https://windward.hawaii.edu/marine-option-program/.

Type: Academic Subject Certificate

Plant Food Production and Technology

The Certificate of Competence in Plant Food Production and Technology is a nine (9)-credit certificate that appeals to a new generation of skilled agricultural-food technicians who seek to expand their skills and knowledge in agricultural biotech and related fields. Besides employing people for research and development, the industry also caters to various other agricultural biotech-related fields including horticulture, floriculture, and tissue culture. Agricultural based biotechnologists can also sharpen students’ academic skills by working with food processing or post-harvest technology. Graduates will gain knowledge in propagating, planting, and understanding the uses of plants, as well as skills in tissue culture and food sciences.

Type: Certificate of Competence

Required Courses: Minimum 9 credits

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AG 120</td>
<td>Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>AG 149</td>
<td>Plant Propagation</td>
<td>3</td>
</tr>
<tr>
<td>AG 152</td>
<td>OrchID Culture</td>
<td>3</td>
</tr>
<tr>
<td>BOT 105</td>
<td>Ethnobotany</td>
<td>3</td>
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<tr>
<td>BOT 130 &amp; 130L</td>
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<tr>
<td>BOT 160</td>
<td>Identification of Tropical Plants</td>
<td>3</td>
</tr>
<tr>
<td>BOT 192V</td>
<td>Special Topics in Plant Science</td>
<td>1-4</td>
</tr>
<tr>
<td>BOT 199</td>
<td>Independent Study</td>
<td>2-3</td>
</tr>
<tr>
<td>FSHN 185</td>
<td>Human Nutrition</td>
<td>3</td>
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</table>
Sustainable Agriculture

The Certificate of Competence in Sustainable Agriculture is a 17-credit certificate designed for students who want to engage in small-scale farming in Hawai‘i. Sustainable agriculture integrates long-term environmental stability with economic profitability in a way that focuses on stewardship of both human and physical resources. In contrast to the ways of farming that have become typical in the last century, sustainable agriculture focuses on reducing energy and resource demands, removing harmful chemicals and by-products of farming, and using alternative processes, such as aquaponics, to create a viable farm.

Upon completion of the Certificate of Competence in Sustainable Agriculture, the student will be able to:

- Evaluate sustainable farming systems and business plans
- Determine the sustainable farming system suited for a specific location in Hawai‘i
- Recommend cultural practices, solve problems and cultivate horticultural crops in a sustainable manner based on sound biological and technological principles

Type: Certificate of Competence

Required Courses

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AG 120</td>
<td>Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>AG 170</td>
<td>Introduction to Aquaponics</td>
<td>4</td>
</tr>
<tr>
<td>AG 171</td>
<td>Farm Renewable Energy Systems</td>
<td>3</td>
</tr>
<tr>
<td>AG 192V</td>
<td>Special Topics in Agriculture</td>
<td>1-4</td>
</tr>
<tr>
<td>BUS 122B</td>
<td>Introduction to Entrepreneurship: Sustainable Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>IS 201</td>
<td>The Ahupua‘a</td>
<td>3</td>
</tr>
</tbody>
</table>

Web Support

The Certificate of Competence in Web Support is a competency-based program designed for the novice or professional information worker who has little to no experience in web support. This certificate is appropriate for upgrading the web skills of industry members or for administrative support professionals.

Upon successful completion of this certificate, students will be able to:

- Use appropriate web development tools to support publishing an effective website that communicates a message, incorporates appropriate media, and adheres to usability and accessibility standards
- Create and edit web-publishable media such as audio, video, and apps
- Describe related terminology, practices, and ethics involved in web publishing

Type: Certificate of Competence

Required Course

<table>
<thead>
<tr>
<th>Item #</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ICS 107</td>
<td>Web Site Development</td>
<td>3</td>
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</table>

Electives (6 credits)

Choose 2 courses from the following.

See course descriptions for prerequisites.
Course Descriptions

Accounting

ACC 200: Introduction to Accounting I
Introduction to managerial and financial accounting and methods used to record and report managerial and financial information to decision makers internal and external to the firm.

Credits: 3
Lecture Hours: 3
Prerequisites: 
Recommended Preparation:

Placement into ENG 100W or higher.

Recommended: Placement into ENG 100W or higher.

Student Learning Outcomes:
- Demonstrate a basic understanding of financial statements, how transactions affect the financial statements and how financial statements are used to evaluate performance.
- Demonstrate a basic understanding of how financial (and other) information is used by individuals within a company to make decisions about resource allocation and evaluate performance.

ACC 201: Introduction to Financial Accounting
Introduction to accounting principles and practices used to record and communicate financial information. Analyze methods for valuating assets, liabilities, and equity of an organization.

Credits: 3
Lecture Hours: 3
Prerequisites: Placement into ENG 100 or equivalent

Student Learning Outcomes:
- 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 generally accepted accounting principles (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 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 202: Introduction to Managerial Accounting
An introduction to managerial accounting methods for evaluating performance including cost accounting, budgeting, break-even analysis, ratio analysis, standard cost systems, and reporting for internal decision making.

Credits: 3
Lecture Hours: 3
Prerequisites: ACC 201 with “C” or better.

Student Learning Outcomes:
- 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 210: Introduction to Accounting II
Introduction to managerial and financial accounting and methods used to record and report managerial and financial information to decision makers internal and external to the firm. Part II.

Credits: 3
Lecture Hours: 3
Prerequisites: A grade of C or better in ACC 200.

Recommended: Placement into ENG 100W or higher.

Student Learning Outcomes:
- Understand financial statements, how transactions affect the financial statements and how financial statements are used to evaluate performance.
- Understand of how financial (and other) information is used by individuals within a company to make decisions about resource allocation and evaluate performance.
Aeronautics

AERO 150: Introduction to Rocketry
This is a general introductory course to rocket science. Principles of propulsion, aerodynamics, and safety protocols for design and ground operations are stressed.
Credits: 3
Lecture Hours: 3
Recommended:
Credit in Math 25, 26, 29, 82, or higher.

Student Learning Outcomes:
• Demonstrate a solid understanding of propulsive methods, especially as pertains to space.
• Solve applicable problems of spacecraft kinematics, dynamics, and energy considerations.
• 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.

Agriculture

AG 93V: Cooperative Education
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 to a total of 4 credits that may be applied to the AS degree, 1 credit applicable toward Certificate of Completion.
Credits: 1-4
Prerequisites:
Open to Agriculture majors only. Instructor’s permission is required.

Student Learning Outcomes:
• Demonstrate the utilization of course work in the field.

AG 100: Agriculture Orientation: Careers
Familiarizes students with different agricultural operations in Hawai‘i through lectures, guest speakers and fieldtrips.
Credits: 1
Lecture Hours: 1

Student Learning Outcomes:
• Describe various careers in agriculture.
• Identify positive and negative aspects of various agriculture careers.

AG 120: Plant Science
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.
Credits: 3
Lecture Hours: 2

Student Learning Outcomes:
• 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 132: Integrated Pest Management
Strategies of integrated pest management; biological and cultural pest controls, weed control, disease control, insect control.
Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
• Identify major insects, weeds, diseases that are detrimental to the horticulture industry in Hawai‘i.
• Define Integrated Plant Management and develop an IPM plan.
• Understand and use economic thresholds.
• Identify common predators and parasites.
• Identify management strategies to reduce pest pressures on plants.

AG 149: Plant Propagation
Introduction to the principles and practices of propagation of fruit, vegetable, and ornamental crops by seed, cuttings, grafting, budding, layering and division.
Credits: 3
Lecture Hours: 3
Recommended:
12th Grade reading level.

Student Learning Outcomes:
• 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
An extensive study of orchid identification, breeding, growth, and culture. Students are required to write a 10 to 15 page research report.
Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
• 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 170: Introduction to Aquaponics
The course covers aquaculture, hydroponics, aquaponics, sustainable aquatic feed production, renewable local seeding technologies and micronutrient supplementation, fish and plant physiology, renewable energy systems, water catchment and conservation techniques, and best aquaponic food safety practices. The basic physical and biological principles governing sustainable farm and agribusiness operations are emphasized.
Credits: 4
Lecture Hours: 3
Recommended: AG 120 and IS 201.
Student Learning Outcomes:
- Design and construct a basic aquaponic system that uses all three grow-out technologies (nutrient film technique, ebb and flow, and floating raft) either alone or in combination.
- Apply best aquaculture practices for culturing fishes in an aquaponic setting.
- Identify the water quality parameters and manage them in order to maximize fish, plant and microbial outputs in an aquaponic setting.
- Use best agricultural practices for plant crop production in an aquaponic setting. Prepare seedlings for planting, harvest produce, stagger production of both plant and fish, and apply food safety procedures.

AG 171: Farm Renewable Energy Systems
This course explores the various renewable energy systems potentially employable on small farms. Topics such as solar, solar thermal, wind, micro-hydraulic, biomass, and hybrid technologies are covered in the course.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Evaluate photovoltaic systems applicable to small farms
- Evaluate solar thermal applications for small farms
- Evaluate biomass systems applicable to small farms
- Evaluate wind systems for small farms
- Evaluate micro-hydraulic systems for small farms
- Evaluate hybrid system applications for small farms

AG 192V: Special Topics in Agriculture
Topics related to diversified agriculture chosen by the Instructor. Course content may vary. May be repeated up to 5 credits with different topics.
Credits: 1-4
Lecture Hours: 1
Student Learning Outcomes:
- Identify the important concepts and facts presented for the topic (s) under examination.
- Make inferences and draw conclusions from the topic (s) under discussion.
- Develop skills appropriate to the topic (s) under discussion.
- Gain a higher appreciation for the human endeavor of agriculture.
- Gain a higher awareness of the potential career paths that this special topic course in agriculture covers.

AG 202: Agriculture, Environment, and Society
The goal of this course is to establish foundational knowledge of agroecosystems. Emphasis is on the interrelationship among the crop plants, essential plant nutrients, social factors, and cultural practices. Key goals are to introduce students to the broad range of topics covered within agroecosystems, as well technical writing in agricultural science, and oral discussion and argument.
Credits: 3
Lecture Hours: 3
Prerequisites:
A grade of C or better in AG 120
Recommended:
A grade of C or better in ENG 100
Student Learning Outcomes:
- Analyze and interpret information from technical and non-technical sources, with an emphasis on scientific articles.
- Discuss interrelationship between plants and animals, and the socio-economic importance of them to humans.
- Describe the relationship(s) between agriculture, society and the environment.
- Describe the concept of agroecosystems and form critical questions for in-class discussion.

AG 202L: Agriculture, Environment, and Society Laboratory
The goal of this course is to establish foundational knowledge of agroecosystems. Emphasis is on the interrelationship among the crop plants, essential plant nutrients, social factors, and cultural practices. Key goals are to introduce students to the broad range of topics covered within agroecosystems, as well as field and laboratory investigations in agroecology.
Credits: 1
Lab Hours: 3
Prerequisites:
Grade of C or better or concurrent enrollment in AG 202.
Recommended:
Grade of C or better in ENG 100.
Student Learning Outcomes:
- Use the scientific method of inquiry to investigate ecological concepts and principles in an agricultural setting.
- Prepare written objective reports describing and interpreting experimental and observational results.
- Conduct experiments that evaluate the application of ecological concepts and principles to the design and management of sustainable food systems.

AG 235: Irrigation Principles and Design
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.
Credits: 3
Lecture Hours: 3
Recommended:
Credit in Math 22, 24, 25, 26, 28, 29, 75X or higher.
Student Learning Outcomes:
- Determine water requirements for plant growth.
- Describe soil water concepts.
- Select the appropriate irrigation method and components for the situation.
- Design a basic drip and sprinkler irrigation system.
- Trouble shoot irrigation problems.
Animal Sciences

ANSC 140: Introduction to Veterinary Technology
This course introduces students to the field of veterinary technology and describes the responsibilities and expectations for students enrolled in the program. Topics include: roles of the veterinary team members, legal and ethical aspects of veterinary practice, breeds of companion animals, safety, sanitation and waste-disposal protocols, and career fields in veterinary medicine.
Credits: 3
Lecture Hours: 3
Prerequisites:
Registration in or a grade “C” or better in ANSC 142 and ANSC 142L. Credit for or placement in ENG 100 and MATH 101. Confirmed attendance to Windward CC veterinary technology information session.
Student Learning Outcomes:
- Describe the roles and legal boundaries of veterinary health care team members and discuss the legality of the veterinary-client-patient relationship.
- Identify and describe common workplace hazards, including zoonotic diseases.
- Establish and maintain appropriate sanitation, nosocomial, and waste-disposal protocols.
- Identify common breeds of companion animals.

ANSC 142: Anatomy and Physiology of Domestic Animals
Introduction to the anatomy and physiology of domestic animals. Compares the anatomy and function of major body systems for the cat, dog and horse, with lesser emphasis on birds, reptiles and amphibians. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields.
Credits: 3
Lecture Hours: 3
Prerequisites:
Registration in or a grade “C” or better in ANSC 140 and ANSC 142. Credit for or placement in ENG 100 and MATH 101. Confirmed attendance to Windward CC veterinary technology information session.
Student Learning Outcomes:
- Discuss the chemical building blocks of major biological molecules.
- Describe the link between cells, tissues, organs, and organ systems.
- Contrast the structure and function of major body systems (e.g., skeletal, circulatory, respiratory, and reproductive) among companion animals and selected livestock species.
- Explain how disease and disorders disrupt the homeostasis of each of the above body systems and discuss how common veterinary medical treatments are used to restore homeostasis.

ANSC 142L: Anatomy of Domestic Animals Laboratory
Laboratory to accompany ANSC 142. This course is designed to acquaint the student with the body systems of common domestic species (e.g., cats, dogs, horses and birds) through dissections, examinations of models, laboratory exercises, and other hands-on activities. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields.
Credits: 1
Prerequisites:
Registration in or a grade “C” or better in ANSC 140 and ANSC 142. Credit for or placement in ENG 100 and MATH 101. Confirmed attendance to Windward CC veterinary technology information session.
Student Learning Outcomes:
- Identify and describe the anatomy of the major body systems for cats, dogs and horses using prepared slides, skeletons, models and dissections.
- Use standard anatomical terms to describe body directions, regions and sectioning planes.
- Identify major anatomical landmarks used to assess patient health during physical exams.
- Demonstrate proficiency at the use of the microscope as a clinical instrument.

ANSC 151: Clinical Laboratory Techniques
Provides students with the background knowledge needed to perform and interpret laboratory techniques commonly used in veterinary practice. Topics include: Homeostatic relationships, cytology, histology, parasitology and clinical physiology of major body systems. Includes a discussion of common disorders affecting major body systems and the techniques used for diagnosis. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields.
Credits: 3
Lecture Hours: 3
Prerequisites:
A grade of “C” or better in ANSC 142 and 142L.
Co-Requisites:
Registration in ANSC 151L.
Student Learning Outcomes:
- Describe the procedures for safely collecting specimens from domestic animals.
- Discuss the clinical tests performed in hematology, urinalysis, clinical chemistries, and cytology.
- Compare the technologies used by automated hematology and blood chemistry machines and discuss their impacts on the accuracy and reliability of test results.
- Recognize accurate vs. erroneous results in order to provide maximum diagnostic benefit.
ANSC 151L: Clinical Laboratory Techniques Lab
Laboratory to accompany ANSC 151. Provides students with the knowledge and skills necessary to perform common veterinary lab tests including urinalysis, hematology, blood chemistry, cytology and parasitology. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields.
Credits: 1
Prerequisites:
A grade of “C” or better in ANSC 142 and ANSC 142L.
Student Learning Outcomes:
- Properly package, handle and store specimens for laboratory analysis.
- Demonstrate proficiency in the use of veterinary lab equipment (e.g. microscopes, blood chemistry analyzers, centrifuges, and refractometers).
- Determine proper maintenance and quality control procedures necessary to ensure accurate results.
- Properly carry out analysis of laboratory specimens, including urinalysis, CBC, blood chemistry and common cytological and parasitological procedures.
- Use critical thinking to analyze and interpret clinical data to determine if a need exists for additional laboratory tests that will provide useful diagnostic information.

ANSC 152: Companion Animal Diseases and Nutrition
An introduction to the common diseases and medical care of companion animals. Topics include identification, clinical signs and symptoms, and treatment of diseases affecting companion animals. This course is intended for students entering veterinary technology or other animal-related fields.
Credits: 3
Prerequisites:
Admission in the Veterinary Technology Program and a grade of “C” or better in all completed ANSC courses.
Student Learning Outcomes:
- Describe the common diseases of companion animals and identify the life stage at which the disease typically occurs.
- List the clinical signs and tests used in the diagnosis of common companion animal diseases.
- Explain the medical treatments for common companion animal diseases.
- Communicate the information that a client or owner would need in the event that a pet was diagnosed with a specific disease.

ANSC 153: Companion Animal Nursing and Nutrition
An introduction to the husbandry and medical care of companion animals. Topics include: safe animal handling techniques, medical records and obtaining patient information, nursing tasks such as bandaging, administering medications, and sample collection. This class also discusses nutritional requirements of dogs and cats in all life stages and toxic substances. This course is intended for students entering veterinary technology, veterinary assisting, or other animal-related fields.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade “C” or better in ANSC 142 and in ANSC 142L.
Student Learning Outcomes:
- Discuss energy and nutrient requirements for various life stages of companion animals and list substances that, when ingested, result in toxicity.
- Describe how animal anatomy and physiology are integrated with animal behavior; compare normal, abnormal, and aggressive animal behavior; and discuss low-stress animal handling techniques.
- Outline nursing procedures such as basic patient care and grooming, bandaging, sample collection, and administering medications and treatments.

ANSC 153L: Companion Animal Nursing Lab
This course provides students with hands-on training in basic companion-animal exam and nursing skills. Topics include: animal restraint methods, medical charting and patient exam procedures, specimen collection, administration of medications, grooming and husbandry. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields.
Credits: 1
Prerequisites:
Grade “C” or better in ANSC 142 and ANSC 142L.
Student Learning Outcomes:
- Safely and effectively restrain companion animals.
- Gather subjective and objective patient information efficiently.
- Perform venipuncture and collect diagnostic samples of skin, blood, urine, and feces.
- Perform basic grooming such as bathing, nail trims, and ear cleaning.
- Apply emergency splints and bandages & administer medications by various routes (IV, IM, SQ, & PO).
ANSC 190: Veterinary Clinical Practices and Internship I
Practical animal experience at veterinary clinics, zoos, research labs or other animal facilities. Topics covered may include restraint procedures, veinipuncture, vital signs assessment, radiological techniques, veterinary business and front-office procedures, routine nursing care and animal husbandry. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields. Students participating in ANSC 190 are required to show proof of current health insurance and obtain a professional liability policy through their internship supervisor.

Credits: 3
Prerequisites:
Admission in the Veterinary Technology Program and a grade of “C” or better in all completed ANSC courses.

Student Learning Outcomes:
• Perform required clinical competencies in assigned veterinary location(s).
• Demonstrate professionalism in attendance, attitude, and behavior.
• Discuss multiple aspects of veterinary medicine through case studies, guest lecturers, or other assignments.

ANSC 191: Veterinary Office and Computer Skills
Veterinary Office and Computer Skills covers the support skills needed in a veterinary office. Because veterinary office skills are critical in the success or failure of a practice, this course will emphasize the following: client communication, public relations, ethical and legal procedures, bookkeeping functions, scheduling, records management, and telephone skills. Students will be introduced to one or more industry-standard veterinary software programs as well as word processing and spreadsheet software.

Credits: 3
Lecture Hours: 3
Prerequisites:
Registration in or a grade “C” or better in ANSC 142 and ANSC 142L. Credit for or placement in ENG 100 and MATH 101. Confirmed attendance to Windward CC veterinary technology information session.

Student Learning Outcomes:
• Contribute to a welcoming office environment that promotes accurate interactions with patients and clients.
• Work as a team member to deliver service in an ethical, compassionate manner, following the Veterinary Technician Code of Ethics developed by the National Association of Veterinary Technicians Association Ethics Committee.
• Perform introductory office administrative duties to insure up-to-date filing and retrieval of documents, data entry, billing and receipts, and inventory.
• Demonstrate knowledge of an industry-standard veterinary software program.
• Demonstrate introductory skills for a word processing and spreadsheet program.

ANSC 252: Diagnostic Imaging for Veterinary Technicians
This course covers the nature and use of x-ray technology in veterinary technology. Students are also given an overview of alternative imaging techniques (ultrasound, CT scans, and digital radiography), as well as an introduction to the radiography of large animals and exotics.

Credits: 3
Lecture Hours: 3
Prerequisites:
Admission in the Veterinary Technology Program and a grade of “C” or better in all completed ANSC courses.

Co-Requisites:
ANSC 252L. Concurrent enrollment in ANSC 252.

Student Learning Outcomes:
• Describe the uses and functioning of various types of medical imaging equipment.
• Implement and observe recommended radiation safety measures.
• Evaluate radiographic images for proper radiographic technique and patient positioning.
• Explain the clinical uses of alternative imaging technologies.

ANSC 252L: Diagnostic Imaging for Veterinary Technicians Lab
This lab trains students to safely and effectively use x-ray technology to obtain diagnostic radiographs of the skeletal- and soft anatomy of companion animals.

Credits: 1
Prerequisites:
Admission in the Veterinary Technology Program and a grade of “C” or better in all completed ANSC courses

Co-Requisites:
Concurrent enrollment in ANSC 252.

Student Learning Outcomes:
• Utilize radiographic equipment to expose and develop radiographic films in order to create diagnostic radiographic images.
• Properly label and file radiographic films and complete radiographic logs and reports.
• Utilize radiographic contrast agents to produce diagnostic images of urinary and GI organs.
• Perform radiographic techniques utilized in screening for canine hip dysplasia.
• Demonstrate proper maintenance and troubleshooting of radiographic equipment.
• Position companion animals safely and humanely for radiographic studies.
ANSC 253: Applied Pharmacology for Veterinary Technicians
This course is designed to give students a practical knowledge of drugs used in veterinary medicine. Topics include drug classification, methods of action, calculations, administration, effects and side effects. Also includes a discussion of client education, drug safety, and federal regulations governing the purchase and storage of controlled drugs. Upon successful completion, students will be able to properly calculate, dispense, and administer medications, recognize adverse reactions and maintain pharmaceutical inventory and administrative records. This course is intended for students entering veterinary technology, veterinary assisting, or other animal-related fields.

Credits: 3
Lecture Hours: 3
Prerequisites:
Admission in the Veterinary Technology Program and a grade of “C” or better in all completed ANSC courses.

Student Learning Outcomes:
- Recognize groups of veterinary drugs, their mechanisms & actions, and clinically relevant side effects.
- Correctly interpret a veterinarian’s pharmacy orders.
- Accurately calculate, dispense, and administer the correct form and dose of a medication.
- Describe the safe and effective manner in which vaccines must be administered.
- Maintain a controlled substances logbook in accordance with local and federal laws.
- Explain federal and state regulatory guidelines for drug purchase, storage, administration, withdrawal, disposal and inventory control.
- Accurately communicate drug information and dosing instructions to clients in order to maximize safety, compliance with prescribed therapy and successful treatment of the patient.

ANSC 258: Clinical Laboratory Techniques II
A continuation of ANSC 151 and 151L, this course provides students with additional instruction and hands-on experience with laboratory tests commonly used in veterinary practice. Topics include: 1) identification of internal parasites 2) performance and evaluation of microbiologic and serologic tests, 3) collection & evaluation of cytological samples 4) veterinary necropsy procedures. Included in this course is a review of the anatomy and physiology of major body systems and an overview of common diseases seen in veterinary practice. This course is intended for students entering veterinary assisting, veterinary technology or other animal-related fields.

Credits: 3
Lecture Hours: 3
Prerequisites:
Admission in the Veterinary Technology Program and a grade of “C” or better in all completed ANSC courses

ANSC 261: Anesthesiology and Dentistry for Veterinary Technicians
This course will focus on dental anatomy, common dental diseases, and basic dental procedures. Topics will include proper charting, routine periodontal care, anesthesia, patient monitoring, analgesia, post-op environment to maintain asepsis during dental procedures. Understand the principles of routine dental care and be able to make recommendations to pet owners. Recognize the levels of periodontal disease and how it affects a patient’s overall health. Identify normal dental anatomy of common veterinary species.
ANSC 261L: Anesthesiology and Veterinary Dentistry for Veterinary Technicians Lab
This course will focus on the clinical skills necessary for safe and effective anesthesia and dental prophylaxis of companion animal patients (dogs and cats). Skills such as intravenous catheter placement, endotracheal intubation, patient preparation and monitoring, and dental prophylaxis under general anesthesia will be covered. The use and side effects of commonly used sedatives, analgesics and anesthetics will be covered. Postoperative procedures include patient monitoring and charting as well as client education for postoperative care.
Credits: 2
Prerequisites:
Admission in the Veterinary Technology Program and a grade of “C” or better in all completed ANSC courses
Co-Requisites:
Co-registration in ANSC 261.
Student Learning Outcomes:
• Safely and effectively manage patients during all phases of anesthetic procedures.
• Safely and effectively select, operate and maintain anesthetic delivery equipment and monitoring instruments.
• Safely and effectively operate and maintain dental equipment.
• Understand and integrate all aspects of patient management for common dental procedures in companion animal species.
• Identify and provide appropriate instruments, supplies and environment to maintain asepsis during dental procedures.

ANSC 262: Clinical Procedures for Large Animals
The student will learn techniques in large animal restraint, husbandry and clinical procedures and be provided some introduction to relevant large animal diseases. Biosecurity and public health will be discussed as they apply to large animal health care and husbandry. The course is appropriate for those entering animal husbandry, veterinary assisting, veterinary technology or animal science fields.
Credits: 3
Lecture Hours: 3
Prerequisites:
Admission in the Veterinary Technology Program and a grade of “C” or better in all completed ANSC courses
Co-Requisites:
ANSC 262L
Student Learning Outcomes:
• Describe common zoonotic diseases of large animals as they apply to animal health and public safety.
• Discuss biosecurity and isolation procedures necessary in livestock operations.
• Describe the signs and treatment for common diseases of large animals.
• Explain anesthetic, surgical, dental, and recovery procedures for large animals.

ANSC 262L: Clinical Procedures for Large Animals Lab
The student will learn techniques in large animal restraint, husbandry and clinical procedures and be provided some introduction to relevant large animal diseases. Biosecurity and public health will be discussed as they apply to large animal health care and husbandry. The course is appropriate for those entering animal husbandry, veterinary assisting, veterinary technology or animal science fields.
Credits: 1
Prerequisites:
Admission in the Veterinary Technology Program and a grade of “C” or better in all completed ANSC courses
Co-Requisites:
ANSC 262
Student Learning Outcomes:
• Safely and successfully restrain various species of livestock for medical examination and procedures.
• Medicate, bandage, groom, and feed large animals.
• Successfully perform diagnostic sampling and imaging tasks on large animals.

ANSC 263: Exotic and Laboratory Animal Procedures
Introduction to the husbandry, care and use of exotics and laboratory animals. Includes discussion in common diseases, biosecurity, and public health as they apply to a wide variety of species, including those found in Hawaii and beyond. This course is intended for students entering lab animal medicine, veterinary technology, veterinary assisting or other animal-related fields.
Credits: 3
Lecture Hours: 3
Prerequisites:
Admission in the Veterinary Technology Program and a grade of “C” or better in all completed ANSC courses.
Student Learning Outcomes:
• Comply with national and institutional regulations regarding the housing, care, and use of laboratory animals.
• Recognize of exotic and lab animal species and describe the signs and treatments for common diseases of lab animals.
• Describe common zoonotic diseases of exotics and lab animals as they apply to animal health and public safety.

ANSC 263L: Exotic and Laboratory Animal Procedures Lab
Laboratory to accompany ANSC 263. Provides student training in restraint and handling, health assessment, and nursing skills of exotic and laboratory animal species. This course is intended for students entering lab animal medicine, veterinary technology, veterinary assisting or other animal-related fields.
Credits: 1
Prerequisites:
Admission in the Veterinary Technology Program and a grade of “C” or better in all completed ANSC courses.
Student Learning Outcomes:
• Safely and humanely restrain common exotic and lab animals for procedures.
• Administer drugs and medications using appropriate sites and routes (IV, IM, SQ and Oral Dosing) to exotic and lab animal species.
• Humanely collect blood samples from exotics and lab animal species.
• Identify and describe the anatomy of the major body systems for exotic mammalian and avian species using skeletons and models.
• Explain anesthetic and recovery procedures in exotics and lab animal species.
ANSC 266: Veterinary Clinical Practices & Internship II
A continuation of ANSC 190, this course provides veterinary technology students with additional practical experience in a clinical setting. Topics covered include: advanced sample collection & handling techniques, dentistry, administration of medications, anesthesiology & surgical assisting, and advanced nursing techniques. Emphasis is placed on integrating classroom learning with practical work experience.
Credits: 2
Prerequisites:
Admission in the Veterinary Technology Program and a grade of “C” or better in all completed ANSC courses.

Student Learning Outcomes:
- Perform required clinical competencies in assigned veterinary location(s).
- Demonstrate professionalism in attendance, attitude, and behavior.
- Discuss multiple aspects of veterinary medicine through case studies, guest lecturers, or other assignments.

ANSC 271: Anesthesiology and Surgical Nursing for Veterinary Technicians
This course will focus on the clinical skills necessary for safe and effective anesthesia and surgery of companion animal patients (dogs and cats). Skills such as intravenous catheter placement, proper endotracheal intubation, patient and surgical site preparation, and patient monitoring under general anesthesia will be stressed. The use and side effects of commonly used sedatives, analgesics and anesthetics will be covered. Postoperative procedures include patient monitoring and charting as well as client education for postoperative care.
Credits: 3
Lecture Hours: 3
Prerequisites:
Admission in the Veterinary Technology Program and a grade of “C” or better in all completed ANSC courses
Co-Requisites:
Co-registration in ANSC 271.

Student Learning Outcomes:
- Understand the proper operation of anesthetic delivery equipment and monitoring instruments.
- Explain all aspects of anesthetic monitoring.
- Understand and integrate all aspects of patient management for common surgical procedures in companion animal species.
- Identify and provide appropriate instruments, supplies and environment to maintain asepsis during surgical procedures.
- Demonstrate understanding of routine surgical procedures including surgeries in these categories: ovariohysterectomy, cesarean section, orchicetomy, laparotomies, and orthopedic procedures.

ANSC 271L: Anesthesiology and Surgical Nursing for Veterinary Technicians Lab
This course will focus on the clinical skills necessary for safe and effective anesthesia and surgery of companion animal patients (dogs and cats). Skills such as intravenous catheter placement, proper endotracheal intubation, patient and surgical site preparation, and patient monitoring under general anesthesia will be stressed. The use and side effects of commonly used sedatives, analgesics and anesthetics will be covered. Postoperative procedures include patient monitoring and charting as well as client education for postoperative care.
Credits: 2
Prerequisites:
Admission in the Veterinary Technology Program and a grade of “C” or better in all completed ANSC courses
Co-Requisites:
Co-registration in ANSC 271.

