WHAT IS A COURSE ALPHA?
It is an abbreviation of a subject area. In this example, ETRO means “electronics.” A Foundations or Diversification designation will be identified in parentheses at the end of a course title. For more information, see page 114.

HOW MUCH TIME WILL I SPEND IN CLASS EACH WEEK?
Add up all the numbers in the “Class hours” line. Courses which are less than a semester in length will show the number of hours like this: 3 lecture, 12 lab per week (8 weeks).

WHAT IS A PREREQUISITE?
A prerequisite is a requirement to be met before you enter a class. Not all classes have prerequisites.

WHAT IS A COREQUISITE?
A corequisite is a course which must be taken at the same time as the course being described.

WHAT DOES A COMMENT TELL ME?
A comment gives you additional information about a course.

WHAT DOES A RECOMMENDED TELL ME?
A recommended is not a requirement, but it gives you additional preparation to consider prior to taking the course.

WHAT DOES A DESCRIPTION TELL ME?
A description gives you detailed information about a course. A course’s offerings will also be listed:
F = offered in the fall semesters
S = offered in the spring semesters
F, S = offered in both the fall and spring semesters (not necessarily every fall or spring semester)
Su = offered in the summer

ETRO 241 - Electronics Circuit Analysis (DA)
Credits: 4
Class hours: 4 lecture
Prereq: “C” or higher in ETRO 280
Coreq: ETRO 287L
Comments: Credit by exam is not an available option.
Description: The student learns how computers operate by studying the architecture of the 8088/80X86 microprocessor, the bus structure, memory, interfaced peripherals, and operating systems. Applications of this technology in data acquisition and networked (LAN/WAN) systems are studied along with maintenance, diagnostics, and repair. TCP/IP in ethernet and token ring networks are discussed in the context of the seven

HWST 281 - Hawaiian Astronomy and Weather Relating to Polynesian Voyaging
Credits: 3
Class hours: 3 lecture
Recommended: Acceptable placement test score or placement in ENG 100 and MATH 24.
Description: A survey of the Hawaiian and Polynesian environment in relationship to migrations, voyaging, and folklore. The course will provide the student with the basics of noninstrument navigation and voyaging as utilized in the voyages of Hokule`a, Hawai`i Loa, and Makali`i. In addition, the student will understand and appreciate the cultural impact of long distance voyaging. F, S, Su
Foundations and Diversification Requirements for UH System:

Kaua‘i Community College has adopted the UH System’s Foundations Requirements and Diversification Requirements: For the A.A. degree, students planning to transfer to Hawai‘i Community College or UH Hilo are advised to check with their counselors for particulars regarding the College’s requirements.

Minimum Foundations Requirements
Global and Multicultural
- Perspectives (FGA, FGB, FGC) ........................................................................ 6 credits from 2 groups
- Symbolic Reasoning (FS) ................................................................................ 3 credits
- Written Communication (FW) ............................................................................. 3 credits

Minimum Diversification Requirements
- Arts (DA), Humanities (DH), and Literatures (DL) ............................................. 6 credits from 2 areas
- Biological Sciences (DB) .................................................................................. 3 credits
- Physical Sciences (DP) ..................................................................................... 3 credits
- Science Lab (DY) ............................................................................................. 1 credit
- Social Sciences (DS) ......................................................................................... 6 credits from 2 different disciplines

Sustainability is defined as fostering the long-term maintenance of well-being, while respecting the balance of environmental, economic, social, and cultural aspects of any one endeavor. In respecting the College’s ambition, Ho‘ouluwehi narrowed down its scope and focus to four areas: 1) food production, 2) renewable energy, 3) affordable housing/sustainable living, and 4) waste elimination. To determine which courses should be awarded the taro leaf logo, five topic areas were used: 1) Economics, 2) Social, cultural, historic, 3) Science and technology, 4) Environmental, and 5) Written, oral, and artistic. Courses with sustainable concepts are listed below.

- ART 125
- BOT 101
- ED 245
- ELEC 70
- ENG 215
- FENG 80
- HWST 107
- HWST 111
- HWST 251
- HPER 100
- HPER 152
- HOST 101
- HOST 150
- HOST 290
- NURS 210
- OCN 120
- PBT 141
- PBT 290V
- SSCI 250
- SOC 100
DEFINITIONS OF WORDS USED IN COURSE DESCRIPTIONS:

Corequisite
A course which must be taken in conjunction with and during the same semester or part of semester term as another course. Corequisites are indicated in the course description.

Approval of Instructor
Written permission granted by the instructor before a student enrolls in a course.

Modular Courses
Modular courses are shorter than one semester, ranging from 2 to 13 weeks and carrying from 1 to 7 credits. Modular courses may be found in accounting, automotive mechanics, business education, mathematics, and nursing. The course description will indicate that a course is modular.

Placement Test
A test administered by the College to assess current skills to determine acceptable class placement.

Prerequisite
A requirement that must be met before you are allowed to enter a course. The purpose of a prerequisite is to ensure that you have the background you need to be successful in the course.

Recommended
Suggested preparation which will enhance a student’s ability to perform well in a particular course.

Transferability
A transfer level course is a 100 or higher level course that is supposed to be considered college level work. Any course that is 100 level or higher can be counted in the total credits required to obtain a bachelor’s degree, even if it doesn’t meet the requirements of a specific major or program.

Writing Intensive Courses (3 credits)
Each semester, courses from a variety of disciplines are offered which are designated Writing Intensive (WI). These courses emphasize using writing as a tool to help students think actively about course content; in addition, WI instructors commit to helping students improve their writing ability. WI courses require students to write 4,000 words over the course of a semester; at least 1,000 words must be polished prose. Completion of one WI course is required for the A.A. degree in Liberal Arts; however, students planning to transfer to UH Mānoa or UH Hilo may opt to take several WI courses to help meet these schools’ requirements. Current WI course offerings appear on the Class Availability link on the KCC homepage.

INSTRUCTIONAL LEVEL
For courses requiring reading and mathematics, students are expected to have reading and math skills above the remedial level or consent of the instructor.
<table>
<thead>
<tr>
<th>Accounting - ACC</th>
<th>Electronics - ETRO</th>
<th>Marketing - MKT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture – AG</td>
<td>Energy – ENRG</td>
<td>Mathematics - MATH</td>
</tr>
<tr>
<td>Anthropology - ANTH</td>
<td>English - ENG</td>
<td>Medical Assisting - MEDA</td>
</tr>
<tr>
<td>Architectural, Engineering, and CAD Technologies - AEC</td>
<td>English Language Institute - ELI</td>
<td>Microbiology - MICR</td>
</tr>
<tr>
<td>Art - ART</td>
<td>Entrepreneurship – ENT</td>
<td>Music - MUS</td>
</tr>
<tr>
<td>Astronomy - ASTR</td>
<td>Facilities Engineering Technology - FENG</td>
<td>Nursing - NURS</td>
</tr>
<tr>
<td>Auto Body Repair and Painting - ABRP</td>
<td>French - FR</td>
<td>Oceanography - OCN</td>
</tr>
<tr>
<td>Automotive Mechanics Technology - AMT</td>
<td>Geography - GEOG</td>
<td>Pharmacology - PHRM</td>
</tr>
<tr>
<td>Biology - BIOL</td>
<td>Geology - GG</td>
<td>Philosophy - PHIL</td>
</tr>
<tr>
<td>Blueprint - BLPR</td>
<td>Hawaiian - HAW</td>
<td>Physics - PHYS</td>
</tr>
<tr>
<td>Botany - BOT</td>
<td>Hawaiian Studies - HWST</td>
<td>Plant Bioscience Technology - PBT</td>
</tr>
<tr>
<td>Business - BUS</td>
<td>Health - HLTH</td>
<td>Political Science - POLS</td>
</tr>
<tr>
<td>Business Law - BLAW</td>
<td>Health, Physical Education, and Recreation - HPER</td>
<td>Psychology - PSY</td>
</tr>
<tr>
<td>Business Technology - BUSN</td>
<td>History - HIST</td>
<td>Religion - REL</td>
</tr>
<tr>
<td>Carpentry - CARP</td>
<td>Horticulture - HORT</td>
<td>Sales and Marketing - SMKT</td>
</tr>
<tr>
<td>Chemistry - CHEM</td>
<td>Hospitality and Tourism - HOST</td>
<td>Science - SCI</td>
</tr>
<tr>
<td>Culinary Arts - CULN</td>
<td>Information and Computer Sciences - ICS</td>
<td>Social Science - SSCI</td>
</tr>
<tr>
<td>East Asian Language and Literature - EALL</td>
<td>Interdisciplinary Studies - IS</td>
<td>Sociology - SOC</td>
</tr>
<tr>
<td>E-commerce - ECOM</td>
<td>Japanese - JPNS</td>
<td>Spanish - SPAN</td>
</tr>
<tr>
<td>Economics - ECON</td>
<td>Journalism - JOUR</td>
<td>Speech - SP</td>
</tr>
<tr>
<td>Education - ED</td>
<td>Linguistics - LING</td>
<td>Sustainable Science Management - SSM</td>
</tr>
<tr>
<td>Electrical Engineering - EE</td>
<td>Machine Shop - MACH</td>
<td>Theatre - THEA</td>
</tr>
<tr>
<td>Electricity - ELEC</td>
<td>Management - MGT</td>
<td>Welding - WELD</td>
</tr>
<tr>
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<td>Marine Science - MARE</td>
<td>Zoology - ZOOL</td>
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**ACCOUNTING**

**(ACC)**

**ACC 124 - Principles of Accounting I**

Credits: 3  
Class hours: 3 lecture  
Prereq: Qualified for ENG 22.  
Description: This course introduces basic accounting principles and practices for service and/or merchandising businesses. Areas include: accounting as an information system, the accounting cycle, financial statements, internal control, current and/or long-term assets, current liabilities, and payroll. Special emphasis will be placed upon the practical application of accounting principles.  
Comments: Credit by exam is not an available option.  
Prereq: "C" or higher in ACC 124.

**ACC 125 - Principles of Accounting II**

Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in ACC 124.  
Comments: Credit by exam is not an available option.  
Description: This course continues the study of financial accounting procedures. Areas include: long-term assets, long-term liabilities, accounting for corporations and/or partnerships. The statement of cash flows and financial statement analysis may be covered.

**ACC 126 - Principles of Accounting III**

Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in ACC 125.  
Comments: Credit by exam is not an available option.  
Description: This course is an introduction to managerial accounting including financial reporting and analysis, responsibility accounting by departments, and cost accounting for manufacturers. Topics include: reporting and analyzing performance (including budgeting and break-even analysis), internal control, and standard cost systems. Upon successful completion of this course, the student should be able to demonstrate an understanding of the knowledge of accounting information and methods that are essential for decision-making internal to the firm.

**Effective Through Fall 2015**

**ACC 132 - Payroll and Hawai'i General Excise Tax**

Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in ACC 124 or ACC 201.  
Comments: Credit by exam is not an available option.  
Description: This course introduces principles, manual and computerized procedures, and terminology for business applications of payroll accounting. Areas include preparation of federal and Hawai'i state forms for payroll taxes and the Hawai'i General Excise and Use Tax.

**Effective Spring 2016**

**ACC 132 – Payroll and Hawai’i General Excise Tax**

Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher or concurrent enrollment in ACC 124 or ACC 201.  
Description: This course introduces principles, manual and computerized procedures, and terminology for business applications of payroll accounting. Areas include preparation of federal and Hawai'i state forms for payroll taxes and the Hawai'i General Excise and Use Tax.

**Effective Through Fall 2015**

**ACC 134 - Income Tax Preparation**

Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in ACC 124 or ACC 201.  
Comments: Credit by exam is not an available option.  
Description: This course introduces Federal and Hawaii tax laws and regulations and basic return preparation for business entities. This course is intended for an individual preparing basic tax returns under the supervision of an accounting professional.

**Effective Spring 2016**

**ACC 137 – Business Income Tax Preparation**

Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in ACC 134.  
Description: This course introduces Federal and Hawai'i tax laws and regulations and basic return preparation for business entities. This course is intended for an individual preparing basic tax returns under the supervision of an accounting professional.

**ACC 193V - Cooperative Education**

Credits: 1-3  
Class hours: 1 hour per week with coordinator and 75 hours work experience for each credit.  
Prereq: Accounting major or Department/instructor approval.  
Comments: May be repeated for a maximum of 3 credits.  
Description: Cooperative Education provides practical career-related work experience through a program used nationally in colleges and universities to apply classroom knowledge and to develop job competencies. Full-time or part-time work (with or without compensation) in private and public sectors is utilized for this program. The number of credits earned depends upon the number of hours spent at the job station during the semester.

**Effective Through Fall 2015**

**ACC 132 - Payroll and Hawai’i General Excise Tax**

Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in ACC 124 or ACC 201.

**Recommended:** Basic computer skills.  
Basic skills accessing and using Laulima.  
Description: This course introduces Federal and Hawai'i tax laws and regulations and basic return preparation for business entities. This course is intended for an individual preparing basic tax returns under the supervision of an accounting professional.  
Comments: Credit by exam is not an available option.
ACCOUNTING  
(ACC) • continued •

ACC 201 - Introduction to Financial Accounting
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100.
Recommended: ACC 199V is recommended each semester to supplement ACC courses.
Description: This course is an introduction to accounting principles and practices used to record and communicate financial information and to analyze methods for valuating assets, liabilities, and equity of an organization.

ACC 202 - Introduction to Managerial Accounting
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ACC 125 or ACC 201.
Recommended: ACC 199V is recommended each semester to supplement ACC courses.
Description: This course is 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. Also included are principles and procedures relating to cash flow analysis and partnerships, corporations, and manufacturing accounting.

ACC 252 – Using QuickBooks in Accounting
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ACC 125 or ACC 201 or approval or instructor.
Description: This course provides a “hands-on” approach to computerized accounting using QuickBooks. Students will apply previously acquired accounting skills and knowledge in a computerized environment to set up and maintain accounting records. An emphasis will be placed on the application of QuickBooks to the accounting cycle.