Student Learning Outcomes:
- Safely and effectively manage patients during all phases of anesthetic procedures.
- Safely and effectively select, operate and maintain anesthetic delivery equipment and monitoring instruments.
- Understand and integrate all aspects of patient management for common surgical procedures in companion animal species.
- Identify and provide appropriate instruments, supplies and environment to maintain asepsis during surgical procedures.

ANSC 290: Veterinary Technician Exam Review
This course prepares students for the Veterinary Technician National Exam (VTNE). Topics include test-taking strategies, formation of a study plan, and a review of topics from previous veterinary technology courses. Students enrolled in this course will develop essential test-taking skills by completing practice exams covering all major topics of the Windward CC veterinary technology curriculum.
Credits: 1
Lecture Hours: 1
Prerequisites:
Admission in the Veterinary Technology Program and a grade of “C” or better in all completed ANSC courses.
Student Learning Outcomes:
- Develop an appropriate study plan and essential test-taking skills to prepare for the VTNE.
- Identify areas of competence as well as topics which require further study.

Anthropology

ANTH 151: Emerging Humanity
This course is an introduction to human biological evolution and the archaeology of culture in the world prior to AD 1500.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Describe the human phylogenetic past, applying the theory of evolution to explain major morphological transitions of the lineage.
- Discuss the relationship(s) among human biology, culture, and environment, both prehistoric and historic.
- Demonstrate an appreciation for how anthropologists gather and use evidence about the past to describe human biological and cultural variation.
ANTH 152: Culture and Humanity
Introduction to cultural anthropology. This course explores how humans create, understand, order and modify their natural, social, supernatural and physical environments, and make meaning and order.

Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- 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.
- 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 anthropological perspectives and research methods to careers and research outside of the discipline.
- Examine his/her own life and culture in a more critical manner in relation to the lives of people in other cultures.

ANTH 175: Polynesian SuRF Culture
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.

Credits: 3
Lecture Hours: 3
Co-Requisites: ANTH 175L
Student Learning Outcomes:
- Demonstrate an understanding and basic knowledge of environmental and cultural factors affecting the development of surfing in Polynesia, surfing’s integration into Hawaiian culture, its decline due to Western influence, and its revitalization as a modern recreational activity.
- Demonstrate an understanding of the principles of anthropology as they apply to the creation and shaping of surfing culture, especially on O‘ahu.
- Coherently address modern social and legal issues relating to surfing.

ANTH 175L: SuRF Culture Field Lab
Complements 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 fieldtrips 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.

Credits: 1
Co-Requisites: ANTH 175
Student Learning Outcomes:
- Demonstrate an understanding and basic knowledge of environmental and cultural factors affecting the development of surfing in Polynesia, surfing’s integration into Hawaiian culture, its decline due to Western influence, and its revitalization as a modern recreational activity.
- Demonstrate an understanding of the principles of anthropology as they apply to the creation and shaping of surfing culture, especially on O‘ahu.
- Coherently address modern social and legal issues relating to surfing.

ANTH 210: Archaeology
This course is an introduction to prehistoric archaeology providing a overview of methods and techniques of excavation and laboratory analysis and a brief survey of theory in relation to change and diversity in prehistoric human groups.

Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Categorize and evaluate the cultural and environmental processes which shape the archaeological record.
- Demonstrate and compare the major methods used by archaeologists in the field and in the laboratory to discover, excavate, date and interpret human cultural materials. Be able to evaluate the validity and usefulness of the various methods with relationship to actual sites.
- Examine the major explanatory concepts and theories in archaeology, and analyze how they are used to develop an understanding of development, change and diversity in prehistoric human groups.
- Analyze examples from specific areas with an emphasis on Hawai‘i to explore how archaeology has been used/misused to develop scientific and popular views of prehistory.
- Examine and evaluate major issues in Hawai‘i in modern archaeology, especially as they Cultural Resource Management.
- Discuss the ethical, legal and social implication of archaeological work especially in relation to NAGPRA and how these issues relate to current debates in Hawai‘i.
ANTH 296: Special Topics in Anthropology
Students will investigate important topics, issues, or subfields within the discipline of Anthropology. May be repeated up to 9 credits with different topics.

Credits: 3
Lecture Hours: 3
Prerequisites: “C” or better in ANTH 151 or ANTH 152

Student Learning Outcomes:
- Identify the important concepts and facts particular to the selected course topic.
- Analyze and interpret the nature and significance of the selected course topic.
- Investigate connections between the selected course topic and contemporary events and issues.

Aquaculture

AQUA 106: Small Scale Aquaculture
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.

Credits: 3
Lecture Hours: 3
Recommended: Registration in AQUA 106L.

Student Learning Outcomes:
- Describe past and present aquaculture technologies.
- Plan and design a small scale aquaculture system.
- Select appropriate small scale aquaculture organisms.
- Determine the optimal conditions for cultivating small scale aquaculture organisms.
- Develop a small-scale aquaculture husbandry and management plan.
- Evaluate the economic feasibility of developing a small-scale aquaculture system.

AQUA 106L: Small Scale Aquaculture Laboratory
Companion laboratory to AQUA 106, Small Scale Aquaculture. Practical, hands-on experiences in small scale aquaculture. Laboratory/field trip class.

Credits: 1
Prerequisites: Credit for or registration in AQUA 106.

Student Learning Outcomes:
- Construct and operate different kinds of small-scale aquaculture systems.
- Identify and classify common species of aquaculture organisms.
- Identify anatomical (internal and external) features of aquaculture organisms.
- Operate a small-scale aquaculture system to successful harvest of target species.
- Monitor culture conditions (physical, chemical and biological) in small-scale aquaculture systems.
- Demonstrate techniques for the cultivation of live food cultivation.
- Demonstrate techniques for the reproduction of aquaculture species.

AQUA 201: The Hawai‘i Fishpond
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.

Credits: 3
Lecture Hours: 3
Recommended: Registration in AQUA 201L.

Student Learning Outcomes:
- Explain the process and philosophical basis of scientific inquiry.
- Distinguish between the types of traditional Hawaiian fishponds, the history of their construction and use throughout the Hawaiian Islands, how and where they were constructed, their operation and management, their characteristics, and their biota.
- Describe the oceanography, biology and ecology of Hawaiian fishponds.
- Describe the basic principles of aquaculture, including pond dynamics, feeding regimes, cultivated species propagation and growth, disease management, production, harvesting and maintenance.
- Discuss the status of Hawaiian fishponds in modern times, including their restoration and their future.

AQUA 201L: The Hawai‘i Fishpond Lab
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.

Credits: 1
Prerequisites: Credit for or registration in AQUA 201 or consent of instructor.

Student Learning Outcomes:
- Use the scientific method of inquiry to study a Hawaiian fishpond.
- Apply the concepts learned in AQUA 201 to an experimental and hands-on observational setting.
- Use analytical tools and instruments to study the oceanography, biology and ecology of Hawaiian fishponds.
- Collect, reduce, and interpret data.
- Prepare written objective reports describing and interpreting experimental and observational results.
- Identify and classify common fishpond species.
- Design a Hawaiian fishpond.
- Manage all aspects of a Hawaiian fishpond.
**Art**

**ART 101: Introduction to the Visual Arts**
Art101 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.

**Credits:** 3  
**Lecture Hours:** 3

**Student Learning Outcomes:**
- 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 104D: Introduction to Printmaking/Screen Printing**
Studio experience mainly for non-majors. An introduction to printmaking providing experience in the development of skills used in designing for screen printing on paper. Includes skill in photo screening. May be repeated up to 6 credits.

**Credits:** 3

**Student Learning Outcomes:**
- Demonstrate a knowledge and understanding of the elements of art, principles of design, and the creative process.
- Select and use screen printing materials.
- Complete the creative problem-solving process, from planning and discovery to implementation and evaluation.
- Examine the process of integrating content and meaning with visual form in the screen printing process.

**ART 105B: Introduction to Ceramics–handbuilding**
Studio experience mainly for no majors. An introduction to clay as an art medium. Emphasis on basic handbuilding techniques, three-dimensional concepts in clay, glazing, decorating and firing kilns.  
**NOTE:** Art Majors: ART 105B and ART 105C must both be taken to receive equivalency at UH Mānoa as an art elective. Liberal Arts Students: ART 105B or ART 105C will transfer to fulfill the Humanities DA core requirements.

**Credits:** 3

**Student Learning Outcomes:**
- 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: Introduction to Ceramics–wheelthrowing**
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.  
**NOTE:** Art Majors: ART 105B and ART 105C must both be taken to receive equivalency at UH Mānoa as an art elective. Liberal Arts Students: ART 105B or ART 105C will transfer to fulfill the Humanities DA core requirements.

**Credits:** 3

**Student Learning Outcomes:**
- 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: Introduction to Photography
Studio experience mainly for non-majors. An introduction to black and white photography emphasizing a variety of picturmaking techniques. Assignments and field trips. Student must have film camera with adjustable shutter speeds and aperture settings.

Credits: 3

Student Learning Outcomes:
- 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 express your feelings, ideas and/or concepts.

ART 108: Elementary Studio: Drawing and Painting
Art 108 is a studio course, which includes drawing and an introduction to acrylic painting techniques, with an emphasis on acrylic painting. Course content will also emphasize composition and color theory. May be repeated up to 6 credits.

Credits: 3

Student Learning Outcomes:
- 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
Art 111 is an introduction to watercolor painting materials and techniques. May be repeated up to 6 credits.

Credits: 3

Recommended: ART 101 and ART 113.

Student Learning Outcomes:
- 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 112: Introduction to Digital Art
ART 112 is a studio introduction to digital technology and its applications to the production of visual art. Emphasis will also be placed on developing an aesthetic criteria for evaluation.

Credits: 3

Recommended: ART 115, ICS 100.

Student Learning Outcomes:
- Create original digital graphic artwork using appropriate design principles, elements of art, vocabulary, digital graphic software, and digital graphical technological processes.
- Apply problem-solving techniques to develop art projects according to specifications, and critique and defend own artwork.
- Use the vocabulary and technological processes of digital graphics.
- Demonstrate basic animation principles and skills.

ART 113: Introduction to Drawing
Art 113 is an introduction to the materials and techniques of drawing, focusing online drawing, rendering, and the use of perspective. This course will include the study of the drawings of old and modern masters. May be repeated up to 6 credits.

Credits: 3

Recommended: ART 101.

Student Learning Outcomes:
- 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
Art 114 is an introductory course focusing on color theory and the application of color as related to studio art practice.

Credits: 3

Recommended: ART 101.

Student Learning Outcomes:
- 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
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.

Credits: 3

Recommended: ART 101.

Student Learning Outcomes:
- 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
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.

Credits: 3

Student Learning Outcomes:
- 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
Art 123 is an introduction to the materials and techniques of oil painting. Classical painting techniques will be emphasized. May be repeated up to 6 credits.

Credits: 3

Recommended:
ART 101, 113 and 114.

Student Learning Outcomes:
- 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 126: 3D Computer Graphics I
This course explores introductory level conceptual and technical topics in 3D computer graphics. Autodesk Maya and related applications will be utilized to develop projects which integrate 3D modeling, UV layout, texture mapping, lighting, and rendering. (Cross-listed as CM 126)

Credits: 3

Prerequisites:
A grade of C or better in ART 112 or consent of instructor.

Recommended:
Algebra, Geometry

Student Learning Outcomes:
- Develop 3D models and related art assets using introductory level technical skills, procedures, and production methodologies.
- Employ the vocabulary of 3D computer graphics to define creative objectives and evaluate outcomes.
- Apply knowledge of contemporary industry responses to 3D computer graphics in the development of 3D models and related art assets.
- Apply knowledge of the theory, history and principles of design and animation in the creation of new media art.
- Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.

ART 131: Introduction to Fused Glass
Introduction to expressive explorations in the use of kiln-formed, fusible-sheet glasses and enameling on glass.

Credits: 3

Student Learning Outcomes:
- Demonstrate the basic skills of glass fusing using float glass, Spectrum 96 fusible glass, high temperature glass enamels, and Bullseye fusible glass
- Design, cut, assemble and fire fused glass
- Apply knowledge of programming and firing of the kiln controller computer

ART 175: Survey of Global Art
Art produced in Asia, Africa, Native America, Europe, and the Pacific Islands, from prehistory to the 15th century. Religious and philosophical ideas expressed in architecture, painting, prints, sculpture, applied art, body art, and textiles.

Credits: 3

Lecture Hours: 3

Student Learning Outcomes:
- Distinguish how art expresses world views and reflects societies’ organization and interaction with other cultures.
- Analyze art through religious, political, and economic factors that have shaped culture in different parts of the globe at different times.
- Analyze a work of art through the recognition of elements of style.
ART 176: Survey of Global Art II
Art produced in Asia, Africa, Native America, Europe, and the Pacific Islands, from the 15th century to the present. Religious and philosophical ideas expressed in architecture, painting, prints, sculpture, applied art, body art, and textiles.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Distinguish how art expresses worldviews and reflects societies’ organization and interaction with other cultures
- Analyze art through religious, political, and economic factors that have shaped culture in different parts of the globe at different times.
- Analyze a work of art through the recognition of elements of style.

ART 189: Introduction to Hawaiian Art
An integrated beginning studio art course, which offers students the opportunity to understand and express Hawaiian cultural perspective through contemporary visual arts activities.
Credits: 3
Recommended: HAW 101 or one semester high school Hawaiian.
Lecture/Lab Hours: 6
Student Learning Outcomes:
- Demonstrate a basic understanding of the historical and formal qualities of objects produced by Hawaiians through pre-contact, post-contact, and contemporary times.
- Demonstrate a basic understanding of art making as a means of contemporary notation, conceptualization and visual organization.
- Develop an appreciation of Hawaiian art, the variety and richness of its art forms and the cultural significance inherent in its production.
- Demonstrate how the Hawaiian language informs the process of art making and offers insights into the metaphorical nature intrinsic in Hawaiian art.
- Use various art making techniques and processes to explore personal imagery.
- Collaborate with others to make creative decisions.

ART 202: Introduction to Digital Imaging
Combined theory and practice examining major techniques, concepts, and aesthetics in contemporary digital image production. Direct studio experience in essential software, printing techniques and hardware necessary in producing the gallery quality inkjet print.
Credits: 3
Prerequisites: Grade of “C” or better in Art 107 and Art 113, or consent from instructor.
Lecture/Lab Hours: 6

ART 207: Intermediate Photography: Techniques and Aesthetics of Photography
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. May be repeated up to 6 credits.
Credits: 3
Prerequisites: Credit for ART 107 or consent of instructor.
Student Learning Outcomes:
- Conceptualize an idea and translate it graphically 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 213: Intermediate Drawing
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. May be repeated up to 6 credits.
Credits: 3
Recommended: ART 101 and ART 113.
Student Learning Outcomes:
- 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
Art 214 is an introductory figure drawing course. Anatomical construction, light, space, diagrammatic analysis, and thematic content will be studied through the drawing process. May be repeated up to 6 credits.
Credits: 3
Prerequisites: Credit for ART 113 or consent of instructor.
Recommended: ART 101 and 213.
Student Learning Outcomes:
- 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 (AKA Atelier Hawai‘i)
Intensive Study in Drawing and Painting
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;
however, students of all skill levels are welcome.
Credits: 6
Student Learning Outcomes:
• Develop observational drawing and painting skills using classical
  measuring and sighting techniques, mapping, and memory to
  make accurate depictions from plaster casts and the live figure
  model.
• Perceive, key, and record values accurately and effectively in
  observational drawings and paintings.
• Execute the painting processes, from preliminary drawings and
  canvas preparation to the completion of a painting, including the
  proper use and care of the painter’s studio implements.
• Discuss and critique work based on classical drawing and painting
  concepts and techniques.

ART 223: Intermediate Painting
Survey of late 19th and early 20th century studio practice. Completion
of paintings which concentrate on historical styles as well as on a more
personal direction. May be repeated for up to 6 credits.
Credits: 3
Prerequisites:
Credit for ART 123 or consent of instructor.
Student Learning Outcomes:
• Create paintings that exhibit a working knowledge of recent
  developments in the pictorial structure of paintings.
• Understand and use the dynamic organization of pattern, two and
  three dimensional space and rhythmic demands of the “flat”
  picture plane.
• Confidently paint shape, edges, color relationships and space with
  increased sensitivity.
• Develop original and personal concepts and techniques.
• Demonstrate an understanding of the technical aspect of the
  painting process.
• Develop the language skills used in the critical evaluation of
  paintings.

ART 224: Painting from Life
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. May be repeated up to 6 credits.
Credits: 3
Prerequisites:
Credit for ART 123 and 214, or consent of instructor.
Student Learning Outcomes:
• 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.
• 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: Intermediate Ceramics–handbuilding
Development of handbuilding techniques, sculptural and vessel
concepts, and surface treatment and glazing. May be repeated up to 6
credits. NOTE: Art Majors: ART 243 and 244 must both be taken to
receive equivalency at UH Mānoa as ART 242, Introduction to
Ceramics.
Credits: 3
Prerequisites:
Credit for ART 105B or consent of instructor.
Recommended:
ART 101, 116.
Student Learning Outcomes:
• 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: Intermediate Ceramics–wheelthrowing
Development of wheelthrowing techniques, vessel and structural concepts, and surface treatment and glazing. May be repeated up to 6 credits. NOTE: Art Majors: ART 243 and 244 must both be taken to receive equivalency at UH Mānoa as ART 242, Introduction to Ceramics.

Credits: 3
Prerequisites:
Credit for ART 105C, or consent of instructor.

Recommended:

Student Learning Outcomes:
- 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 251: Mold Making for Ceramics and Sculpture
ART 251 is an introduction to mold making techniques and their application in the creation of functional ceramics and sculptural objects. Emphasis on the fabrication of various types of plaster molds from original and “found” objects, pressing and casting forms from molds in clay and other non-metal media, and various finishing techniques including glazing and firing. May be repeated up to 6 credits.

Credits: 3
Recommended:
ART 101, ART 105B, 105C, or ART 116

Student Learning Outcomes:
- Select, fabricate, and employ various mold types in the making of functional ceramics and sculptural objects.
- Design and produce original objects in clay and other materials to be used as mold patterns.
- Produce finished functional and artistic objects that explore the possibilities of mold made forms.

ART 253: Sculpture–figure Modeling
Modeling the human figure in clay, with emphasis on the basic skeletal structure and muscles in relation to surface modulation, proportion, volume and gesture. May be repeated up to 6 credits.

Credits: 3
Student Learning Outcomes:
- Demonstrate through finished sculpture, an understanding of figure and portrait modeling, mold-making, fabrication, and the casting process and materials.
- Demonstrate an understanding of drawing as a tool for conceptualization and documentation of personal imagery.
- Demonstrate an awareness of historic and contemporary examples of sculpture.
- Perceive and sculpt volume and mass with increased sensitivity and personal confidence.
- Trust one’s own decisions, insights, and perceptions during the creative problem-solving process.
- Demonstrate an ability to articulate the concepts and intent of a finished sculpture.

ART 260: Gallery Design and Management
Design theory and techniques for presentation of art work and mounting an exhibition. May be repeated up to 6 credits.

Credits: 3
Student Learning Outcomes:
- Plan and install an art display using the appropriate skills and techniques of gallery design and management.
- Evaluate spatial relationships, design principles and color theory as related to gallery displays and discover the role intuition plays in the arts and gallery design.
- Critique and evaluate works of art and presentation by using art terminology.
- Prepare publicity related to gallery displays and discover the role intuition plays in gallery displays and discover the role intuition plays in
- Generate a portfolio documenting art exhibitions in our local community.

ART 269V: Study Abroad (Designated Region, Variable Credit)
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.

Credits: 1-6
Prerequisites:
Meet with instructor for approval.

Lecture/Lab Hours: 30

Student Learning Outcomes:
- Become more informed about the peoples and culture of the designated locations visited.
- Become aware of Internationalism and an interdependency of cultures.
- Understand the development of ceramic art and/or architecture of the designated locations visited.
- Use group discussions, essays and examinations, and a visual studio process as a tool to analyze, understand and sensitively appreciate and appraise forms and structures of the art studied.
Astronomy

**ASTR 110: Survey of Astronomy**
Introduction to the astronomical universe for non-science students.

**Credits:** 3  
**Lecture Hours:** 3

**Student Learning Outcomes:**
- 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: Survey of Astronomy Lab**
Demonstration of astronomical principles through laboratory observations and analysis of astronomical data. Not required for ASTR 110.

**Credits:** 1  
**Prerequisites:** Credit for or registration in ASTR 110 or consent of instructor.

**Student Learning Outcomes:**
- 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**
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.

**Credits:** 3  
**Lecture Hours:** 3

**Recommended:** ASTR 110.

**Student Learning Outcomes:**
- 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.

**ASTR 180: Planetary Astronomy**
A survey of modern solar system astronomy with emphasis on the underlying physical principles. Topics discussed include the celestial sphere and aspects of the night sky, the structure and evolution of the Sun's planetary system, comparative planetology, and theories of the formation of planetary systems. Intended for science majors and prospective science teachers.

**Credits:** 3  
**Lecture Hours:** 3

**Recommended:**  
The student should have a good operational familiarity with high school algebra.

**Student Learning Outcomes:**
- Outline the development of planetary astronomy from ancient times to present and explain the role of the scientific method in this historic context.
- Describe the major geological and atmospheric features of the objects in our Solar System.
- Describe the physical and chemical properties of the objects in our solar system and apply the concept of comparative planetology.
- Outline the origins of our Solar System and formulate models that explain the different physical and chemical characteristics of objects within the Solar System.
- Describe the properties of our Sun and their effects on objects in the Solar System.
- Outline techniques for discovering extrasolar planets and extraterrestrial life.
**ASTR 181: Stellar Astronomy**
A survey of modern stellar, galactic, and extragalactic astronomy, with emphasis on the underlying physical principles. Topics covered include stellar structure, interstellar environments and the formation of stars, stellar evolution and death, the structures of galaxies, and cosmology. Intended for science majors and prospective science teachers. The student should have a good operational familiarity with high school algebra.

**Credits:** 3  
**Lecture Hours:** 3  
**Recommended:**  
The student should have a good operational familiarity with high school algebra; credit in ASTR 110 and/or ASTR 180.

**Student Learning Outcomes:**  
- Outline the development of stellar astronomy from ancient times to present and explain the role of the scientific method in this historic context.  
- Identify the appropriate instruments used by astronomers to understand the universe and describe the nature of electromagnetic radiation and its role in deciphering the mysteries of stellar astronomy.  
- 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, including the role of the interstellar medium.  
- Compare and contrast the structure of our Milky Way and other galaxies.  
- Outline and appraise the leading cosmological theories of the origin of the universe.  
- Apply astronomical concepts to the search for extraterrestrial life.

**ASTR 250: Observational Astronomy**
An introduction to the tools and techniques of observational astronomy: astronomical time and coordinate systems, photometric systems and magnitudes, principles of telescopes and their operation, introduction to modern astronomical instruments, analysis of astronomical data. Includes planetary, solar and stellar observations.

**Credits:** 3  
**Lecture Hours:** 3  
**Prerequisites:**  
Credit for ASTR 110; or ASTR 180 and ASTR 181  
**Recommended:**  
Student should have operational familiarity with high school algebra and basic trigonometry.

**Student Learning Outcomes:**  
- Use appropriate celestial charts and astronomical time system to identify and locate celestial objects, such as stars, nebulae, galaxies, planets, satellites and asteroids.  
- Describe the primary functions of an astronomical telescope and major detectors, such as spectrometers and photometers.  
- Apply basic principals in planetary remote sensing and image processing.  
- Outline astronomical techniques involved in observing planetary and stellar objects, such as variable stars, asteroids and the Sun and Moon.  
- Compare and contrast the research involved in optical, radio, infrared and cosmic ray astronomy.  
- Use appropriate techniques to analyze astronomical data.

**ASTR 250L: Observational Astronomy Lab**
A lab course in modern observational astronomy, with emphasis on "hands-on" use of instruments to acquire data with research-grade telescopes at the college's Lanihuli Observatory. Remote telescope observations may also be used. Students will gain on-site observing experience with CCD photometry and spectroscopy through direct acquisition and data analysis using modern laboratory data reduction software. Applications to planetary, solar, stellar and, where possible, galactic astrophysics will be covered.

**Credits:** 1  
**Prerequisites:**  
credit or current enrollment in ASTR 250  
**Recommended:**  
Student should have operational familiarity with high school algebra and basic trigonometry.

**Student Learning Outcomes:**  
- Use appropriate celestial charts and astronomical time system to identify and locate celestial objects, such as stars, nebulae, galaxies, planets, satellites and asteroids.  
- Describe the fundamentals optics and telescopic observations.  
- Operate and make observations with optical, radio and cosmic ray telescopes.  
- Apply basic principals in planetary remote sensing and image processing using both real-time observations and archived data.  
- Apply the techniques of astrophotography and spectrometry.  
- Use appropriate techniques to analyze astronomical data.

**ASTR 281: Space Explorations**
Current topics in planetary exploration, extraterrestrial life, and space resources and colonization.

**Credits:** 3  
**Lecture Hours:** 3  
**Prerequisites:**  
Credit for ASTR 110 or consent of instructor.

**Recommended:**  
Student should have operational familiarity with high school algebra and basic trigonometry.

**Student Learning Outcomes:**  
- Use appropriate celestial charts and astronomical time system to identify and locate celestial objects, such as stars, nebulae, galaxies, planets, satellites and asteroids.  
- Compare and contrast terrestrial and Jovian worlds and apply geological and atmospherical 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**
This course covers current topics in astronomy. The course is designed to have variable credit to coincide with the rigor of the topic. May be repeated up to 8 credits with different topics. A course description will be presented in the schedule of classes.

**Credits:** 1-4  
**Lecture Hours:** 1  
**Prerequisites:**  
Credit for ASTR 110 or consent of instructor.

**Student Learning Outcomes:**  
- 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.

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**Atmospheric Sciences**

**ATMO 101: Introduction to Weather and Climate**
Introductory (DP) Diversification Physical Science course for all undergraduates in any major. A non-mathematical introduction to basic atmospheric variables, Earth’s past climates, global warming, air pollution, El Nino, hurricanes, tornadoes, and forecasting weather in Hawai’i.

**Credits:** 3  
**Lecture Hours:** 3  
**Prerequisites:**  
“C” or better in MATH 25, 26, 28, 29, 75X or higher.

**Student Learning Outcomes:**  
- 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.

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**Biochemistry**

**BIOC 141: Fundamentals of Biochemistry**
Biological chemistry focusing on the integration of concepts from general, inorganic, and biochemistry and their application to living systems. Satisfies the one-semester chemistry requirement for pre-nursing and pre-dental hygiene majors.

**Credits:** 3  
**Lecture Hours:** 3  
**Prerequisites:**  
“C” or better in MATH 25, 26, 28, 29, 75X or higher.

**Student Learning Outcomes:**  
- Utilize precise chemical language to effectively communicate biochemical and allied health-related concepts and results.  
- Analyze and apply appropriate procedures for solving biochemical and allied health-related calculations involving solids, liquids, gases, and solutions.  
- Relate the location of an element in the periodic table to its electronic structure and chemical reactivity.  
- Describe ionic and covalent bonding theories and apply them to the construction of proper Lewis structures and prediction of molecular characteristics.  
- Relate biochemical and allied health-related concepts, theories and laws to everyday phenomena.

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**Biology**

**BIOL 100: Human Biology**
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.

**Credits:** 3  
**Lecture Hours:** 3  
**Prerequisites:**  
“C” or better in MATH 25, 26, 28, 29, 75X or higher.

**Student Learning Outcomes:**  
- Use scientific reasoning to answer a question about phenomena in our natural universe or to determine the validity of a scientific claim.  
- Distinguish between living things and inanimate objects.  
- Relate cell structure and function to the architecture and functioning of the human body.  
- Use information about the form (anatomy) and function (physiology) of the human body to make effective decisions about human health.  
- Describe the interrelationships between humans and their environments.
BIOL 100L: Human Biology Laboratory
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.
Credits: 1
Prerequisites:
Credit for or registration in BIOL 100 or equivalent preparation or consent of instructor.
Student Learning Outcomes:
- Use the scientific method of inquiry to investigate biological phenomena.
- Apply the concepts learned in BIOL 100 to an experimental and hands-on observational setting.
- Collect, reduce, and interpret biological data.
- Prepare written objective reports describing and interpreting experimental and observational results.
- Demonstrate the use of some of the standard tools of the biological scientist, such as microscopes, scales, spectrophotometers, computers, and other analytical tools.
- Apply the standard analytical procedures needed to study human biology, such as dissection, separation of biological compounds, microscopic examination of cells and tissues, membrane transport mechanisms, energy metabolism, genetics, digestion and nutrition, excretion, skeletal muscle physiology, cardiovascular function, nervous system function, respiration, and blood analyses.
- Recognize and identify basic human tissue types and their distinguishing characteristics.
- Demonstrate basic knowledge of anatomy (structure) and physiology (function) of the fetal pig (using preserved specimens) and human body (using models and figures).

BIOL 101: Biology and Society
Historical development of scientific concepts, characteristics, and interaction of science and society from the perspective of biological sciences.
Credits: 4
Lecture Hours: 3
Prerequisites:
Credit in MATH 25, 26, 29, 82 or higher or equivalent preparation; and placement in ENG 100, or consent of instructor.
Student Learning Outcomes:
- Distinguish science as a way of knowing from other epistemological systems.
- Discuss the historical development of the discipline of biology into what it is today, relating the contributions made by significant individuals and concepts of the past to modern biology.
- Explain the major integrating principles of biology.
- Explain the origin and organization of the diversity of life on Earth.
- Describe how living systems function, relating structure to function, at all levels within the hierarchy of life from molecules to the biosphere.
- Solve problems in inheritance and genetics.
- Present informed, rational and objective opinions on biologically-related issues important to human society.
- Use the scientific method of inquiry to investigate biological phenomena.
- Apply the concepts learned to an experimental and hands-on observational setting.
- Collect, reduce, and interpret biological data.
- Prepare written objective reports describing and interpreting experimental and observational results.
- Demonstrate the use of some of the standard tools and methods of the biological scientist, such as microscopes, scales, spectrophotometers, computers, dissection dichotomous keys, and other analytical tools.
- Identify the major systematic groups to which specimens of living things belong.

BIOL 124: Environment and Ecology
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.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Explain the process and philosophical basis of scientific inquiry.
- Describe the basic principles of ecology, including population ecology, community ecology, and ecosystem function.
- Describe the characteristics of the major biomes and ecosystems of the Earth.
- Describe the interrelationships between land, sea, the atmosphere and the living things that occupy these environments.
- Discuss the role that humans play in affecting the characteristics of the environment.
- Evaluate current environmental issues and problems including the solutions and management practices that have been used or offered to address these issues and problems.
**BIOL 124L: Environment and Ecology Lab**
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.  
**Credits:** 1  
**Prerequisites:**  
Credit for or registration in BIOL 124 or consent of instructor.  
**Student Learning Outcomes:**  
- Use the scientific method of inquiry to investigate environmental phenomena.  
- Apply the concepts learned in BIOL 124 to an experimental and hands-on observational setting.  
- Collect, reduce, and interpret biological data.  
- Prepare written objective reports describing and interpreting experimental and observational results.  
- Demonstrate the use of some of the standard tools of the environmental scientist, such as microscopes, scales, spectrophotometers, various environmental meters, and basic statistical procedures.  
- Apply the standard analytical procedures needed to study the environment, such as soil analyses, water quality determinations, stream bioassessments, and quantitative resource inventories.  
- Conduct experiments that evaluate how environmental factors affect living organisms.

**BIOL 171: Introduction to Biology I**  
First semester of introductory biology for all life science majors. Topics include: Overview of the science of biology; Cell structure, chemistry, growth, and reproduction; Classical, chromosomal and molecular genetics; Evolution, phylogeny and systematics; and Biology and diversity of viruses and bacteria.  
**Credits:** 3  
**Lecture Hours:** 3  
**Recommended:**  
High school chemistry or college chemistry and registration in BIOL 171L.  
**Student Learning Outcomes:**  
- Develop and evaluate a scientific hypothesis.  
- Describe cell structure and function.  
- Describe how genetic characteristics are passed from generation to generation and how they are manifested into the characteristics of the whole organism.  
- Explain how the process of biological evolution influenced the history of life on our planet.  
- Classify living things into a hierarchical system of groups based upon morphology, genetics, and phylogeny.  
- Describe the characteristics, systematics, and biology of viruses and bacteria.

**BIOL 171L: Introduction to Biology I Lab**  
Laboratory to accompany BIOL 171.  
**Credits:** 1  
**Prerequisites:**  
Credit for or registration in BIOL 171  
**Recommended:**  
High school chemistry or college chemistry.  
**Student Learning Outcomes:**  
- Use the scientific method of inquiry to investigate biological phenomena.  
- Apply the concepts learned in BIOL 171 to an experimental and hands-on observational setting.  
- Collect, reduce, and interpret biological data.  
- Prepare written objective reports describing and interpreting experimental and observational results.  
- Demonstrate the use of some of the standard tools of the biological scientist, such as microscopes, scales, spectrophotometers, computers, and other analytical tools.  
- Apply the standard analytical procedures of biology, such as chromatography, biochemical analyses, preparation of materials for microscopic examination, culture techniques, and statistical procedures (descriptive statistics and hypothesis testing).

**BIOL 172: Introduction to Biology II**  
Continuation of BIOL 171. Topics include: Origin of eukaryotic organisms, their general characteristics, life cycles, systematics and evolution; Anatomy, physiology and classification of higher plants; Anatomy, physiology, behavior and classification of animals; and Basic ecological principles.  
**Credits:** 3  
**Lecture Hours:** 3  
**Prerequisites:**  
Credit for BIOL 171  
**Recommended:**  
Concurrent enrollment in BIOL 172L.  
**Student Learning Outcomes:**  
- Contrast the general characteristics, life cycles, evolution and systematics of eukaryotic organisms.  
- Describe the detailed biology of higher plants.  
- Describe the detailed biology of animals.  
- Explain how interacting environmental factors (physical, chemical and biological) determine the distribution and abundance of living things.
BIOL 172L: Introduction to Biology II Lab
Laboratory to accompany BIOL 172.
Credits: 1
Co-Requisites:
BIOL 172.
Recommended:
High school biology and college level reading and writing skills.
Student Learning Outcomes:
- Use the scientific method of inquiry to investigate biological phenomena.
- Apply the concepts learned in BIOL 172 to an experimental and hands-on observational setting.
- Collect, reduce, and interpret biological data.
- Prepare written objective reports describing and interpreting experimental and observational results.
- Apply standard analytical procedures for the comparative study of plants and animals, such as the handling of living and preserved materials for study, dissection procedures, preparation of materials for microscopic examination, and use of dichotomous keys.
- Identify the diagnostic anatomical features of organisms representing major groups of plants and animals.
- Identify the major systematic groups to which specimens of plants and animals belong.

BIOL 200: Coral Reefs
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, anatomy, 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.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Explain the process and philosophical basis of scientific inquiry.
- Distinguish between living things and inanimate objects.
- Describe the classification of living things, the kinds of criteria used to classify them, and the formal protocol in naming them.
- Demonstrate an understanding of the biology of corals (e.g., systematics & classification, soft tissue morphology and cytology, skeletal morphology, endosymbiosis with zooxanthellae, modes of feeding, reproduction, environmental factors that influence growth and distribution, and evolution) with an emphasis on Hawaiian corals.
- Describe the ecological relationships among the living components of coral reef communities and their interactions with the physical environment.
- Describe the types of reefs and the processes that create and shape them.
- Describe the resources that coral reefs provide, especially to Pacific island nations and states.
- Describe the impacts of human activities on coral reefs and the significance of these impacts to Pacific island nations and states.

BIOL 200L: Coral Reef Laboratory and Field Studies
Laboratory and field studies of the biology, ecology, and geology of stony corals and the reef structures they build; companion course to BIOL 200.
Credits: 1
Prerequisites:
Credit for BIOL 200 or consent of instructor
Recommended:
High school biology and algebra.
Student Learning Outcomes:
- Use the scientific method of inquiry to investigate biological phenomena.
- Apply the concepts learned in BIOL 200 to an experimental and hands-on observational setting.
- Collect, reduce, and interpret biological data.
- Prepare written objective reports describing and interpreting experimental and observational results.
- Demonstrate the use of some of the standard tools of the biological scientist, such as microscopes, scales, spectrophotometers, computers, and other analytical tools.
- Demonstrate the use of specialized tools and methods frequently used in the study of corals and coral reefs.

BIOL 265: Ecology and Evolutionary Biology
Principles of ecology and evolution for life science majors stressing integrated approach and recent advance.
Credits: 3
Lecture Hours: 3
Prerequisites:
Credit for BIOL 171/171L and 172/172L; or one year of introductory college biology plus labs; or equivalent preparation; or consent of the instructor
Co-Requisites:
BIOL 265L; or consent of instructor
Student Learning Outcomes:
- Apply the appropriate terminology when describing, explaining, and applying ecological theory.
- Summarize abiotic environmental features including climate, soil and geographical structure.
- Identify the biological and physical structures of ecosystems, major biogeochemical cycles, and energy flow.
- Examine the basic principles of population dynamics including birth and mortality rates, population growth models, life history strategies, competition and carrying capacity.
- Define the interactions within communities including interspecific competition, predation, and mutualism.
- Describe the evolutionary adaptations of organisms to their environment.
- Give examples of evolutionary principles that produced unique island communities.
- Evaluate the impact of habitat alteration and destruction, loss of biodiversity, and effects of alien species.
- Interpret and produce tabular and graphical representations of information, including tables, graphs, and maps.
- Locate and critique the value of printed and online resources.
- Evaluate the consequences of population growth, increased resource use and pollution on global ecosystems.
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Student Learning Outcomes:
• Use the scientific method of inquiry to investigate ecological and evolutionary phenomena.
• Apply the concepts learned in BIOL 265 to an experimental and hands-on observational setting.
• Apply standard analytical procedures for the study of evolution and ecology. These include the following areas of study: experimental design and set-up; descriptive statistics and hypothesis testing; age structure of a natural population; sampling and describing population attributes; sampling, describing, and quantifying the flora, fauna, and relevant abiotic characteristics of a terrestrial habitat; plant competition; optimal foraging theory; sampling and describing community characteristics and functions; primary productivity; natural selection; colonization and adaptive radiation of Hawaiian flora and fauna; taxonomy, systematics, and phylogenetics.
• Collect, reduce, and interpret ecological and evolutionary data.
• Prepare written objective reports describing and interpreting experimental and observational results.

BIOL 275: Cell and Molecular Biology
Integrated cell and molecular biology for life science majors. Modern advances in recombinant DNA technology.

Credits: 3
Lecture Hours: 3
Prerequisites: “C” or better in BIOL171/171L and CHEM 272/272L or consent of instructor
Co-Requisites: BIOL275L or consent of instructor.

Student Learning Outcomes:
• 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, mitosis, meiosis, genetic recombination and gene expression.

BIOL 275L: Cell and Molecular Biology Lab
Laboratory for cell and molecular biology.

Credits: 1
Co-Requisites: BIOL 275; or consent of the instructor.

Recommended: ICS 101 or ICS 105B-E, calculus or algebra.

Student Learning Outcomes:
• 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 101: General Botany
Introduction to plant structure, function, reproduction, and evolution; plants in relation to the environment and human activities. Lecture course.

Credits: 3
Lecture Hours: 3
Prerequisites: Credit for or registration in BOT 101.

Recommended: High School Biology DY

Student Learning Outcomes:
• 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.

BOT 101L: General Botany Lab
Lab observations and experiments illustrating basic principles of plant biology.

Credits: 1
Prerequisites: Credit for or registration in BOT 101.

Recommended: High School Biology DY

Student Learning Outcomes:
• Operate dissecting and compound microscopes.
• Cultivate and maintain the growth of plants.

BOT 105: Ethnobotany
The scientific study of the interaction between human culture and plants, including the interrelationship of botany, socio-economics, belief systems and history that have shaped the cultural uses of plants in Hawai‘i, as well as Asia or the Pacific. Lecture/field trip course with service-learning option.

Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
• Identify plants of major importance in various aspects of Hawaiian, Asian and Pacific Island cultures.
• Utilize the plants for food, medicine, and other material goods.

BOT 130: Plants in the Hawaiian Environment
Introduction to the evolution of plant communities and species of Hawaiian ecosystems; ecological interactions; observations, identification and systematics of native and introduced flora.

Credits: 3
Lecture Hours: 3

Prerequisites: Credit for or registration in BOT 130L

Student Learning Outcomes:
• Discuss geological history of the Hawaiian Islands and natural history of plants in Hawai‘i.
• 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 130L: Plants in the Hawaiian Environment Lab
BOT 130L focuses on observations of Native Hawaiian plant species, populations and communities as they interact in the natural environment and studies the unique characteristics of the plants through lab observations.
Credits: 1
Prerequisites:
Credit for or registration in BOT 130
Student Learning Outcomes:
- Mastering botanical terminology for use in identifying Native Hawaiian plants
- Analyzing the environmental factors that affect the plant dispersal and establishment, adaptation and diversification.

BOT 160: Identification of Tropical Plants
Nontechnical course in identification of common plants of tropics, including native and introduced flora.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Operate dissecting microscopes.
- Recognize unique vegetative and generative characteristics of plant families.
- Use manuals, flora and monographs to identify plants.
- Prepare herbaria.

BOT 192V: Special Topics in Plant Science
Topics from diverse fields in plant science, and chosen by the Instructor. Course content may vary. May be repeated.
Credits: 1-4
Lecture Hours: 1
Student Learning Outcomes:
- Identify the important concepts and facts presented for the topic(s) under examination.
- Make inferences and draw conclusions from the topic(s) under discussion.
- Develop skills appropriate to the topic(s) under discussion.
- Gain a higher awareness of the potential career paths that this special topic course covers.

BOT 199: Independent Study
Credits: 2-3

BOT 205: Ethnobotanical Pharmacognosy
A study of medicinal plants of Hawai‘i, their characteristics, plant extraction, isolation and identification of their chemical constituents for possible uses in pharmaceuticals or in their natural state, and bioproduct manufacturing. This course is designed to train students for careers in plant and medical biotechnology. Lecture and laboratory/fieldtrip course.
Credits: 4
Lecture Hours: 3
Prerequisites:
Credit for or registration 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.
Student Learning Outcomes:
- Discuss theories and principles in the study of medicinal and nutritious plants.
- Discuss ethics, intellectual property rights and conservation of traditional knowledge.
- Perform Laboratory activities: plant extraction, distillation, bioassay tests, analysis of chemical constituents for possible uses in pharmaceuticals and nutraceutical products.
- Produce lab reports using the standard scientific format.

BOT 210: Phytobiotechnology
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.
Credits: 4
Lecture Hours: 3
Prerequisites:
Credit for or registration in BOT 101, or AG 152, or MICR 130 and MICR 140, or BIOL 171 and 171L. Placement into MATH 100 or higher.
Recommended:
High school biology or chemistry, MATH 24.
Student Learning Outcomes:
- 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 bioethical issues, risks and benefits of biotechnology.
- Produce lab reports using the standard scientific format.
BUS 120: Principles of Business
Surveys the fundamentals of the American business enterprise. Examines the foundations and responsibilities of accounting, business, management, finance, marketing, and the business environment.
Credits: 3
Lecture Hours: 3
Recommended:
Credit for ENG 21 and ENG 22, or ENG 23 or higher.
Student Learning Outcomes:
• Demonstrate qualitative understanding of the impact of external factors on business decisions relative to the accomplishment of the mission and objectives of an organization.
• Demonstrate qualitative understanding of various forms of business ownership to determine their appropriateness relative to an organization's resources, goals, and objectives.
• Demonstrate qualitative understanding of various business functions and practices and their impact on the successful operation of a business.
• Demonstrate qualitative understanding of the impact of business decisions on the external environment.

BUS 122: Introduction to Entrepreneurship
This course covers the basic economic and business principles regarding small-scale business enterprises. Focusing on the creation of a business plan, topics include researching and evaluating resources, planning, marketing, cultivating money resources, and understanding key concepts in law, budgeting, financial statements, and business documentation.
Credits: 3
Lecture Hours: 3
Recommended:
BUS 120 and placement into ENG 100.
Student Learning Outcomes:
• Develop a comprehensive business plan for a future business enterprise.
• Apply fundamental economic, financial, and organizational principles to the operation of a sustainable agriculture business.
• Work collaboratively in a group setting to cultivate entrepreneurship and develop solutions to economic issues.
• Apply general entrepreneurial concepts to sustainable agriculture practices in Hawai‘i.

BUS 122B: Introduction to Entrepreneurship: Sustainable Agriculture
This course is a specialized section of Introduction to Entrepreneurship that focuses on sustainable agriculture. The course will cover the basic economic and business principles regarding small-scale business enterprises connected to agriculture, with a particular focus on sustainable agriculture in Hawai‘i. With a focus on the creation of a business plan, topics include researching and evaluating resources, planning, marketing, cultivating money resources, and understanding key concepts in law, budgeting, financial statements, and business documentation.
Credits: 3
Lecture Hours: 3
Recommended:
BUS 120 and placement into ENG 100.
Student Learning Outcomes:
• Develop a comprehensive business plan for a future business enterprise.
• Apply fundamental economic, financial, and organizational principles to the operation of a sustainable agriculture business.
• Work collaboratively in a group setting to cultivate entrepreneurship and develop solutions to economic issues.
• Apply general entrepreneurial concepts to sustainable agriculture practices in Hawai‘i.

Business Law
BLAW 200: Legal Environment of Business
Introduction to the legal environment of business operations with particular attention to business law and ethics and to principles of law relating to contracts, agency, partnerships, and corporations.
Credits: 3
Lecture Hours: 3
Recommended:
A grade of C or higher in ENG 100.
Student Learning Outcomes:
• Summarize the American system of justice and jurisprudence, and its evolution, and effectively use its concepts, terminology, and procedures.
• Explain how laws are made, implemented, interpreted and enforced by the three branches of government at the national, state and local levels.
• Examine, explain and apply basic principles of law, including contracts, torts, real and personal property, business organizations, agency, employment, products and consumer protection, environmental law, and anti-trust, etc.
• Discuss how business and legal disputes arise and are avoided and/or resolved, including informal processes and alternative dispute resolution.
• Participate in ethical decision-making, taking into account various legal, business and ethical approaches, philosophies and codes.
**Business Technology**

**BUSN 121: Introduction to Word Processing**
The course covers proper keyboarding techniques; word processing concepts (Microsoft® Word); and document formatting of letters, memos, tables, reports, and email. Basic file management and operating system functions are included. Keyboarding speed and accuracy are emphasized.

**Credits:** 3  
**Lecture Hours:** 3  
**Recommended:** Credit for ENG 23 or higher.

**Student Learning Outcomes:**
- Input information (alphabetic, numeric, and symbolic) using proper techniques with accuracy  
- Use the computer’s operating system to manage documents and folders  
- Produce basic mailable business documents in a timely manner using word processing software

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**Chemistry**

**CHEM 100: Chemistry and Society**
Introduction to chemistry for non-science majors. Discussion of basic chemistry concepts and their application to everyday life. 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 have little or no background in chemistry and serves to fulfill a general education physical science core course for the non-science major or as a preparatory course for CHEM 151 or BIOC 141.

**Credits:** 3  
**Lecture Hours:** 3  
**Prerequisites:** Credit in MATH 24, 25, 26, 28, 29, 75X or higher, and placement in ENG 23 or higher.

**Student Learning Outcomes:**
- 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 Lab
Experiments introducing laboratory techniques and illustrating chemical principles; supplemented by films, demonstrations, and problem sessions.

Credits: 1
Prerequisites:
Credit for or registration in CHEM 151.

Student Learning Outcomes:
- 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
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.

Credits: 3
Lecture Hours: 3
Prerequisites:
Credit for CHEM 151 or equivalent or consent of instructor.

Student Learning Outcomes:
- 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 biochemistry concepts to discuss the genetic cause of a metabolic disorder in a short research paper.

CHEM 161: General Chemistry I
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.

Credits: 3
Lecture Hours: 3
Prerequisites:
A grade of “C” or better in Math 103 or higher, or placement into Math 135 or consent of instructor
Co-Requisites:
Registration in CHEM 161L.
Recommended:
Student should have taken high school chemistry, CHEM 100, or CHEM 151.

Student Learning Outcomes:
- 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 I Lab
Laboratory experiments illustrating fundamental principles of chemistry.

Credits: 1
Prerequisites:
Credit for or registration in CHEM 161.

Student Learning Outcomes:
- 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
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.
Credits: 3
Lecture Hours: 3
Prerequisites:
A grade of “C” or better in CHEM 161, credit for or registration in MATH 135, or consent of instructor
Co-Requisites:
CHEM 162L.
Student Learning Outcomes:
• 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 II Lab
Laboratory experiments illustrating fundamental principles of chemistry.
Credits: 1
Prerequisites:
Credit for or registration in CHEM 162.
Student Learning Outcomes:
• Develop an appreciation for the methods of scientific inquiry through 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.

CHEM 272: Organic Chemistry I
This is the first semester course in organic chemistry intended for science majors. Topics to be covered include structure, properties, nomenclature, reactions, reaction mechanisms, stereochemistry and spectroscopy of alkanes, alkenes, alkynes, alkyl halides, alcohols and their applications to biology.
Credits: 3
Lecture Hours: 3
Prerequisites:
A grade of “C” or better in CHEM 162 or consent of instructor.
Student Learning Outcomes:
• Discuss the bonding and structure of organic compounds.
• Name various organic compounds using IUPAC rules and diagram their structures.
• Use stereochemical concepts in understanding physical and chemical properties.
• Identify chemical structure and physical chemical properties.
• Explain the relationship between structure and physical chemical properties.
• Predict reaction products, deduce starting materials and diagram reaction mechanism.
• Cite applications and important role of organic reactions in biology.

CHEM 272L: Organic Chemistry I Lab
Laboratory principles of Organic Chemistry I, the first semester course in organic chemistry intended for science majors. Topics to be covered include structure, properties, nomenclature, reactions, reaction mechanisms, stereochemistry and spectroscopy of alkanes, alkenes, alkynes, alkyl halides, alcohols and their applications to biology.
Credits: 2
Prerequisites:
A grade of “C” or better or registration in CHEM 272 or consent of instructor.
Student Learning Outcomes:
• Perform and develop skills in organic chemistry laboratory methods and techniques used in separation and purification.
• Determine the chemical identity of some organic chemicals through their properties.
• Keep complete and accurate records, manipulate data for mathematical calculations, including reactant recovery and percent yield.
• Apply laboratory safety and safety disposal of waste procedures that can be used in all future laboratory experiences.
• Gain experience in conducting synthesis and functional group conversion.
• Interpret experimental data and formulate conclusions as evidenced in laboratory reports.
CHEM 273: Organic Chemistry II
This is the second semester course in organic chemistry intended or science majors. Topics to be covered include structure, properties, nomenclature, reactions, reaction mechanisms, stereochemistry and spectroscopy of conjugated systems, aromatic compounds, aldehydes, ketones, carboxylic acids and their derivatives, enols, enolates and their applications to biology.
Credits: 3
Lecture Hours: 3
Prerequisites:
A grade of “C” or better in CHEM 272 or consent of instructor.
Student Learning Outcomes:
- Discuss the bonding and structure of organic compounds.
- Name various organic compounds using the IUPAC rules and diagram their structures.
- Use stereochemical concepts in understanding physical and chemical properties of organic compounds.
- Identify chemical structure based on spectroscopic data.
- Explain the relationship between structure and physical and chemical properties of organic compounds.
- Predict reaction products, deduce starting materials and diagram reaction mechanisms.
- Cite applications and the important role of organic reactions in biology.

CHEM 273L: Organic Chemistry II Lab
Laboratory principles of Organic Chemistry II, the second semester course in organic chemistry intended for science majors. Topics to be covered include techniques, synthesis, qualitative organic analysis and applications of spectroscopy.
Credits: 1
Prerequisites:
A grade of “C” or better in CHEM 272L and a grade of “C” or better or registration in CHEM 273 or consent of instructor.
Student Learning Outcomes:
- Perform and develop skills in organic chemistry laboratory methods and techniques used in separation and purification.
- Determine the chemical identity of some organic chemicals through their properties.
- Keep complete and accurate records, manipulate data for mathematical calculations, including reactant recovery and percent yield.
- Apply laboratory safety procedures, including safe disposal of waste.
- Gain experience in organic synthesis and functional group conversion.
- Interpret experimental data and formulate conclusions as evidenced in laboratory reports.

Civil Engineering
CE 270: Applied Mechanics I
This course is a study of equilibrium of rigid bodies under the action of forces and the application of the principles of mechanics to solve static problems in engineering.
Credits: 3
Lecture Hours: 3
Prerequisites:
Physics 170; credit for or registration in MATH 243 (formerly MATH 231) or consent of instructor
Student Learning Outcomes:
- Solve problems involving forces, resultant and static equilibrium and their application to rigid bodies.
- Analyze equilibrium of rigid bodies in two and three dimensions.
- Solve problems involving center of gravity, centroids, couples, and moments of inertia.
- Analyze engineering structures subjected to concentrated loads, distributed loads, and frictional forces.
- Utilize abstract thinking and analytical reasoning in the analysis of word problems dealing with mechanical structures.
- Apply calculation techniques to dynamic problems in engineering.

Community Health Work
CHW 101: Community Health Worker Fundamentals
Identifies the roles that Community Health Workers play in Hawai‘i and the broader public health system and introduces the attitudes, skills and knowledge of the profession.
Lecture Hours: 3
Prerequisites:
Placement into ENG 100X.
Student Learning Outcomes:
- Develop communication and interpersonal skills through interactions with fellow students, clients, and professionals in the community.
- Develop professional skills and identify best practices for use with various populations and in diverse human service settings.
- Use critical thinking, problem solving, and research skills to evaluate the social conditions of vulnerable populations and identify potential advocacy strategies.

CHW 135: Health Promotion and Disease Prevention
Explores the role Community Health Workers play in health promotion and disease prevention. Introduces the major causes of premature mortality and morbidity, behavioral and environmental contributions to illness and injury, and strategies for promoting health, wellness, and risk reduction. Provides opportunities to practice developing and teaching health promotion/disease prevention classes.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of C or better in CHW 101, or instructor consent.
Student Learning Outcomes:
- Identify health promotion strategies and their rationale.
- Examine major behavioral and environmental risk factors for illness, disease, and injury.
- Apply concepts and practice teaching skills to promote healthy behaviors and prevent chronic disease.
- Access and analyze health information.
CHW 140: Introduction to Counseling & Interviewing
Offers a basic introduction to counseling theory and practice for those interested in working in helping professions. Provides opportunities to practice skills through role-playing.
Lecture Hours: 3
Prerequisites:
Placement into ENG 100X.
Recommended:
Credit for CHW 101
Student Learning Outcomes:
- Use critical thinking and problem solving skills to improve personal wellbeing and enhance professional potential.
- Demonstrate attitudes, skills and knowledge of best practice strategies appropriate to a variety of populations in diverse human service settings.
- Identify vulnerable populations and the social conditions that contribute to their vulnerability, and consider advocacy strategies to help alleviate those conditions.
- Engage in civic activities that assist in the development of self-awareness and influence the development of professionalism.

CHW 141: Case Management
Provides knowledge and practical skills to become a competent case manager in health and human services agencies. Students apply the Ecological Model, Strengths Perspective, and effective interviewing skills to case management tasks including intake, assessment, service planning, care coordination, discharge planning, and referral. Explores individual and community capacity building, cultural competence, professional ethics and boundaries.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of C or better in CHW 140, or instructor consent
Student Learning Outcomes:
- Apply the Ecological Model, Strengths Perspective and Patient-Centered Care in case management tasks with people of diverse backgrounds and needs.
- Identify, demonstrate and evaluate the attitudes, skills and knowledge (ASK) required to effectively engage individuals in case management services.
- Explain and apply professional, ethical and cultural considerations in case management activities.

CHW 145: Community Health Worker Practicum
Students will complete 225 practicum hours over the semester. Practicum hours include preparation of resume, letter of introduction, researching agencies and interviewing for placement. (225 hours Clinical Instruction)
Credits: 4
Prerequisites:
Grade of C or better in HSER 140 and ENG 100, or instructor consent.
Student Learning Outcomes:
- Develop interpersonal skills that build appropriate, collaborative, respectful relationships with fellow students, clients and professionals in the community.
- Perform to reflect the attitudes, skills and knowledge of best practice strategies across a variety of populations in diverse human service settings.
- Identify vulnerable populations and the social conditions that contribute to their vulnerability and consider advocacy strategies to help alleviate those conditions.
- Develop self-awareness of person values, interpersonal styles, strengths and challenges that influence the development of professionalism.

Creative Media

CM 120: Introduction to Digital Video
Students will develop basic skills in video production.
Credits: 3
Lecture Hours: 2
Student Learning Outcomes:
- Demonstrate basic knowledge and skills of digital video production including operating a digital video camera and sound recording kit.
- Demonstrate the ability to edit a video project in a digital non-linear system.
- Apply effective storytelling skills through the use of basic cinematography concepts, composition, light and movement.
- Produce videos that meet industry standards and ethics.

CM 126: 3D Computer Graphics I
This course explores introductory level conceptual and technical topics in 3D computer graphics. Autodesk Maya and related applications will be utilized to develop projects which integrate 3D modeling, UV layout, texture mapping, lighting, and rendering. (Cross-listed as ART 126)
Credits: 3
Prerequisites:
A grade of C or better in ART 112 or consent of instructor.
Recommended:
Algebra, Geometry
Student Learning Outcomes:
- Develop 3D models and related art assets using introductory level technical skills, procedures, and production methodologies.
- Employ the vocabulary of 3D computer graphics to define creative objectives and evaluate outcomes.
- Apply knowledge of contemporary industry responses to 3D computer graphics in the development of 3D models and related art assets.
- Apply knowledge of the theory, history and principles of design and animation in the creation of new media art.
- Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
CM 142: Introduction to Video Game Design
This course offers an introduction to the fundamentals of video game and application design, development, and deployment through project-based challenges that culminate in a publishable application.

Credits: 3  
Lecture Hours: 2  

Student Learning Outcomes:
- Design and execute a coding project for publication on the public iOS/Android/PC market.
- Identify and apply good industry practices for project and time management as well as technical skill in completing coding projects.
- Communicate and collaborate in a group professional team environment.

CM 204C: Introduction to Creative Writing (Screenwriting)
CM 204C Introduction to Creative Writing (Screenwriting) introduces students to the basic practices and principles of screenwriting. (Cross-listed as ENG 204C)

Credits: 3  
Lecture Hours: 3  

Prerequisites:  
Grade of “C” or better in ENG 100, or consent of instructor.

Recommended:  
Students should possess a strong foundational knowledge of grammar, word usage, and punctuation. Additionally, students must be able to accept constructive criticism from peers and the instructor.

Student Learning Outcomes:
- Create original short screenplays that include screenwriting format, devices, and conventions.
- Propose and employ feedback in the writing workshop model.
- Enter screenplays for local and/or national contests and/or productions.

CM 220: Intermediate Digital Video
Students will develop intermediate skills in video production and apply them to creating videos for publication on the web and other distribution platforms. Repeatable for up to 6 credits.

Credits: 3  
Lecture Hours: 2  

Prerequisites:  
A grade of C or better in CM 120 or consent of instructor.

Student Learning Outcomes:
- Produce videos that meet industry standards and ethics.
- Generate original story ideas.
- Demonstrate appropriate proficiency in cinematography, sound recording and editing skills.
- Analyze videos produced by the mass media.

CM 223: Introduction to Acting for Camera
An introduction to acting techniques for film, TV production, and other camera-based media. Repeatable up to 6 credits. (Cross-listed as THEA 223)

Credits: 3  
Lecture Hours: 3  

Prerequisites:  
Grade of C or better in THEA 221.

Recommended:  
THEA 101, 221, and 222.

Student Learning Outcomes:
- Demonstrate the skill of acting by using the camera lens to convey story.
- Illustrate the complexities of character within a given text.
- Analyze performances for television and film for quality and desired effect on the audience.

CM 240: Introduction to Digital Music Production
Introduction to digital music and sound production on the Macintosh platform: MIDI sequencing, audio recording, music arranging, editing, mixing and mastering; preparing audio files for CD, video and web applications; sound synthesis and programming using virtual instruments. (Cross-listed as MUS 240.)

Credits: 3  
Lecture Hours: 3  

Prerequisites:  
MUS 108, 121 (alpha) or 253; or consent of instructor.

Recommended:  
Basic Keyboard (piano) skills, computer (Mac) skills.

Student Learning Outcomes:
- Use MIDI sequencing and audio recording software, and/or notation software, as tools for music composition, arranging and performance.
- Apply basic skills in MIDI sequencing and editing, and digital audio recording and editing to audio mixing and mastering projects.
- Prepare audio files for CD burning, and video and web applications.
- Apply understanding of sound synthesis to create original sounds for music projects.
- Transfer skills to other MIDI sequencing and digital audio software programs across PC and Mac platforms.
CM 242: Video Game Design II
This course picks up where CM 142 left off. In addition to creating games at a higher technical and aesthetic standard, presentation skills (as in “presentation to potential investors”) are emphasized. May be repeatable up to 6 credits.
Credits: 3
Lecture Hours: 3
Prerequisites:
A grade of C or better in CM 142
Recommended:
Algebra, Geometry, Trigonometry, basic Javascript, basic C# scripting.
Student Learning Outcomes:
• Create, work and write basic 3D assets in Unity 3D and programming scripts applicable to gaming in C# language.
• Publish games to mobile and web platforms.
• Identify game design elements in order to offer constructive critique to existing games.
• Express ideas to “potential investors” using clear, concise and persuasive speech and presentation skills and identify the function and expectations of people in roles within a professional Game Design and Development team.

CM 255: Introduction to Cinema and Digital Media
The course is an in-depth study of the process and art of cinematic storytelling. We will watch, discuss, analyze, read and write about films, television programs and/or online video with a critical eye to understanding cinematic storytelling and its various elements such as mise-en-scene, cinematography, editing and sound.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
• Analyze and write about films using the language and grammar of cinema.
• Identify methods of expressing meaning through mise-en- scene, shot composition, camera angles, camera movements, lighting, editing, sound and music.
• Plan, visualize and tell a cinematic story using a storyboard and shot list.