ACC 255 – Using Excel in Accounting
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in or concurrent enrollment in ACC 125 or ACC 201.
Description: This course provides hands-on training in the use of spreadsheets on computers to solve accounting problems. It applies previously acquired accounting skills and knowledge and emphasizes financial and managerial accounting. Additionally, students will develop the ability to use a numeric keypad to perform business computations.

AGRICULTURE  
(AG)

AG 103 - Sustainable Agriculture Systems
Credits: 2
Class hours: 2 lecture
Prereq: Qualified for ENG 22.
Description: This course explores sustainable agriculture systems in Kaua‘i, Hawai‘i and the world. It compares various sustainable models and examines various sectors of production agriculture and related agribusinesses in Hawai‘i. Field trips to farms, processors and wholesalers will complement the course.

AG 103B - Sustainable Farm Management
Credits: 1
Class hours: 1 lecture
Prereq: Qualified for ENG 22. Qualified for either MATH 26 or MATH 75.
Description: This course covers business and regulation aspects, available resources, and collaborative opportunities for farmers. Students will learn through guest speakers, lectures, readings, and business planning.
ANTHROPOLOGY

(ANTH)

ANTH 199V - Special Studies
See explanation under the heading of Special Studies.

ANTH 200 - Cultural Anthropology
(DS)
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100.
Description: Orientation on the nature of culture, basic concepts for analyzing cultural behavior. F, S

ANTH 220 - Prehistory of Hawai’i
(DS)
Credits: 3
Class hours: 3 lecture
Description: This course studies the development of prehistoric Hawaiian culture through legendary, archaeological, ethnographic, and historic sources. Prehistory of Hawai’i is designed for the layperson who is interested in a general course on the culture of Hawai’i prior to 1778. ANTH 220 concentrates on the early human use of and adaptation to the geography and environment of these islands.

ARCHITECTURAL, ENGINEERING, AND CAD TECHNOLOGIES

(AEC)

AEC 81 - Introduction to AutoCAD
Credits: 3
Class hours: 2 lecture and 3 lab
Prereq: Qualified for ENG 21 and MATH 22.
Description: This class is designed for students with no previous Computer-Aided Design (CAD) training. It will introduce new users to basic AutoCAD two-dimensional (2D) drafting tools, commands, and concepts essential to related fields in carpentry, architecture, engineering, and green construction technology. F

AEC 110 - AutoCAD 1
Credits: 3
Class hours: 2 lecture and 3 lab
Prereq: “C” or higher in AEC 81.
Description: This course reinforces fundamental essential Computer-Aided Design (CAD) operator skills introduced in AEC 81, Introduction to AutoCAD, by providing additional concepts and tools that demonstrate technical knowledge essential to the architectural, engineering, and construction technology related fields. S
ART 101 - Introduction to the Visual Arts (DA)
Credits: 3
Class hours: 3 lecture
Description: This course is a general introduction to the visual arts including media, techniques, and history. It is designed to offer an in-depth appreciation of the creative processes involved in the visual arts. This course reviews two- and three-dimensional art forms, methods and media; examines the visual elements and principle of design; and surveys art styles from the prehistoric to the 20th Century. It is oriented to students who have not been exposed to the formal study of these disciplines. F, S

ART 105 - Introduction to Ceramics (DA)
Credits: 3
Class hours: 2 lecture and 4 studio
Comments: May be repeated for a maximum of 3 credits.
Description: This course introduces students to creating three dimensional concepts in clay. Students complete hand-building and wheel-throwing projects and learn how to use a kiln. F, S

ART 106 - Introduction to Sculpture
Credits: 3
Class hours: 2 lecture and 4 studio
Description: This course introduces students to the traditional sculptural techniques of carving, modeling, and constructing. Students will use these techniques through the creation of relief sculpture, sculpture in the round, and mold-making. F

ART 107D - Introduction to Digital Photography (DA)
Credits: 3
Class hours: 2 lecture and 4 studio
Description: This course is an introduction to the fundamental, technical, and aesthetic issues of digital photography. This includes thorough instruction in camera operation, image and print processing, basic lighting concepts, and composition. Assignments will demonstrate mastery of technical skills and individual creative expression. Activities include camera operation, picture taking, computer editing techniques and procedures, and photo printing. Students must have access to a digital camera (an SLR type digital camera is preferred but not required). F, S

ART 111 - Introduction to Watercolor Painting (DA)
Credits: 3
Class hours: 2 lecture and 4 studio
Prereq: "C" or higher in ART 113.
Description: This course is an introduction to the theory and practice of watercolor painting. Students will learn about the use of watercolor materials and wet and dry painting techniques, including applying washes, glazing, lifting, scraping, and creating blends. They also will concentrate on painting composition, paint consistency, and color development within the context of practicing and improving their technical painting skills. F, S

ART 112 - Introduction to Digital Arts
Credits: 3
Class hours: 2 lecture and 4 studio
Description: This course is an introduction to digital imaging technology and the use of the computer as an artist's tool. Emphasis will also be placed on developing an aesthetic criteria for the evaluation of digital images. F, S, Su

ART 113 - Introduction to Drawing (DA)
Credits: 3
Class hours: 2 lecture and 4 studio
Description: This course involves students in two-dimensional visualization and rendering of forms, spaces, and ideas through a variety of approaches and media. Students learn the basics of line, contour, shading, texture, perspective, composition, and action drawing. Students will create several original works of art and compile a portfolio of their drawings at the end of the term. F

ART 115 - Introduction to 2D Design
Credits: 3
Class hours: 2 lecture and 4 studio
Description: Introduction to 2D Design is a course for beginning art students and those interested in art fundamentals, which introduces basic elements, principles, and techniques or organization used by artists. F

ART 117 - Introduction to Screenwriting
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in ENG 100 or ENG 104.
Comments: Cross-listed with ENG 117.
Description: This is an introductory course in which students will learn basic principles of screenwriting. This includes thorough instruction in story development, structure, appropriate terminology, and the experience of the writing and rewriting process. Activities include script writing, viewing and analyzing short films, in-class writing assignments, reading essays, and reading and critiquing short screenplays. F, S

ART 123 - Introduction to Painting (DA)
Credits: 3
Class hours: 2 lecture and 4 studio
Prereq: "C" or higher in ART 113.
Description: This course teaches the fundamentals of painting to beginning painting students. Students will explore the technical and expressive possibilities of the paint media. The class will focus on the formal, conceptual, and Technical problems in painting. Emphasis will be given to color mixing systems and successfully manipulating paint as a medium for self expression. F, S

ART 125 - Introduction to Graphic Design
Credits: 3
Class hours: 2 lecture and 4 studio
Recommended prereq or coreq: ART 112
Description: This course is an introduction to techniques and information for graphic design focusing on print media. This course stresses creative development with sections on the history of graphic design, the design process, text and typography, layout, advertising design, and electronic prepress. F, S
ART 126 - 3D Computer Graphics I
Credits: 3
Class hours: 2 lecture and 4 studio
Recommended coreq: ART 112
Description: This course provides an introduction to 3D computer graphics. Students will gain an understanding of the fundamental concepts and techniques used in 3D modeling. They will also learn how to use 3D modeling software to create 3D objects. Students will be expected to have some knowledge of computer graphics and basic art skills.

ART 157 - Introduction to Digital Video/Storytelling
Credits: 3
Class hours: 2 lecture and 4 studio
Description: This course is an introduction to digital video production. Students will learn about the history of digital video, as well as the tools and techniques used to create digital video. They will also learn about the role of digital video in storytelling.

ART 190B - Introduction to Adobe Photoshop®
Credits: 1
Class hours: 2 lecture/lab
Prereq: "C" or higher in ART 101.
Description: This course is an introduction to Adobe Photoshop®. Students will learn about the basic tools and techniques used in Adobe Photoshop®, as well as how to create digital images.

ART 190C - Intermediate Adobe Photoshop®
Credits: 1
Class hours: 2 lecture/lab
Prereq: "C" or higher in ART 190B.
Description: Students will acquire a working knowledge of the tools and techniques of Adobe Photoshop®, as they are applied to graphic design, multimedia, and other studio art applications. It is intended to build on the ART 190B course. The course will cover: advanced operation of tools and palettes, file formats, preparing and optimizing images for the web, transferring files, masks, paths and channels, color adjustment for printing and prepress production, advanced filters, animation for the web, and general tips.

ART 190D - Advanced Adobe Photoshop®
Credits: 1
Class hours: 2 lecture/lab
Prereq: "C" or higher in ART 190C.
Description: Students will acquire a working knowledge of the tools and techniques of Adobe Photoshop®, as they are applied to graphic design, multimedia, and other studio art applications. It is intended to build on the ART 190B and ART 190C courses. The course will cover: advanced layered image production, special effects, as well as illustration/painting tools and prepress tools in Adobe Photoshop®.

ART 207D - Intermediate Digital Photography (DA)
Credits: 3
Class hours: 2 lecture and 4 studio
Prereq: "C" or higher in ART 107D.
Description: This course covers intermediate level, technical, and aesthetic issues of digital photography. This includes advanced instruction in camera operation, image and print processing, and lighting concepts and composition. Assignments will demonstrate mastery of technical skills and individual creative expression. Activities include camera operation, picture taking, computer editing techniques and procedures, and photo printing. Students must have access to a digital camera; an SLR type digital camera supplied by student is strongly recommended.

ART 211 - Intermediate Watercolor (DA)
Credits: 3
Class hours: 2 lecture and 4 lab
Prereq: "C" or higher in ART 111.
Comments: This course can be repeated once for credit.
Description: This course is a continuation of ART 111 that provides intensive application of basic techniques. Emphasis is placed on the development of a personal style in the medium of watercolor.

ART 213 - Intermediate Drawing (DA)
Credits: 3
Class hours: 2 lecture and 4 studio
Prereq: "C" or higher in ART 113.
Description: This course has an emphasis on the development of intermediate drawing skills especially the use of color. There will be an emphasis on the power of observation from life. This course introduces students to the intermediate skills and elements of descriptive drawing with some abstraction later in the semester. Students will become familiar with the basic vocabulary and conventions of objective drawing processes and media while practicing an enhanced perceptual awareness and eye/hand motor skills.

ART 223 - Intermediate Painting (DA)
Credits: 3
Class hours: 2 lecture and 4 studio
Prereq: "C" or higher in ART 123.
Description: This course provides an overview of the origins, influences, development and impact of major artistic movements in Europe and the U.S. Students will paint with an emphasis on familiarizing themselves with the subject matter, styles, techniques, and intentions of famous artists from these movements to further develop the skill they learned in ART 123.
ART 225 - Intermediate Graphic Design
Credits: 3
Class hours: 2 lecture and 4 studio
Prereq: “C” or higher in ART 112 and ART 125.
Description: This is an advanced course covering a continuation of techniques and information for graphic design focusing on print media. This course stresses creative development with sections on the history of graphic design, the design process, text and typography, layout, advertising design, and electronic prepress. This course emphasizes the practical use of digital tools and processes in graphic design as well as color management for graphic design.  

ART 229 - Interface Design I
Credits: 3
Class hours: 2 lecture and 4 studio
Prereq: “C” or higher in ART 112.
Description: Students will acquire an introductory knowledge of the design and development of multimedia and web-based interactive interfaces, as well as the production of graphic images for those interfaces. A variety of software programs will be utilized in the production of still images and animations, including some video editing.

ART 243 - Intermediate Ceramics - Hand Building (DA)
Credits: 3
Class hours: 2 lecture and 4 lab
Prereq: "C” or higher in ART 105.
Description: Students explore the development of sculptural concepts using hand building techniques.

ART 244 - Intermediate Ceramics - Wheel Throwing (DA)
Credits: 3
Class hours: 2 lecture and 4 lab
Prereq: "C” or higher in ART 105.
Description: Students experience the development of vessel and sculptural concepts using wheel throwing techniques.

ART 248 - Digital Post-Production
Credits: 3
Class hours: 2 lecture and 4 studio
Recommended: ART 157
Description: This course is an introduction to the fundamental technical and aesthetic issues of video editing. Topics include terminology, technologies, aesthetics, basic picture-only editing skills, and the editor’s role augmented by hands-on experience. Upon completion, students should be able to use editing equipment and basic digitizing, logging, and picture-only editing skills.

ART 249 - Interface Design II
Credits: 3
Class hours: 2 lecture and 4 studio
Prereq: “C” or higher in ART 112 and ART 229.
Description: Students will acquire an advanced knowledge of the design and development of multimedia interactive interfaces and production of graphic images for those interfaces. A variety of software programs will be utilized in the production of still images and animations, including video editing. The production of interactive interfaces for web and multimedia projects to be used in students’ professional portfolios will be emphasized.

ART 250 - Film and World History Since WWII
Credits: 3
Class hours: 3 lecture
Comments: Cross-listed with HIST 250.
Description: This course examines historical events, from WWII until the present, through cinema. Significant events and turning points will be discussed, including the attack on Pearl Harbor, the Holocaust, and the Cold War. Films from around the world will be examined for their context in history, as well as for their inherent cinematic qualities. The course will examine how cinema has influenced world events, as well as how world events have shaped the direction of cinema.

ART 267 - Intermediate Digital Video/Storytelling
Credits: 3
Class hours: 2 lecture and 4 studio
Prereq: “C” or higher in ART 157.
Description: This course examines the technical and aesthetic issues of digital storytelling at the intermediate level. Emphasis is on production management and organization, principles of directing, cinematography, and advanced camera operations. Activities include script writing, storyboard production, directing actors, video and sound recording, lighting, art design, sound design, editing techniques, and DVD production.

ASTRONOMY (ASTR)

ASTR 110 - Survey of Astronomy (DP)
Credits: 3
Class hours: 3 lecture
Prereq: Acceptable math placement test score.
Description: This course for the non-science major is an introduction to the astronomical universe and its physical concepts.