CM 271: Games and Gaming in Society
This survey study of games and gaming in human culture and society brings together various methodologies and conceptual tools.
Credits: 3
Lecture Hours: 2
Prerequisites:
A grade of C or better in CM 271
Student Learning Outcomes:
• Analyze the connection between gaming and larger political, social, and psychological patterns in society.
• Conduct surveys and interviews with populations of gamers and major figures in current gaming trends.
• Calculate mathematical probabilities of success or failure in various games.
• Design an effective, balanced game that speaks to a population of gamers.

CM 272: Concepts in Game Design
This course introduces students to concepts in game design, and cultivates their ability to create and produce games.
Credits: 3
Lecture Hours: 2
Prerequisites:
Grade of C or better in CM 271
Student Learning Outcomes:
• Analyze Game Mechanics
• Evaluate Market Trends in Gaming
• Design Games Prototypes

CM 280: Book Production: Pueo Literary and Art Journal
This course is intended to acquaint students with the theory, practice, and skills required to publish a book (Pueo Literary and Art Journal), and, by extension, enable students to participate in the production of any small publication such as magazines, handbooks, manuals, brochures, flyers, newsletters, etc. To varying degrees over two semesters, the course covers planning, publicity, selection, editing, proofreading, layout, production, distribution, and celebration. Six credits may be applied to the AA degree. (Cross-listed as ENG 280.)
Credits: 3
Lecture Hours: 2
Prerequisites:
Grade of “C” or better in Eng 100 or consent of instructor.
Student Learning Outcomes:
• Evaluate how audience, purpose, and mode of publication affect publication design.
• Employ skills such as editing, proofreading, design, and layout.
• Participate in imaginative and creative collaboration in the production of a journal that maintains high standards.
CM 286: Multimedia News Production
Students will develop intermediate skills in video journalism and produce video and multimedia news stories about campus and community events and issues for publication on the Ka Ohana website and other distribution platforms. Repeatable for up to 6 credits.
(Crosslisted as JOUR 286.)
Credits: 3
Lecture Hours: 2
Prerequisites:
Credit for CM 120 or JOUR 120; or consent of instructor.
Student Learning Outcomes:
- Produce various news videos independently or in groups that meet professional journalistic standards and can be published on the Ka Ohana website.
- Generate story ideas; research, gather and organize information; work collaboratively with editors and reporters; follow through on assignments; and meet deadlines.
- Develop basic knowledge and skills of digital video production including cinematography, sound and editing.
- Critically analyze news videos produced by the mass media.

CM 295A: Careers in Video Game Design
This capstone course covers the basic business, legal and ethical issues related to careers in video game design. May be repeated up to 6 credits.
Credits: 3
Lecture Hours: 3
Prerequisites:
A grade of C or better or registration in CM 242, or consent of instructor.
Student Learning Outcomes:
- Describe the basics of intellectual property law as it applies to video games.
- Produce a marketing plan for a video game.
- Identify distribution options for a video game.

CM 295B: Careers in Filmmaking
This capstone course covers the basic business, legal and ethical issues related to careers in filmmaking. May be repeated up to 6 credits.
Credits: 3
Lecture Hours: 3
Prerequisites:
A grade of C or better or registration in CM 220, or consent of instructor.
Student Learning Outcomes:
- Describe the basics of intellectual property law as it applies to films.
- Produce a fundraising plan for a short film.
- Produce a marketing plan for a short film.
- Identify distribution options for a short film.

Dance

DNCE 121: Beginning Ballet
Introduction to classical ballet technique. May be repeated up to 9 credits.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Correctly define ballet terminology. Execute proper ballet technique. Perform ballet routines.

DNCE 122: Continuing Beginning Ballet
Continuation of beginning classical ballet technique. May be repeated up to 9 credits.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in DNCE 121 or consent of instructor.
Student Learning Outcomes:
- Demonstrate correct usage of ballet terminology and core concepts
- Execute proper ballet technique
- Perform ballet routines

DNCE 131: Beginning Modern Dance
Introduction to modern dance technique. May be repeated up to 9 credits.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in DNCE 121 or consent of instructor.
Student Learning Outcomes:
- Correctly define modern dance terminology
- Demonstrate kinesthetic proficiency in modern dance technique through performance
- Demonstrate conceptual understanding of contemporary modern dance technique

DNCE 132: Continuing Beginning Modern Dance
Continuation of beginning modern dance technique. May be repeated up to 9 credits.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in DNCE 131 or Instructor consent.
Student Learning Outcomes:
- Discuss concepts in modern dance utilizing proper terminology
- Develop kinesthetic proficiency in contemporary modern dance technique
- Perform modern dance choreography

DNCE 221: Low Intermediate Ballet
Low intermediate ballet technique. Maybe repeated up to 9 credits.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in DNCE 122 or Instructor’s consent.
Student Learning Outcomes:
- Discuss Core Concepts in Ballet Using Proper Ballet Terminology
- Execute Intermediate Level Ballet Techniques
- Perform Intermediate Level Choreography

DNCE 231: Low Intermediate Modern Dance
Low intermediate modern dance technique. May be repeated up to 9 credits.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in DNCE 122 or Instructor’s consent.
Student Learning Outcomes:
- Discuss concepts in modern dance utilizing proper terminology
- Develop kinesthetic proficiency in contemporary modern dance technique
- Perform modern dance choreography
DNCE 270: Dance Performance
DNCE 270 is a performance course designed to enhance and develop students’ dance skills through the staging of selected dance pieces either as individual pieces or as part of a larger production project.

Credits: 3
Prerequisites:
Grade of C or better in DNCE 121 or 131, or Instructor’s consent

Student Learning Outcomes:
- Demonstrate selected dance and theatre etiquette and protocol.
- Identify selected theatre and dance terminology.
- Perform dances demonstrating application of physical and interpretative skills
- Analyze dance for performance through evaluation and review.

Economics

ECON 130: Principles of Microeconomics
Examination of the decision-making process of both households and firms. Analysis of the functioning of a competitive market system, using supply and demand models and the role of government in cases of market failure.

Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- 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 and 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: Research skills, Writing skills, Ability to formulate a hypothesis, and Ability to use the scientific method.

ECON 131: Principles of Macroeconomics
Examination of the forces determining levels of and changes in national income, employment and the price level, including the role of government through its fiscal and monetary policies.

Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- Translate important macroeconomic 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 backup arguments using published research and to cite that research appropriately.

ECON 220: Introduction to Environmental Economics
Environmental Economics uses the basic tools of economic analysis to focus on issues that pertain to the natural environment and its resources. The central theme is that there are competing demands for our limited natural resources necessitating that difficult choices be made regarding how those resources are used. Topics include global warming, Hawai‘i’s environment and other current environmental issues as time permits.

Credits: 3
Lecture Hours: 3
Recommended:
Credit for Economics 130 or 131 and a course in Environmental Science, or instructor consent.

Student Learning Outcomes:
- Explain how prices allocate resources in a free market economy, especially as related to the environment.
- Evaluate the benefits and costs of environmental clean-up
- Contrast free market solutions to environmental clean-up vs. competing views.
- Evaluate outcomes and government policy responses in markets with negative externalities.

Electrical Engineering

EE 160: Programming for Engineers
Introductory course on computer programming and modern computing environments with an emphasis on algorithm and program design, implementation and debugging. Designed for engineering students, this course includes a hands-on laboratory to develop and practice programming skills.

Credits: 4
Lecture Hours: 3
Prerequisites:
Credit for or registration in Math 140 or consent of instructor
Recommended:
ICS 101

Student Learning Outcomes:
- explain the steps involved in the programming process.
- solve simple problems and express those solutions as algorithms.
- use the fundamental techniques of selection, looping, assignment, input, and output to describe the steps the computer takes to solve a problem.
- write algorithms and code in a top-down manner.
- work with arrays in searching and sorting applications.
- work with structures and unions types.
- write, test, and debug small programs.
- write functions and use pointers.
- work with characters and strings.
- work in text based environment like UNIX.
- interface with text base using a GUI interface.
EE 211: Basic Circuit Analysis I
This is an introductory course covering linear passive circuits, time domain analysis, transient and steady state responses, phasors, impedance and admittance, power and energy, frequency responses, and resonance.
Credits: 4
Lecture Hours: 3
Prerequisites:
Credit for or registration in MATH 243 (formerly MATH 231) or higher, credit for or registration in PHYS 272, or consent of instructor.
Student Learning Outcomes:
• Analyze and assemble basic circuits.
• Describe and analyze the basic functionality of the components of a basic circuit.
• Describe the rudiments of electric power production.

English
ENG 23: Introduction to College Reading and Writing
This course prepares students for college-level reading and writing with practice in the writing process, instruction in grammar and mechanics, emphasis on effective paragraphs and essays, introduction to research techniques, and practice in vocabulary development and reading comprehension.
Credits: 4
Lecture Hours: 3
Prerequisites:
Placement in ENG 23, grade of “C” or better in ENG 18 or ENG 20, or approval of designated Language Arts representative.
Student Learning Outcomes:
• Effectively use a multi-step writing process that includes drafting, revising, and editing; respond constructively to written and oral feedback.
• Write compositions that have a main point and supporting ideas developed with specific, logically organized details.
• Integrate source material according to academic conventions.
• Proofread for effective grammar, word choice, punctuation, and spelling.
• Effectively use entry-level college vocabulary.
• Comprehend various types of entry-level written and visual college materials.
• Demonstrate application of varied reading strategies to entry-level college texts.

ENG 100: Composition I
This college-level composition course promotes critical reading, the writing process, rhetorical principles, research strategies, and the documentation of sources.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in ENG 22, OR placement into ENG 100, OR grade of “C” or better in ENG 23 and corequisite enrollment in ENG 100W, OR placement and enrollment in co-requisite ENG 100W OR grade of “C” or better in ENG 100W OR approval of designated Language Arts representative.
Co-Requisites:
ENG 100W
Student Learning Outcomes:
• Write complex and well-reasoned compositions in language, style, and structure appropriate to particular purposes and audiences.
• Engage in a writing process that includes exploring ideas, considering multiple points of view, developing and supporting a thesis, revising with the help of peer and instructor feedback, editing, and proofreading.
• Find, evaluate, integrate, and properly document information from libraries, the internet, and other sources, with an eye for reliability, bias, and relevance.
• Read for main points, perspective, and purpose, and analyze the effectiveness of a variety of rhetorical strategies in order to integrate that knowledge into their writing.

ENG 100W: Composition I Writing Workshop
This course offers increased student-teacher collaboration on English 100 course content: college-level composition, critical reading, the writing process, rhetorical principles, research strategies, and the documentation of sources. (140 min studio)
Credits: 1
Prerequisites:
Grade of “C” or better in ENG 23, or placement into ENG 100W, or approval of designated Language Arts representative.
Co-Requisites:
ENG 100
Student Learning Outcomes:
• Write complex and well-reasoned compositions in language, style, and structure appropriate to particular purposes and audiences.
• Engage in a writing process that includes exploring ideas, considering multiple points of view, developing and supporting a thesis, revising with the help of peer and instructor feedback, editing, and proofreading.
• Find, evaluate, integrate, and properly document information from libraries, the internet, and other sources, with an eye for reliability, bias, and relevance.
• Read for main points, perspective, and purpose, and analyze the effectiveness of a variety of rhetorical strategies in order to integrate that knowledge into their writing.
ENG 200: Composition II
A writing intensive composition course that furthers the study of rhetorical, conceptual, and stylistic demands of writing, through a variety of assignments, each essay students write will build on the next one, culminating in a final argumentative research paper into which students will incorporate the knowledge they have gained through the writing and research performed during the semester.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in ENG 100, or consent of instructor.
Recommended:
Students should possess a strong foundational knowledge of grammar, punctuation; ideally, students will know MLA and/or APA writing styles.
Student Learning Outcomes:
• Summarize and organize appropriate primary and secondary sources.
• Analyze written arguments and resolutions using Aristotle’s rhetorical triangle.
• Evaluate the validity and relevance in a given argument.
• Employ MLA and APA documentation styles in a written research project.

ENG 204A: Introduction to Creative Writing (Fiction)
English 204A Introduction to Creative Writing (fiction) introduces students to the basic practices and principles involved in the writing and publication of short stories and novels.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in ENG 100, or consent of instructor.
Student Learning Outcomes:
• View the world as a writer, with an eye for detail and an ear for dialogue.
• Exercise the imagination as a tool for creation.
• Write short stories or novels.
• Submit writing for publication.
• Gain and deliver useful writing feedback.

ENG 204B: Introduction to Creative Writing (Poetry)
English 204B Introduction to Creative Writing (Poetry) introduces students to the basic practices and principles involved in the writing and publication of poems.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in ENG 100, or consent of instructor.
Recommended:
Students should possess a strong foundational knowledge of grammar, word usage, and punctuation. Additionally, students must be able to accept constructive criticism from peers and the instructor.
Student Learning Outcomes:
• Create original poems that reflect a skillful use of literary devices, forms, and conventions.
• Analyze poems written by peers and published authors.
• Propose and employ feedback in the writing workshop model.
• Evaluate and submit poems for publication.

ENG 204C: Introduction to Creative Writing (Screenwriting)
English 204C Introduction to Creative Writing (Screenwriting) introduces students to the basic practices and principles of screenwriting.
(Cross-listed as CM 204C)
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in ENG 100, or consent of instructor.
Recommended:
Students should possess a strong foundational knowledge of grammar, word usage, and punctuation. Additionally, students must be able to accept constructive criticism from peers and the instructor.
Student Learning Outcomes:
• Create original short screenplays that include screenwriting format, devices, and conventions.
• Propose and employ feedback in the writing workshop model.
• Enter screenplays for local and/or national contests and/or productions.

ENG 204D: Introduction to Creative Writing: Creative Nonfiction
English 204D Introduction to Creative Writing (Creative Nonfiction) introduces students to the basic practices and principles involved in the writing and publication of creative nonfiction, which includes autobiography, biography, nature and travel writing, cultural criticism, and historical and scientific writing.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of C or better in ENG 100, or consent of instructor.
Recommended:
Students should possess a strong foundational knowledge of grammar, word usage, and punctuation. Additionally, students must be able to accept constructive criticism from peers and the instructor.
Student Learning Outcomes:
• Create original works of creative nonfiction that reflect a skillful use of literary devices, forms, and conventions.
• Analyze creative nonfiction written by peers and published authors.
• Propose and employ feedback in the writing workshop model.
• Evaluate and submit work for publication.

ENG 209: Business Writing
A study of business and managerial writing; practice in writing letters, memos, and reports, including a report requiring research and documentation.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in ENG 100.
Student Learning Outcomes:
• Compose and edit business messages and reports for specific contexts, audiences, and purposes.
• Conduct business research by gathering and analyzing information, drawing conclusions, documenting sources, and presenting results both in writing and orally.
• Develop collaborative communication and writing skills.
• Proofread and edit business writing for grammatical, spelling, punctuation and mechanical errors.
ENG 271: Introduction to Literature: Genre
This course introduces students to the study of significant works of literature in selected genres. Emphasis is on discussion of and writing about characteristics and themes of the works. A student may enroll in this course more than one time (for different genres); however, only three credits will be applied toward degree.
Credits: 3
Lecture Hours: 3
Prerequisites:
A grade of "C" or better in ENG 100.
Student Learning Outcomes:
- 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 with the student's own.
- Enjoy a more creative, enlightened, and fulfilled life through an appreciation of literature's social, cultural, political, and philosophical themes and techniques.
- Exhibit knowledge about selected writers and their characteristic themes and techniques.

ENG 272: Introduction to Literature: Culture and Literature
This course introduces students to the study of significant works of literature in selected cultures and cultural formations. Emphasis is on discussion of and writing about characteristics and themes of the works. A student may enroll in this course more than one time (for different cultures); however, only three credits will be applied toward degree.
Credits: 3
Lecture Hours: 3
Prerequisites:
A grade of "C" or better in ENG 100.
Student Learning Outcomes:
- 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 with the student's own.
- Enjoy a more creative, enlightened, and fulfilled life through an appreciation of literature's social, cultural, political, and philosophical themes and techniques.
- Exhibit knowledge about selected writers and their characteristic themes and techniques.

ENG 280: Book Production: Pueo Literary and Art Journal
This course is intended to acquaint students with the theory, practice, and skills required to publish a book (Pueo Literary and Art Journal), and, by extension, enable students to participate in the production of any small publication such as magazines, handbooks, manuals, brochures, flyers, newsletters, etc. To varying degrees over two semesters, the course covers planning, publicity, selection, editing, proofreading, layout, production, distribution, and celebration. Six credits may be applied to the AA degree. (Cross-listed as CM 280.)
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of "C" or better in ENG 100 or consent of instructor.
Recommended:
Willingness to carry out collaborative responsibilities on time and to work cooperatively with others. Strong knowledge of grammar, word usage, and punctuation. Awareness of literary forms and styles. Basic computer skills. An eye for visual detail.
Student Learning Outcomes:
- Evaluate how audience, purpose, and mode of publication affect publication design.
- Employ skills such as editing, proofreading, design, and layout.
- Participate in imaginative and creative collaboration in the production of a journal that maintains high standards.

Food Science and Human Nutrition
FSHN 185: Human Nutrition
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.
Credits: 3
Lecture Hours: 3
Prerequisites:
Placement in ENG 100 and credit in Math 25, 26, 29, or 82 or higher, placement into Math 103 or higher, or consent of instructor.
Student Learning Outcomes:
- Describe the six categories of nutrients and evaluate the nutrient adequacy of a diet.
- Identify factors influencing eating habits.
- Correctly interpret and evaluate information on food labels, packages and product advertising based on generally accepted scientific methods and standards.
- Define various types of malnutrition and discuss their causes, cures, and associated health effects.
- Discuss current issues related to the safety of the food supply, using concepts from toxicology.
- Describe physiological changes that occur during the lifecycle and explain the changes in nutrient needs that accompany these changes.
- Discuss various environmental and ecological conditions, which interact with human nutrition, both locally and globally.
**Geography**

**GEOG 101: The Natural Environment**
Survey of the natural environment; distribution and interrelationships of climates, vegetation, soil, and land forms.
Credits: 3
Lecture Hours: 3

**Student Learning Outcomes:**
- 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.
- Explain critically the interaction of humans and the physical environment.
- Illustrate how his/her views of the physical environment have (or have not) changed.

**GEOG 101L: The Natural Environment Laboratory**
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.
Credits: 1
Prerequisites:
Credit for or registration in GEOG 101.

**Student Learning Outcomes:**
- 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.
  - Use various instruments, such as a compass, GPS unit and thermometer, to gather environmental data.
  - Use the metric system, scientific notation, graphs, and geographic and basic statistical measurements.
  - Write a lab report using the standard scientific format.

**GEOG 102: World Regional Geography**
Geography 102 is a survey of the world's major cultural regions. Environmental, cultural, political, and economic characteristics of each region and regional interactions are explored from a geographic perspective.
Credits: 3
Lecture Hours: 3

**Student Learning Outcomes:**
- Demonstrate knowledge of basic geographic terms, locations, concepts, theories, and methodology.
- Demonstrating an understanding of historical, social and environmental processes shaping the world's major cultural regions.
- Apply the knowledge of basic geographic terms, locations, concepts, theories, and methodology to critically explain current world events and issues and daily events.

**GEOG 151: Geography and Contemporary Society**
Elements of population geography and urban studies, economic geography and resource management; application to current problems of developed and underdeveloped countries.
Credits: 3
Lecture Hours: 3

**Student Learning Outcomes:**
- 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.

**GEOG 252: The Landscape of Japan: Natural, Cultural and Historical**
Analyses of ordinary and symbolic landscapes of Japan from natural, cultural and historical perspectives. The course interprets a landscape synthesizing underlying physical, cultural and historical settings of the landscape.
Credits: 3
Lecture Hours: 3

**Recommended:**
Knowledge of Japanese culture and language.

**Student Learning Outcomes:**
- Identify and describe an ordinary or symbolic landscape of Japan
- Describe the natural, cultural, and historical settings of Japan behind the landscape
- Analyze the landscape by applying the natural, cultural, and historical settings.
- Evaluate the landscapes of Japan through using local, national, and global perspectives

**Geology and Geophysics**

**GG 101: Introduction to Geology**
The natural physical environment; the landscape; rocks and minerals, rivers and oceans; volcanism, earthquakes and other processes inside the Earth; effects of human use on the Earth and its resources. Field trip.
Credits: 3
Lecture Hours: 3

**Student Learning Outcomes:**
- Explain the relevance of geology and geophysics to human needs, including those appropriate to Hawai‘i, and be able to discuss issues related to geology and its impact on society and planet Earth.
- Apply technical knowledge of relevant computer applications, laboratory methods, and field methods to solve real-world problems in geology and geophysics.
- Use the scientific method to define, critically analyze, and solve a problem in earth science.
- Reconstruct, clearly and ethically, geological knowledge in both oral presentations and written reports.
- Evaluate, interpret, and summarize the basic principles of geology and geophysics, including the fundamental tenets of the sub-disciplines, and their context in relationship to other core sciences, to explain complex phenomena in geology and geophysics.
GG 101L: Introduction to Geology Lab
Hands-on study of minerals, rocks, and topographic maps. Examine volcanism, hydrology, coastal processes and hazards, geologic time and earthquakes. Field trips to investigate landslides, beaches and O‘ahu geology.
Credits: 1
Student Learning Outcomes:
- Explain the relevance of geology and geophysics to human needs, including those appropriate to Hawai‘i, and be able to discuss issues related to geology and its impact on society and planet Earth.
- Apply technical knowledge of relevant computer applications, laboratory methods, and field methods to solve real-world problems in geology and geophysics.
- Use the scientific method to define, critically analyze, and solve a problem in earth science.
- Reconstruct, clearly and ethically, geological knowledge in both oral presentations and written reports.
- Evaluate, interpret, and summarize the basic principles of geology and geophysics, including the fundamental tenets of the sub-disciplines, and their context in relationship to other core sciences, to explain complex phenomena in geology and geophysics.

GG 103: Geology of Hawaiian Islands
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.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- explain the relevance of geology and geophysics to human needs, including those appropriate to Hawai‘i, and be able to discuss issues related to geology and its impact on society and planet Earth.
- Apply technical knowledge of relevant computer applications, laboratory methods, and field methods to solve real-world problems in geology and geophysics.
- Use the scientific method to define, critically analyze, and solve a problem in earth science.
- Reconstruct, clearly and ethically, geological knowledge in both oral presentations and written reports.
- Evaluate, interpret, and summarize the basic principles of geology and geophysics, including the fundamental tenets of the sub-disciplines, and their context in relationship to other core sciences, to explain complex phenomena in geology and geophysics.

GG 211: Big Island Field Geology
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.
Credits: 1
Prerequisites:
Credit for or registration in GG 101, GG 103, or consent of instructor. Must have medical clearance.
Student Learning Outcomes:
- 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 Hawai‘i, and how time is measured thus the time-scale known.

GG 212: Maui Field Geology
A four-day field trip on the island of Maui. A survey of Hawaiian volcanology and geomorphology illustrated by field studies of Haleakalā and West Maui volcanoes. Students are responsible for air and ground transportation, meals, and lodging.
Credits: 1
Prerequisites:
Credit for or registration in GG 101, GG 103, or consent of instructor. Must have medical clearance.
Student Learning Outcomes:
- 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 Hawai‘i, and how time is measured thus the time-scale known.

GG 213: Moloka‘i, Lana‘i, and Kaho‘olawe Field Geology
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.
Credits: 1
Prerequisites:
Credit for or registration in GG 101, GG 103, or consent of instructor. Must have medical clearance.
Student Learning Outcomes:
- 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 Hawai‘i, and how time is measured thus the time-scale known.
**GG 214: Kaua‘i and Ni‘ihau Field Geology**
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.

**Credits:** 1  
**Prerequisites:**  
Credit for or registration in GG 101, GG 103, or consent of instructor.

**Student Learning Outcomes:**
- 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 Hawai‘i, and how time is measured thus the time-scale known.

**Hawaiian Language**

**HAW 101: Elementary Hawaiian I**
An elementary course in the Hawaiian language which focuses on rules of grammar, pattern drills, the building of an adequate vocabulary to facilitate conversation, and reading of selected materials at an elementary level.

**Credits:** 4  
**Lecture Hours:** 4  
**Student Learning Outcomes:**
- Recognize and reproduce the correct pronunciation of consonants, semivowels, vowels, diphthongs, words and names in Hawaiian.
- Demonstrate the ability to comprehend and respond to basic directions, requests, questions and answers.
- Demonstrate the ability to generate basic phrases and sentences for everyday situations with a vocabulary of 400-500 Hawaiian words, plus idiomatic expressions.
- Demonstrate the ability to read and write Hawaiian sentences at an elementary level on subject matter covered in class.
- Speak Hawaiian with the proper inflection, intonation, and rhythm.

**HAW 102: Elementary Hawaiian II**
Continuation of HAW 101.

**Credits:** 4  
**Lecture Hours:** 4  
**Prerequisites:**  
Credit for HAW 101 or consent of instructor.

**Student Learning Outcomes:**
- 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 201: Intermediate Hawaiian I**
Continuation of HAW 102 with emphasis on increasing proficiency in use of major sentence patterns in reading, writing, conversation, and translation.

**Credits:** 4  
**Lecture Hours:** 4  
**Prerequisites:**  
Credit for HAW 102 or consent of instructor.

**Student Learning Outcomes:**
- 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‘ao.

**HAW 202: Intermediate Hawaiian II**
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.

**Credits:** 4  
**Lecture Hours:** 4  
**Prerequisites:**  
Credit for HAW 201 or consent of instructor.

**Student Learning Outcomes:**
- 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, access, and evaluate major Hawaiian studies sources.
- Identify implications of the relationships and develop proposals for possible ways to affect positive change.

**Hawaiian Studies**

**HWST 107: Hawai‘i: Center of the Pacific**
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.

**Credits:** 3  
**Lecture Hours:** 3  
**Student Learning Outcomes:**
- Describe aspects of Hawaiian relationship with other groups of people in and outside of Hawai‘i.
- Identify, access, and evaluate major Hawaiian studies sources.
- Identify implications of the relationships and develop proposals for possible ways to affect positive change.
HWST 110: Huaka'i Wa'a: Introduction to Hawaiian Voyaging
This course introduces students to modern Hawaiian canoe voyaging through a beginning examination of the science and narratives of ancient voyaging, the history of the modern revival of voyaging, and the Hawaiian navigator’s toolkit.
Credits: 3
Lecture Hours: 3

Recommended:
Familiarity with Hawaiian language and culture is helpful but not required.

Student Learning Outcomes:
- Show knowledge of location of the Hawaiian islands and island groups of Oceania.
- Explain the various aboriginal and academic narratives relating to the migration to and settlement of Oceania.
- Discuss the historical and cultural events leading to the revival and reestablishment of Hawaiian voyaging.
- Demonstrate knowledge of the tools contemporary navigators use for open-ocean voyaging.

HWST 115: Mo'okūauhau: Hawaiian Genealogies
This is a course in which students will learn about the centrality of genealogy to Hawaiian history, culture, and family. Students of any ancestry or background will gain value in learning about a central aspect of Hawaiian culture, and in doing research that is geared toward either their own family genealogy or the researching of the genealogies of public figures, or historical figures. Students will be guided through a research process and set of research methodologies for vital statistics, land, tax, census, historical material, and online resources. Students will also learn chiefly and family genealogies of Hawai‘i, which is a Hawaiian method through which some of the history of Hawai‘i is also explored. By completion of the semester, students will be expected to assemble a genealogy and family history beyond what they might already have completed before enrollment in this class for either themselves or a public figure cleared by the instructors of this course.
Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- Demonstrate knowledge of the centrality and importance of genealogy to Hawaiian culture.
- Show knowledge of some of the major genealogies of Hawaiian chiefs and large families in Hawai‘i.
- Demonstrate the ability to conduct research in public and private institutions in Hawai‘i, and through the use of internet genealogy web sites.
- Show that they are able to research and construct a genealogy and family history.

HWST 130: Hula Ōlapa: Traditional Hawaiian Dance
In this class students will learn various beginning traditional hula interpretations. Students will be taught the basic footwork and hand gestures of traditional hula accompanied by chanting, Ipu Heke (double gourd) or Pahu (drum). Students may also be required to make accompanying instruments like Ipu (smaller single gourd), Kala‘au (sticks), ‘Ili‘ili (stones), and Pū‘ili (split bamboo), and learn accompanying oli (chants) under the direction of the class Instructor. Students will be taught different historical aspects of specific hula, associated hula mythology, ali‘i (chiefly) genealogies, plants and place names.
Credits: 3
Lecture Hours: 2

Student Learning Outcomes:
- Learn how to perform several hula in unison, and the relationship between movements with the significance of lyrical content in a mele or oli combined with the occasions for which one is dancing.
- Learn how to prepare adornments for their specific hula.

HWST 131: Hula Ōlapa ‘elua: Traditional Hawaiian Dance II
Continuation of HWST 130. In this second class, students will learn intermediate traditional hula interpretations. Foot work and hand gestures of traditional hula will be reinforced accompanied by chanting, Ipu Heke (double gourd) or Pahu (drum). Students will be exposed to chants, and pule of traditional and ceremonial protocols related to the discipline of hula. Students may also be required to make accompanying instruments, like Ipu (smaller single gourd), Kala‘au (sticks), ‘Ili‘ili (stones), and Pū‘ili (split bamboo) under the direction of the class instructor. Students will be taught different historical aspects of specific hula, associated hula mythology, ali‘i (chiefly) genealogies; plants, and place names.
Credits: 0
Lecture Hours: 2

Prerequisites:
Credit for HWST 130, and enrollment in or credit for HAW 101 or HWST 107.

Student Learning Outcomes:
- Describe and discuss the stories behind the creation and performance of various hula.
- Perform several hula demonstrating the relationship between movements and the significance of lyrical content in mele.
- Prepare and use adornment for specific hula.
HWST 135: Kālai Lā‘au: Hawaiian Woodwork and Wood Carving
This is a Hawaiian cultural woodwork and wood carving project class. This class will involve the development of two to three introductory woodworking projects of Hawaiian cultural significance or ceremonial use. through this class the students will develop both the skills needed to work effectively and safely with wood, and the cultural knowledge important to the pieces developed. As a project class, there will be specific projects and themes set by the instructor of general Hawaiian cultural interest. Students will learn different aspects and solutions in carving and creating Hawaiian cultural projects.
Credits: 3
Student Learning Outcomes:
- Learn to plan and create woodworking projects of Hawaiian cultural relevance or significance.
- Gain a deeper insight into Hawaiian cultural use of wood.
- Gain deeper understanding of the cultural significance of the wood-working project the student has undertaken.
- Learn to work with wood in an effective and safe manner.

HWST 136: Kālai Lā‘au II: Advanced Techniques in Hawaiian Carving
This is a Hawaiian cultural carving class that is a continuation of the themes and techniques learned in HWST 135 Kālai Lā‘au. Students will be required to complete at least one large piece and two highly finished smaller pieces. Students will be expected to have a basic understanding of carving upon entering the class and will spend their time fine tuning and working on a larger scale. through this class students will develop skills and techniques with more advanced tools needed to work effectively and safely with wood, bone, and/or stone, and students will acquire the cultural knowledge important to the pieces developed. Students will also learn how to make some of the tools required for use in the class.
Credits: 3
Prerequisites:
- Credit for HWST 135 with a grade of “B” or better, or consent of the instructor.

Student Learning Outcomes:
- Students will plan and complete carving projects using advanced tools on wood, stone, and bone in an effective and safe manner.
- Students will research and analyze Hawaiian cultural use of wood, bone, and stone.
- Students will be able to design, forge and finish a tool for use in carving projects.

HWST 140: Mahi‘ai I: Hawaiian Taro Culture
Credits: 3
Lecture Hours: 3
Recommended:
- Grade of C or better in HWST 107 or consent of instructor.

Student Learning Outcomes:
- Tell the Mo‘olelo (traditional history) of kalo
- Explain the cultural significance of kalo in Hawaiian culture
- Identify varieties of kalo and their characteristics
- Record and analyze observations of kalo cultivation
- Create papa ku‘i ‘ai

HWST 142: Mahi‘ai Kalo II - Traditional and Modern Techniques of Lo‘i Kalo Production
This course expands on the traditional Hawaiian kalo growing knowledge covered in the first class to include the ecology of wetland kalo systems, focusing on traditional lo‘i techniques, and the integration of nutrient flow analysis through the ahupua‘a and nutrient management practices for lo‘i kalo. Additional emphasis is placed on both scientific and practical approaches. Cooking and eating are used throughout the course to demonstrate linkages between kalo and human nutrition and wellbeing. The course will consist of a mixture of lecture and hands-on field experience.
Credits: 3
Lecture Hours: 3
Prerequisites:
- A grade of C or better in HWST 140 or consent of instructor

Student Learning Outcomes:
- Explain traditional Hawaiian and modern technical farming terminology and processes;
- Discuss nutrients, nutrient budgets, or nutrient cycling in lo‘i kalo farming;
- Identify major patterns of nutrient flows in ahupua‘a/watershed systems and the impacts of changes to those patterns.

An introduction to beginning Hawaiian protocol(s) and chant. Students will learn types of chants, voice quality, modes of chanting, and their basic elements of place chants at an introductory level.
Credits: 3
Lecture Hours: 3
Prerequisites:
- Grade of C or better in HWST 107 or consent of instructor.
- Grade of C or better in HAW 102.
Recommended:
- Grade of C or better in HAW 102.

Student Learning Outcomes:
- Illustrate the history and types of oli and their role in protocol.
- Demonstrate techniques and performance of basic oli pule and oli mele.
HWST 217: Understanding Polynesian Religions

This course provides an introduction to the study of Polynesian religions through an exploration of the oral traditions of Hawai‘i, Aotearoa (New Zealand), French Polynesia (Tahiti et al.), and Samoa among others. In this class, students will gain a foundational understanding of important religious themes that permeate Polynesia. Main themes include but are not limited to deities’ forms & functions, cosmogonies, etiologies, and belief-regulated practices. Additionally, a portion of the semester will focus on belief narratives as vehicles for the transmission of knowledge and the significance of contemporary representation and self-representation of Polynesian religion and culture. This class will use comparative analysis between Hawaiian religion and the religious traditions of Aotearoa, French Polynesia, and Samoa to identify the fundamental concepts needed to understand Polynesian religions and explore how they are interconnected and interwoven into the fabric of our lives today. (Cross-listed as REL 217)

Credits: 3

Lecture Hours: 3

Student Learning Outcomes:
- Identify and describe significant source-language terms, major figures, and stories in Hawaiian and other Polynesian religions
- Identify and describe important themes common to Hawaiian and other Polynesian religions
- Analyze, compare, contrast, major themes common to Hawaiian and other Polynesian religions

HWST 222: Ma‘awe No‘eau: Hawaiian Fiber Work

This is a Hawaiian cultural fiber arts project class. This class will involve the development of three to four introductory fiber arts projects of Hawaiian cultural significance or ceremonial use, through this class students will learn how to procure the materials needed to complete various fiber arts projects, including learning related protocol and methods for gathering, understanding of Native Hawaiian gathering rights, and the type of environments in which specific materials grow and can be gathered, Students will develop the skills needed to work effectively and safely with various fiber arts materials on introductory projects, and students will learn the cultural knowledge important to the pieces created. As a project class, there will be specific projects and themes set by the instructor of general Hawaiian cultural interest.

Credits: 3

Lecture Hours: 3

Student Learning Outcomes:
- Plan, create, and finish, in a safe and effective manner, fiber arts projects of Hawaiian cultural relevance or significance.
- Explain issues and history of fiber material use in Hawaiian culture and, observing cultural protocols, apply these to gathering materials for a fiber arts project.

HWST 238: Native Voices through Contemporary Hawaiian and Indigenous Literature

This course surveys contemporary Literature of Native Hawaiians and other Indigenous Peoples, especially to focus on the situational and cultural impetus from which these texts were created.

Credits: 3

Lecture Hours: 3

Prerequisites:
Grade of C or better in ENG 100 and HWST 107 or PACS 108, or instructor consent.

Student Learning Outcomes:
- Demonstrate knowledge of the authors of the 19th and 20th century from a range of ethnic and cultural groups.
- Describe knowledge of major themes seen across different ethnic or cultural literary works.
- Discuss knowledge in the diversity of literary opinions, conflict and commonality in examined literary texts.

HWST 253: Kamehameha I and the Hawaiian Kingdom

Kamehameha I, also known as Pai‘ea, Ka Na‘i Aupuni, and Kawaihiloumoku is the most famous Hawaiian in history. This course will look at the rise to power of Kamehameha I, as he consolidated all of the islands under his control establishing the Hawaiian Kingdom. We will examine his genealogy and chiefly family relations including, his most famous exploits and battles, the olelo no‘eau (wise sayings) related to his life, and the cultural and political legacies he has left Hawai‘i.

Credits: 3

Lecture Hours: 3

Recommended:
HWST 107 and HAW 101

Student Learning Outcomes:
- Identify important events and characters associated with the life and events of Kamehameha’s time.
- Compare and contrast different ideas and values we see in the stories about Kamehameha.
- Relate the life and events of Kamehameha’s time to contemporary events and issues.
HWST 255: Introduction to the Hawaiian Kingdom
This course covers the origins and features of the Hawaiian state. Starting with Hawai‘i’s roots as a navigator society, this course explores the island kingdoms of Kaua‘i, O‘ahu, Maui and Hawai‘i island. Detailed interaction between Hawaiians and navigators from other countries around the world such as Cook and Vancouver open up an investigation through the reign of Kamehameha I and his powerful wife Ka‘ahumanu. The decision to construct a constitutional monarchy, achieve state recognition and develop a modern nation-state are examined further through the eighty-eight year period of Kingdom of Hawai‘i statecraft. Using tools from history, linguistics, political science and law, students will engage the transition of Hawaiian political systems as they emerged across specific periods with an eye towards developing theoretical frameworks for understanding why Hawaiian political systems progressed as they did.

Credits: 3
Lecture Hours: 3
Prerequisites:
A grade of “C” or better in HWST 107, HIST 284 or HIST 224.

Student Learning Outcomes:
- Identify and analyze key narratives, historical figures and events in the discovery and settlement of the Hawaiian Islands.
- Identify and analyze key historical figures and events in the formation and development of the Hawaiian nation and state through the 19th century.
- Describe and analyze the historical interaction between Hawaiian and European values, ideas and technology as they relate to political systems.

HWST 263: Hawaiian and Indigenous Film
This course is a study of films created by Hawaiian and Indigenous cinematic filmmakers and their adaptation to the screen in cinematic storytelling. Focus is to be placed on the narrative and dramatic film genre.

Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of C or better in ENG 100, as well as C or better in HWST 107 or PACS 108, or instructor consent.

Student Learning Outcomes:
- Illustrate major themes seen across different filmic works.
- Describe the diversity of filmic opinions, conflict, and commonality in cinematic stories.
- Discuss cinematic stories and storytellers from a range of ethnic and cultural indigenous groups.

HWST 270: Hawaiian Mythology
A survey of gods, ‘aumakua, kupua, mythical heroes, heroines and their kinolau as the basis of traditional Hawaiian metaphor.

Credits: 3
Lecture Hours: 3
Prerequisites:
Credit for HWST 107 or HAW 102.

Student Learning Outcomes:
- 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.

HWST 273: Tattoo Traditions of Polynesia
An overview of the traditional tattoo practices of the various Polynesian islands within the context of the great Pacific.

Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- Compare and contrast the migrations and the peopling of the Pacific focusing on ancestral connections and continuities in the tattoo practices of the Pacific peoples.
- Identify primary and secondary source material and incorporate original documents in their analysis whenever possible.
- Identify the cultural contexts and differences (both traditional and modern) among the tattoo styles of the primary Polynesian groups.

HWST 275: Wahi Pana: Mythology of the Hawaiian Landscape
Wahi Pana: Mythology of the Landscape, is designed to illuminate Hawaiian intelligence regarding the geographic features of these islands. Students will undertake a basic study of the natural sciences from a Western/modern perspective. They will then look at various Hawaiian chants and epic tales to explore the connections with indigenous knowledge forms found in a Hawaiian worldview. Cross-cultural comparisons are made with the goal of bringing forth specific, physical information about important Hawaiian places. Students will gain cultural awareness of their surroundings through the bridging of geography and the mythology studied, thus creating a more Hawaiian sense-of-place in our community.

Credits: 3
Lecture Hours: 3

Prerequisites:
Grade of “C” or better in HWST 107, or HWST 270.

Recommended:
REL 205.

Student Learning Outcomes:
- Students will compare and contrast landscape descriptions, mythology, and human behavior from different cultural perspectives.
- Students will analyze Hawaiian mythology as it applies to Hawaiian place names, Native Hawaiian social history, and Native Hawaiian relationship to the natural environment.
- The student will explain the importance of place in the island ecosystem and the values of environmental sustainability.
HWST 275L: Wahi Pana: Mythology of the Hawaiian Landscape Field Lab
This field lab supports HWST 275. Together, they illuminate Hawaiian intelligence regarding the geographic features of these islands. The course highlights the Ko‘olau districts (Waimānalo to Waimea) or O‘ahu as a living classroom resource where the Wahi Pana (sacred places) and mythology of the landscape can be seen and appreciated. Students will explore connections between the social and natural sciences, and indigenous knowledge forms found in a Hawaiian worldview from observing their physical surroundings. Cross-cultural comparisons are made with the goal of bringing forth specific, physical information about important Hawaiian places.
Credits: 1
Prerequisites:
Enrollment or credit in HWST 275 lecture component.

Student Learning Outcomes:
- Students will examine the physical properties of the geographic landscape to identify their place in Hawaiian myths.
- Students will observe the physical properties of the physical landscape and describe them from a Hawaiian worldview.

HWST 285: Lā‘au Lapa‘au I: Hawaiian Medicinal Herbs
In this class students will learn the basic philosophy and traditions surrounding Hawaiian healing herbs. Students will also learn how to identify, grow, harvest, prepare, store and use these herbs for various human ailments.
Credits: 4
Lecture Hours: 3
Prerequisites:
Credit for HWST 107 or BOT 105.

Student Learning Outcomes:
- Learn Hawaiian and introduced medicinal herbs and be able to identify them by name, color, smell, taste, and sight.
- Learn the beliefs and practices of Hawaiian herbal healing.
- Learn planting, growing and harvesting techniques used to raise traditional Hawaiian herbal healing plants.
- Prepare, use and store Hawaiian herbal remedies.

HWST 296: Special Topics in Hawaiian Studies
Students will investigate important topics in Hawaiian Studies such as specific people, events, or periods. May be repeated up to 9 credits with different topics.
Credits: 3
Lecture Hours: 3
Prerequisites:
“C” or better in HWST 107.

Student Learning Outcomes:
- Identify the important concepts and facts particular to the selected course topic.
- Analyze and interpret the nature and significance of the selected course topic.
- Investigate connections between the selected course topic and contemporary events and issues.

Health

HLTH 123: Introduction to Clinical Skills and Patient Care
HLTH 123 provides an opportunity for students to discover their suitability for a career in direct client care and clinical medicine. Personal and cultural values and practices, professional conduct, and team-based care will be explored. In depth study will focus on medical terminology, common illnesses, interviewing patients, clinical cases, health care service models, workforce, and provider organizations. Safety/OSHA/HIPPA, CPR/AED certification, payor systems, and health ethics. Concepts and skills learned will be supplemented with site visits to healthcare facilities and guest lectures from selected healthcare professionals.
Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- Explain the relationship, interplay, and trust between patients and providers;
- Distinguish different levels of healthcare, types of care, healthcare workforce and provider organizations;
- Perform skill sets pertaining to patient-centered care;
- Communicate effectively in written and verbal forms.

HLTH 123C: Introduction to Clinical Skills and Patient Care
HLTH 123C will be taught by a registered nurse and satisfies the requirements for the State of Hawaii Certified Nurses Aide Licensure. This course provides an opportunity for students to discover their suitability for a career in direct client care and clinical medicine. Personal and cultural values and practices, professional conduct, and team-based care will be explored. In depth study will focus on medical terminology, common illnesses, interviewing patients, clinical cases, health care service models, workforce, and provider organizations. Safety/OSHA/HIPPA, CPR/AED certification, payor systems and health ethics. Concepts and skills learned will be supplemented with site visits to healthcare facilities and guest lectures from selected healthcare professionals.
Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- Explain the relationship, interplay, and trust between patients and providers;
- Distinguish different levels of healthcare, types of care, healthcare workforce and provider organizations;
- Perform skill sets pertaining to patient-centered care;
- Communicate effectively in written and verbal forms.
HLTH 124: Introduction to Hawaiian and Indigenous Health and Healing: Kupuna Care for Nurse Aides
Intro to Hawaiian and Indigenous Health and Healing combines traditional and Western healing knowledge and care giving skills. Training in the Native Hawaiian traditional healing practices focuses on mālama kupuna (elder care), mālama 'aina (agricultural practices), 'ai pono (healthy nutrition), ho'oponopono (mutual reciprocation), lomilomi (massage), and lā'au lapa'au (plant medicine). The Western elements of the course focuses on human anatomy, medical terminology, basic nursing care, basic home care, nutrition, basic personal care, patient interaction and communication, dressing, bathing and feeding patients, helping patients get out of bed or move about, taking patients' temperature, blood pressure and pulse, and reporting to nurses.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of C or better in HLTH 123 or instructor consent.
Student Learning Outcomes:
- Explain appropriate pre and post procedures used when providing care;
- Successfully perform 14 of the State of Hawaii CNA mandatory skills;
- Describe the healthcare standards of care.

HLTH 124C: Introduction to Hawaiian and Indigenous Health and Healing: Kupuna Care for Nurse Aides
Intro to Hawaiian and Indigenous Health and Healing combines traditional and Western healing knowledge and caregiving skills. HLTH 124C will be taught by a registered nurse and satisfies the requirements for the State of Hawaii Certified Nurses Aid licensure. Intro to Hawaiian and Indigenous Health and Healing combines traditional and Western healing knowledge and care giving skills. Training in the Native Hawaiian traditional healing practices focuses on mālama kupuna (elder care), mālama 'aina (agricultural practices), 'ai pono (healthy nutrition), ho'oponopono (mutual reciprocation), lomilomi (massage), and lā'au lapa'au (plant medicine). The Western elements of the course focuses on human anatomy, medical terminology, basic nursing care, basic home care, nutrition, basic personal care, patient interaction and communication, dressing, bathing and feeding patients, helping patients get out of bed or move about, taking patients' temperature, blood pressure and pulse, and reporting to nurses.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of C or better in HLTH 123C or instructor consent.
Student Learning Outcomes:
- Explain appropriate pre and post-procedures used when providing care;
- Successfully perform 14 of the State of Hawaii CNA mandatory skills; (even with the non-CNA track, they will be performing the same skills)
- Describe the healthcare standards of care.

HLTH 125: Survey of Medical Terminology
HLTH 125 familiarizes the student with medical terminology used in both human and animal medicine through analysis of prefixes, suffixes, and word roots. This course covers the pronunciation, spelling, and definitions of selected medical words dealing with mammalian body systems. Commonly used medical abbreviations and pharmacological terms are also discussed.
Credits: 1
Lecture Hours: 1
Prerequisites:
Grade of “C” or better in ENG 21 or ENG 23, or placement in ENG 100X
Co-Requisites:
ENG 100.
Student Learning Outcomes:
- Correctly define, spell and pronounce selected medical terms dealing with anatomical planes and regions, anatomy of major body systems and associated diseases and disorders.
- Correctly use plural endings for medical terms.
- Apply knowledge of root words, prefixes and suffixes to identify meaning of novel medical terms.
- Define and give examples of terminology used to describe common surgical and diagnostic procedures.
- Recognize and define common medical and pharmacological abbreviations.

HLTH 134: Practicum to Hawaiian and Indigenous Health and Healing: Kupuna care for Nurse Aides
This course is a practicum companion to HLTH 124 and prepares students to work in non-long-term care settings. However, it does not qualify students to sit for the State of Hawai‘i Nurse Aide exam to become a Certified Nurse Aide (CNA). Intro to Hawaiian and Indigenous Health and Healing combines traditional Western healing knowledge and care giving skills. Training in the Native Hawaiian traditional healing practices focuses on mālama kapuna (elder care), mālama ‘aina (agricultural practices), ka’a‘ike waha (communication), ‘ai Pono (healthy nutrition), ho’oponopono (mutual restitution), lomilomi (massage), and lā‘au lapa‘au (plant medicine). Western knowledge focuses on human anatomy, medical terminology, basic nursing care, basic home care, emergency care, nutrition, dressing, bathing and feeding patients, taking patients’ temperature, blood pressure and pulse, and reporting too nurses. (3 hours Clinical Instruction)
Credits: 1
Prerequisites:
Grade of C or better or registration in HLTH 124.
Recommended:
Grade of C or better in ENG 23, OR placement into ENG 100W or higher. Grade of C or better in MATH 75x, OR placement into MATH 82.
Student Learning Outcomes:
- Explain appropriate pre and post procedures used when providing various types of care;
- Successfully perform 14 of the State of Hawaii CNA mandatory skills.
HLTH 134C: Practicum to Hawaiian and Indigenous Health and Healing: Kupuna care for Nurse Aides
This course is a practicum companion to HLTH 124 and is required for students planning to qualify to sit for the State of Hawaii Nurse Aide exam to become a Certified Nurse Aide (CNA). Intro to Hawaiian and Indigenous Health and Healing combines traditional Western healing knowledge and care giving skills. Training in the Native Hawaiian traditional healing practices focuses on mālama kūpuna (elder care), mālama ʻaina (agricultural practices), kaʻa ʻike waha (communication), ʻai Pono (healthy nutrition), hoʻoponopono (mutual restitution), lomilomi (massage), and lāʻau lapaʻau (plant medicine). Western knowledge focuses on human anatomy, medical terminology, basic nursing care, basic home care, emergency care, nutrition, dressing, bathing and feeding patients, taking patients' temperature, blood pressure and pulse, and reporting too nurses. (3 hours clinical instruction)
Credits: 1
Prerequisites:
Grade of C or better or registration in HLTH 124C.
Recommended:
Grade of C or better in ENG 23, OR placement into ENG 100W or higher. Grade of C or better in MATH 75X, OR placement into MATH 82.
Student Learning Outcomes:
• Explain appropriate pre and post procedures used when providing various types of care;
• Successfully perform 14 of the Hawaii CNA mandatory skills.

History

HIST 151: World History to 1500
A global and historical survey focusing on human societies and cross-cultural interactions to 1500 C.E.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
• 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) that gave rise to a distinct European civilization.
• Synthesize primary sources in order to evidence an argument dealing with a significant issue in Pre-Modern European history.
• Evaluate contemporary issues and events in terms of Pre-Modern European events (i.e., historical roots).

HIST 241: Civilizations of Asia I
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.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
• 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**
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.

**Credits:** 3  
**Lecture Hours:** 3  
**Student Learning Outcomes:**  
- 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 260: Twentieth Century World History**  
This course covers the major individuals and political, economic, social, and culture events of the world during the twentieth century. Emphasis will be placed on global relationships, conflict, and changing patterns of interaction among cultures and peoples in an era of near-constant change.

**Credits:** 3  
**Lecture Hours:** 3  
**Prerequisites:**  
Grade of C or better in ENG 100, or consent of instructor.  
**Recommended:**  
Credit for HIST 152.

**Student Learning Outcomes:**  
- Identify important individuals, events, organizations, conflicts, and concepts in twentieth century world history.  
- Describe and analyze global processes of the twentieth century (e.g. imperialism, colonialism, economic trends, ecological forces, conflict/war, advancements in technology, etc.)  
- Explain cause and effect relationships in twentieth century world history.  
- Relate historical events to contemporary issues and events.

**HIST 281: Introduction to American History I**  
An introduction to American history covering significant events in U.S. history from the colonial to Civil War period.

**Credits:** 3  
**Lecture Hours:** 3  
**Student Learning Outcomes:**  
- 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**  
Continuation of HIST 281 focusing on significant events in American history from Reconstruction (1865) to the present.

**Credits:** 3  
**Lecture Hours:** 3  
**Student Learning Outcomes:**  
- 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.

**HIST 284: History of Hawai’i**  
A general study of the social, political and economic development of Hawai’i from the ancient Hawaiians to the present.

**Credits:** 3  
**Lecture Hours:** 3  
**Student Learning Outcomes:**  
- Identify important individuals and events in American history from Reconstruction to the present.  
- Critically analyze primary sources.  
- Make connections between contemporary events and Hawai’i’s history.

**HIST 285: Environmental History of Hawai’i**  
This course investigates human interactions with the natural world in the Hawaiian Islands. It is interdisciplinary, drawing on insights from history, geography, anthropology and the natural sciences. Topics covered will include island biogeography and evolution; the natural and human histories of Hawai’i; Hawaiian and American attitudes toward the environment; the impact of introduced diseases, plants and animals in Hawai’i.

**Credits:** 3  
**Lecture Hours:** 3  
**Student Learning Outcomes:**  
- Describe cause and effect relationships in the interaction between humans and their environment throughout history.  
- Analyze global processes as humans, plants, animals and diseases move around the world.  
- Investigate traditional Hawaiian attitudes toward nature.  
- Explain the evolution of American attitudes toward nature.  
- Apply outcomes 1 through 4 to events specific to Hawai’i and the Windward side of O‘ahu in order to evaluate current environmental problems from a historical perspective.
Human Development and Family Services

HDFS 230: Human Development and Family Services
This course provides students with theories of biological, cognitive, and psycho-social development from infancy to adulthood and with similarities and differences among individuals and their cultures.
Credits: 3
Lecture Hours: 3
Recommended: PSY 100.
Student Learning Outcomes:
• Compare and contrast the various theories of human development and behavior.
• Describe biological, cognitive, and psychosocial development for each life-span period.
• Investigate the existence of similarities, differences, and uniqueness in human development among individuals and their culture.
• Apply human development theories and concepts to personal, social, educational, and occupational experiences.

Information and Computer Sciences

ICS 100: Computing Literacy and Applications
Fundamental information technology concepts and computing terminology, productivity software for problem solving, computer technology trends and impact on individuals and society. Emphasizes the utilization of operating systems and the production of professional documents, spreadsheets, presentations, databases, and web pages.
Credits: 3
Lecture Hours: 3
Recommended: Credit in both ENG 22 or ENG 23 and MATH 22, 24, 25, 26, 28, 29, 75X or higher.
Student Learning Outcomes:
• Utilize the basic features of computer applications to communicate effectively (major content area).
• Utilize operating system interfaces to manage computing resources effectively and securely.
• Utilize online resources for research and communication.
• Define, explain, and demonstrate proper computing terminology usage in areas such as hardware, software, and communications.
• Describe ethical and security issues involved in the use of computing technology.

ICS 101: Digital Tools for the Information World
Fundamental information technology concepts and computing terminology, productivity software for problem solving, computer technology trends and impact on individuals and society. Emphasizes the utilization of operating systems and the production of professional documents, spreadsheets, presentations, databases, and web pages.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
• Utilize the appropriate computing applications to produce professional documents, spreadsheets, presentations, databases, and webpages for effective communication (major content area).
• Utilize operating system interfaces to manage computing resources effectively and securely.
• Extract and synthesize information from available Internet resources using intelligent search and discrimination.
• Define, explain, and demonstrate proper computing 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: Introduction to Computing Skills
In this introductory computing course, students will learn basic file management, digital communication, word processing, and presentation software. Students will explore various computing systems and terminology. This course is recommended for students inexperienced in computing.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
• Use appropriate computing tools to communicate effectively.
• Demonstrate basic file management tasks.
• Identify computing terminology, systems, and issues.

ICS 107: Web Site Development
An introduction to the concepts and skills for developing websites from planning through publishing. Design, usability, accessibility, markup and styling language, and integrating media will be emphasized. Web development software utilized.
Credits: 3
Lecture Hours: 3
Recommended: Intermediate computing skills including file management and common computing skills: cut, copy, paste, open/save files, web search.
Student Learning Outcomes:
• Demonstrate the website development cycle.
• Use appropriate web development software to create an effective website that communicates a message, incorporates appropriate media, and adheres to usability and accessibility standards.
• Describe ethical issues involved in the development and use of websites.
ICS 111: Introduction to Computer Science I
Intended for computer science majors and all others interested in a first course in programming. An overview of the fundamentals of computer science emphasizing problem solving, algorithm development, implementation, and debugging/testing using an object-oriented programming language.
Credits: 3
Lecture Hours: 3
Prerequisites:
MATH 103 with a grade of “C” or better, placement into MATH 135, or consent of instructor.
Student Learning Outcomes:
- 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 computing language.
- Illustrate basic programming concepts such as program flow and syntax of a high-level general purpose language and basic security practices.
- Demonstrate working with primitive data types, strings, and arrays.

ICS 119: Introduction to Social Media
This computing course explores the foundations of building a presence on the Web, developing an entity’s brand and creating a social channel to share ideas, expertise and business philosophies. Topics covered: choosing a domain name, securing a content hosting service, initiating content creation, and constructing a social web channel.
Credits: 3
Lecture Hours: 3
Recommended:
Write well-formed sentences and organized paragraphs using proper grammar and correct spelling. Have computing skills including file management, uploading/downloading files and Internet search skills.
Student Learning Outcomes:
- Use the appropriate social media tools to create an online identity.
- Create content that uniquely represents an entity’s image.
- Plan and implement a social media campaign and analyze its effectiveness.
- Analyze the ethical roles and responsibilities of a content creator.

ICS 121: Computing Topics
This course covers current computing topics. The course is designed to have variable credits to coincide with the rigor of the topic. Maybe repeated up to 6 credits with different topics. A course description will be on record to designate the various topics for a student’s transcript.
Credits: 1-4
Lecture Hours: 1
Prerequisites:
TBA based on course topic.
Student Learning Outcomes:
- Produce a final project to demonstrate knowledge of the computer topic.

ICS 123: Introduction to Digital Audio and Video Production
This is an introductory course covering concepts and skills of working with digital audio and video including recording, editing and publishing online.
Credits: 3
Lecture Hours: 3
Recommended:
Intermediate computing skills including file management and common computing skill including cut, copy, paste, open/save files, web search and ability to independently access technical support through online forums.
Student Learning Outcomes:
- Record, edit and produce digital audio.
- Produce a digital video project to communicate an effective message.
- Define audio and video terminology and ethical practices as they apply to the use of digital media.

ICS 129: Introduction to Databases
This course covers the fundamental concepts in database technology, including storage structures, access methods, recovery, concurrency, and integrity. The relational model and its implementation will be covered in depth together with an overview of SQL and its role in application development. The course will also present an overview of database administration, including modeling and design activities. A substantial part of the course involves the development of an understanding of database concepts.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Define common database terminology.
- Create Entity Relationship Diagrams (ERD).
- Design and create a relational database using the normalization process.
- Use Structured Query Language (SQL) to manipulate data.
- Follow best practices in secure database design.

ICS 141: Discrete Mathematics for Computer Science I
This course covers logic, sets, functions, matrices, algorithmic concepts, mathematical reasoning, recursion, counting techniques, and probability theory.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in MATH 103 or placement into MATH 135 or higher, or consent of instructor.
Student Learning Outcomes:
- Analyze issues and apply mathematical problem solving skills to plan courses of action in decision-making situations.
- Solve problems by using basic mathematical formal logic, proofs, recursion, analysis of algorithms, sets, combinatorics, relations, functions, matrices and probability.

ICS 1123: Introduction to Social Media
This computing course explores the foundations of building a presence on the Web, developing an entity’s brand and creating a social channel to share ideas, expertise and business philosophies. Topics covered: choosing a domain name, securing a content hosting service, initiating content creation, and constructing a social web channel.
Credits: 3
Lecture Hours: 3
Recommended:
Write well-formed sentences and organized paragraphs using proper grammar and correct spelling. Have computing skills including file management, uploading/downloading files and Internet search skills.
Student Learning Outcomes:
- Use the appropriate social media tools to create an online identity.
- Create content that uniquely represents an entity’s image.
- Plan and implement a social media campaign and analyze its effectiveness.
- Analyze the ethical roles and responsibilities of a content creator.

ICS 121: Computing Topics
This course covers current computing topics. The course is designed to have variable credits to coincide with the rigor of the topic. Maybe repeated up to 6 credits with different topics. A course description will be on record to designate the various topics for a student’s transcript.
Credits: 1-4
Lecture Hours: 1
Prerequisites:
TBA based on course topic.
Student Learning Outcomes:
- Produce a final project to demonstrate knowledge of the computer topic.
ICS 163: Design for Print
Upon completion of this course, the student will (1) understand how to design professional print materials which integrate typography, images, space, and color theory; (2) be able to use desktop publishing software; (3) have developed familiarity with manipulating digital images; and (4) be able to produce materials such as business cards, fliers, brochures, and multi-page documents.

Credits: 3
Lecture Hours: 3
Recommended:
Intermediate computing skills, including file management and common computer skills: cut, copy, paste, open/save files, web search.

Student Learning Outcomes:
- Produce professional documents to meet business needs.
- Demonstrate awareness of design principles in the creation of projects from initial design to final production.
- Create projects from initial design to final production.

ICS 171: Introduction to Computer Security
Examines the essentials of computer security, including risk management, the use of encryption, activity monitoring, intrusion detection; and the creation and implementation of security policies and procedures to aid in security administration.

Credits: 3
Lecture Hours: 3
Prerequisites:
ICS 184 with a C or better, or concurrent enrollment, or consent of the instructor.

Student Learning Outcomes:
- List the first principles of security and describe why each principle is important to security and its relationship to the development of security mechanisms and security policies.
- Describe why good human machine interfaces are important to system use, the interaction between security and system usability and the importance for minimizing the effects of security mechanisms.
- Analyze common security failures and identify specific design principles that have been violated, and the needed design principle, when given a specific scenario.
- List the fundamental concepts of the Information Assurance/Cyber Defense discipline and describe how they can be used to provide system security.
- Identify the elements of a cryptographic system and describe the differences between symmetric and asymmetric algorithms, which cryptographic protocols, tools and techniques are appropriate for a given situation, and implementation issues.