ART 299V - Special Studies
See explanation under the heading of Special Studies.
AUTO BODY REPAIR AND PAINTING
(ABRP)

ABRP 19 - Introduction to Auto Body Repair
Credits: 2
Class hours: 4 lecture/lab
Comments: Credit by exam is not an available option. May be repeated any number of times for credit.
Description: This class is an introductory course in theory and limited manipulative training in metal work and patch work. F, S

ABRP 20 - Introduction to Collision Repair
Credits: 1
Class hours: 2 lecture/lab
Coreq: ABRP 23 and ABRP 26
Description: This course is designed to acquaint the student with the basic skills used in collision repair. Emphasis will be placed on the collision repair career; measuring and mixing; tools and equipment; safety; and writing damage reports. Students will gain an understanding of career opportunities, shop safety practices, personal safety protection, and health and environmental concerns related to the field. F (every 2 years)

ABRP 23 - Auto Body Welding
Credits: 4
Class hours: 8 lecture/lab
Coreq: ABRP 20 and ABRP 26
Description: This course is designed to acquaint the student with the basic skills used in auto body welding. Emphasis will be placed on safety; protective clothing; tools and equipment procedures; and techniques of gas metal arc welding (GMAW), oxyacetylene gas welding, and plasma arc cutting. F (every 2 years)

ABRP 26 - Non-Structural Analysis and Repair
Credits: 4
Class hours: 8 lecture/lab
Coreq: ABRP 20 and ABRP 23
Description: This course is designed to teach the student conventional and unitized body construction. Emphasis will be placed on what can be repaired and what must be replaced. Students will learn to lay out and fabricate repair panels from gauge sheet metal and repair rust damage. F (every 2 years)

ABRP 30 - Non-Structural Analysis Damage Repair
Credits: 3
Class hours: 6 lecture/lab
Prereq: "C" or higher in ABRP 26.
Coreq: ABRP 32, ABRP 34, ABRP 36
Description: This course is designed to teach the student conventional and unitized body construction. Emphasis will be placed on repairing auto panels to manufacturer’s specifications.
S (every 2 years)

ABRP 32 - Structural Analysis Damage Repair/Frame
Credits: 3
Class hours: 6 lecture/lab
Prereq: "C" or higher in ABRP 26.
Coreq: ABRP 30, ABRP 34, ABRP 36
Description: This course provides the student with practical applications in frame inspection, measurement, and repair. Welding applications will be used as needed. Emphasis of this course will be on aligning the unibody to manufacturer’s specifications and on the replacement of fixed glass.
F (every 2 years)

ABRP 34 - Painting and Refinishing: Surface and Prep/Safety
Credits: 2
Class hours: 4 lecture/lab
Prereq: "C" or higher in ABRP 20.
Coreq: ABRP 30, ABRP 32, ABRP 36
Description: This course is designed to teach the student techniques and methods of preparing the autobody surface for painting. Emphasis will be placed on proper safety procedures and practices for automotive refinishing to include refinishing, to include OSHA guidelines, Right-to-Know Act, and EPA laws and regulations. S (every 2 years)

ABRP 36 - Plastics and Adhesives
Credits: 2
Class hours: 4 lecture/lab
Prereq: "C" or higher in ABRP 20.
Coreq: ABRP 30, ABRP 32, ABRP 34
Description: This course is designed to teach the student the techniques and methods of using plastics and adhesives in the repair of domestic and foreign manufactured vehicles. Safety during the mixing and handling of these chemicals will be emphasized.
S (every 2 years)

ABRP 40 - Structural Analysis Repair/Unibody
Credits: 4
Class hours: 8 lecture/lab
Prereq: "C" or higher in ABRP 32.
Description: This course provides the student with practical applications in unibody inspection, measurement, and repair. Welding applications will be used as needed. Emphasis of this course will be on aligning the unibody to manufacturer’s specifications and on the replacement of fixed glass.
F (every 2 years)

ABRP 42 - Non-Structural Analysis Damage Repair III
Credits: 4
Class hours: 8 lecture/lab
Prereq: "C" or higher in ABRP 30.
Description: This course is designed to teach the student conventional and unitized body construction. The emphasis will be placed on replacing and adjusting auto panels to the manufacturer’s specifications.
F (every 2 years)

ABRP 44 - Painting and Refinishing: Spray Gun Operation I
Credits: 3
Class hours: 6 lecture/lab
Prereq: "C" or higher in ABRP 34.
Description: This course is designed to teach the student spray gun techniques and methods of painting the auto body. The emphasis will be placed on paint mixing, color matching in different types of paint, and the operations of a variety of spray guns used in the auto body industry. F (every 2 years)
ABRP 50 - Painting and Refinishing: Spray Gun Operation II
Credits: 3
Class hours: 6 lecture/lab
Prereq: "C" or higher in ABRP 44.
Description: This course is designed to teach the student techniques and methods of painting the auto body. Emphasis will be placed on paint mixing, matching of colors and types of paint, and the operations of a variety of spray guns used in the auto body industry. Disposal of hazardous wastes will be taught in accordance with applicable laws. S (every 2 years)

ABRP 52 - Structural Analysis Damage Repair/Peripheral Components
Credits: 3
Class hours: 6 lecture/lab
Prereq: "C" or higher in ABRP 40.
Description: This course provides the student with practical applications in frame and unibody inspection, measurement, and repair of various domestic and foreign manufactured automobiles. Glass replacement and welding applications will be used as needed. Emphasis is placed on properly repairing the unibody to the manufacturer’s specifications. S (every 2 years)

ABRP 54 - Painting and Refinishing/Problem Solving
Credits: 3
Class hours: 6 lecture/lab
Prereq: "C" or higher in ABRP 44.
Description: This course is designed to teach the student techniques and methods of correcting problems encountered during the painting process. The causes and cures of finish defects will be studied and procedures established to correct the defects. S (every 2 years)

ABRP 93V - Cooperative Education
Credits: 1-3
See explanation under the heading of Cooperative Education.

ABRP 99V - Special Studies
See explanation under the heading of Special Studies.
AUTOMOTIVE MECHANICS TECHNOLOGY (AMT)

AMT 16 - Car Care
Credits: 1
Class hours: 1 lecture/lab (semester) or 2 lecture/lab (8 weeks)
Comments: Credit by exam is not an available option. May be repeated any number of times for credit. Open to all students.
Description: This course offers technical information on the history and development of automobiles; the function of the lubricating, cooling, fuel, and electrical systems; the major automobile components; minor trouble-shooting; tire changing; and car maintenance. F, S

AMT 18 - Minor Tune-Up and Repair
Credits: 2
Class hours: 1 lecture and 2 lab
Comments: Credit by exam is not an available option. May be repeated any number of times for credit.
Description: This course is designed to help students acquire an understanding of some of the elementary principles involved in the operation and maintenance of the various units of an automobile. Emphasis is upon developing the student’s interest in minor automotive repair in a safe and efficient manner. F, S

AMT 20 - Introduction to Automotive Technology
Credits: 2
Class hours: 1 lecture and 3 lab
Prereq: Qualified for ENG 21 and MATH 50.
Comments: Credit by exam is not an available option.
Description: This course will cover policies and procedures of the AMT program, shop procedures, safety, use of technical reference manuals, identification and use of hand tools, hazardous material training, employees’ Right-to-Know laws, job opportunities in automotive and related areas, preventative maintenance and service procedures, identification and use of fasteners, and safety check inspection procedures. Besides the noted competencies taught in Engines (AMT 30), additional competencies of automotive computer literacy/electronic information systems, such as repair data, estimating, invoicing/technical writing, and vehicle computer reprogramming will be added. F

AMT 30 - Engines
Credits: 6
Class hours: 3 lecture and 9 lab
Prereq: Qualified for ENG 21 and MATH 50. “C” or higher in AMT 20.
Comments: Credit by exam is not an available option.
Description: This course will cover shop safety, tools and all components found in the modern internal combustion engine. The course is designed to provide students with an understanding of the fundamental operation and construction of internal combustion engines. Instruction will include theory and laboratory (shop) activities in which students will learn how to inspect, service, maintain, diagnose, and repair automobile engine malfunctions. This course includes live work. Students are required to have a valid driver’s license. F, S

AMT 40B - Fuel and Emissions
Credits: 3
Class hours: 1 lecture and 6 lab
Prereq: Qualified for ENG 21 and MATH 50. “C” or higher in AMT 20.
Comments: Credit by exam is not an available option.
Description: Diagnosis of engine mechanical, batteries, starting systems, charging systems, fuel system delivery (pumps, regulators), fuel injectors, ignition systems, and emission control systems using digital storage oscilloscopes, scanners, and various electronic testers. F

AMT 40D - Engine Performance I
Credits: 3
Class hours: 1 lecture and 6 lab
Prereq: Qualified for ENG 21 and MATH 50. “C” or higher in AMT 20, AMT 40B, AMT 40E, and AMT 41.
Comments: Credit by exam is not an available option.
Description: Diagnosis of engine mechanical, batteries, starting systems, charging systems, fuel system delivery (pumps, regulators), fuel injectors, ignition systems, and emission control systems using digital storage oscilloscopes, scanners, and various electronic testers. F

AMT 40E - Electrical/Electronic Systems I
Credits: 4
Class hours: 2 lecture and 6 lab
Prereq: Qualified for ENG 21 and MATH 50. “C” or higher in AMT 20.
Description: This course will provide students with fundamental principles of automotive electricity and electronics. Practical skills to diagnose, test, and service battery, starting, charging and lighting systems are covered. Testing and repair of electrical safety devices, wiring, connectors, and relays are also covered. Students are required to have a valid driver’s license. F
AMT 40G - Electrical/Electronic Systems II  
Credits: 3  
Class hours: 1 lecture and 6 lab  
Prereq: Qualified for ENG 21 and MATH 50. “C” or higher in AMT 20 and AMT 40E.  
Comments: Credit by exam is not an available option.  
Description: This course covers essential theories and practical skills in diagnosing and repairing automotive accessory circuits such as power windows, power door locks, power antennas, power mirrors, audio systems, anti-theft systems, power seats, horns, blower fan, and wiper/washer. Also covered are conventional instrumentation, digital instrumentation, and supplemental inflatable restraint (SRS). Students are required to have a valid driver’s license. S

AMT 40H - Engine Performance II  
Credits: 5  
Class hours: 2 lecture and 9 lab  
Prereq: Qualified for ENG 21 and MATH 50. “C” or higher in AMT 40E.  
Comments: Credit by exam is not an available option.  
Description: Computer engine management systems of domestic and foreign cars are studied in this course. Covers theory of operation, diagnosis and repair of sensors, actuators, and on-board computers. Use of scanners, digital storage oscilloscopes, digital graphing multi-meters, and DVOMs are covered. S

AMT 41 - Ignition Systems  
Credits: 2  
Class hours: 1 lecture and 3 lab  
Prereq: Qualified for ENG 21 and MATH 50. “C” or higher in AMT 40E.  
Comments: Credit by exam is not an available option.  
Description: This course studies the basic function of an ignition system, as well as its components and their functions. The operation and testing of ignition coils, electronics sensing devices (sensors, pickups), primary side ignition wiring, secondary side ignition wiring and components, and ignition modules. The operation, maintenance, diagnosis, and repair of distributorless ignition (EI) are also covered. F

AMT 43 - Heating and Air Conditioning  
Credits: 4  
Class hours: 2 lecture and 6 lab  
Prereq: Qualified for ENG 21 and MATH 50.  
Comments: Credit by exam is not an available option.  
Description: This course provides theory of operation as well as the methods to diagnose and repair the modern HVAC systems. The terminology used and the varieties of different systems encountered are covered. Service procedures, both old and new (with regard to new regulations), are covered. S

AMT 46 - Manual Drive Trains and Axles  
Credits: 4  
Class hours: 2 lecture and 6 lab  
Prereq: Qualified for ENG 21 and MATH 50.  
Comments: Credit by exam is not an available option.  
Description: This course covers the theory and fundamental operating principles of the modern automotive drive trains and axles. Students learn maintenance and repair of C-V shafts, propeller shafts, U-joints, standard transmissions, standard transaxles, rear axles, and differentials. S

AMT 50 - Automatic Transmissions/Transaxles  
Credits: 4  
Class hours: 2 lecture and 6 lab  
Prereq: Qualified for ENG 21 and MATH 50.  
Comments: Credit by exam is not an available option.  
Description: This course is designed to provide the student with the elementary theories, maintenance, and repair procedures of automatic transmissions. Also covered are linkage adjustments, oil change, diagnosis, and road test. F

AMT 53 - Brakes  
Credits: 3  
Class hours: 1 lecture and 6 lab  
Prereq: Qualified for ENG 21 and MATH 50.  
Comments: Credit by exam is not an available option.  
Description: This course is designed to introduce theory covering the basic principles in the operation of the modern automotive brake system. Further development in new technology such as computerized ABS (Anti-skid Brake Systems), electronic power brakes, and four-wheel disc brakes will be covered. Repair and service techniques of the complete brake system will be demonstrated. F

AMT 55 - Suspension and Steering  
Credits: 4  
Class hours: 2 lecture and 6 lab  
Prereq: Qualified for ENG 21 and MATH 50.  
Comments: Credit by exam is not an available option.  
Description: This course is designed to provide the student with related technical information in the operation, construction, design, maintenance, and repair of suspension and steering systems in the modern automobile. Modern four-wheel alignment is also covered. F

AMT 60 - Diagnostic and Repair  
Credits: 4  
Class hours: 1 lecture and 9 lab  
Prereq: Qualified for ENG 21 and MATH 50.  
Comments: Credit by exam is not an available option.  
Description: This course is designed to provide the student with realistic on-the-job types of training. Students will be exposed to different types of live jobs to build self-confidence, improve their approach to troubleshooting, and improve their skills of the trade with emphasis on accuracy, neatness, and speed. S
**AMT 80 - Introduction to Small Engines Repair**

*Credits:* 2  
*Class hours:* 1 lecture and 2 lab  
*Comments:* Credit by exam is not an available option.  
*Description:* This class introduces students to the field of small gasoline engine repair. An overview of job opportunities and skills required is included. The course emphasizes shop safety, tool use and identification, and the general construction and repair of small gasoline engines.  