ICS 184: Introduction to Networking
This course provides the student with the knowledge and skills to manage, maintain, troubleshoot, install, operate and configure basic network infrastructure, as well as to describe networking technologies, basic design principles, and adhere to wiring standards and use testing tools. The course also introduces the student to network security concepts.

Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Manage networking projects as part of a team.
- Discuss information security technologies such as cryptography, digital signatures, key management, and authentication as they relate to computer networks.
- Describe the fundamental concepts, technologies, components, terminology, protocols, standards, organizations, and business, legal, ethical, and security issues related to communications and data networks.
- Describe a basic secure network architecture in accordance with current best practices given a specific need and set of hosts/clients.
- Use current network tools to monitor, map and troubleshoot a network and to track and identify packets.

ICS 193V: Cooperative Education/Internship/Practicum
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.

Credits: 1-3
Lecture Hours: 1
Prerequisites:
Various as determined by the particular course of study and placement of the cooperative education/internship practicum in the sequence of courses.

Student Learning Outcomes:
- 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.

ICS 203: Digital Image Editing
Introduction to the terminology, tools, features and techniques of digital image editing.

Credits: 3
Lecture Hours: 3
Recommended:
Intermediate Computing Skills which include the following: File management File Compression Upload/download files Internet search skills Troubleshooting skills

Student Learning Outcomes:
- Use photographic practices and concepts to demonstrate the merits of digital photography.
- Implement skills for digital image capture and manipulation with a variety of output formats and input devices.
- Apply the visual elements of line, shape, value, color, texture, space, time and motion as well as the design principles of balance, rhythm, emphasis, contrast, variation and unity in the creation of digital art works.
- Complete the creative process from concept development through revisions to final output using problem-solving strategies.
ICS 207: Building Web Applications
Web Applications introduces programming for the web. Topics include: problem solving; web interactivity for websites; building applications with web authoring languages for markup, styling and scripting; presenting applications for mobile devices.
Credits: 3
Lecture Hours: 3
Recommended: Students must have HTML and CSS experience.
Student Learning Outcomes:
- Programming with javascript
- Utilizing javascript with HTML and CSS to create a web application.
- Using events to trigger an action
- Drawing on the web canvas
- Using video and audio files on a web page
- Going beyond standard fonts
- Detecting the screen size of a device and optimize the application for the different sizes
- Using local storage to remember data across web sessions.

ICS 208: Website Design
Introduces basic principles related to website design including terminology, tools, media, layout principles, and concepts. Topics and tasks include the creation of digital images and media for Web use, the integration of design elements into websites, and the development of skills in industry-standard computer programs.
Credits: 3
Lecture Hours: 3
Prerequisites: ICS 107 or consent of instructor.
Student Learning Outcomes:
- Demonstrate understanding of important design techniques, concept development and composition.
- Utilize image editing tools to create and edit images.
- Apply web media and consistent styling to increase appeal throughout a website while maintaining usability and accessibility.

ICS 211: Introduction to Computer Science II
Reinforce and strengthen problem-solving skills using abstract data types and introduce software development practices. Emphasize the use of searching and sorting algorithms and their complexity, recursion, object-oriented programming, and data structures.
Credits: 3
Lecture Hours: 3
Prerequisites: A grade of “C” or better in ICS 111 or consent of instructor.
Student Learning Outcomes:
- Use and implement abstract data types such as lists, stacks, queues, and trees.
- Select the appropriate searching or sorting algorithm based on the algorithm’s behavior.
- Develop recursive algorithms and programs.
- Use standard libraries or packages as well as advanced object-oriented programming techniques (polymorphism, inheritance, and encapsulation).
- Produce robust and secure programs using exception handling and extensive program testing.

ICS 212: Program Structure
Program organization paradigms, programming environments, implementation of a module from specifications, the C and C++ programming languages.
Credits: 3
Lecture Hours: 3
Prerequisites: Grade of “C” or better in ICS 211 or consent of instructor.
Student Learning Outcomes:
- Use an editor, make file, and compiler in the UNIX environment.
- Use recursion, arrays, pointers, character variables, bitwise operators, structures, and linked data structures in C.
- Use classes (constructors, destructor, and overloaded assignment), operator overloading, inheritance, and polymorphism in C++.
- Use linked data structures and recursion in C++.
- Use standard C++ strings and C++ STL library data structures, such as STL lists.

ICS 215: Introduction to Scripting
Introduction to scripting languages for the integration of applications and systems. Scripting in operating systems, web pages, server-side application integration, regular expressions, event handling, input validation, selection, repetition, and parameter passing for languages such as Perl, JavaScript, PHP, Python, and/or shell scripting.
Credits: 3
Lecture Hours: 3
Prerequisites: Grade of “C” or better in ICS 211 or consent of instructor.
Student Learning Outcomes:
- Use regular expressions to solve different problems.
- Produce robust client and server side scripts in a variety of scripting languages using software engineering techniques such as review and extensive program testing.
- Handle user and system generated events using various scripting languages.
- Validate user input using various scripting languages for security purposes.

ICS 241: Discrete Mathematics for Computer Science II
Includes program correctness, recurrence relations and their solutions, divide and conquer relations, graph theory, trees and their applications, Boolean algebra, introduction to formal languages and automata theory.
Credits: 3
Lecture Hours: 3
Prerequisites: Grade of “C” or better in ICS 141 or consent of instructor.
Student Learning Outcomes:
- Analyze issues and apply more complex mathematical problem solving skills to plan courses of actions in high-level decision-making situations.
- Utilize such tools as graphs, trees, boolean algebra, and recurrence relations.
- Explain discrete math concepts such as formal languages, finite-state machines, and program correctness.
ICS 281: Ethical Hacking
This course covers basic ethical hacking techniques also known as white hat hacking. It stresses the moral and legal issues about hacking and how these techniques can be used to defend against attacks as well as to perform authorized system security evaluation testing.

Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of C or better in ICS 171, or consent of instructor.

Student Learning Outcomes:
- Demonstrate how to apply current cyber-attack, countermeasures and best practices using current cyber defense tools, methods and components.
- Implement a defense incident response and recovery strategies.
- Evaluate the moral and legal obligations of an ethical hacker.
- Apply the knowledge gained in hardening systems to prevent or minimize attacks.

ICS 282: Computer Forensics
This course covers basic computer forensics including operating system diagnostics, the use of forensic toolkits to examine and validate computer activity and techniques for the proper collection, examination and preservation of forensic evidence.

Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of C or better in ICS 171, or consent of instructor.

Student Learning Outcomes:
- Discuss the rules, laws, policies, and procedures that affect digital forensics.
- Demonstrate the proper use of one or more common digital forensics tools.
- Describe the steps in performing digital forensics from the initial recognition of an incident through the steps of evidence gathering, preservation and analysis, through the completion of legal proceedings.

Interdisciplinary Studies

IS 103: Introduction to College
This course offers strategies for success in college and life-long learning. It emphasizes understanding yourself, setting and attaining goals, critical thinking, effective communication, relationship building, study habits and skills, time management, college resources, and setting your foundation to succeed. Students will participate in and lead classroom learning through discussions, readings, writing assignments, group activities, and hands-on experiences.

Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Identify personal characteristics (e.g., learning styles, strengths and weaknesses, habits of mind) and analyze how these impact decision-making and success.
- Consider those factors which impact student relationships with others and articulate strategies and skills to encourage strong relationship building.
- Identify college policies and resources related to students.
- Practice learning strategies (e.g., note-taking, time management, test-taking) to increase success in college coursework.

IS 105B: Career Decision Making
An introductory course designed to prepare students to make more focused career/life decisions through self analysis and world of work examinations.

Credits: 2
Lecture Hours: 2
Recommended:
Placement in ENG 22 or ENG 23 or higher.

Student Learning Outcomes:
- 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
Facilitates employment search by emphasizing professional techniques and standards in the preparation of application forms, resumes, cover letters, and employment interviews. (Cross-listed as BUSN 166.)

Credits: 1
Lecture Hours: 1
Recommended:
Credit for ENG 22, ENG 23, or higher, keyboarding skills, and knowledge of word processing.

Student Learning Outcomes:
- 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 201: The Ahupua’a
Study of the traditional Hawaiian approaches to natural resource 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.

Credits: 3
Lecture Hours: 2
Recommended:
BIOL 101 or BIOL 124 or similar preparation.

Student Learning Outcomes:
- Describe how 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’ai; and the fish and the lawai’a.
- Discuss the ancient and present management value of water.
- Describe and assist in the reconstruction of lō‘i kaloandloko‘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 204: Themes in Popular Culture
An interdisciplinary study of a specific event, person, idea, or process in popular culture which will bring together various methodologies and conceptual tools to create a complex analysis. Topics covered will include: the concept of popular culture, how elements of popular culture are created and circulated, how elements of popular culture connect to historical, political, social, symbolic and intellectual history, how different groups in society are related to the elements of popular culture, and how popular culture plays a role in the lives of individuals.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Identify the connection between the theme in popular culture with larger political, social, and intellectual patterns in society.
- Analyze the connection between the theme in popular culture and other themes, either contemporary or historical.
- Participate effectively in group discussions, given evidence of thoughtfulness and an engagement with other people’s positions.
- Connect local elements of popular culture to global economic and political systems.
- Explain and justify an evaluation of the role of popular culture in the student’s life.

IS 231: The Zombie Apocalypse & Other Doomsday Beliefs in Popular Culture
An interdisciplinary study of the zombie apocalypse and other doomsday beliefs in popular culture which will bring together various methodologies and conceptual tools to create a complex analysis. Topics covered will include: the concept of apocalyptic beliefs in popular culture; how apocalyptic beliefs are created and circulated in popular culture; how elements of apocalyptic beliefs in popular culture connect to historical and contemporary political, social, psychological, and intellectual issues; how different groups and individuals in history and contemporary society relate to apocalyptic beliefs.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Identify significant themes in representations of doomsday beliefs in popular culture (e.g., social contract, communitarianism, tribalism, realism, liberalism, neo-conservatism, fascism, barbarism, morality).
- Analyze doomsday beliefs in popular culture using historical, religious, political, philosophical, psychological, social, &/or intellectual frameworks.
- Evaluate how doomsday beliefs in popular culture serve as metaphor to current issues and events, and provides social commentary on the historical context it was produced in.

Japanese Language

JPN 101: Elementary Japanese I
An introductory course focusing on grammar and vocabulary sufficient to maintain conversation at the elementary level and on the three writing systems: hiragana, katakana, and kanji.
Credits: 4
Lecture Hours: 4
Student Learning Outcomes:
On completing the course, students will be able to:
- Express themselves orally using learned phrases and sentences for introductory-level students in various social and academic contexts.
- Read learned materials written in hiragana, katakana and approximately 75 kanji.
- Write short sentences and passages using the three writing systems: hiragana, katakana and kanji.

JPN 102: Elementary Japanese II
A continuation of JPN 101 focusing on additional grammar topics and increased vocabulary to maintain conversation at the elementary level and on the three writing systems: hiragana, katakana, and kanji.
Credits: 4
Lecture Hours: 4
Prerequisites:
Credit for JPN 101 or consent of instructor.
Student Learning Outcomes:
On completing the course, students will be able to:
- Express themselves orally using sentences combining learned and new vocabulary and grammatical structures in various social and academic contexts.
- Read materials in hiragana, katakana and learned kanji, such as menus, memos, and passages.
- Develop a functional command of 161 kanji.

JPN 108: Basic Japanese Conversation
Elementary-level conversational Japanese to develop speaking and understanding of Japanese culture. This is a course recommended for people who deal with or are interested in things concerning Japan.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Use basic Japanese to communicate appropriately in formal and informal situations.
JPN 201: Intermediate Japanese I
A continuation of JPN 102 focusing on additional grammar topics and increased vocabulary to maintain conversation at the intermediate level and on the three writing systems: hiragana, katakana, and kanji.

Credits: 4
Lecture Hours: 4
Prerequisites:
Credit for JPN 102 or consent of instructor.

Student Learning Outcomes:
On completing the course, students will be able to:

- Express themselves orally using complex sentences in a variety of everyday situations, reinforcing what students have already learned in JPN 101/102.
- Read several paragraphs utilizing skimming, scanning, and intensive reading techniques.
- Write various kinds of texts, such as letters, suggestions, and descriptions, reinforcing what students have already learned in JPN 101/102.
- Learn 75 new kanji.

JPN 202: Intermediate Japanese II
A continuation of JPN 201 focusing on additional grammar topics and increased vocabulary to maintain conversation with greater proficiency at the intermediate level and on the three writing systems: hiragana, katakana, and kanji.

Credits: 4
Lecture Hours: 4
Prerequisites:
Credit for JPN 201 or consent of instructor.

Student Learning Outcomes:
On completing the course, students will be able to:

- Express themselves orally using complex sentences in a variety of everyday situations, reinforcing what students have already learned in JPN 101/102/201.
- Read several paragraphs utilizing skimming, scanning, and intensive reading techniques.
- Write various kinds of texts, such as letters and stories, reinforcing what students have already learned in JPN 101/102/201.
- Learn 118 new kanji.
- Develop communication skills by comparing Japanese culture/society/history with their own to broaden their understanding of the world.

Journalism

JOUR 150: Media and Society
The role of the media in contemporary society, including development, influence, rights, responsibilities, issues and trends - with emphasis on the social, political and economic effects.

Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- Compare and evaluate various forms of mass media and their effect on society.
- Use critical reasoning skills to distinguish fact from opinion and judge the credibility of various information sources.
- Describe and apply basic mass media principles as well as social science methods (e.g. interviews, observation and surveys) to analyze examples from the media.
- Illustrate and explain why an understanding of news and media literacy is important in the 21st century.

JOUR 200: Introduction to Multimedia Journalism
Fundamentals of multimedia journalism including reporting stories that include photography, audio, graphics and video that can be combined into the ideal online package.

Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- Apply basic journalistic concepts and principles to produce multimedia stories that can be published online.
- Generate story ideas and determine the best way to convey those stories through text, audio, photography, video and/ or infographics.
- Gather essential information for a story, including conducting interviews, following through on assignments and meeting deadlines.
- Take pictures using a digital camera applying concepts of photocomposition and then edit them using editing software.

JOUR 250: Media Writing
An introductory course in reporting and writing news stories for delivery to different media, including print, online media and video.

Credits: 3
Lecture Hours: 3

Prerequisites:
“C” or better in ENG 100.

Student Learning Outcomes:
- Analyze the quality of coverage in stories produced by the mass media to become a more informed consumer of news.
- Describe the basic journalistic issues related to news values and communication law and ethics.
- Produce various multimedia writing (print, online media, and video) using journalistic concepts and principles.
- Write, edit and proofread stories for readability, clarity, accuracy, news value, conciseness and mechanics.
JOUR 270: Introduction to Multimedia Storytelling
Fundamentals of multimedia storytelling using video, audio and photography to report and produce news and documentary stories for the web and other distribution platforms.
Credits: 3
Lecture Hours: 3
Prerequisites:
Credit for or registration in JOUR 150 or JOUR 250 or consent of instructor
Student Learning Outcomes:
• Produce various news videos and short documentaries independently or in groups that meet professional journalistic standards and ethics
• Generate story ideas; research, gather and organize information; follow through on assignments; and meet deadlines
• Apply basic knowledge and skills of digital video production including cinematography, sound and editing
• Critically analyze news videos and documentaries produced by the mass media

JOUR 285: Multimedia News Production
Students will develop intermediate skills in video journalism and produce video and multimedia news stories about campus and community events and issues for publication on the Ka’Ohana website and other distribution platforms. Repeatable for up to 6 credits.
(Crosslisted as CM 286.)
Credits: 3
Lecture Hours: 2
Prerequisites:
Credit for CM 120 or JOUR 120; or consent of instructor.
Student Learning Outcomes:
• Produce various news videos independently or in groups that meet professional journalistic standards and can be published on the Ka’Ohana website.
• Generate story ideas; research, gather and organize information; work collaboratively with editors and reporters; follow through on assignments; and meet deadlines.
• Develop basic knowledge and skills of digital video production including cinematography, sound and editing.
• Critically analyze news videos produced by the mass media.

JOUR 287V: Newspaper Production
Complete production of the student newspaper Ka’Ohana, including reporting, writing, layout, editing, photography, web and social media. Repeatable for up to 6 credits.
Credits: 1-3
Lecture Hours: 1
Prerequisites:
Grade of C or better in ENG 100 and credit for or registration in JOUR 205 or 250; or consent of instructor. NOTE: credits are variable 1 to 3 credits.
Student Learning Outcomes:
• 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 and to edit them for publications.
• 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 110: College Study Skills
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.
Credits: 3
Lecture Hours: 3
Prerequisites:
Placement in ENG 21 or ENG 23 or higher or consent of instructor.
Student Learning Outcomes:
• 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.
Management

MGT 120: Principles of Management
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.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Describe the basic functions of management including planning, organizing, staffing, leading and controlling.
- Apply management skills in areas such as technical, human relations, administration, communication and problem solving.
- Discuss ethical dilemmas faced by managers and the social responsibilities of business.
- Develop strategies to reduce resistance to change.

Math

MATH 75X: Introduction to Mathematical Reasoning
This course prepares students for MATH 100, MATH 101, MATH 111, and MATH 115. Course topics include ratio and percent, unit conversion, graphs, data interpretation, basic algebra, solving linear equations, and working with formulas with special emphasis on pattern recognition and problem solving. Additional topics may include set theory, inequalities, and quadratics.
Credits: 4
Lecture Hours: 4
Student Learning Outcomes:
- Solve applied mathematical problems, judge reasonableness of results, and communicate conclusions using appropriate terminology and symbols.
- Recognize and express mathematical patterns in various forms and contexts.
- Perform operations on real numbers.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 78: College Math Companion
This course provides students concurrently enrolled in MATH 100, MATH 101, MATH 111, or MATH 115 with Just-In-Time support with special emphasis on pattern recognition and problem solving. Course topics are tailored to the concurrent course and may include ratio and percent, unit conversion, graphs, data interpretation, basic algebra, solving linear equations, and working with formulas. (Grading is CR/NC)
Credits: 1
Lecture Hours: 1
Prerequisites:
Satisfactory Placement Score
Student Learning Outcomes:
- Demonstrate college-level mathematical reasoning skills.

MATH 82: Algebraic Foundations
This course covers elementary algebra topics. Topics include linear equations and inequalities, graphing, linear systems, properties of exponents, operations on polynomials, factoring, rational and radical expressions and equations, quadratic equations, and applications.
Credits: 4
Lecture Hours: 4
Prerequisites:
Satisfactory Placement, or a Grade of “C” or better in Math 21, Math 21B, Math 24, Math 28, or Math 75X.
Student Learning Outcomes:
- Use algebraic techniques to analyze and solve applied problems.
- Graph linear and quadratic equations.
- Solve equations, inequalities, and systems.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 88: College Algebra Companion
Math 88 provides students with supplemental algebra instruction that directly supports the topics covered in Math 103. (Grading is CR/NC)
Credits: 2
Lecture Hours: 2
Prerequisites:
Satisfactory Placement Score
Co-Requisites:
MATH 103
Student Learning Outcomes:
- Demonstrate algebra skills needed to be successful in Math 103.

MATH 100: Survey of Mathematics
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.
Credits: 3
Lecture Hours: 3
Prerequisites:
“C” or better in MATH 25, 26, 28, 29, 75X or higher or equivalent
Co-Requisites:
enrollment in MATH 78, satisfactory math placement test score, or consent of instructor.
Student Learning Outcomes:
- Utilize basic properties and/or operations related to the topics covered in the course.
- 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 101: Mathematics for Veterinary Assistants & Technicians
An introduction to clinical calculations used in veterinary medicine. Topics include the application of mathematical skills to solve applied problems in veterinary nursing and pharmaceutical dispensing with emphasis on dosage, concentration, dilution and drip rates. Also included is mathematical and laboratory terminology. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of C or better in MATH 25, 26, 28, 29, 75X or higher or equivalent, satisfactory math placement test score.
Student Learning Outcomes:
• Identify information needed for dosage calculations and perform dosage calculations.
• Utilize appropriate techniques to solve applied problems in the veterinary profession.
• Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.
• Demonstrate proficiency in calculating infusion rates for fluid therapy.

MATH 103: College Algebra
Linear equations, inequalities, systems of equations, polynomials, functions, fractional expressions and equations, exponents, powers, roots, quadratic equations and functions; rational, exponential and logarithmic functions.
Credits: 4
Lecture Hours: 4
Prerequisites:
“C” or better in MATH 25, 26, 28, 29, 82 or equivalent
Co-Requisites:
enrollment in MATH 88, satisfactory math placement test score, or consent of instructor.
Student Learning Outcomes:
• Graph or interpret algebraic relations that are relevant to the topics in this course.
• Employ algebraic techniques to find the solutions to equations or inequalities, or systems of equations or inequalities appropriate to the level of this course.
• Use algebraic techniques to analyze and solve applied problems.
• Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 111: Mathematics for Elementary Teachers I
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 and proof.
Credits: 3
Lecture Hours: 3
Prerequisites:
“C” or better in Math 25, 26, 28, 29, 75X, or higher or equivalent, satisfactory math placement test, and grade of C or better in ENG 22 or ENG 23 or placement in ENG 100.
Student Learning Outcomes:
• Explain the meaning of numerical operations and how they relate to each other.
• Utilize symbolic forms to represent, model, and analyze mathematical situations to solve problems.
• Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 112: Mathematics for Elementary Teachers II
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 the representation of and operations on the natural numbers and properties of those operations. Emphasis will be on communication, connections and problem solving, representation and reasoning.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in MATH 111.
Student Learning Outcomes:
• Use mathematical concepts to demonstrate critical thinking.
• Employ appropriate techniques to solve problems related to elementary math education.
• Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.
MATH 115: Introduction to Statistics and Probability
Utilizes basic statistical topics including measures of central tendency and dispersion, classification of variables, sampling techniques, elementary probability, normal and binomial probability distributions, tests of hypothesis, linear regression and correlation in order to solve problems.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in Math 25, 26, 28, 29, 75X or higher or equivalent, satisfactory math placement test score, or consent of instructor.
Student Learning Outcomes:
• Demonstrate proficiency in graphing, statistical data, calculating measures of central tendency, measures of variation, percentiles, 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
Investigates linear, quadratic, polynomial, rational, exponential, logarithmic functions, and related topics. This course is the first part of the precalculus sequence.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in MATH 103 or equivalent, satisfactory math placement test score, or consent of instructor.
Student Learning Outcomes:
• Use appropriate symbolic techniques to analyze and solve applications problems.
• Utilize elementary function concepts.
• Graph elementary functions utilizing behavior information and/or transformations.
• Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 140: Precalculus: Trigonometry and Analytic Geometry
Studies trigonometric functions, analytic geometry, polar coordinates, vectors, and related topics. This course is the second part of the precalculus sequence.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in MATH 135 or equivalent, satisfactory math placement test score, or consent of instructor.
Student Learning Outcomes:
• Employ algebraic and geometric representations of trigonometric functions and other relations.
• Use appropriate techniques to analyze and solve application problems requiring the use of trigonometry or analytical geometry.
• Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 203: Calculus for Business and the Social Sciences
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.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “B” or better in MATH 103, “C” or better in MATH 135 or equivalent, satisfactory math placement test score or consent of instructor.
Student Learning Outcomes:
• Demonstrate proficiency in determining limits, derivatives, and integrals.
• Use calculus techniques to analyze and solve applied problems.
• Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 241: (Formerly Math 205) Calculus I
Basic mathematical concepts, topics in differentiation, and introductory integration of algebraic and trigonometric functions. Applications of differentiation and integration will be demonstrated.
Credits: 4
Lecture Hours: 4
Prerequisites:
Grade of “C” or better in MATH 140 or equivalent, satisfactory math placement test score, or consent of instructor.
Student Learning Outcomes:
• Demonstrate proficiency in determining limits, derivatives, and integrals.
• Use calculus techniques to analyze and solve applied problems.
• Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.
MATH 242: (Formerly Math 206) Calculus II
Differentiation and integration concepts of trigonometric, exponential, logarithmic and hyperbolic functions. Integration implements, infinite series, and applications of derivatives and integrals are also featured.

Credits: 4
Lecture Hours: 4
Prerequisites:
Grade of “C” or better in MATH 205 or MATH 241 or equivalent or consent of instructor.

Student Learning Outcomes:
- Demonstrate proficiency in determining limits, derivatives, and integrals associated with the topics in the course.
- Use concepts from the course to solve applied problems.
- Demonstrate proficiency in working with sequences or series.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 243: (Formerly Math 231) Calculus III
Vector algebra, vector-valued functions, differentiation in several variables, and optimization.

Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in MATH 206 or MATH 242 or equivalent.

Student Learning Outcomes:
- Apply concepts and techniques in vector calculus.
- Apply principles and concepts from calculus to multivariable functions.
- Use strategies from this course to solve applied problems.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 244: (Formerly Math 232) Calculus IV
Math 244 is the fourth course in the calculus sequence. Topics include multiple integrals, line integrals, Green's Theorem, surface integrals, Stokes' Theorem, Gauss' Theorem and differential equations.

Credits: 3
Lecture Hours: 3
Prerequisites:
“C” or better in Math 231 or MATH 243 or equivalent or consent of instructor.

Student Learning Outcomes:
- Double Integrals in Rectangular and Polar Coordinates
- Triple Integrals in Rectangular, Cylindrical and Spherical Coordinates; Mass Calculations
- Change of Variables in Multiple Integration; Vector Fields
- Applications of Green’s Theorem, Stoke’s Theorem, and Divergence Theorem

Microbiology

MICR 130: General Microbiology
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.

Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- 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 140L: General Microbiology Lab
Laboratory course illustrating fundamental techniques and concepts of microbiology, such as microscopic observations, aseptic transfer, 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 Agripharmatech, nursing, dental hygiene and nutrition. Science laboratory course.

Credits: 2
Prerequisites:
Credit for or registration in MICR 130; placement into Math 24, 25, 26, 28, 29, 82 or higher.

Student Learning Outcomes:
- 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.
Music

MUS 106: Intro to Music Literature
Elements, styles, and forms of music, from the listener’s standpoint. Focus on classical music literature. Concert attendance and written critique required for two live performances during semester.
Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- 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 Cultures
Music as organized sound and as a cultural object. Role of music in various societies: ancient and modern, sophisticated and non-sophisticated, child and adult, Western and non-Western. Representative styles and regional characteristics viewed in terms of musical characteristics and related cultural factors; a conceptual introduction to music and culture. Attendance at one ethnic performance is required.
Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- 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: Music Fundamentals
A basic music theory course. Emphasis on learning basic concepts involved in reading and writing music. Notation and reading of simple and compound rhythm, pitch, intervals and triads. Application to performance.
Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- Read and write music (pitch and rhythm) in conventional notation.
- Identify and write major and minor key signatures and scales; intervals, triads.
- Apply knowledge to performance on a primary instrument.
- Apply knowledge of solfege to diatonic melodies in major and minor keys.

MUS 114: College Chorus
Rehearsal and performance of choral literature. Open to all students. No previous choral experience required. Attendance at class concerts is required. Repeatable for up to 8 credits.
Credits: 2
Lecture Hours: 1
Lecture/Lab Hours: 2

Student Learning Outcomes:
- Read pitch and rhythmic notation in choral parts.
- Demonstrate musicianship in ensemble singing and professional performance practices.

MUS 121B: Voice 1
Performance class in vocal production and literature for voice. No previous vocal training required. Repeatable for up to 4 credits.
Credits: 2
Lecture Hours: 1
Lecture/Lab Hours: 2

Student Learning Outcomes:
- Demonstrate basic vocal techniques of physical alignment, breath support, breath control, and tone production of performances.
- Apply basic concepts of rhythm and pitch accuracy in performances.
- Employ basic concepts of sight reading in learning music for performance.
- Learn and demonstrate professional performance practices.

MUS 121C: Piano 1
Basic principles of performance. Relevant problems in piano literature at elementary level. MUS 121C, 122C must be taken in sequence. May be repeated up to 6 credits.
Credits: 2
Lecture Hours: 1
Lecture/Lab Hours: 2

Student Learning Outcomes:
- Identify and write the basic concepts of music notation.
- Demonstrate basic concepts, such as rhythm, notation, dynamics, and expression in accurate performances.
- Analyze history of piano development.
- Learn and demonstrate professional performance practices.

MUS 121D: Guitar 1
Basic principles of classical guitar performance; relevant problems in literature. Repeatable for up to 4 credits.
Credits: 2
Lecture Hours: 1
Lecture/Lab Hours: 2

Student Learning Outcomes:
- Identify and write the basic concepts of music notation.
- Demonstrate basic concepts, such as rhythm, notation, dynamics, and expression in accurate performances.
- Analyze history of guitar development.
- Learn and demonstrate professional performance practices.
MUS 121F: Slack Key Guitar 1
Basic principles of performance; relevant problems in literature. Student learns to play two slack key 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. May be repeated up to 6 credits.
Credits: 2
Lecture Hours: 1
Lecture/Lab Hours: 2
Student Learning Outcomes:
- Demonstrate knowledge of the history of slack key guitar development.
- Demonstrate knowledge of basic concepts, such as rhythm, notation, dynamics, and expression in accurate performances.
- Use knowledge of slack key techniques and music concepts (music theory) to complete in-class recitals.
- Learn and demonstrate professional performance practices.

MUS 121Z: 'ukulele 1
Introductory course in 'ukulele. Basic principles of performance; history and development of 'ukulele playing methods. Focus on principles of performance. Course is intended for students with little or no experience in playing the ukulele. May be repeated for up to 6 credits.
Credits: 2
Lecture Hours: 1
Lecture/Lab Hours: 2
Student Learning Outcomes:
- Discuss the history of 'ukulele development.
- Demonstrate basic concepts, such as rhythm, notation, dynamics, and expression in accurate performances.
- Strum chords in different keys, applying music theory applications.
- Learn and demonstrate professional performance practices.

MUS 122B: Voice 2
Performance class in vocal production and literature for voice. Class is designed for students with previous vocal experience or training. May be repeated up to 4 credits.
Credits: 2
Lecture Hours: 1
Lecture/Lab Hours: 2
Prerequisites:
Grade of C or better in MUS 121B or consent of instructor.
Student Learning Outcomes:
- 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.
- Learn and demonstrate professional performance practices.

MUS 122C: Piano 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. Repeatable for up to 4 credits.
Credits: 2
Lecture Hours: 1
Lecture/Lab Hours: 2
Prerequisites:
Grade of C or better in MUS 121C or consent of the instructor.
Student Learning Outcomes:
- Incorporate additional theoretical concepts in the performance of piano music.
- Demonstrate musical concepts such as rhythm, notation, dynamics, and expression in accurate performances of the level-two repertoire.
- Sight read music with increasing accuracy and musicianship.
- Learn and demonstrate professional performance practices with level-two repertoire.

MUS 122F: Slack Key Guitar 2
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. May be repeated up to 6 credits.
Credits: 2
Lecture Hours: 1
Prerequisites:
Credit for MUS 121F or consent of instructor.
Lecture/Lab Hours: 2
Student Learning Outcomes:
- Incorporate additional theoretical concepts in the performance of slack key music.
- Demonstrate knowledge of intermediate level concepts on performances.
- Sight read tablature notation with increasing accuracy and musicianship.
- Exhibit greater confidence in performing level-two repertoire.

MUS 122Z: 'ukulele 2
Continuation of MUS 121Z. Increased emphasis on 'ukulele literature. Focus on principles of performance. Emphasis on ensemble playing. Repeatable for up to 6 credits.
Credits: 2
Lecture Hours: 1
Prerequisites:
Credit for MUS 121F or consent of instructor.
Lecture/Lab Hours: 2
Student Learning Outcomes:
- Incorporate additional theoretical concepts in the performance of 'ukulele music.
- Demonstrate intermediate level concepts in performances, e.g., triplets, arpeggios.
- Sight-read tablature with increasing accuracy and musicianship.
- Exhibit greater confidence in performing level-two repertoire.
MUS 130F: Slack Key Guitar Ensemble
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.
Credits: 2
Prerequisites:
Credit for MUS 122F.
Student Learning Outcomes:
- 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 140: Introduction to Audio Production
Introduction to the process of audio engineering for live concerts and performances. Students learn the proper usage of audio production tools in both the analog and digital formats through lecture and hands-on projects. May be repeated for up to 6 credits.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Describe the fundamental physics of sound.
- Operate various audio equipment components.
- Employ procedures and methods used in live sound engineering.
- Discuss best practices for professional sound engineers.

MUS 166: Popular Music in America
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. Fieldtrips and concert attendance required.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Describe the role of music in different communities.
- Describe and compare the distinctive aural features and music aesthetics of the various style of popular music.
- Describe the historical, religious, social and political aspects of a society that contribute to the development of diverse musical styles.
- Compare/contrast different styles of popular music.

MUS 177: Intro to Hawaiian Music
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.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Identify and define the basic concepts, terminology and distinguishing features of Western European and Hawaiian music.
- Identify the distinguishing features of indigenous and post-contact Hawaiian music and musical instruments.
- Explain or discuss the functions of music in pre-contact Hawaiian society and in contemporary Hawai‘i.
- Identify and discuss important events and personalities in the evolution of Hawaiian music.
- Put theories of Hawaiian music into practice in vocal and instrumental performances.

MUS 211: Intro to Hawaiian Ensemble
Performance of Hawaiian music for groups of various sizes at an introductory level. Exploration of basic principles of history and development of ensemble performance. Students learn to play while singing. Ability to read music is not required. Repeatable up to 6 credits.
Credits: 2
Lecture Hours: 1
Prerequisites:
Grade of C or better in MUS 121Z, MUS 121F, MUS 121D, OR by instructor consent.
Lecture/Lab Hours: 2
Student Learning Outcomes:
- Discuss the history of Hawaiian music.
- Apply basic musical concepts in accurate solo and ensemble performances.
- Demonstrate professional performance practices.

MUS 212: Polynesian Music
Performance of Polynesian music for groups of various sizes. Exploration of basic principles, histories, and techniques for different Polynesian styles of music. Students learn to play while singing. Ability to read music is not required. Repeatable up to 6 credits. (1 hour lecture, 2 hour lecture/lab)
Credits: 2
Lab Hours: 2
Lecture Hours: 1
Prerequisites:
Grade of C or better in MUS 121Z, MUS 121F, MUS 121D, or MUS 211; or by instructor consent.
Student Learning Outcomes:
- Discuss the music history and techniques of different Polynesian islands.
- Demonstrate basic concepts, such as rhythm, notation, dynamics, and expression in accurate performances.
- Perform songs from 3 different Polynesian Islands.
- Demonstrate professional performance practices.

MUS 221C: Piano 3
Continuation of MUS 122C. Increased emphasis on piano literature up to the intermediate level. Repeatable for up to 4 credits.
Credits: 2
Lecture Hours: 1
Prerequisites:
Grade of C or better in MUS 122C or consent of the instructor.
Lab Hours: 2
Student Learning Outcomes:
- Incorporate additional theoretical concepts in the performance of piano music.
- Demonstrate musical concepts such as rhythm, notation, dynamics, and expression in accurate performances of the level-three repertoire.
- Sight read music with increasing accuracy and musicianship.
- Learn and demonstrate professional performance practices with level-three repertoire.
MUS 222C: Piano 4
Continuation of MUS 221C. Increased emphasis on piano technique and literature up to the intermediate level. Introduction to accompanying. Repeatable for up to 4 credits.

Credits: 2
Lecture Hours: 1
Prerequisites:
Grade of C or better in MUS 221C or consent of the instructor.
Lecture/Lab Hours: 2
Student Learning Outcomes:
• Apply, analyze, and discuss the form, articulation, rhythm, and phrasing of performance repertoire.
• Provide logical fingering for repertoire pieces.
• Learn and demonstrate professional performance practices with level-four repertoire.

MUS 231B: Applied Music, Western (Voice)
This course provides individual instruction in vocal performance. The course covers intermediate vocal technique paced to an appropriate level for each student's experience. Applied Voice is a performance class. The emphasis will be toward developing vocal technique that focuses on breath technique, expression, movement, clarity, dynamics, diction and musicianship. May be repeated up to 4 credits. (1 hour individual instruction)

Credits: 1
Prerequisites:
A grade of C or better in MUS 121 B
Student Learning Outcomes:
• Demonstrate intermediate level concepts of vocal performance.
• Demonstrate musical concepts such as rhythm, breath support, dynamics, expression, and diction in accurate performance of selected repertoire.
• Demonstrate musical concepts such as rhythm, breath support, dynamics, expression, and diction in accurate performance of selected repertoire 3. Sight read vocal music with increasing accuracy and musicianship.
• Demonstrate professional performance practices.

MUS 231C: Applied Music, Western (Piano)
This course provides individual instruction in piano performance, covering intermediate and advanced piano technique paced to an appropriate level for each student’s experience. Applied piano instruction is a performance class. The emphasis will be toward developing piano technique that has clarity, flexibility, dynamic intensity, and sensitivity of phrasing for expressive musicianship through increasingly more confident and skillful performances. Pedaling, theory, sight-reading, and learning/practicing/memorization/performing techniques will also be covered. May be repeated up to 4 credits. (1 hour Individual Instruction)

Credits: 1
Prerequisites:
A grade of C or better in MUS 121 C.
Student Learning Outcomes:
• Incorporate additional theoretical concepts in the performance of piano music.
• Demonstrate musical concepts such as rhythm, notation, dynamics, and expression in accurate performance of selected repertoire.
• Sight read music with increasing accuracy and musicianship.
• Learn and demonstrate professional performance practices.

MUS 240: Introduction to Digital Music
Introduction to digital music and sound production on the Macintosh platform: MIDI sequencing, audio recording, music arranging, editing, mixing and mastering; preparing audio files for CD, video and web applications; sound synthesis and programming using virtual instruments. (Cross-listed as CM 240.)

Credits: 3
Lecture Hours: 3
Prerequisites:
MUS 108, 121 (alpha) or 253; or consent of instructor.
Recommended:
Basic Keyboard (piano) skills, computer (Mac) skills.
Student Learning Outcomes:
• Use MIDI sequencing and audio recording software, and/or notation software, as tools for music composition, arranging and performance.
• Apply basic skills in MIDI sequencing and editing, and digital audio recording and editing to audio mixing and mastering projects.
• Prepare audio files for CD burning, and video and web applications.
• Apply understanding of sound synthesis to create original sounds for music projects.
• Transfer skills to other MIDI sequencing and digital audio software programs across PC and Mac platforms.

MUS 241: Digital Music Production II
Continuation of principles and skills introduced in MUS 240. Digital music composition and audio production on the Macintosh platform with emphasis on advanced MIDI and mixing techniques, audio editing, sound synthesis, and programming of virtual instruments and effects.

Credits: 3
Lecture Hours: 3
Prerequisites:
MUS 240 or consent of instructor.
Student Learning Outcomes:
• Advanced use of MIDI sequencing and audio recording software, or notation software, as tools for music composition, arranging and performance.
• Apply advanced skills in MIDI sequencing and editing, and digital audio editing to music composition projects.
• Effectively mix, bounce and prepare audio files for appropriate media and applications.
• Create and edit original sounds and effects for music projects.
• Transfer skills to other MIDI sequencing and digital audio software programs across PC and Mac platforms.
MUS 253: Elementary Music in Action
Deals with musical concepts, philosophy & pedagogy; the use of media, singing, movement, and instruments; and resources for an active elementary classroom. Presents correlation between music and brain development in early childhood. Intended for Education majors. Music is a vital stimulus to the developmental process and contributes to the emergence of positive self-esteem. Elementary education candidates learn to apply appropriate strategies in order to provide music making as part of everyday classroom activities.

Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- Identify and write the basic components of Western music notation.
- 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.
- Apply basic knowledge of basic theoretical concepts to performance on various instruments.
- Teach a mini model lesson, demonstrating a grade-appropriate musical concept.
- Harmonize simple melodies.

MUS 280: Basic Theory and Aural Skills
Basic Theory and Aural Skills develops students’ skills in music reading and music perception through notation, sight singing and dictation exercises. Students learn how to notate simple rhythms in simple and compound time; learn to recognize intervals, scales, triads, seventh chords and harmonic functions; and learn how to analyze non-modulating harmonic progressions in root position.

Credits: 3
Lecture Hours: 3

Prerequisites:
Credit for MUS 108

Student Learning Outcomes:
- Explain and use musical terminology at a beginning level.
- Identify and use basic elements of music (pitch, scales, intervals, rhythm, meter) to create music at a beginning level.
- Analyze music for its melodic, harmonic, rhythmic and formal qualities at a beginning level.

MUS 296: Special Topics in Music
Students will investigate important topics in music, such as specific people, genres, or periods. Classes may include a performance component. Specific course information will be made available in the schedule of classes. May be repeated up to 9 credits with different topics.

Credits: 3
Lecture Hours: 3

Recommended:
Introductory MUS class.

Student Learning Outcomes:
- Identify the important concepts and facts particular to the selected course topic.
- Analyze and interpret the nature and significance of the selected course topic.
- Investigate connections between the selected course topic and contemporary events and issues.

Oceanography

OCN 101: Introduction to the Marine Option Program
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.

Credits: 1
Lecture Hours: 1

Recommended:
“C” or better in MATH 24, 25, 26, 28, 29, 75X or higher.

Student Learning Outcomes:
- Develop a curriculum/program to facilitate the completion of a Marine Option Program (MOP) Certificate at Windward CC and other MOP campuses.
- Describe the ocean and freshwater related activities that are being undertaken statewide and on other UH campuses.
- Find information about statewide/nationwide/international projects, organizations, and career opportunities relating to marine and freshwater systems.
- Find information about internship and scholarship opportunities relating to water environments.
- Identify an appropriate MOP project topic.
- Identify appropriate mentors and experts in the project area.
- Complete a written MOP project proposal.
- Prepare and deliver an oral presentation.

OCN 102: Introduction to the Environment and Sustainability
This course will introduce students to the basic principles of environmental science and sustainability as they apply to analysis of environmental systems on a global scale. The integrated natures of ocean, terrestrial and atmospheric systems will be introduced by first introducing the Earth’s major ecosystems and then discussing their coupled integration. The concepts of sustainability will be infused into the course with an emphasis on the importance of sustaining resources and mitigating pollution to ecosystems. This issue of sustainability will be approached from the perspective of the impact that 9 billion or more people will impose upon the planet’s resources and ecosystems. Similarly, this course will include the concepts of sustainability with Native Hawaiian culture and indigenous knowledge.

Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- Define the Earth’s major ecosystems and the major flows of matter and energy through them.
- List the identity, source and action of the major pollutants that disrupt these ecosystems.
- Relate the carrying capacities of each major ecosystem relative to these pollutant loads, as well as the consequences to the environment if they fail.
- Define the fundamentals of sustainability metrics in terms of major impact categories (into which pollutants and activities are grouped) and their units.
- State how the cultural practices and indigenous knowledge of the Native Hawaiians relate to sustainability.
OCN 120: Global Environmental Challenges
Scientific approach to evaluating human-caused environmental challenges and their potential solutions.
Credits: 3
Lecture Hours: 3
Recommended:
Basic pre-college level math, chemistry, physics.
Student Learning Outcomes:
- Apply scientific principles and methods to describe natural Earth system interactions and human impacts on the environment.
- Solve very basic problems involving chemistry and physics, and read and create graphs of data.
- Apply scientific principles and methods to compare causes of environmental problems and impacts of potential solutions to environmental challenges.
- Apply scientific principles and reasoning to critically evaluate proposed explanations for global environmental challenges.

OCN 201: Science of the Sea
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.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Understand how the scientific method works, how it has been applied in Earth science, and how it differs from other ways of acquiring knowledge.
- Articulate how the Earth is in integrative system across many scientific disciplines.
- Understand the internal structure of the Earth and the dynamic processes of plate tectonics that shape its surface, including seafloor spreading, subduction, and continental drift.
- Understand the causes of rising sea level and its impacts on coastal areas, including erosion and beach loss.
- Identify the major pathways of chemicals to the oceans and the effect that biological processes have on redistributing and removing chemicals from the oceans.
- Describe the major processes that cause the deep and shallow circulation of water in the oceans.
- Identify the major marine habitats, the types of organisms that live in those habitats, and give examples of how organisms are adapted to their habitat.
- Describe the types of interactions that occur among organisms in the marine food web and between organisms and their environment.

OCN 201L: Science of the Sea Lab
Experiments, computer exercises and field trips demonstrating the geological, physical, chemical and biological principles, and equipment, of earth and ocean sciences.
Credits: 1
Prerequisites:
Credit for or registration in OCN 201 or equivalent preparation or consent of instructor.
Recommended:
High school algebra and chemistry; ability to use a computer.
Student Learning Outcomes:
- Develop a practical understanding of the principals of oceanography.
- Use the methodology of marine biology and oceanography to define and solve problems independently and collaboratively.
- Use a wide variety of laboratory and field techniques with accuracy, precision and safety.
- Accurately interpret biological and oceanographic information.
- Demonstrate proficient library, mathematical and computer skills in data gathering and analysis.
- Apply scientific concepts to environmental and societal issues.
- Apply their learning in an off-campus professional setting.

OCN 260: Pacific SuRF Science and Technology
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.
Credits: 3
Lecture Hours: 3
Recommended:
Ability to access information from the Internet.
Student Learning Outcomes:
- 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

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 on site weather observation activities, and physical processes involved in shaping waves as they approach a shoreline will be examined through several coastal studies.

Credits: 1

Prerequisites:
Credit for or registration in OCN 260.

Student Learning Outcomes:
- 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.

Pacific Islands Studies

PACS 108: Pacific Worlds: an Introduction to Pacific Islands Studies

This course situates Hawai‘i in the larger context of Oceania and exposes students to issues, themes, values, and practices across the region. It also introduces students to the geography, societies, histories, cultures, and arts of Oceania, including Hawai‘i. This course combines lecture and discussion that emphasize Pacific Islander perspectives and experiences.

Credits: 3

Lecture Hours: 3

Student Learning Outcomes:
- Locate and name the island groups, geographic regions, and political entities of Oceania.
- Describe social and cultural similarities and differences among Pacific Island societies.
- Identify themes in the works of Pacific Island artists and writers.
- Discuss contemporary social, political, economic, cultural, and environmental issues in the Pacific Islands.
- Explain significant themes in indigenous, colonial, and postcolonial histories of the Pacific Islands.

Pharmacology

PHRM 203: General Pharmacology

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.

Credits: 3

Lecture Hours: 3

Prerequisites:
Grade of “C” or better in ZOOL 141 and ZOOL 142.

Recommended:
College level chemistry.

Student Learning Outcomes:
- Describe the basic mechanisms of drug action.
- Demonstrate knowledge of the terminology and special concepts useful in the study of pharmacology.
- Describe how differences between individuals govern their response to drugs.
- Define how drugs are processed and bio transformed by the body.
- Identify frequent complications and side effects associated with the major drug classes.
- Describe significant interactions between drugs.
- Use information from the pharmacokinetics of a specific drug to determine dosing schedules and best route of drug administration.
- State the therapeutic uses for each major drug group.

Philosophy

PHIL 100: Introduction to Philosophy: Survey of Problems

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.

Credits: 3

Lecture Hours: 3

Student Learning Outcomes:
- 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
Social and individual values, obligations, rights, and responsibilities. Course will cover normative theories and their applications to business, medicine, ethics and sexual relations.

Credits: 3
Lecture Hours: 3
Recommended:
College level reading ability.

Student Learning Outcomes:
- 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
Introductory course in selected schools of Asian thought. Universal issues/problems examined from Asian perspective. Focus will be on Indian, Chinese, and Japanese traditions.

Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- 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 modern times.
- Analyze Indian, Chinese, and Japanese thought in terms of (a) methodology, metaphysics, and ethics in order to better understand Asian concerns.

PHIL 110: Introduction to Logic
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.

Credits: 3
Lecture Hours: 3

Student Learning Outcomes:
- 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 111: Introduction to Inductive Logic
Introduction to the theory of arguments based on probabilities and to the theory of decision-making in the context of uncertainty.

Credits: 3
Lecture Hours: 3

Recommended:
Credit in PHIL 110

Student Learning Outcomes:
- Correctly classify data and variables.
- Create and interpret various graphs.
- Calculate and interpret descriptive statistics, including the mean, median, and mode.
- Construct and interpret point and interval estimates.

PHIL 211: Ancient Philosophy
The philosophical traditions of Greece and Rome between the 5th century BCE and the 5th century CE. Important works by four representative figures (two from Classical Greece and two from the Roman tradition).

Credits: 3
Lecture Hours: 3

Recommended:
Completion of ENG 100 or equivalent.

Student Learning Outcomes:
- 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.

Physics

PHYS 122: Introduction to Science: Physical
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.

Credits: 3
Lecture Hours: 3

Prerequisites:
Credit in Math 25, 26, 28, 29, 75X or higher or equivalent.

Co-Requisites:
PHYS 122L.

Student Learning Outcomes:
- 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
Lab experiments illustrating topics and methods in the Physical Sciences with emphasis in Physics and Chemistry. Designed for nonscience majors.
Credits: 1
Prerequisites: Credit for or registration in PHYS 122 or consent of instructor.
Student Learning Outcomes:
• 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
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.
Credits: 3
Lecture Hours: 3
Prerequisites: Credit for or registration in MATH 140 or higher, or consent of instructor.
Co-Requisites: PHYS 151L.
Student Learning Outcomes:
• 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 I Lab
Experiments in statics, mechanics, energy, waves, and friction.
Credits: 1
Prerequisites: Credit for or registration in PHYS 151.
Student Learning Outcomes:
• 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
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.
Credits: 3
Lecture Hours: 3
Prerequisites: Credit for PHYS 151 or equivalent, or consent of instructor.
Co-Requisites: PHYS 152L.
Student Learning Outcomes:
• 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 II Lab
Experiments in electricity, magnetism, optics, and modern physics.
Credits: 1
Prerequisites:
Credit for or registration in PHYS 152.
Student Learning Outcomes:
• 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 170: General Physics I
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.
Credits: 4
Lecture Hours: 4
Prerequisites:
Credit for MATH 241 (formerly MATH 205) or higher or equivalent or consent of instructor
Co-Requisites:
PHYS 170L and credit for or registration in MATH 242 (formerly MATH 206) or equivalent, or consent of instructor.
Student Learning Outcomes:
• 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 Lab
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 hours laboratory)
Credits: 1
Co-Requisites:
Credit for or registration in PHYS 170.
Student Learning Outcomes:
• 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 172: General Physics II
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.
Credits: 3
Lecture Hours: 3
Prerequisites:
Credit for MATH 242 (formerly MATH 206) or higher or equivalent and a grade of "C" or better in PHYS 170 or consent of instructor
Co-Requisites:
PHYS 172L.
Student Learning Outcomes:
• 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 172L: General Physics II Lab
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.
Credits: 1
Prerequisites:
Credit for or registration in PHYS 172.
Student Learning Outcomes:
• 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 272: General Physics III
This course focuses on the study of physical optics, special relativity, quantum mechanics, solid state physics, atomic and nuclear physics, and elementary particle physics.
Credits: 3
Lecture Hours: 3
Prerequisites:
Credit for PHYS 272 and PHYS 272L, and credit for or registration in MATH 243 (formerly MATH 231), or consent of instructor.
Student Learning Outcomes:
• Describe the theory of special relativity and its effects: time dilation and space contraction.
• Describe the particle like properties of electromagnetic radiation as demonstrated in the photoelectric effect and Compton scattering.
• Analyze the wavelike properties of matter known as quantum theory.
• Identify and describe knowledge of the different properties of solids such as crystal structure, thermal and magnetic properties, and superconductivity.
• Describe nuclear structure, radioactive decay, nuclear interactions, and their applications.
• Identify the different elementary particles and describe their role in the forces that hold matter together.
Physiology

PHYL 141: (Formerly Zool 141) Human Anatomy and Physiology I

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.

Credits: 3
Lecture Hours: 3
Prerequisites: High school chemistry or equivalent preparation or consent of instructor.
Recommended: High school biology, BIOL 100, BIOL 101 or ZOOL 101; registration in ZOOL 141L.

Student Learning Outcomes:

• 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.

PHYL 141L: (Formerly Zool 141L) Human Anatomy and Physiology I Lab

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.

Credits: 1
Prerequisites: Credit for or registration in ZOOL 141 or equivalent preparation or consent of instructor.

Student Learning Outcomes:

• 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.

PHYL 142: (Formerly Zool 142) Human Anatomy and Physiology II

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.

Credits: 3
Lecture Hours: 3
Prerequisites: Credit for ZOOL 141 or equivalent preparation or consent of instructor.
Recommended: Registration in ZOOL 142L.

Student Learning Outcomes:

• 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.
PHYL 142L: (Formerly Zool 142l) Human Anatomy and Physiology II Lab
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.
Credits: 1
Prerequisites:
Credit for or registration in ZOOL 142 or equivalent preparation or consent of instructor.
Student Learning Outcomes:
- 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.

Political Science

POLS 110: Introduction to Political Science
Introduction to politics as a human activity. Discusses theories, ideologies, systems, and processes of politics.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Identify and describe the structure of political issues and political relationships.
- Clearly explain and evaluate complex political thought and the positions of several thinkers in political theory.
- Examine and interpret contemporary political issues through the application of political theory.
- Relate media, technology, and language to the formation and maintenance of the political order.
- Carefully justify one’s own political position.

POLS 120: Introduction to World Politics
Power economics and world politics from cross-national perspectives. Discussion of U.S. foreign policy since 1945.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- 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
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.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- 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
Introduction to the study of political institutions, processes, and issues in Hawai‘i.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- 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.

POLS 243: Introduction to Politics and Film
The course introduces students to the analysis of the relationship between politics and film. Topics covered in the course will include the impact of films and the film industry on politics, the impact of politics on film, and methods for understanding the representational practices of film.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Identify and describe the narrative and compositional structure of film.
- Clearly explain and evaluate the political thoughts, assumptions and implications of several key films.
- Examine and interpret contemporary political issues in film through the application of political thought.
- Relate media, technology, and language to the formation and maintenance of the political order.
- Carefully justify one’s own political position.

Psychology

PSY 100: Survey of Psychology
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.
Credits: 3
Lecture Hours: 3
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 psychology.
PSY 170: Psychology of Adjustment
Focus is on understanding, evaluating and improving adjustment. Includes study of theories, concepts and techniques concerning personal growth and behavior change.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- 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 Gender
Survey of topics in psychology relevant to gender and its impact on the lives of women and men: socialization of gender, mental health, racial identity, majority-minority status, sexual orientation, life-span issues, and violence. (Cross-listed as WS 202)
Credits: 3
Lecture Hours: 3
Prerequisites:
A grade of "C" or better in WS 151 or PSY 100 or consent of instructor.
Student Learning Outcomes:
- Describe the central concepts, theoretical perspectives, and research methods used in the psychology of gender.
- Use theoretical perspectives to explain gender behavior.
- Describe the biological influences on sex.
- Describe the cultural influences on gender.

PSY 212: Survey of Research Methods
Provides an overview of research design strategies used in psychological research. Topic covered include the scientific method; reviewing literature for hypothesis development; ethical issues in research; the operational definition of variables; observational, self-report and experimental methods; data analysis; inferential hypothesis testing; and the American Psychological Association writing style. The course furnishes students with the fundamentals of research that all psychology majors should be aware of, regardless of whether they plan to pursue a research career. Emphasis is placed on the critical evaluation of psychological research as it is reported in the popular media and research periodicals.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of C or better in PSY 100
Student Learning Outcomes:
- Describe basic research methods for psychology.
- Craft a solid research question
- Identify appropriate variables for a given research question.
- Choose the appropriate methodology to answer a research question.
- Critically analyze the research methodology in scholarly publications and in various other sources.

PSY 224: Abnormal Psychology
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.
Credits: 3
Lecture Hours: 3
Recommended:
PSY 100.
Student Learning Outcomes:
- 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
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.
Credits: 3
Lecture Hours: 3
Prerequisites:
Credit for PSY 100 or consent of instructor.
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
This course will provide students with an understanding of the relationship of social roles on human behaviors and how interpersonal relationships, attribution theories, attitudes, group behaviors, and stereotypes affect human behaviors.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in PSY 100.
Student Learning Outcomes:
- 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 251: Human Sexuality
Examines topic areas in the field of human sexuality including anatomy/physiology, sexual response, and sexual themes in society. Emphasizes understanding of one's sexuality through decision-making and communication skills.

Credits: 3  
Lecture Hours: 3  
Prerequisites:  
Credit for PSY 100 or consent of instructor.

Student Learning Outcomes:
- Recognize the study of human sexuality as a science.
- Describe the role of biology, culture, and socio-economic factors in the understanding and expression of human sexuality.
- Discuss the basic perspectives, concepts, principles, and general information comprising the field of human sexuality.

PSY 257: Psychology in Literature
This course explores how psychological concepts are utilized in popular literature. The literature analyzed varies with student interest. The course emphasizes how psychological theories are illustrated through literary characters and situations along with investigating how accurately these characters and situations reflect real life research on said theories.

Credits: 3  
Lecture Hours: 3  
Prerequisites:  
Grade of C or better in PSY 100

Student Learning Outcomes:
- Analyze empirical articles.
- Evaluate the application of psychological concepts in popular literature.
- Construct a research question to investigate and determine appropriate sources to answer that question.
- Describe current research on a psychological concept.

PSY 260: Psychology of Personality
An introduction to the basic theoretical approaches to personality, how they are developed, changed and analyzed.

Credits: 3  
Lecture Hours: 3  
Prerequisites:  
Credit for PSY 100.

Student Learning Outcomes:
- 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
This course will provide students with an understanding of the history, theories and current developments in clinical psychology and different methods of assessment, forms of intervention and types of psychological problems.

Credits: 3  
Lecture Hours: 3  
Prerequisites:  
Grade of “C” or better in PSY 100.

Student Learning Outcomes:
- 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 150: Introduction to World’s Major Religions
Introduction to the world’s major religions: Primitive, Hinduism, Buddhism, Shinto, Confucianism, Taoism, Judaism, Christianity, and Islam. Fieldtrips maybe required outside class time.

Credits: 3  
Lecture Hours: 3  
Prerequisites:  
Grade of C or better in PSY 100.

Student Learning Outcomes:
- 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
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.

Credits: 3  
Lecture Hours: 3

Student Learning Outcomes:
- 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
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.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- 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.

REL 202: Understanding Indian Religions
Historical survey of the teachings and practices of the major religious traditions of India.
Credits: 3
Lecture Hours: 3
Prerequisites:
Placement in ENG 100, or consent of instructor.
Recommended:
REL 150 or 151.
Student Learning Outcomes:
- Identify the myths, histories, doctrines, and practices of Hinduism, Jainism, Buddhism, and Sikhism.
- Identify each religion’s understanding of the human condition, ethics, knowledge, death, the afterlife, and conceptions of the divine.
- Identify common themes within the religions studied.
- Interpret primary sources (such as epics, devotional poetry, mystical instruction, myths, and hymns).
- Examine the relationship between religion and culture/society.
- Question and think critically.

REL 205: Understanding Hawaiian Religion
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 BA language/culture core requirements at UH Mānoa.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- 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.

REL 206: Understanding Confucianism
Exploration of Confucianism in its philosophical, cultural, and historical context in China.
Credits: 3
Lecture Hours: 3
Recommended:
Credit for REL 150 Introduction to Major World Religions.
Student Learning Outcomes:
- Analyze the primary and secondary texts.
- Explore the relevance of these texts to contemporary issues today, both in China and elsewhere.
- Describe the origins and major historical periods in Confucian belief and practice.
- Examine the relationship between religion and culture/society.

REL 207: Understanding Buddhism
Survey of major forms and practices of Buddhism.
Credits: 3
Lecture Hours: 3
Recommended:
ENG 100 and either REL 150 or REL 151.
Student Learning Outcomes:
- Identify the myths, histories, doctrines, and practices of the major schools of Buddhism.
- Identify each school’s understanding of the human condition, ethics, knowledge, death, the afterlife, and conceptions of the divine.
- Interpret primary sources.
- Examine the relationship between religion and culture/society.
- Question and think critically.

REL 212: Science Fiction and Religion
This course explores and reflects on the presence of religions and religious themes in science fiction films and television shows. Students will also discuss the ethics of robots and other forms of artificial intelligence (AI). This course explores the presence of religious themes such as the messianic hero, immortality, free will and determinism, prophecy, evil, mysticism, and apocalypse in films and tv shows including Star Trek, Star Wars, the Matrix, I Robot, Avatar, Superman, and more.
Credits: 3
Lecture Hours: 3
Recommended:
REL 150
Student Learning Outcomes:
- Identify the presence of the major religious motifs in science fiction films and television shows.
- Analyze the hero archetype, the monomyth, in religious literature and science fiction media.
- Investigate the ways in which science fiction constitutes contemporary religious myth-making.
- Examine the influence and impact that artificial intelligence will have on society.
REL 217: Understanding Polynesian Religions
This course provides an introduction to the study of Polynesian religions through an exploration of the oral traditions of Hawai‘i, Aotearoa (New Zealand), French Polynesia (Tahiti et al.), and Samoa among others. In this class, students will gain a foundational understanding of important religious themes that permeate Polynesia. Main themes include but are not limited to deities’ forms & functions, cosmogonies, etiologies, and belief-regulated practices. Additionally, a portion of the semester will focus on belief narratives as vehicles for the transmission of knowledge and the significance of contemporary representation and self-representation of Polynesian religion and culture. This class will use comparative analysis between Hawaiian religion and the religious traditions of Aotearoa, French Polynesia, and Samoa to identify the fundamental concepts needed to understand Polynesian religions and explore how they are interconnected and interwoven into the fabric of our lives today. (Cross-listed as HWST 217)
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Identify and describe significant source-language terms, major figures, and stories in Hawaiian and other Polynesian religions
- Identify and describe important themes common to Hawaiian and other Polynesian religions
- Analyze, compare, contrast, major themes common to Hawaiian and other Polynesian religions

SCI 160B: Polynesian Voyaging and Seamanship
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.
Credits: 3
Lecture Hours: 3
Co-Requisites:
SCI 160L
Student Learning Outcomes:
- 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.