**AMT 93V - Cooperative Education**

See explanation under the heading of Cooperative Education.  

**AMT 99V - Special Studies**

See explanation under the heading of Special Studies.  

**AMT 171 - HEV I - Introduction to Hybrid and Electric Vehicle Technology**

*Credits:* 3  
*Class hours:* 1 lecture and 6 lab  
*Prereq:* “C” or higher in AMT 40E, ETRO 18, and AMT 171; Or automotive industry work experience with instructor’s approval.  
*Recommended:* Basic electrical knowledge of Ohm's Law and proper use of a DVOM to determine voltage drop, shorts, opens, and resistance problems. Knowledge on basic theory of operation on automotive electrical and mechanical subsystems.  
*Description:* This course is designed to familiarize the student with the safety, electrical and electronic theories related to hybrid and electric vehicles, high voltage analysis tools used in hybrid and electric vehicles, high voltage safety systems, AC induction electric machines, and permanent magnet electric motors theory and construction. Hands-on application to safety disconnect and use of high voltage analysis tools to perform basic checks.  

**AMT 172 - HEV II - Preventive Maintenance and Repair**

*Credits:* 3  
*Class hours:* 1 lecture and 6 lab  
*Prereq:* “C” or higher in AMT 40E, ETRO 18, and AMT 171; Or automotive industry work experience with instructor’s approval.  
*Recommended:* Basic electrical knowledge of Ohm’s Law and proper use of a DVOM to determine voltage drop, shorts, opens, and resistance problems. Knowledge on basic theory of operation on automotive electrical and mechanical subsystems.  
*Description:* This course is designed to familiarize the student with hybrid and electric vehicle safety, hybrid internal combustion engines (ICE), regenerative braking systems, high voltage climate control system, power inverter and battery pack cooling systems, high voltage analysis tools used, high voltage safety systems, and 12 volt systems used in hybrid and electric vehicles. Hands-on application to safety disconnect, use of high voltage analysis tools to perform diagnostic tests on high voltage insulation failures, electric motor failures, battery failures, and differentiate between an ICE failure and an electric machine failure. Perform battery pack testing and reconditioning.  

**AMT 173 - HEV III – Diagnostic and Repair**

*Credits:* 3  
*Class hours:* 1 lecture and 6 lab  
*Prereq:* “C” or higher in AMT 40E, ETRO 18, and AMT 171; Or automotive industry work experience with instructor’s approval.  
*Recommended:* Basic electrical knowledge of Ohm’s Law and proper use of a DVOM to determine voltage drop, shorts, opens, and resistance problems. Knowledge on basic theory of operation on automotive electrical and mechanical subsystems.  
*Description:* This course is designed to familiarize the student with hybrid and electric vehicle safety, hybrid internal combustion engines (ICE), hybrid transmissions, parallel/series, power inverter system, AC induction electric machines, permanent magnet electric motors theory and construction, and battery pack construction. Hands-on application to safety disconnect, use of high voltage analysis tools to perform diagnostic tests on high voltage insulation failures, electric motor failures, battery failures, and differentiate between an ICE failure and an electric machine failure. Perform battery pack testing and reconditioning.
**BIOLOGY**

(BIOL)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Class hours</th>
<th>Prereq</th>
<th>Coreq</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 100</td>
<td>Human Biology (DB)</td>
<td>3</td>
<td>3 lecture</td>
<td>Qualified for ENG 100</td>
<td></td>
<td>This general biology survey course will emphasize the interaction of science with society illustrated by topics in geology, meteorology, oceanography, and biology of the Hawaiian Islands.</td>
</tr>
<tr>
<td>BIOL 100L</td>
<td>Human Biology Laboratory (DY)</td>
<td>1</td>
<td>3 lab</td>
<td>“C” or higher in BIOL 101, BOT 101, or ZOOL 101</td>
<td>BIOL 100</td>
<td>This lab course complements the human biology lecture with an emphasis on basic science concepts using the gross and microscopic anatomy and physiology of the ten systems of the human body.</td>
</tr>
<tr>
<td>BIOL 110V</td>
<td>Projects in Biology</td>
<td>1-2</td>
<td>Meetings arranged</td>
<td></td>
<td></td>
<td>This class offers the opportunity to use equipment, techniques, or materials not ordinarily used in regular biology courses. The student will be actively involved with developing procedures, making adaptations, and constructing an apparatus used in the course.</td>
</tr>
<tr>
<td>BIOL 123</td>
<td>Introduction to Science: Hawaiian Environment (DB)</td>
<td>3</td>
<td>3 lecture</td>
<td>Qualified for ENG 100</td>
<td>BIOL 123L</td>
<td>This general biology survey course will emphasize the interaction of science with society illustrated by topics in geology, meteorology, oceanography, and biology of the Hawaiian Islands.</td>
</tr>
<tr>
<td>BIOL 123L</td>
<td>Hawaiian Environment Science Laboratory (DY)</td>
<td>1</td>
<td>3 lab</td>
<td></td>
<td>BIOL 123</td>
<td>This laboratory complements BIOL 123 lecture which needs to be taken concurrently. Subject matter illustrates topics and methods in science using examples from Hawaiian Natural History.</td>
</tr>
<tr>
<td>BIOL 171</td>
<td>Introduction to Biology I (DB)</td>
<td>3</td>
<td>3 lecture</td>
<td>BIOL 171L and CHEM 151 (or CHEM 161)</td>
<td></td>
<td>This course covers introductory biology with a marine emphasis for all life science majors including cell structure, chemistry, growth, reproduction, genetics, evolution, viruses, bacteria, and simple eukaryotes.</td>
</tr>
<tr>
<td>BIOL 171L</td>
<td>Introduction to Biology Laboratory I (DY)</td>
<td>1</td>
<td>3 lab</td>
<td>BIOL 171 and CHEM 151 (or CHEM 161)</td>
<td></td>
<td>This laboratory complements BIOL 171 and must be taken concurrently with the lecture. It is intended to provide laboratory experiences that focus on organic molecules, cell structure, cell functions, and genetics.</td>
</tr>
<tr>
<td>BIOL 172</td>
<td>Introduction to Biology II (DB)</td>
<td>3</td>
<td>3 lecture</td>
<td></td>
<td>BIOL 172L</td>
<td>This course is cross-listed with MARE 172.</td>
</tr>
<tr>
<td>BIOL 172L</td>
<td>Introduction to Biology Laboratory II (DY)</td>
<td>1</td>
<td>3 lab</td>
<td></td>
<td></td>
<td>This laboratory complements the BIOL 172 lecture and must be taken concurrently with the lecture. It is intended to provide laboratory experiences that focus on a systemic study of the anatomy and physiology of plants and animals, and how they interact in populations, ecosystems, and communities.</td>
</tr>
<tr>
<td>BIOL 208</td>
<td>Field Biology: Island Ecosystems (DB)</td>
<td>3</td>
<td>2 lecture and 3 lab</td>
<td>Qualified for ENG 100 and MATH 103</td>
<td></td>
<td>This course covers a biological science course and laboratory (BIOL 123/123L; BOT 101, BOT 130/130L; SCI 121/121L).</td>
</tr>
</tbody>
</table>

**BIOL 123 - Introduction to Science: Hawaiian Environment (DB)**

- **Credits:** 3
- **Class hours:** 3 lecture
- **Prereq:** Qualified for ENG 100.
- **Coreq:** BIOL 123L
- **Description:** This general biology survey course will emphasize the interaction of science with society illustrated by topics in geology, meteorology, oceanography, and biology of the Hawaiian Islands.

**BIOL 123L - Hawaiian Environment Science Laboratory (DY)**

- **Credits:** 1
- **Class hours:** 3 lab
- **Coreq:** BIOL 123
- **Description:** This one credit, three-hour laboratory complements BIOL 123 lecture which needs to be taken concurrently. Subject matter illustrates topics and methods in science using examples from Hawaiian Natural History.

**BIOL 171 - Introduction to Biology I (DB)**

- **Credits:** 3
- **Class hours:** 3 lecture
- **Coreq:** BIOL 171L and CHEM 151 (or CHEM 161)
- **Recommended:** ENG 100 or equivalent.
- **Comments:** Cross-listed with MARE 171.
- **Description:** This course covers introductory biology with a marine emphasis for all life science majors including cell structure, chemistry, growth, reproduction, genetics, evolution, viruses, bacteria, and simple eukaryotes.

**BIOL 171L - Introduction to Biology Laboratory I (DY)**

- **Credits:** 1
- **Class hours:** 3 lab
- **Coreq:** BIOL 171 and CHEM 151 (or CHEM 161)
- **Comments:** Cross-listed with MARE 171L.
- **Description:** The laboratory complements BIOL 171 and must be taken concurrently with the lecture. It is intended to provide laboratory experiences that focus on organic molecules, cell structure, cell functions, and genetics.

**BIOL 172 - Introduction to Biology II (DB)**

- **Credits:** 3
- **Class hours:** 3 lecture
- **Prereq:** “C” or higher in BIOL 171 and 171L.
- **Coreq:** BIOL 172L
- **Comments:** This course is cross-listed with MARE 172.
- **Description:** This laboratory complements the BIOL 172 lecture and must be taken concurrently with the lecture. It is intended to provide laboratory experiences that focus on a systemic study of the anatomy and physiology of plants and animals, and how they interact in populations, ecosystems, and communities.

**BIOL 172L - Introduction to Biology Laboratory II (DY)**

- **Credits:** 1
- **Class hours:** 3 lab
- **Coreq:** BIOL 172L
- **Comments:** This course is cross-listed with MARE 172L.
- **Description:** This laboratory complements the BIOL 172 lecture and must be taken concurrently with the lecture. It is intended to provide laboratory experiences that focus on a systemic study of the anatomy and physiology of plants and animals, and how they interact in populations, ecosystems, and communities.

**BIOL 208 - Field Biology: Island Ecosystems (DB)**

- **Credits:** 3
- **Class hours:** 2 lecture and 3 lab
- **Prereq:** Qualified for ENG 100 and MATH 103. Ability to do moderate hiking and outdoor activity.
- **Recommended:** “C” or higher in a biological science course and laboratory (BIOL 123/123L; BOT 101, BOT 130/130L; SCI 121/121L).
- **Comment:** The laboratory is part of the class.
- **Description:** Oceanic island communities in the Pacific, such as Hawai`i, offer a unique and exciting environmental setting for a hands-on experiential field biology course. This course will provide students with an opportunity to perform standardized tests and field research techniques to collect current data on specific island ecosystems. Students will learn to analyze the data and relate the information they have acquired to the diversity and health of the ecosystem, gaining a greater understanding and appreciation of the changing and fragile nature of island communities.
BLUEPRINT READING (BLPR)

BLPR 22 - Blueprint Reading
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 21 and MATH 22.
Comments: Credit by exam is not an available option.
Description: This course is designed to help students acquire an understanding of some of the basic principles in blueprint reading. Emphasis is on developing interpretation and visualization techniques as they refer to construction drawings and concepts essential to related fields in carpentry, architecture, engineering, and green construction technology.  

BLPR 40 - Advanced Blueprint Reading and Estimates
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 21 and MATH 22. “C” or higher in BLPR 22.
Description: This course is designed to help students further acquire an understanding of blueprint reading techniques and basic material and cost estimation. Emphasis is on interpretation of construction relationships between architectural, structural, electrical, and mechanical drawings essential to related fields in carpentry, architecture, engineering, and green construction technology.  

BOTANY (BOT)

BOT 101 - General Botany (DB & DY)
Credits: 4
Class hours: 3 lecture and 3 lab
Comments: Credit by exam is not an available option. The laboratory is part of the class.
Description: This course covers the structure, growth, functions, and evolution of plants and their relationship to the environment and human activities. The course will give the student an overall view of the plant kingdom and the integral part that they play in life. The lecture and laboratory are combined in BOT 101.  

BOT 105 - Ethnobotany (DS)
Credits: 3
Class hours: 3 lecture
Description: Students explore plants and their influence upon the culture of Hawai‘i and Pacific. Uses of cultivated and wild plants are examined.  

BOT 130 - Plants in the Hawaiian Environment (DB)
Credits: 3
Class hours: 3 lecture
Coreq: BOT 130L
Recommended: Qualified for ENG 21, ENG 22, and MATH 24.
Description: Introduction to the biological sciences demonstrated through the study of the evolution of plant species and communities of the Hawaiian Islands. The course will include the study of ecological interactions, human impact on the environment, observational skills and scientific inquiry, plant structure and form in relation to function, and the identification and systematics of native and introduced flora.  

BOT 130L - Plants in the Hawaiian Environment Laboratory (DY)
Credits: 1
Class hours: 3 lab
Coreq: BOT 130
Recommended: Qualified for ENG 21, ENG 22, and MATH 24.
Description: BOT 130L is a one-credit laboratory science course designated to accompany BOT 130. The course is a hands-on, experiential approach to the biological sciences. This course will involve students in specific application of lecture materials and concepts through scientific inquiry and field observations. Field trips are included.  

S
<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
<th>CLASS HOURS</th>
<th>PREREQ</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSN 89 - Electronic Calculating</td>
<td>1</td>
<td>1 lecture</td>
<td></td>
<td>This course gives students practice with real world skills used in the modern business environment; emphasizes proper technique and speed with the ten-key pad found on calculators, computer keyboards, and cash registers; and develops the ability to work with numbers and use of a calculator to perform business computations.</td>
</tr>
<tr>
<td>BLAW 200 - Legal Environment of Business</td>
<td>3</td>
<td>3 lecture</td>
<td></td>
<td>This course introduces fundamental principles of law as applied to ordinary business relationships, sources of business law, the essential elements of a contract, the agency and employment relationships, negotiable instruments, bailments, personal property, and the sale of personal property. Emphasis is placed on the Uniform Commercial Code.</td>
</tr>
<tr>
<td>BUS 120 - Principles of Business</td>
<td>3</td>
<td>3 lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 130 - Business Communications - Oral</td>
<td>3</td>
<td>3 lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 175 - Business Communications - Written</td>
<td>3</td>
<td>3 lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 293V - Cooperative Education</td>
<td>1-3</td>
<td>1 credit = 75 hours of work experience, 2 credits = 150 hours of work experience, 3 credits = 225 hours of work experience</td>
<td></td>
<td>Cooperative Education is a supervised field experience that is related to the student’s major or career goals. The experience will enable the student to apply knowledge and skills learned in coursework to the business environment.</td>
</tr>
<tr>
<td>BUS 106 - Introduction to Medical Coding</td>
<td>3</td>
<td>3 lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 121 - Introduction to Word Processing</td>
<td>3</td>
<td>3 lecture</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
BUSINESS TECHNOLOGY (BUSN) • continued

BUSN 123 - Word Processing for Business
Credits: 3
Class hours: 3 lecture
Prereq: 35 gwam, or “C” or higher in BUSN 121.
Description: This course introduces students to the basic functions of word processing programs. It includes the input, retrieval, and processing of alphanumeric data on computerized documents. Students will develop proficiency in creating and editing business documents and sending electronic mail. F, S

BUSN 130 - Spreadsheet and Database
Credits: 3
Class hours: 3 lecture
Recommended: BUSN 121 and BUSN 189.
Description: This course introduces students to the basic functions of spreadsheet and database programs. It includes the input, retrieval, and processing of alphanumeric data on computerized spreadsheet and database programs. Students will develop expertise in designing worksheets and databases. F, S

BUSN 150 - Introduction to Business Computing
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in or concurrent enrollment in ENG 21 and ENG 22.
Recommended: “C” or higher in BUSN 121 or ability to keyboard by touch.
Description: This course is an introduction to computers and the components of a business computer system, including “hands-on” exposure to elementary applications and learning how computer technology can be applied to satisfy business needs. F, S

BUSN 151 - Intermediate Business Computing
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in BUSN 150.
Description: This course expands the concepts of business computing introduced in BUSN 150, broadens the knowledge of word processing, spreadsheet, database, and presentation software utilizing intermediate- and advanced-level features of the software, and provides experience with typical business applications that utilize the intranet and internet technologies. Students develop greater proficiency in creating, modifying, and printing documents, spreadsheets, database queries, reports, and forms. S

BUSN 155 - Creating and Managing the Virtual Office
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 21, ENG 22, BUSN 123, BUSN 150, and BUSN 164.
Recommended: Basic computer, internet, and keyboarding skills.
Description: This course will explore concepts and issues involved in establishing a virtual assistant business. Students will use integrated software applications to complete assignments, conduct research, and prepare a comprehensive business and marketing plan. S

BUSN 156 - Telephone Techniques and Communications
Credits: 1
Class hours: 1 lecture
Description: Students will learn to develop positive telephone communication skills (professional relationships, a positive image, and reliable customer service). They will also study how current technology facilitates information processing. Emphasis will be on answering and using the telephone efficiently and courteously and taking messages effectively. F, S

BUSN 156A - Customer Service - Basic Concepts
Credits: 1
Class hours: 1 lecture
Recommended: Basic computer, internet, and keyboarding skills.
Description: This course covers basic customer service concepts, which include gaining customer loyalty, handling difficult customers, and exceeding customer expectations. F, S

BUSN 160 - Telephone Techniques
Credits: 1
Class hours: 1 lecture
Recommended: Ability to keyboard and knowledge of word processing.
Description: This course facilitates employment search by emphasizing professional techniques and standards in the preparation of application forms, résumés, cover letters, and employment interviews. F, S
BUSINESS TECHNOLOGY (BUSN) • continued

BUSN 170 - Records and Information Management

Credits: 3  
Class hours: 3 lecture  
Recommended: Ability to keyboard at 30 words a minute (w.a.m.).  
Comments: Credit by exam is not an available option.  
Description: The course studies principles of and procedures for organizing and operating Records and Information Management (RIM) programs. Topics include selection of filing systems, equipment, and supplies; procedures for storage, retrieval, transfer, retention, and disposal of records; study and application of Association of Records Managers and Administrators (ARMA) rules for alphabetic, alphanumeric, geographic, numeric, and subject methods.  
F, S

BUSN 179 - Business English

Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in BUSN 123 and qualified for ENG 100 and 102.  
Description: This course is the study of language fundamentals needed to communicate effectively in a business environment. Basic language skills include grammar, usage, punctuation, capitalization, number style, and spelling.  
S

BUSN 189 - Business Mathematics

Credits: 3  
Class hours: 3 lecture  
Prereq: Qualified for ENG 21 and MATH 24.  
Description: This course introduces various accounting and finance computational procedures utilizing various electronic calculating tools. Students will survey concepts in algebra, logical structure, numeration systems, and statistics. Students will also develop critical thinking skills in making personal and business decisions.  
F, S

BUSN 193V - Cooperative Education

Credits: 1-3 (1 hour per week with coordinator and 75 hours work experience for each credit)  
Prereq: Approval of instructor.  
Comments: May be repeated for a maximum of 3 credits.  
Description: Cooperative Education provides practical career-related work experience through a program used nationally in colleges and universities to apply classroom knowledge and to develop job competencies. Full-time or part-time work in the private and public sectors is utilized for this program. The number of credits earned depends upon the number of hours spent at the job station during the semester.  
F, S

BUSN 199V - Special Studies

See explanation under the heading of Special Studies.
### CARP 19B - Minor Home Repairs and Maintenance Fabrication

| Credits: | 2 |
| Class hours: | 3 lecture/lab |
| Comments: | Credit by exam is not an available option. May be repeated any number of times for credit. |
| Description: | An advanced course for homeowners in theory and manipulative skills involved in the use of hand tools and machinery dealing with the repair and fabrication of various segments of home constructions. Safety will be stressed throughout the course. | F, S |

### CARP 20B - Introduction to Carpentry I

| Credits: | 3 |
| Class hours: | 1 lecture and 4 lecture/lab |
| Comments: | Credit by exam is not an available option. May be repeated any number of times for credit. |
| Description: | This is an introductory course into the theory and manipulative skills involved in the use of the basic hand and power tools used in carpentry. The course provides practical experience in repairs and alterations to a typical home. | F |

### CARP 20C - Introduction to Carpentry II

| Credits: | 8 |
| Class hours: | 3 lecture, 2 lecture/lab, and 12 lab |
| Prereq: | Qualified for MATH 50. “C” or higher in CARP 20B. |
| Description: | This is an introductory course in carpentry technology. Students will develop basic carpentry skills required by the industry. This course will cover the use, safety, and maintenance of hand and power tools, identification and application of materials, assembly methods, and basic material takeoff. Emphasis will be on sustainable construction practices. | F |

### CARP 22B - Concrete Forms I

| Credits: | 5 |
| Class hours: | 2 lecture and 9 lab |
| Prereq: | “C” or higher in CARP 20C. |
| Description: | This course focuses on the theory and practice of concrete form construction, including forms for footings and walls. Other topics include the study of concrete and concrete products, form construction terminology, and form materials and methods. Projects include on-site building foundation layout using the transits and levels. Safety practices in form construction are stressed. | S |

### CARP 22C - Concrete Forms II

| Credits: | 6 |
| Class hours: | 3 lecture and 9 lab |
| Prereq: | “C” or higher in CARP 22B. |
| Description: | This course covers the theory and practice of concrete form construction, including forms for beams, stairs, and above-grade slabs. Other topics include the study of new building materials used in form construction and methods. Projects include on-site building foundation layout using the transits and levels. Safety practices in form construction are stressed. | S |

### CARP 241B - Rough Framing and Exterior Finish I

| Credits: | 6 |
| Class hours: | 3 lecture and 9 lab |
| Prereq: | Qualified for MATH 50 or higher. “C” or higher in CARP 20C. |
| Description: | This is a course on the theory and practice in construction of framing walls, rough openings, floors, and exterior wall coverings and exterior trim. Other topics include floor framing methods and layout, roof framing methods and layout, and introduction to sustainable building construction practices. Safety is stressed throughout the course. | F, S |

### CARP 42B - Finishing I

| Credits: | 6 |
| Class hours: | 3 lecture and 9 lab |
| Prereq: | Qualified for MATH 50 or higher. “C” or higher in CARP 20C. |
| Description: | In this course, students are introduced to the safe installation of materials for finishing the interior surfaces of a framed house. Students will install, repair, and prepare drywall for painting. Hardwood, laminate, and resilient floorings will be covered as will door and window installation and molding trim. Estimating on a time and materials basis and calculating labor cost are introduced. The goal of the class is to present the best practices to achieve professional results and produce a durable and sustainable product. | S |

### CARP 42C - Finishing II

| Credits: | 5 |
| Class hours: | 2 lecture and 9 lab |
| Prereq: | “C” or higher in CARP 42B. |
| Description: | In this course, students will be introduced to shop woodworking tools and their safe use producing and installing complex moldings. Wood joinery as it pertains to interior stairs, cabinetry, and countertops will result in an understanding of the millwork package necessary to finish a living space. The goal of the class is to present the best practices to achieve professional results and produce a durable and sustainable product. | S |

### CARP 93V - Cooperative Education

See explanation under the heading of Cooperative Education.

### CARP 99V - Special Studies

See explanation under the heading of Special Studies.
CHEM 161 - General Chemistry I (DP)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in MATH 25 or MATH 26.
Coreq: CHEM 161L
Description: An introduction to the basics of college chemistry. Topics include measurements; atomic, quantum, and chemical bonding theories; stoichiometry; chemical reactions; thermochemistry; and gaseous, liquid, and solid states. F (every 2 years)

CHEM 161L - General Chemistry Laboratory I (DY)
Credits: 1
Class hours: 3 lab
Coreq: CHEM 161
Comments: Credit by exam is not an available option.
Description: Introduction to chemical principles and procedures in the laboratory. F (every 2 years)

CHEM 162 - General Chemistry II (DP)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in CHEM 161.
Coreq: CHEM 162L
Description: An introduction to the basics of college chemistry. Topics include chemical kinetics, chemical equilibrium, acid-bases, acid-base equilibrium, solubility equilibrium, entropy, electrochemistry, coordination, and nuclear chemistry. S (every 2 years)

CHEM 162L - General Chemistry Laboratory II (DY)
Credits: 1
Class hours: 3 lab
Coreq: CHEM 162
Comments: Credit by exam is not an available option.
Description: Introduction to chemical principles and procedures in the
# Cooperative Education

**Cooperative Education**

<table>
<thead>
<tr>
<th>Credits:</th>
<th>1-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class hours:</td>
<td>1 hour per week seminar and 75 hours work experience for each credit.</td>
</tr>
</tbody>
</table>

**Prereq:** Approval of Co-op instructor.

**Comments:** May be repeated with approval of the Co-op instructor.

**Description:** Cooperative Education is a program that integrates classroom studies with work experience directly related to a student’s academic field of study. Field experiences may be on- or off-campus, paid or volunteer, part- or full-time. Students earn one to three college credits in this formal program (1 credit = 75 hours, 2 credits = 150 hours, 3 credits = 225 hours). A student’s current employment may qualify as a student’s co-op site if it directly relates to that student’s field of study.

If a student does not work in a position that qualifies as a co-op site, the Co-op coordinator will locate a volunteer site from a group of participating agencies in business, industry, and government. If students need a paid co-op experience, they are expected to find their own paying co-op sites.

Co-op field experiences are a graduation requirement for the Hospitality and Tourism as well as the Business Technology programs. These degree programs view Cooperative Education as a capstone or exit experience within their program curriculum.

Co-op is also available in the Auto Body Repair and Painting, Automotive Technology, Electronics, and Culinary Arts programs.

The Co-op office also provides students with internship opportunities. Internships are defined as short-term work experiences that offer students an opportunity to learn about a career area. Internships, unlike cooperative education placements, do not have to be directly related to the student’s field of study.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABRP 93V</td>
<td>for trade technology majors.</td>
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<tr>
<td>AMT 93V</td>
<td>for trade technology majors.</td>
</tr>
<tr>
<td>BUSN 193V</td>
<td>for business majors.</td>
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<tr>
<td>CULN 193V</td>
<td>for culinary arts majors.</td>
</tr>
<tr>
<td>ETRO 93V</td>
<td>for electronic majors.</td>
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<tr>
<td>ETRO 193V</td>
<td>for electronic majors.</td>
</tr>
<tr>
<td>HOST 193V</td>
<td>for hotel operations majors.</td>
</tr>
</tbody>
</table>
### CULINARY ARTS

(CULN)

#### CULN 101B - Introduction to Food Service, Basic Skills, and Sanitation

**Credits:** 4  
**Class hours:** 1 lecture and 6 lecture/lab  
**Description:** This course will provide an overview of the rapidly growing food service industry from entry level to management positions. Students will learn the basic skills needed to enter an entry level position with an emphasis on sound work ethics and attitudes required to seek employment in the food service industry.  

#### CULN 101C - Introduction to Food Service, Short Order, and Quantity Food Cookery

**Credits:** 4  
**Class hours:** 1 lecture and 6 lecture/lab  
**Prereq:** “C” or higher in CULN 101B.  
**Description:** This course will provide an overview of the rapidly growing food service industry from entry level to management positions. The students will reinforce the basic skills needed to enter an entry level position with an emphasis on sound work ethics and attitudes required to seek employment in the food service industry. This course emphasizes high production standards, attractive service, use of proper equipment, and efficient use of time. Students will demonstrate principles in quantity food preparation using large quantity equipment. This course also stresses food selection, proper food storage/sanitation, and recipe and product evaluations.  