SCI 296: Special Topics in Religion
Students will investigate important topics in the study of religion such as Sacred Places, Religion and the Media, or Religion and Politics. A specific course description will be printed in the schedule of classes.
Credits: 3
Lecture Hours: 3
Recommended:
REL 150 or REL 151
Student Learning Outcomes:
- Identify the important concepts and facts associated with the topic under examination.
- Explain cause and effect relationships in connection to the topic discussed.
- Compare and contrast various religions' ideas of the topic.
- Relate the topic to contemporary events.

SCI 160L: Polynesian Voyaging and Seamanship Lab
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.)
Credits: 1
Prerequisites:
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-Requisites:
SCI 160B
Student Learning Outcomes:
- Apply both traditional Polynesian skills and modern scientific methods when engaged in sailing and environmental exploring activities.
- Apply basic sailing and navigational skills to prepare and carry out a sailing plan.
- Apply water safety skills.
- Conduct basic canoe operations, including rigging, sailing and maintenance.
- Identify Polynesian-introduced plants and native plants that are valuable for voyaging and discuss their value as food source, medicine, building material, and cordage.
SCI 210: Polynesian Voyaging: Seamanship and Stewardship
This course focuses on the fundamentals of oceanic voyaging by blending the traditions of Polynesian culture, history and skills with modern science and technology. An interdisciplinary approach is used in treating topics in astronomy, navigation, geology, oceanography, meteorology and archaeology. Students are introduced to the basic skills of seamanship and stewardship, including the techniques in navigational wayfinding and the impact of human activity on the island environments.

Credits: 3
Lecture Hours: 3
Recommended:
Credit for or concurrent enrollment in HSWT 110

Student Learning Outcomes:
- Describe the basic geography of Polynesia and its settlement as gleaned from archaeological findings.
- Apply the fundamental concepts in modern positional astronomy and techniques of wayfinding (non-instrument navigation).
- Discuss Polynesian mythology and cosmology, especially as related to voyaging.
- Apply the basic concepts in geology and weather forecasting in the Pacific area.

SCI 210L: Polynesian Voyaging: Seamanship and Stewardship Lab
Laboratory/field trip course designed to acquire seamanship skills and apply knowledge of astronomy, geology, oceanography, meteorology, marine biology, ethnomedicine and archaeology through sailing and environmental exploring activities. Laboratory/field trip course is also designed to apply knowledge of Polynesian skills and modern science to the impact on the environment due to human settlement, especially in Hawai'i.

Credits: 1
Lab Hours: 3
Prerequisites:
1. Minimum water skills and survival requirements Student must demonstrate an: -Ability to swim a minimum of 500 yards in the open ocean using any strokes, except backstroke. -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.)
2. 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.)

Recommended:
Credit for or concurrent enrollment in SCI 210.

Student Learning Outcomes:
- Apply both traditional Polynesian skills and modern scientific methods when engaged in sailing and environmental exploring activities.
- Apply basic sailing and navigational skills to prepare and carry out a sailing plan.
- Apply water safety skills.
- Conduct basic canoe operations, including rigging, sailing and maintenance.
- Identify Polynesian-introduced plants and native plants that are valuable for voyaging and discuss their value as food source, medicine, building material, and cordage.
- Identify common marine organisms found in Hawaii and know what to do when stung or bitten, and know which marine organisms is suitable as a food source.
- Respond to navigational and environmental problems using knowledge of constellations, wayfinding, geology, oceanography, weather forecasting, and ecology.
SCI 260A: Polynesian Voyaging and Stewardship
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.

Credits: 3

Prerequisites:
Credit for SCI 160A or SCI 160B or consent of instructor.

Student Learning Outcomes:
- 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 Kāne‘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.

SCI 260B: Polynesian Voyaging and Stewardship
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.

Credits: 3

Prerequisites:
Credit for SCI 160A or SCI 160B or consent of instructor.

Student Learning Outcomes:
- 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 Kāne‘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.

SCI 260L: Polynesian Voyaging and Stewardship Lab
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, sail 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.)

Credits: 1

Prerequisites:
1. Credit for SCI 160L 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.)

Co-Requisites:
SCI 260B.

Student Learning Outcomes:
- Respond to navigational and environmental problems using knowledge of constellations, wayfinding geology, oceanography, weather forecasting, and ecology.
- Apply basic sailing and navigational skills to prepare and carry out a sailing plan.
- Plan and prepare a balanced diet for voyaging.
- Strengthen swimming skills and water safety skills.
- Mentor others in the basics of Polynesian sailing and environmental stewardship.

SCI 295V: Introduction to Stem Research
SCI 295V offers a research experience in science, technology, engineering, and/or mathematics, emphasizing the application of the scientific method to a specific project. Repeatable for up to 6 credits. (3 hours cooperative education/work experience per week per credit)

Credits: 1-3

Prerequisites:
Instructor consent.

Recommended:
Completion of a lab science course as stipulated by the instructor.

Student Learning Outcomes:
- Use research and technology skills to access information from multiple sources.
- Design and implement a plan to solve a specific STEM-based research project.
- Collect, analyze and interpret data generated by the selected research project.
- Communicate conclusions in written and/or oral form.
Social Sciences

SSCI 293: Cooperative Arts and Science Education (CASE)
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. May be repeated up to 6 credits.
Credits: 1-4
Prerequisites: Minimum of 12 credit hours of general curricula.
Student Learning Outcomes:
• Integrate the foundations of knowledge, skills, professional attitudes and values associated with a careerfield in the helping and human resource professions.
• Discuss the dynamics and multiple causes of interpersonal, family, and organizational dysfunction.
• Utilize a range of helping strategies and skills appropriate for prevention and early intervention work in a variety of settings.
• Apply the basic knowledge and practice of counseling and problem solving skills.

SSCI 193: Cooperative Arts and Science Education
A work-study course providing opportunities to reinforce skills learned in the Social Science areas and to apply those skills in actual job situations. May be repeated up to 6 credits.
Credits: 1-4
Prerequisites: SSCI 193V.
Student Learning Outcomes:
• Integrate the foundations of knowledge, skills, professional attitudes and values associated with a careerfield in the helping and human resource professions.
• Discuss the dynamics and multiple causes of interpersonal, family, and organizational dysfunction.
• Utilize a range of helping strategies and skills appropriate for prevention and early intervention work in a variety of settings.
• Apply the basic knowledge and practice of counseling and problem solving skills.

Social Work

SW 200: The Field of Social Work
Orientation to the profession of social work; the nature and scope of social work, historical development, values and philosophy, methods of practice, scope, and aims.
Credits: 3
Lecture Hours: 3
Prerequisites:
Credit for ENG 22 or ENG 23 or placement in ENG 100.
Student Learning Outcomes:
• Explain social work values and their applications in the field.
• Analyze social problems affecting individuals, families, groups, and communities.
• Explain the theories and skills of social problems and their applications.

Sociology

SOC 100: Survey of General Sociology
This course is an introduction to the scientific discipline of sociology. It will focus on key concepts, main theoretical perspectives, and research findings used by sociologists to explain the social world and social interaction. The course examines the fundamental components and institutions that make up the structure of human societies as well as the basic processes and direction of social change.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
• Summarize and distinguish the three main theoretical perspectives in sociology.
• Analyze and apply specific sociological theories and perspectives to human behavior and social issues.
• Explain and evaluate how society and culture affect our beliefs, values, behavior, and thinking patterns.
• Express and communicate ideas and opinions clearly in writing.

SOC 214: Introduction to Race and Ethnic Relations
This course focuses on race and ethnic relations from local (Hawaii), national, and international perspectives; patterns of race/ethnic relations; and the social, economic, and political problems associated with racial/ethnic conflict.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
• Explain why sociologists call race a ‘social construction’.
• Describe examples of racial inequality in the United States.
• Identify examples of racism and microaggressions.
• Apply major sociological perspectives to race/ethnic relations at both the micro and structural level.

SOC 218: Introduction to Social Problems
This course is a theoretical and substantive survey of the nature and causes of social problems; selected topics may vary from semester to semester.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
• Identify and utilize sociological perspectives to analyze social problems in society.
• Use critical thinking skills to evaluate the causes of social problems.
• Evaluate proposed solutions to social problems.

SOC 231: Introduction to Juvenile Delinquency
This course focuses on juvenile delinquency in the U.S. and examines the nature of and trends in juvenile delinquency, explanations for and theories of juvenile delinquency, and institutional responses to and treatment of juvenile delinquency in the U.S. juvenile justice system.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
• Apply sociological theories of juvenile delinquency to contemporary cases.
• Explain the multiple causes of juvenile delinquency.
• Describe the differences in male and female offenders.
• Describe how social institutions prevent and/or contribute to juvenile delinquency.
SOC 251: Introduction to Sociology of the Family
SOC 251 is the study of human relationships within courtship, marriage, and the family as influenced by culture and society. It is designed to challenge students to re-examine assumptions regarding behavior, decisions, choices, and motivations in interpersonal relationships. The course places particular emphasis on diverse family forms, and the changing nature of how we define family.

Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
- Identify, describe, and analyze major trends in the family from a sociological perspective.
- Describe and analyze the connections between individual family experiences and larger social institutions.
- Analyze contemporary social and political issues and describe how those issues affect the family.

Spanish Language

SPAN 101: Beginning Spanish I
Introduction to 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.

Credits: 4
Lecture Hours: 4
Student Learning Outcomes:
- 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
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.

Credits: 4
Lecture Hours: 4
Prerequisites: Credit for SPAN 101 or consent of instructor.
Student Learning Outcomes:
- 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
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.

Credits: 3
Lecture Hours: 3
Prerequisites: Credit for SPAN 102 or consent of instructor.
Student Learning Outcomes:
- 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.
SPAN 202: Intermediate Spanish II
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.
Credits: 3
Lecture Hours: 3
Prerequisites:
Credit for SPAN 201 or consent of instructor.
Student Learning Outcomes:
• Use accurate pronunciation, structure and vocabulary to communicate orally with speakers of Spanish, creating dialogs based on real-life situations.
• Read and understand authentic documents in Spanish (articles, poems, short stories, film scripts, plays) for cultural information and critical thinking.
• Write texts (poems, essays, diaries, reports) using knowledge of vocabulary, culture and increasingly sophisticated syntax and grammatical structure, with increasing fluency and proficiency.
• Analyze oral, written and visual sources (dialogs, articles, film clips, feature length films, Internet sites) of information about Hispanic culture and compare and contrast with what the students know of their own culture.
• Create short film clips in the u-tube genre, containing both visual and verbal information about Hispanic culture.

Speech

SP 151: Personal and Public Speech
This course introduces students to the basic principles of human communication. Students will receive practice in improving their competency in the areas of public speaking, specifically in informative and persuasive speaking.
Credits: 3
Lecture Hours: 3
Prerequisites:
Placement in ENG 21 or ENG 23 or higher.
Student Learning Outcomes:
• Describe the principles and processes of human communication.
• Compare and contrast differences between interpersonal, intrapersonal, and public speaking.
• Demonstrate and evaluate effective verbal and nonverbal communication.
• Appropriately adapt communicative messages to the self and to others.
• Demonstrate effective listening skills.

SP 181: Introduction to Interpersonal Communication
Introduction to basic principles of interaction between two people. Emphasis is on enhancement of skills in a variety of interpersonal contexts.
Credits: 3
Lecture Hours: 3
Prerequisites:
Placement in ENG 21 or ENG 23 or higher.
Student Learning Outcomes:
• Analyze situations in terms of communication models, identifying perspective and perception.
• Demonstrate improvement in listening skills through tests and critical analysis of other students by avoiding listening problems and practicing guidelines for listener feedback.
• Determine the source of individual values and development in understanding and analyzing self-image as the communicator.
• Recognize nonverbal communication identifying body language, gesture, facial expression, and posture.
• Apply effectively specific skills to improve assertiveness.
• Define conflict/stress and identify steps in reaching a mutually acceptable decision.
• Trace the development of relationships, identifying major steps of each level, and analyzing the progression of these levels.

SP 251: Principles of Effective Public Speaking
This course provides students with the opportunity to build on their public speaking skills through extensive practice in speech preparation and delivery techniques. This course will focus on how to organize a presentation, develop rhetorical skills, and use analytical skills.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in ENG 100 or credit for SP 151.
Student Learning Outcomes:
• Demonstrate correct usage of relevant concepts, theories, and principles of effective public communication.
• Analyze the ethical implications of speaking and being an attentive audience member.
• Select appropriate and effective speech topics.
• Conduct quality research and gather supporting material for various types of public speeches.
• Critique and provide constructive feedback to public speakers.

SP 253: Argumentation and Debate
SP 253 develops writing, reading, critical thinking, and communication skills. Students will learn to develop techniques to researching and presenting arguments in an effective and articulate manner.
Credits: 3
Lecture Hours: 3
Prerequisites:
Grade of “C” or better in ENG 100 or credit for SP 151.
Recommended:
Recommended course SP 151
Student Learning Outcomes:
• Use different speech components to form cohesive argument
• Identify support for claims and be able to refute and explain logical fallacies
• Recognize ethical and unethical arguments through the use of rhetoric
• Differentiate between propositions of fact, value, and policy
• Demonstrate an increased self-awareness of critical thinking and reasoning including identifying self-biases and inferences
**SP 260: Organizational Communication**

SP 260 introduces theories and strategies for managing communication in organizations. Students will gain an understanding of how communication functions by addressing the self, maintaining interpersonal relationships, problem solving and decision-making, and the use of technology in the workplace.

**Credits:** 3  
**Lecture Hours:** 3  
**Prerequisites:**  
Grade of “C” or better in ENG 100 or credit for SP 151.  

**Student Learning Outcomes:**  
- Discuss the characteristics of groups and teams in organizations  
- Analyze communication problems in the workplace  
- Evaluate the role of interpersonal relationships in organizations  
- Apply communication theories to everyday situations using multiple perspectives

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**Theatre**

**THEA 101: Introduction to Drama and Theatre**

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.

**Credits:** 3  
**Lecture Hours:** 3  

**Student Learning Outcomes:**  
- 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 131: Beginning Unarmed Stage Combat**

Introduction to theatrical unarmed stage combat. Maybe repeated up to 9 credits.

**Credits:** 3  
**Lecture Hours:** 3  

**Student Learning Outcomes:**  
- Correctly define stage combat specialized terminology and concepts.  
- Execute theatrical fight techniques  
- Choreograph and perform staged fights

**THEA 132: Beginning Sword Stage Combat**

Introduction to sword-fighting for the stage. May be repeated up to 9 credits.

**Credits:** 3  
**Lecture Hours:** 3  

**Prerequisites:**  
Grade of “C” or better in THEA 131 or instructor consent.  

**Student Learning Outcomes:**  
- Demonstrate correct usage of sword stage combat terminology and core concepts  
- Execute sword techniques for the stage  
- Perform choreographed theatrical sword fights

**THEA 133: Stage Combat Workshop Level I**

Continuing exploration of theatrical stage combat in assorted weapons. May be repeated up to 9 credits.

**Credits:** 3  
**Recommended:**  
Credit for THEA 221 or THEA 131  

**Student Learning Outcomes:**  
- Define stage combat specialized terminology and concepts.  
- Execute theatrical fight techniques.  
- Choreograph and perform staged fights.

**THEA 177: Introduction to Theatre of Hawai‘i**

An exploration of theatrical performances and plays showcasing the people, places and history of Hawai‘i.

**Credits:** 3  
**Lecture Hours:** 3  

**Recommended:**  
THEA 101  

**Student Learning Outcomes:**  
- Describe the historical, religious and cultural content of theatre in Hawai‘i.  
- Analyze the dramatic and cultural content of local, original Hawaiian plays using artifacts from original performances.  
- Communicate the themes and body of work of a major local or Hawaiian playwright, director or theatrical company.

**THEA 200B: Beginning Theatre Practicum: (Acting)**

Beginning workshop experience in the practical application of theatre skills: (B) acting. THEA 200 is repeatable up to four credits in each alpha. Pre: for 200B, audition and performance of role in a THEA 260 production or similar performance deemed appropriate by instructor.

**Credits:** 1  
**Co-Requisites:**  
THEA 260  
**Recommended:**  
THEA 221  

**Student Learning Outcomes:**  
- Demonstrate skill in chosen role’s duties in a professional theatrical production.  
- Communicate effectively with Director and fellow cast and crewmembers in discipline specific language and terminology.  
- Execute all duties of chosen role in a live theatrical performance.

**THEA 200C: Beginning Theatre Practicum: (Stagecraft)**

Beginning workshop experience in the practical application of theatre skills: (C) Stagecraft. THEA 200 is repeatable up to four credits in each alpha.

**Credits:** 1  
**Recommended:**  
THEA 101 or THEA 240  

**Student Learning Outcomes:**  
- Demonstrate skill in chosen role’s duties in a professional theatrical production.  
- Communicate effectively with Director and fellow cast and crewmembers in discipline specific language and terminology.  
- Execute all duties of chosen role in a live theatrical performance.
### THEA 200D: Beginning Theatre Practicum: (Costume)

Beginning workshop experience in the practical application of theatre skills: (D) Costume. THEA 200 is repeatable up to 4 credits in each alpha.

**Credits:** 1

**Recommended:**
THEA 101 or THEA 240

**Student Learning Outcomes:**
- Demonstrate skill in chosen role's duties in a professional theatrical production.
- Communicate effectively with Director and fellow cast and crewmembers in discipline specific language and terminology.
- Execute all duties of chosen role in alive theatrical performance.

### THEA 211: Mask Making and Performance

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.

**Credits:** 3

**Lecture Hours:** 3

**Student Learning Outcomes:**
- 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 220: Beginning Voice and Movement

Introduction to vocal and movement techniques to increase self-awareness and potential for self-expression. May be repeated up to 6 credits.

**Credits:** 3

**Lecture Hours:** 3

**Student Learning Outcomes:**
- Demonstrate awareness of personal habits, tensions and methods for releasing them, and physical and vocal preferences.
- Execute a wide variety of warmup and performance tools
- Perform pieces with self-expression through vocal and physical choices.

### THEA 221: Acting I

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. May be repeated up to 9 credits.

**Credits:** 3

**Lecture Hours:** 3

**Prerequisites:**
Grade of “C” or better in THEA 260 and THEA 200B, or Instructor Permission.

**Recommended:**
THEA 101, THEA 221, and THEA 222.

**Student Learning Outcomes:**
- Articulate and project the voice well.
- Devise and execute pantomimes and improvisations.
- Perform dramatic one- and two-person scenes.
- Identify, analyze and critically evaluate the technique and believability of dramatic performances.

### THEA 222: Acting II

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. May be repeated up to 9 credits.

**Credits:** 3

**Lecture Hours:** 3

**Prerequisites:**
Grade of “C” or better in THEA 221.

**Student Learning Outcomes:**
- Articulate and project the voice well.
- Devise and execute pantomimes and improvisations.
- Perform dramatic one- and two-person scenes.
- Identify, analyze and critically evaluate the technique and believability of dramatic performances.

### THEA 223: Introduction to Acting for Camera

An introduction to acting techniques for film, TV production, and other camera-based media. Repeatable up to 6 credits. (Cross-listed as CM 223)

**Credits:** 3

**Lecture Hours:** 3

**Prerequisites:**
Grade of C or better in THEA 221.

**Recommended:**
THEA 101, 221, and 222.

**Student Learning Outcomes:**
- Articulate and project the voice well.
- Devise and execute pantomimes and improvisations.
- Perform dramatic one- and two-person scenes.
- Identify, analyze and critically evaluate the technique and believability of dramatic performances.

### THEA 225: Shakespeare Workshop

A study of William Shakespeare's life, works, contemporary performance practices, and the Royal Shakespeare Company's current training and methods of bringing the Bard's work to life for modern audiences. The curriculum of this course is tailored to the Royal Shakespeare Company's Summer Season, and this course serves as mandatory preparation for the WCC Footholds Shakespeare Study Abroad program to London and Stratford-upon-Avon.

**Credits:** 3

**Prerequisites:**
Grade of C or better in THEA 260 and THEA 200B, or Instructor Permission.

**Recommended:**
THEA 101, THEA 221, and THEA 222.

**Student Learning Outcomes:**
- Analyze Shakespeare's use of meter and poetry.
- Replicate Shakespeare's Contemporary Performance Practices.
- Deliver Shakespeare's Poetic Text with skillful use of iambic pentameter.
- Perform Scenes and Monologues from some of Shakespeare's great roles.
THEA 226: Footholds Uk Shakespeare Study Abroad
This course is a two-week intensive study abroad program to England. The first week is spent working with top-tier industry professionals at East 15 Acting School in London, and viewing productions at noted theatres there, as well as meeting professional actors for Q&A sessions. The second week is spent in Stratford-upon-Avon training closely with the Royal Shakespeare Company, attending lectures and seminars at the Shakespeare Birthplace Trust, and viewing two productions at the Royal Shakespeare Theatre. The course culminates in a performance of scenes and monologues in Shakespeare’s own gardens for visiting tourists.
Credits: 3
Prerequisites:
Grade of B or better in THEA 225.
Recommended:
THEA 101, 221, 222, 260 and 200B.
Student Learning Outcomes:
• Analyze professional productions in London and Stratford.
• Interface effectively with current industry professionals.
• Demonstrate knowledge of Shakespeare’s plays and roles.
• Perform scenes and monologues from Shakespeare’s canon in his own gardens.

THEA 231: Intermediate Unarmed and Staff Stage Combat
Intermediate training in the Unarmed and Quarterstaff disciplines of Stage Combat. Repeatable for up to 9 credits.
Credits: 3
Lecture Hours: 3
Prerequisites:
THEA 131 or instructor approval.
Student Learning Outcomes:
• Demonstrate correct usage of stage combat terminology and core concepts.
• Execute intermediate-level techniques for the stage.
• Perform choreographed theatrical fights.

THEA 232: Intermediate Rapier and Dagger Stage Combat
Intermediate training in Rapier and Rapier and Dagger weapon disciplines in Stage Combat. Repeatable for up to 9 credits.
Credits: 3
Lecture Hours: 3
Prerequisites:
THEA 132 or instructor approval.
Recommended:
THEA 131 or THEA 132 DA
Student Learning Outcomes:
• Demonstrate correct usage of rapier and rapier and dagger stage combat terminology and core concepts.
• Execute rapier and rapier and dagger techniques for the stage.
• Perform choreographed theatrical sword fights.

THEA 233: Stage Combat Workshop Level II
Level II Training in assorted weapon disciplines. Repeatable for up to 9 credits.
Credits: 3
Prerequisites:
Credit for THEA 131 AND 132, OR Credit for THEA 133 OR Instructor approval
Student Learning Outcomes:
• Demonstrate correct usage of stage combat terminology and core concepts.
• Execute stage combat techniques for the stage.
• Perform choreographed theatrical sword fights.

THEA 240: Introduction to Stagecraft
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. May be repeated up to 6 credits.
Credits: 3
Lecture Hours: 3
Student Learning Outcomes:
• 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
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. May be repeated up to 6 credits.
Credits: 3
Lecture Hours: 3
Prerequisites:
Credit for THEA 240 or consent of instructor.
Student Learning Outcomes:
• Demonstrate knowledge of one particular area of stagecraft through a presentation to the class and/or the instructor.

THEA 260: Dramatic Production
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. Maybe repeated up to 9 credits.
Credits: 3
Student Learning Outcomes:
• Identify key theatrical terms and concepts.
• Critically evaluate a theatrical event.
• Demonstrate professionalism in one particular area of theatrical production.

THEA 280: Beginning Playwriting
The course introduces structure, guidelines, and format of the monologue and short play; beginning with the conception of an idea, followed by effective outlining and research techniques, subsequent drafts, and the final product in a polished monologue and short play.
Credits: 3
Lecture Hours: 3
Prerequisites:
Credit for ENG 100.
Student Learning Outcomes:
• Analyze the theme, plot-structure, historical context, political and/or cultural commentary and influence on later works of three to five plays.
• Write monologues and scenes.
• Write a complete short play (one or two acts).
THEA 296: Special Topics in Theatre
Students will investigate important topics in Theatre Studies such as specific artists/practitioners, genres, or methods of training. May be repeated up to 6 credits with different topics.

Credits: 3  
Lecture Hours: 3  
Prerequisites:  
“C” or better in THEA 101 or “C” or better in THEA 221.

Student Learning Outcomes:
- Identify the important concepts and facts associated with the topic under examination.
- Explain cause and effect relationships in connection to the topic discussed.
- Compare and contrast various interpretations of the topic.
- Relate the topic to contemporary events.

Women's Studies

WS 151: Introduction to Women's Studies
This course is an introduction to feminist interdisciplinary analysis from global and critical perspectives. It explores relationships between women and men from various cultures, with a focus on gender, race, class, and sexual dynamics. The course also explores women's negotiations with institutional dynamics.

Credits: 3  
Lecture Hours: 3  
Student Learning Outcomes:
- Explain the difference between sex as a biological category and gender as a social category.
- Describe the various ways that gender categories are socially constructed.
- Describe the historical changes in both gender roles and the status of women in the United States.
- Explain the similarities and differences of women's roles across cultural, racial, social, and economic lines.

WS 200: Culture, Gender, and Appearance
This course explores the social construction of gender within culture and its visual expression through appearance. An analysis of role, identity, conformity, and deviance in human appearance is emphasized.

Credits: 3  
Lecture Hours: 3  
Student Learning Outcomes:
- Use concepts and apply theories to describe the role of individual choice in appearance.
- Describe the links between clothing and culture.
- Describe the role appearance plays in gender development.
- Explain the communicative nature of appearance and expressions of identity.

WS 202: Psychology of Gender
Survey of topics in psychology relevant to gender and its impact on the lives of women and men: socialization of gender, mental health, racial identity, majority-minority status, sexual orientation, life-span issues, and violence. (Cross-listed as PSY 202)

Credits: 3  
Lecture Hours: 3  
Prerequisites:  
A grade of “C” or better in WS 151 or PSY 100, or consent of instructor.

Student Learning Outcomes:
- Describe the central concepts, theoretical perspectives, and research methods used in the psychology of gender.
- Use theoretical perspectives to explain gender behavior.
- Describe the biological influences on sex.
- Describe the cultural influences on gender.

Zoology

ZOOL 105: Hawaiian Use of Fish and Aquatic Invertebrates
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.

Credits: 3  
Lecture Hours: 3  
Recommended:  
High school biology.

Student Learning Outcomes:
- describe the origin of Hawaiian aquatic fauna in relationship to the geologic history of the Islands, human introductions and the environments in which they occur.
- identify (common names, scientific names, and Hawaiian names) the fish and aquatic invertebrates used in old Hawai‘i and recent times and the roles these species played in Hawaiian culture and resource utilization.
- describe the various methods whereby aquatic animals were acquired, cultured, and managed.
**ZOOL 154: Exercise for Wellness**
The course will introduce students to the field of exercise, including a discussion of the underlying physiology, clinical responses, and the recommended medically related remediation. Exercise will be analyzed as an open energy system, supported by the major body systems, including cardiovascular, pulmonary, skeletal and neuromuscular systems. Important factors that will be considered include the frequency, intensity, type, and duration/time of exercise as well as the impact of gender, age, purpose, lifestyle and your body composition and metabolic status.

**Credits:** 3  
**Lecture Hours:** 3  
**Recommended:**  
BIOL 100 or ZOOL 101 or ZOOL 141 and ZOOL 142.  
**Student Learning Outcomes:**
- Define basic terms, concepts and principles of exercise, fitness, and wellness.  
- Describe the fundamental classification of exercise biology and its underlying processes.  
- Discuss the relationships between exercise and health.  
- Explain the specificity of exercise and its multiple modes of application and related responses.  
- Describe guidelines for assessing and planning a fitness-wellness program.  
- Contrast Western and Eastern approaches to wellness.

**ZOOL 200: Marine Biology**
Biological, physical, and chemical characteristics, flora and fauna, and interactions of components of marine ecosystems; survey of marine environments; utilization, exploitation, pollution, and conservation of marine resources; with special emphasis on the Hawaiian marine environment.

**Credits:** 3  
**Lecture Hours:** 3  
**Recommended:**  
Registration in ZOOL 200L.  
**Student Learning Outcomes:**
- Explain the process and philosophical basis of scientific inquiry.  
- Distinguish between living things and inanimate objects.  
- Demonstrate an understanding of the physical and chemical characteristics of the marine environment, especially those of the Hawaiian marine environment, and how they impact marine life.  
- Communicate knowledge of the diversity of marine organisms, especially Hawaiian species.  
- Exhibit an appreciation of the interaction between structure and function of marine life and how marine organisms are taxonomically related.  
- Illustrate and provide examples of the ecological role of and relationships between marine organisms.  
- Describe the major life zones of the ocean and the adaptations of living things relevant to being a successful species in these zones.  
- Recognize and suggest solutions to the negative impacts of human activities on the marine environment.  
- Research and write, using the language of the field, about a marine biology topic.

**ZOOL 200L: Marine Biology Lab**
Companion laboratory to ZOOL 200, Marine Biology. Practical, hands-on experiences in marine biology. Laboratory/fieldtrip class.

**Credits:** 1  
**Prerequisites:**  
Credit for or registration in ZOOL 200 or consent of instructor.  
**Student Learning Outcomes:**
- Use the scientific method of inquiry to investigate biological phenomena.  
- Apply the concepts learned in ZOOL 200 to an experimental and hands-on observational setting.  
- Collect, reduce, and interpret biological data.  
- Prepare written objective reports describing and interpreting experimental and observational results.  
- Demonstrate the use of some of the standard tools of the biological scientist, such as microscopes, scales, spectrophotometers, computers, and other analytical tools.  
- Demonstrate the use of specialized tools and methods frequently used in the study of the marine environments and the organisms that live in these environments.

**ZOOL 254: Exercise Therapy**
This course introduces selected concepts, principles and practices of physical activity that affect human wellness and fitness throughout all stages of life. In particular, the concepts of exercise specificity, adaptation, and remediation are presented as they affect human growth and development, and the aging process. The clinical concept of hypokinetic disease (under activity) is presented and its counterpart, clinical exercise therapy (Rx dosage) for purposes of preventative health application and remediation. Comparative study of both Western and Eastern exercise regimens are included in the context of their clinical contribution to wellness.

**Credits:** 3  
**Lecture Hours:** 3  
**Recommended:**  
BIOL 100 or ZOOL 101 or ZOOL 141 and ZOOL 142.  
**Student Learning Outcomes:**
- Define basic terms, concepts and principles of exercise, fitness, and wellness.  
- Describe the fundamental classification of exercise biology and its underlying processes.  
- Discuss the relationships between exercise and health.  
- Explain the specificity of exercise and its multiple modes of application and related responses.  
- Describe guidelines for assessing and planning a fitness-wellness program.  
- Comprehend the professional literature and correctly interpret and categorize new developments/approaches in the field.  
- Apply scientific logic to the selection and application of the many commercial products and procedures inundating the field.  
- Contrast Western and Eastern approaches to wellness.