#### CULN 102B - Introduction to Food Service, Breakfast Cookery, and Cafeteria Service

**Credits:** 4  
**Class hours:** 1 lecture and 6 lecture/lab  
**Description:** This course will provide an overview of the rapidly growing food service industry with the basic skills needed to enter an entry level position with an emphasis on sound work ethics and attitude required to seek employment in the food service industry. This course emphasizes high production standards, attractive service, use of proper equipment, and efficient use of time. The course also stresses food selection, proper food storage/sanitation, and recipe and product evaluations. This course introduces students to breakfast short order cooking concepts and includes instruction and practical application in the following: eggs cooked to order, omelets, pancakes, waffles, French toast, and hot cereals. Students will also be trained in offering weekly specials for cafeteria operation.  

#### CULN 102C - Introduction to Food Service, Pantry Development, and Basic Baking

**Credits:** 4  
**Class hours:** 1 lecture and 6 lecture/lab  
**Prereq:** “C” or higher in CULN 102B.  
**Description:** This course will provide an overview of the rapidly growing food service industry with the basic skills needed to enter an entry level position with an emphasis on sound work ethics and attitudes required to seek employment in the food service industry. This course emphasizes high production standards, attractive service, use of proper equipment, and efficient use of time. The course also stresses food selection, proper food storage/sanitation, and recipe and product evaluations. Students will gain knowledge and skills in the preparation and presentation of hot and cold sandwiches, salads, salad dressings. This course is an introduction to baking, emphasizing the basic formulas, fundamentals, and procedures.  

#### CULN 111 - Introduction to the Culinary Industry

**Credits:** 2  
**Class hours:** 2 lecture  
**Coreq:** CULN 275 and CULN 294  
**Description:** This course provides an overview of the culinary industry within the aspects of the entire hospitality industry. It provides students with an introduction to the historical, social, and cultural forces that have affected and shaped the industry of today. Students will identify job qualifications and opportunities, professional standards, communication skills, and attitudes essential for successful workers in the industry.  

#### CULN 112 - Sanitation and Safety

**Credits:** 2  
**Class hours:** 2 lecture  
**Recommended:** Qualified for ENG 21.  
**Description:** This course is the study and application of principles and procedures of sanitization and safety in the hospitality industry. This course includes the study of foodborne illnesses, biological hazards, chemical hazards, physical hazards, and cross-contamination as they may occur during the flow of food. An introduction to Hazard Analysis Critical Control Point (HACCP) and other sanitation and safety programs will also be presented. Safety issues and Occupational Safety and Health Administration (OSHA) guidelines and standards will be covered as they apply to the hospitality industry.  

#### CULN 115 - Menu Merchandising

**Credits:** 2  
**Class hours:** 2 lecture  
**Prereq:** “C” or higher in BUSN 189 or MATH 75 or higher, and ENG 21.  
**Coreq:** CULN 275 and CULN 294  
**Description:** This course is a study of the factors involved in planning effective menus for a variety of food service operations. This course includes the design, format, selection, costing, pricing, and balance of menu items based on an understanding of the needs of various target markets.  

#### CULN 116 - Introduction to Culinary Sustainability

**Credits:** 1  
**Class hours:** 1 lecture  
**Prereq:** CULN 101B and CULN 102B  
**Recommended:** Qualified for ENG 21.  
**Description:** This course overviews a variety of sustainable practices, and examines how to implement them in a food service operation. Students will learn to combine elements of purchasing, receiving, energy and water conservation, and recycling to help control costs while reaping the benefits of being good environmental stewards.  

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**Credits:** 2  
**Class hours:** 2 lecture  
**Recommended:** Qualified for ENG 21.  
**Description:** This course is the study and application of principles and procedures of sanitization and safety in the hospitality industry. This course includes the study of foodborne illnesses, biological hazards, chemical hazards, physical hazards, and cross-contamination as they may occur during the flow of food. An introduction to Hazard Analysis Critical Control Point (HACCP) and other sanitation and safety programs will also be presented. Safety issues and Occupational Safety and Health Administration (OSHA) guidelines and standards will be covered as they apply to the hospitality industry.  

#### CULN 115 - Menu Merchandising

**Credits:** 2  
**Class hours:** 2 lecture  
**Prereq:** “C” or higher in BUSN 189 or MATH 75 or higher, and ENG 21.  
**Coreq:** CULN 275 and CULN 294  
**Description:** This course is a study of the factors involved in planning effective menus for a variety of food service operations. This course includes the design, format, selection, costing, pricing, and balance of menu items based on an understanding of the needs of various target markets.  

#### CULN 116 - Introduction to Culinary Sustainability

**Credits:** 1  
**Class hours:** 1 lecture  
**Prereq:** CULN 101B and CULN 102B  
**Recommended:** Qualified for ENG 21.  
**Description:** This course overviews a variety of sustainable practices, and examines how to implement them in a food service operation. Students will learn to combine elements of purchasing, receiving, energy and water conservation, and recycling to help control costs while reaping the benefits of being good environmental stewards.
CULINARY ARTS
(CULN) • continued

CULN 120 - Fundamentals of Cookery
Credits: 4
Class hours: 2 lecture/lab and 9 lab
Prereq: Qualified for ENG 22 and MATH 26 or MATH 75 or higher. "C" or higher in or concurrent enrollment in CULN 150.
Description: This course is an introduction to the fundamental concepts, skills, and techniques of food preparation. Course coverage includes basic cooking methods for meats, stocks, soups, sauces, seafood, vegetables, and starches. Students will learn to identify, use, and maintain all equipment, tools, and utensils in a safe and sanitary manner. F

CULN 130 - Intermediate Cookery
Credits: 5
Class hours: 1 lecture, 2 lecture/lab, and 9 lab
Prereq: "C" or higher in CULN 120.
Description: This course applies the basic concepts, skills, and techniques taught in CULN 120 to short order cookery, including breakfast cookery, as found in the coffee shops, snack bars, and other quick-service outlets, with emphasis in American Cuisine, quantity food production, menu development, recipe standardization and conversion, and quality control. This course includes quantity food production and short order cookery experiences in the College’s cafeteria. F

CULN 150 - Fundamentals of Baking
Credits: 5
Class hours: 1 lecture, 2 lecture/lab, and 9 lab
Prereq: "C" or higher in CULN 130.
Description: This course provides instruction in the study and development of basic skills in baking as practiced and required in the food industry. Theory and laboratory work will provide the student with knowledge and skills in the preparation of breakfast breads, pastries, bread, and rolls. S

CULN 160 - Dining Room and Beverage Service
Credits: 5
Class hours: 1 lecture, 2 lecture/lab, and 9 lab
Prereq: "C" or higher in CULN 150.
Description: This course is a study and application of the variety of service styles such as American, French, and Russian services and techniques practiced by industry with special emphasis on the importance of the coordination between the front and back of the house. This course includes the study of stewarding procedures and a study of the principles and practices of profitable beverage operations and the responsibilities and liabilities associated with alcohol service. In addition, students must successfully achieve certification in the American Heart Association CPR/First Aid Course. S

CULN 185 - Culinary Nutrition
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 22 or higher and MATH 26 or MATH 75 or higher.
Description: This course provides a practical and systematic approach in developing a philosophy about healthful eating. It also provides the necessary guidelines for recipe adaptation and menu planning. F

CULN 210 - Continental Cuisine
Credits: 5
Class hours: 1 lecture, 2 lecture/lab, and 9 lab
Prereq: "C" or higher in CULN 150 and CULN 160.
Description: This course expands on the skills gained in Fundamentals of Cookery, Intermediate Cookery, Fundamentals of Baking, and Dining Room and Beverage Service courses, emphasizing creativity and refining skills. It includes practice in preparing cooked-to-order dishes typically served in hotels and fine dining restaurants with emphasis on American and European cuisines. Laboratory work in the college fine dining restaurant emphasizes station organization and culinary experience. F

CULN 220 - Asian Pacific Cuisine
Credits: 5
Class hours: 1 lecture, 2 lecture/lab, and 9 lab
Prereq: "C" or higher in CULN 221 and CULN 222.
Description: This course is a study of Chinese, Japanese, Thai, Vietnamese, Filipino, and Pacific Island cuisines. This course includes an overview of the history, culture, and foods of Asia and their influence on the foods of Hawai’i. Emphasis is placed on the culinary traditions, artistry, and special uses of fruits, vegetables, spices, herbs, and cooking ingredients commonly used in Asian and Pacific Island cuisines. F

CULN 221 - Continental Cuisine
Credits: 4
Class hours: 3 lecture and 3 lab
Prereq: "C" or higher in ENG 21 and MATH 75.
Description: This course is an introduction to the principles and practices of purchasing, receiving, storing, and issuing food supplies in a food service organization. Students will be introduced to cost control systems as they apply to restaurants, hotels, and other food and beverage operations. The College’s food service complex will serve as the laboratory for class exercises. The course includes preparation and analysis of financial and control-related reports. Students will utilize computer technology to reinforce their practical experiences and introduce examples of technology practiced in industry. F

126
CULINARY ARTS (CULN) • continued

CULN 275 - Human Resources Management and Supervision

Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in CULN 271 and ENG 21 or higher.
Description: This course is designed to prepare the student for the transition from employee to supervisor in a food service operation. Students will learn to identify and evaluate various leadership styles and techniques. Course content also includes employee training, as well as motivation and evaluation techniques common in food service operations.

CULN 294 - Culinary Arts Practicum

Credits: 5
Class hours: 1 lecture, 2 lecture/lab, and 9 lab
Prereq: Approval of instructor or “C” or higher in CULN 185, CULN 240, and CULN 271.
Coreq: CULN 115 and CULN 275.
Description: This capstone course is designed to integrate culinary training with academic studies and field experience using fundamental cooking techniques, food science, aesthetics, managerial principles, and sensory perception as the framework. Students will plan, organize, staff, direct, and control a restaurant on campus. They will be responsible for menu designs, service, finances, purchasing, and productivity. The instructor serves as a resource in the areas of market analysis, menu creation and design, cost control, and financial analysis.
EAST ASIAN LANGUAGE AND LITERATURE (EALL)

EALL 272 - Japanese Literature in Translation-Modern (DL)

Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100.
Comment: Knowledge of Japanese language is not required.
Description: This course introduces students to representative Japanese poetry, fiction, and drama in translation from the beginning of the Meiji era in 1868 to the present, along with a few classical works from earlier periods as cultural background.

E-COMMERCE (ECOM)

ECOM 100 - Introduction to E-Commerce

Credits: 3
Class hours: 3 lecture
Recommended: Working knowledge of personal computer systems and the ability to operate standard web browsers and use email comfortably. Knowledge of data communications systems would be very helpful.
Description: This course provides an introduction to the technology and history of the internet and its use as an electronic commerce medium from informational websites to full online retail systems. Included in this introductory survey course will be an analysis and evaluation of retail and business-to-business internet-based systems. Coursework includes webpage design and the construction of a business-style website, and in-depth internet and email marketing techniques.

ECONOMICS (ECON)

ECON 130 - Principles of Microeconomics (DS)

Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100.
Description: In this course, students will study supply, demand, and price determination in a market economy; costs, revenues, and price policies of the firm under conditions of competition and monopoly; and the determination of wages, rent, interest, and profits.

ECON 131 - Principles of Macroeconomics (DS)

Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100. "C" or higher in MATH 24.
Description: This course is an introduction to macroeconomics the analysis of economic systems focusing on the determination and measurement of national income; the role of government through its fiscal and monetary policies to deal with inflation, unemployment and economic growth; and on trade imbalances and exchange rates.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Class Hours</th>
<th>Prereq</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 105</td>
<td><strong>Introduction to Early Childhood Education</strong></td>
<td>3</td>
<td>3 lecture</td>
<td>Qualified for ENG 100</td>
<td>This course introduces and explores the historical roots and fundamental principles of early childhood care and education programs, the variety and scope of programs in the community, issues confronting the field, and career options. Students learn about and practice using observation and assessment tools to record children’s growth and learning. This course may be taken on a CR/N basis.</td>
</tr>
<tr>
<td>ED 110</td>
<td><strong>Developmentally Appropriate Practices</strong></td>
<td>3</td>
<td>3 lecture</td>
<td>“C” or higher in or concurrent enrollment in ENG 22.</td>
<td>This course provides an overview and basic awareness of the knowledge and skills necessary for working with children from birth through age eight.</td>
</tr>
<tr>
<td>ED 115</td>
<td><strong>Health, Safety, and Nutrition for the Young Child</strong></td>
<td>3</td>
<td>3 lecture</td>
<td>Qualified for ENG 100</td>
<td>This course introduces theories and practices for creating and maintaining a safe, healthy learning environment for young children and adults in group settings. It introduces guidelines and practices for providing for the nutritional needs of young children and adults in group settings.</td>
</tr>
<tr>
<td>ED 131</td>
<td><strong>Child Development: Theory Into Practice</strong></td>
<td>3</td>
<td>3 lecture</td>
<td>Qualified for ENG 100</td>
<td>This course covers principles of human development from conception through early childhood. It focuses on the interrelation of physical, cognitive, emotional, and social aspects of the individual during this period and how this information about development affects one’s expectations and relationship to the individual child.</td>
</tr>
<tr>
<td>ED 140</td>
<td><strong>Guidance of Young Children in a Group Setting</strong></td>
<td>3</td>
<td>3 lecture</td>
<td>Qualified for ENG 100</td>
<td>This course addresses positive ways to support children’s social-emotional development. It focuses on adult-child and child-child interactions and relationships.</td>
</tr>
<tr>
<td>ED 140</td>
<td><strong>Guidance of Young Children</strong></td>
<td>3</td>
<td>3 lecture</td>
<td>Qualified for ENG 100</td>
<td>This course focuses on the interrelation of physical, cognitive, emotional, and social aspects of the individual during this period and how this information about development affects one’s expectations and relationship to the individual child.</td>
</tr>
<tr>
<td>ED 170</td>
<td><strong>Introduction to Working with Infants and Toddlers</strong></td>
<td>3</td>
<td>3 lecture</td>
<td>Qualified for ENG 100</td>
<td>This course provides an overview of basic skills in working with infants and toddlers in groups. Focus on interactive aspects of child development, infant-toddler caregiving routines and environments, caregiver roles, as well as prior ways to enrich experiences and to promote strong relationships with families.</td>
</tr>
<tr>
<td>ED 192</td>
<td><strong>Beginning Preschool Seminar and Laboratory</strong></td>
<td>2</td>
<td>4 lecture/lab</td>
<td>Qualified for ENG 100</td>
<td>This course provides an introductory supervised work experience in an early childhood education and care setting. This course is designed to support students in integrating content knowledge with practice.</td>
</tr>
<tr>
<td>ED 195</td>
<td><strong>Field Experience in Early Childhood Education</strong></td>
<td>4</td>
<td>8 lecture/lab</td>
<td>“C” or higher in ED 115, ED 140, and ED 192.</td>
<td>This course provides a mid-program supervised work experience in an early childhood education and care setting. It is designed to support students in integrating content knowledge with practice.</td>
</tr>
<tr>
<td>ED 199V</td>
<td><strong>Special Studies</strong></td>
<td>3</td>
<td>3 lecture</td>
<td>Qualified for ENG 100</td>
<td>This course will develop communication skills for establishing effective relationships with diverse families and other adults. Students are introduced to the local resources available for family referral.</td>
</tr>
<tr>
<td>ED 245</td>
<td><strong>Child, Family, and Community</strong></td>
<td>3</td>
<td>3 lecture</td>
<td>Qualified for ENG 100</td>
<td>This course will focus on the theoretical foundation and practice in the planning, implementation, and assessment of the language arts and creative expression curriculum.</td>
</tr>
<tr>
<td>ED 263</td>
<td><strong>Language and Creative Expression Curriculum</strong></td>
<td>3</td>
<td>3 lecture</td>
<td>“C” or higher in ED 105, ED 110, and ED 131.</td>
<td>This course will focus on the theoretical foundation and practice in the planning, implementation, and assessment of the language arts and creative expression curriculum.</td>
</tr>
<tr>
<td>ED 264</td>
<td><strong>Inquiry and Physical Curriculum</strong></td>
<td>3</td>
<td>3 lecture</td>
<td>“C” or higher in ED 263.</td>
<td>This course will focus on the theoretical foundation and practice in the planning, implementation, and assessment of the language arts and creative expression curriculum.</td>
</tr>
</tbody>
</table>
EDUCATION  
(ED) • continued

ED 290C - Field Experience in Early Childhood Education II
Credits: 4
Class hours: 8 lecture/lab
Prereq: “C” or higher in ED 195, ED 264, and ENG 100.
Description: This course provides a final supervised work experience in an early childhood education and care setting. It is designed to support students in integrating content knowledge with practice.  F, S

ED 299V - Special Studies
See explanation under the heading of Special Studies.

ELECTRICAL ENGINEERING  
(EE)

EE 160 - Programming for Engineers
Credits: 4
Class hours: 3 lecture and 3 lab
Prereq: Qualified for MATH 205 (Calculus I) or concurrent enrollment in MATH 140.
Description: This course studies 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.

EE 205 - Object-Oriented Programming
Credits: 3
Class hours: 3 lecture
Prereq: ”C” or higher in EE 160 or approval of instructor.
Description: This is a second-level programming course for Engineers. The course introduces the object-oriented programming paradigm focusing on the definition and use of classes along with fundamentals of object-oriented design in a modern object-oriented language such as C++. Other topics include complex data structures, simple searching and sorting techniques, and an introduction to software engineering issues.

EE 211 - Basic Circuit Analysis I
Credits: 4
Class hours: 3 lecture and 3 lab
Prereq: Qualified for MATH 232 (Calculus IV) or concurrent enrollment in MATH 231 (Calculus III).
Description: This course studies linear passive circuits, time domain analysis, transient and steady-state responses, phasors, impedance and admittance; power and energy, frequency responses, and resonance.

EE 213 - Basic Circuit Analysis II
Credits: 4
Class hours: 3 lecture and 3 lab
Prereq: ”C” or higher in EE 211. ”C” or higher in or concurrent enrollment in MATH 232 (Calculus IV).
Description: This course studies Laplace transforms, Fourier transforms, convolution and the applications to circuits, frequency selective circuits, design of active filters, and state space analysis of circuits.

EE 260 - Introduction to Digital Design
Credits: 4
Class hours: 3 lecture and 3 lab
Prereq: ”C” or higher in EE 160.
Description: This course is an introduction to the design of digital systems with an emphasis on design methods and the implementation and use of fundamental digital components.

EE 296 - Sophomore Project
Credits: 1
Class hours: 1 lecture
Prereq: Approval of instructor.
Comments: May be repeated for a maximum of 3 credits.
Description: Sophomore level individual or team project under EE faculty direction and guidance. The project provides design experience and develops practical skills. Repeatable unlimited times.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Class hours</th>
<th>Prereq</th>
<th>Coreq</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC 20</td>
<td>Electrical Fundamentals</td>
<td>3</td>
<td>1 lecture</td>
<td></td>
<td></td>
<td>This course introduces students to AC and DC electrical theory and practical concepts, including basic laws and formulas. The course includes how basic circuits are configured and the necessary materials required and the wiring of common electrical devices. Tools and test equipment requirements and simple wiring techniques will be covered. F, S</td>
</tr>
<tr>
<td>ELEC 22</td>
<td>Wiring Materials, Methods and NEC Codes</td>
<td>3</td>
<td>1 lecture</td>
<td></td>
<td></td>
<td>This course introduces students to AC and DC electrical theory and practical concepts, including basic laws and formulas. The course includes how basic circuits are configured and the necessary materials required and the wiring of common electrical devices. Tools and test equipment requirements and simple wiring techniques will be covered. F, S</td>
</tr>
<tr>
<td>ELEC 30</td>
<td>Electrical Installation Theory I</td>
<td>4</td>
<td>2 lecture</td>
<td></td>
<td></td>
<td>This course introduces students to AC and DC electrical theory and practical concepts, including basic laws and formulas. The course includes how basic circuits are configured and the necessary materials required and the wiring of common electrical devices. Tools and test equipment requirements and simple wiring techniques will be covered. F, S</td>
</tr>
<tr>
<td>ELEC 40</td>
<td>Electrical Installation Theory II</td>
<td>4</td>
<td>4 lecture</td>
<td></td>
<td></td>
<td>This course introduces students to AC and DC electrical theory and practical concepts, including basic laws and formulas. The course includes how basic circuits are configured and the necessary materials required and the wiring of common electrical devices. Tools and test equipment requirements and simple wiring techniques will be covered. F, S</td>
</tr>
<tr>
<td>ELEC 41</td>
<td>Industrial Motor Controls I</td>
<td>3</td>
<td>2 lecture</td>
<td></td>
<td></td>
<td>This course introduces students to AC and DC electrical theory and practical concepts, including basic laws and formulas. The course includes how basic circuits are configured and the necessary materials required and the wiring of common electrical devices. Tools and test equipment requirements and simple wiring techniques will be covered. F, S</td>
</tr>
<tr>
<td>ELEC 42</td>
<td>Electrical Installation Laboratory II</td>
<td>6</td>
<td>12 lecture</td>
<td></td>
<td></td>
<td>This course introduces students to AC and DC electrical theory and practical concepts, including basic laws and formulas. The course includes how basic circuits are configured and the necessary materials required and the wiring of common electrical devices. Tools and test equipment requirements and simple wiring techniques will be covered. F, S</td>
</tr>
</tbody>
</table>
ELECTRICITY
(ELEC) • continued

ELEC 85 - Renewable Energy PV Technical Sales
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ELEC 70.
Description: This course is designed to advance the student in the photovoltaic (PV) field. Emphasis is on the understanding of system performance and site evaluation. Energy usage and evaluation to lower energy consumption, developing accurate bid proposals, and utilizing available resources are covered in the course. Successful completion of the course satisfies the educational requirements for an individual to take the North American Board of Certified Energy Practitioners (NABCEP) Certification exam in PV Technical Sales.

ELEC 99V - Special Studies
See explanation under the heading of Special Studies.

ELECTRONICS
(ETRO)

ETRO 18 - General Electronics
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 21. “C” or higher in MATH 22 or MATH 50.
Comments: Credit by exam is not an available option.
Description: This introduction to DC, AC, semi-conductor, and digital electronics includes characteristics, applications, power supplies, and amplifiers. The course also includes the use of the oscilloscope and meters.

ETRO 93V - Cooperative Education
Credits: 1-3
Class hours: 75 hours of supervised work per credit
Prereq: Approval of instructor.
Description: This course is designed to offer students the opportunity to explore and test career options within the electronics field.

ETRO 120 - Electronics I
Credits: 3
Class hours: 3 lecture
Prereq: Acceptance into the Electronics Technology program.
Coreq: ETRO 120L
Comments: Credit by exam is not an available option.
Description: This course covers the basic theory of electricity from the atomic theory to filter circuits. Topics covered include Ohm’s Law, Power, Energy, DC and AC circuits, network analysis, sinusoidal and non-sinusoidal voltages and current, resonant circuits, and the use of meters, probes, and oscilloscopes.

ETRO 120L - Electronics I Lab
Credits: 1
Class hours: 3 lab
Prereq: Acceptance into the Electronics Technology program.
Coreq: ETRO 120
Comments: Credit by exam is not an available option.
Description: This course demonstrates the principles studied in ETRO 120 by means of laboratory experiments. Circuits are constructed and tested using various electronic tools.

ETRO 121 - Electronic Fabrication and Assembly
Credits: 2
Class hours: 1 lecture and 3 lab
Recommended: ETRO 18.
Comments: Credit by exam is not an available option.
Description: ETRO 121 introduces the students to techniques and hand powered tools currently used by the electronics industry in the manufacture, installation, and repair of electronics equipment.

ETRO 122 - Electronics II
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ETRO 120 and ETRO 120L.
Coreq: ETRO 122L
Comments: Credit by exam is not an available option.
Description: The course teaches practical and theoretical principles of AC and semiconductor circuits, including applications to power supplies, amplifiers, oscillators, integrated circuits, filters, and instrumentation.

ETRO 122L - Electronics II Laboratory
Credits: 1
Class hours: 3 lab
Prereq: “C” or higher in ETRO 120 and ETRO 120L.
Coreq: ETRO 122
Comments: Credit by exam is not an available option.
Description: This course demonstrates the principles studied in ETRO 122 by means of laboratory experiments. DC/AC electronics and semiconductor theories presented in ETRO 122 lectures are verified and reinforced by building and testing electronic circuits.
### ETRO 143 - Digital Electronics

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** “C” or higher in ETRO 120 and ETRO 120L.  
**Coreq:** ETRO 143L  
**Comments:** Credit by exam is not an available option.  
**Description:** This course introduces number systems, codes, logic gates, Boolean algebra, and ICs used in digital circuits. Digital design using both logic gates and VHDL programming language are studied. Analog-to-digital/digital-to-analog and microprocessor interfacing are introduced.  
*S (every 2 years)*

### ETRO 143L - Digital Electronics Laboratory

**Credits:** 1  
**Class hours:** 3 lab  
**Prereq:** “C” or higher in ETRO 120 and ETRO 120L.  
**Coreq:** ETRO 143  
**Comments:** Credit by exam is not an available option.  
**Description:** This course demonstrates the principles studied in ETRO 143 by means of laboratory experiments. Digital electronics concepts presented in ETRO 143 lectures are verified and reinforced by simulating, building, and testing digital electronics and computer circuits.  
*S (every 2 years)*

### ETRO 157 - Fundamentals of Web Design

**Credits:** 3  
**Class hours:** 6 lecture/lab  
**Prereq:** “C” or higher in ICS 100.  
**Description:** This course teaches the techniques for creating and managing a website using ADOBE’s web design software (GoLive, Photoshop, Illustrator, Live Motion, and Image Ready). The production process, elements of layout and design, interactivity, media creation, testing and optimization, and implementation are covered. By following these principles and techniques, a webpage that attracts and keeps browsers returning to it can be created. The student will design a website for a client and also have a website designed to his/her specification by another student.  
*F, S*

### ETRO 161 - Introduction to Optics and Photonics

**Credits:** 3  
**Class hours:** 6 lecture/lab  
**Prereq:** Qualified for ENG 100 and MATH 25.  
**Description:** This introductory photonics course covers the physics of light, laser safety, geometric optics, lenses, mirrors, polarizing lenses, interference/diffraction waves, laser physics, optical imaging, and bio-photonics. Lab experiments and projects are embedded to reinforce the theory and provide practical experience for those interested in pursuing a career in this field.  
*F, S*

### ETRO 166 - Introduction to Fiber Optics

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** Qualified for ENG 100 and MATH 25.  
**Description:** This course is an introduction to fiber optic communications, providing a basic background and featuring “hands-on” training for installation and maintenance. Emphasis will be on fiber optic data links for Local Area Network (LAN) applications. The basic background will cover the technology for fiber optic communications: fiber, cables, splices and connectors, emitters and detectors, transmitters and receivers, data links, LANs, and equipment for installation and maintenance.  
*F, S*
ETRO 199V - Projects in Electronics
Credits: 1-4
Class hours: 3 hours (1 credit), 5 hours (2 credits), 7 hours (3 credits), 9 hours (4 credits)
Prereq: Approval of instructor.
Recommended: ICS 100 or ETRO 18.
Comments: May be repeated for any number of times for credit.
Description: Students in this independent studies course are expected to write a project proposal which states the objectives or scope of the project, materials cost, expected outcomes, and implementation plan. A schedule of lab use time and instructor consultation time should also be included. The project must be documented and a final report is expected. F, S, Su

ETRO 240B - Cisco Networking 3
Credits: 3
Class hours: 6 lecture/lab
Prereq: "C" or higher in ETRO 140B and ETRO 140C.
Recommended: Basic computer and internet usage skills.
Description: This course describes the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with Open Shortest Path First (OSPF), Enhanced Interior Gateway Routing Protocol (EIGRP), and Spanning-Tree Protocol (STP) in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement a Wireless Local Area Network (WLAN) in a small-to-medium network. S (every 2 years)

ETRO 240C - Cisco Networking 4
Credits: 3
Class hours: 6 lecture/lab
Prereq: "C" or higher in ETRO 240B, or approval of instructor.
Recommended: Basic computer and internet usage skills.
Description: This course discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students will also develop the knowledge and skills needed to implement virtual private network (VPN) operations in a complex network. S

ETRO 244 - Cisco CCNA Security
Credits: 4
Class hours: 8 lecture/lab
Prereq: "C" or higher in ETRO 140B, or approval of instructor.
Recommended: ETRO 18 and ETRO 240B.
Description: CCNA Security is a hands-on career-oriented course preparing students with the associate-level knowledge and skills required to secure Cisco networks. Emphasis is placed on the development of a security infrastructure; identification of threats and vulnerabilities to networks; mitigation of security threats; and core security technologies. Students will experience hands-on installation, troubleshooting and monitoring of network devices to maintain integrity, confidentiality, and availability of data and devices.
ETRO 245 - Advanced Routing
Credits: 3
Class hours: 6 lecture/lab
Prereq: "C" or higher in ETRO 140B, ETRO 140C, ETRO 240B, and ETRO 240C or valid CCNA certification, or approval of instructor.
Comments: May be repeated for a maximum of 1 time for credit.
Description: The purpose of this course is to develop the knowledge and skills needed to manage Internet Protocol (IP) traffic and access; understand scalable internetworks; configure advanced routing protocols including Border Gateway Protocol [BGP], Enhanced Interior Gateway Routing Protocol [EIGRP], and Open Shortest Path First [OSPF]; configuration of Internet Protocol version 6 (IPv6); and configuration of secure routing solutions to support branch offices and mobile workers. Comprehensive labs emphasize hands-on learning and practice to reinforce configuration skills.
F (every 2 years)

ETRO 247 - Multilayer Switching
Credits: 3
Class hours: 6 lecture/lab
Prereq: "C" or higher in ETRO 140B, ETRO 140C, ETRO 240B, and ETRO 240C or valid CCNA certification, or approval of instructor.
Comments: May be repeated for a maximum of 1 time for credit.
Description: This course focuses on the development of knowledge and skills in monitoring and maintaining complex enterprise routed and switched Internet Protocol (IP) networks. Skills learned include the planning and execution of regular network maintenance, as well as support and troubleshooting using technology-based processes and best practices, in a systematic approach. Extensive labs emphasize hands-on learning and practice to reinforce configuration and troubleshooting skills.
S (every 2 years)

ETRO 248 - Network Troubleshooting
Credits: 3
Class hours: 6 lecture/lab
Prereq: "C" or higher in ETRO 245, ETRO 246, and ETRO 247.
Comments: May be repeated for a maximum of 1 time for credit.
Description: This course focuses on the development of knowledge and skills in monitoring and maintaining complex enterprise routed and switched Internet Protocol (IP) networks. Skills learned include the planning and execution of regular network maintenance, as well as support and troubleshooting using technology-based processes and best practices, in a systematic approach. Extensive labs emphasize hands-on learning and practice to reinforce configuration and troubleshooting skills.
S (every 2 years)

ETRO 257 - RF Communications
Credits: 4
Class hours: 8 lecture/lab
Prereq: "C" or higher in ETRO 122 and ETRO 122L.
Description: This course studies the general principles and characteristics of a variety of Radio Frequency (RF) Communications Systems. The coverage includes the analysis of digital and analog communications systems, subsystems, modulation techniques, and circuits. RF communication theory will be reinforced in lab with practical hands-on experience.
F (every 2 years)

ETRO 275 - Fundamentals of Linux
Credits: 3
Class hours: 6 lecture/lab
Prereq: "C" or higher in ICS 101, or approval of instructor.
Description: This course introduces the student to fundamentals of the Linux-based system that provides essential services for a local area network. Upon completion of this course, the student will have a basic understanding of the Linux operating system and have hands-on experience installing, managing, and troubleshooting the Linux operating system.
S (every 2 years)

ETRO 280 - Microprocessor Architecture, Programming, and Interfacing
Credits: 3
Class hours: 3 lecture
Prereq: Acceptance into Electronics Technology program. Qualified for ENG 100. "C" or higher in MATH 25 or MATH 26 or qualified for MATH 103.
Recommended: ETRO 143/143L.
Comments: Credit by exam is not an available option.
Description: Microprocessor trainers will be used to introduce microprocessor architecture, interfacing, and machine language programming. Memory, interfaces, I/O devices, and interrupt processed I/O will also be covered.
F (every 2 years)

ETRO 287 - Computer Systems and Networking
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in ETRO 280, or approval of instructor.
Coreq: ETRO 287L.
Comments: Credit by exam is not an available option.
Description: The Computer Systems course is the study of computer hardware, peripheral devices, and operating systems. Students gain an understanding of how hardware and peripheral devices are connected and function in the operation of a computer. Students also learn how the operating system software works in conjunction with the hardware to service the software applications. This basic knowledge will enable students to install, maintain, troubleshoot, and repair computer systems and peripherals. It will also enable them to upgrade, maintain, and troubleshoot operating systems. Hands-on experiences are provided in the co-requisite ETRO 287L.
S (every 2 years)
ETRO 287L - Computer Systems and Networking Laboratory

Credits: 1
Class hours: 3 lab
Prereq: "C" or higher in ETRO 280, or approval of instructor.
Coreq: ETRO 287
Comments: Credit by exam is not an available option.
Description: Computer Systems and Networking Laboratory is a co-requisite course to ETRO 287. Students gain hands-on experience working with computer hardware, peripheral devices, operating systems, and networks by working on a series of laboratory assignments. Students will build, upgrade, maintain, and troubleshoot computer and network hardware. Operating system installation, optimization, and troubleshooting are also included. Students also research and develop a project related to computer technology and present this project as a capstone experience. This experience reinforces the content of the computer systems lecture course and provides the necessary qualification to work as entry-level computer technicians. S (every 2 years)

ETRO 299V - Special Studies
See explanation under the heading of Special Studies.

ENRG 101 - Introduction to Sustainable Energy Technology (DP)

Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 22. Qualified for either MATH 26 or MATH 75.
Recommended: ICS 100, and qualified for ENG 100.
Description: This course introduces alternative methods for meeting long term energy needs, identifies and explores local resources including demand-side management of conventional gas and electric power and sustainable energy resources such as solar, wind, biomass, small hydroelectricity, geothermal, ocean thermal energy conversion, and alternative transportation fuel options.
ENG 18 - Reading Essentials
Credits: 3
Class hours: 3 lecture
Prereq: Acceptable reading placement test score (COMPASS 37-55).
Description: This course provides practice in building the essential skills which serve as the foundation for effective reading and study. Students will build vocabulary skills; identify main points, supporting details, and transitional elements; follow basic patterns of organization; recognize assumptions; differentiate between facts and opinions; and draw inferences. F, S

ENG 19 - Writing Essentials
Credits: 3
Class hours: 3 lecture
Prereq: Acceptable writing placement test score.
Recommended coreq: ENG 18
Description: Writing instruction in this course concentrates on sentence structure and paragraph development, with particular emphasis on topic sentences, organization, support, and correctness. Students will write an assortment of informal compositions of varying lengths. Through structured reading and writing, students will improve their skills in vocabulary, usage, punctuation, grammar, spelling, and structure. Students will also be introduced to a variety of study skills and self-management models as a means of increasing their academic successes.

ENG 21 - Introduction to College Reading
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 18 or acceptable reading placement test score.
Description: This course teaches the reading and study skills necessary to understand college-level readings, particularly academic texts. The primary emphasis is on improving literal, interpretive, and critical reading comprehension. Vocabulary building exercises are also included.

ENG 22 - Introduction to Composition
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 19 or acceptable writing placement test score.
Description: This course includes instruction in the writing process, including development and organization of ideas, revising, and editing, and also serves as an introduction to research strategies and writing from sources. Students will write a variety of compositions to communicate ideas for purposes. F, S, Su

ENG 100 - Composition I (FW)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 22 or acceptable writing placement test score.
Description: This course introduces students to the essential rhetorical, conceptual, and stylistic demands of writing in Standard American English at the college level. Instruction in composing processes, research strategies, and writing from sources is a focus of the course. The course also provides students with experiences in the library and on the internet to enhance their skills in accessing and using various types of primary and secondary materials. Students will engage in research activities, evaluate sources, and apply the principles of college writing to produce substantial college-level compositions, building foundation skills for writing in courses across the college curriculum.

ENG 99V - Special Studies
See explanation under the heading of Special Studies.

ENG 104 - Introduction to Creative Writing (DA)
Credits: 3
Class hours: 3 lecture
Recommended: ENG 100.
Description: This course introduces an introduction to the art of creative expression. Types of writing may include poetry, short stories, imaginative essays, and plays. The class offers opportunity for self-expression.

ENG 106 - Technical Writing
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 22 or acceptable reading and writing placement test scores.
Description: This course offers instruction and practice in the specialized writing that may be required of the students in various trade and technical positions and will emphasize practice in critical thinking and writing clear, effective university-level prose. Attention will be given to generating ideas, researching, drafting, revising, and editing.

ENG 117 - Introduction to Screenwriting
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100 or ENG 104.
Comments: Cross-listed with ART 117
Description: This is an introductory course in which students will learn the basic principles of screenwriting. This includes thorough instruction in story development and structure, appropriate terminology, and the experience of the writing and re-writing process. Activities include script writing, viewing and analyzing short films, in-class writing assignments, reading essays, and reading and critiquing short screenplays.

ENG 199V - Special Studies
See explanation under the heading of Special Studies.
Effective Through Fall 2015
ENG 253 - World Literature to 1600 (DL)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100.
Description: Students read selected major works from world literature translated into English from classical times through the 16th century. 
F

Effective Spring 2016
ENG 253 - World Literature to 1600 (DL)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100.
Description: Students read selected major works from world literature from classical times (Generally beginning with The Epic of Gilgamesh from around 2000 B.C.) through the 16th century, or the time of Shakespeare. Students will look at works from all the major cultures of the world. They will discuss these works in relation to their context, ideas, intended meaning, and historical significance. Literary movements and methods of interpretation also will be discussed.

Effective Through Fall 2015
ENG 254 - World Literature After 1600 (DL)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100.
Description: Students read selected major works of world literature from 1600 to the present.

Effective Spring 2016
ENG 254 - World Literature After 1600 (DL)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100.
Description: Students read selected major works of world literature from 1600 to the present.

ENG 254K - World Literature to 1600 (DL)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100.
Description: Students read selected major works from world literature translated into English from classical times through the 16th century. 

ENG 254K - World Literature to 1600 (DL)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100.
Description: Students read selected major works from world literature from classical times (Generally beginning with The Epic of Gilgamesh from around 2000 B.C.) through the 16th century, or the time of Shakespeare. Students will look at works from all the major cultures of the world. They will discuss these works in relation to their context, ideas, intended meaning, and historical significance. Literary movements and methods of interpretation also will be discussed.

ENG 255 - Short Story and Novel (DL)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100.
Description: This course offers opportunity for analysis and appreciation of two genres of fiction: the short story and the novel. 

ENG 256 - Drama and Poetry (DL)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100.
Description: This course offers opportunity for analysis and appreciation of poetry and drama.

ENG 257 - Literature by Women (DL)
Credits: 3
Class hours: 3 lecture
Prerequisite: "C" or higher in ENG 100.
Description: This course focuses on women authors and their works in a variety of literary genres. Students will read literature from the past and present by women of varied social and ethnic backgrounds to discover the common personal and political concerns which have motivated women to write throughout history. Emphasis will be placed upon developing critical thinking skills for understanding and appreciating individual texts as well as upon relating texts to each other.

ENG 257A - Literature and the Law
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in ENG 100.
Description: This course focuses on the study of literary texts that deal with significant aspects of the criminality and the law.

ENG 257K - Literature and Medicine (DL)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100.
Description: This course focuses on literature related to health and medicine. Students will read, analyze, and appreciate poetry, drama, and fiction related to disease, medical ethics, death and dying, and other issues.
ENGLISH
(ENG) • continued

ENG 257N - Introduction to Literature and Film (DL)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100.
Description: This course focuses on the study of short stories, novels, and plays adapted to film. The course will include film screenings and readings of literary texts and film criticism.

ENG 257T - Introduction to Children’s Literature (DL)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100.
Description: This course is an introduction to Children’s Literature and will offer a general survey of the history and development of children’s literature. Students will critically evaluate various genres of literature written for children and adolescents, including folk-tales, picture books, chapbooks, classical myths & legends, and the novel. Students will explore many themes associated with preteen and adolescent literature.

ENG 261 - Literature of the Pacific (DL)
Credits: 3
Class hours: 3 lecture
Recommended: “C” or higher in ENG 100.
Description: This class is an introduction to reading and interpreting literature of and about the cultures of the Pacific, including those of Melanesia, Micronesia, and Polynesia. Students will read, analyze, and appreciate works in a variety of literary genres. The class also will consider these works within their cultural, historical, political, and social contexts. Emphasis will be placed upon developing critical thinking skills through class discussion and close readings to improve students' understanding and appreciation of individual texts as well as to illustrate and explore the significance of common and conflicting themes.

ENG 299V - Special Studies
See explanation under the heading of Special Studies.
ENGLISH LANGUAGE INSTITUTE (ELI)

ELI 1 - Understanding and Speaking American English
Credits: 3
Class hours: 3 lecture
Prereq: Acceptable TOEFL score.
Comments: May be repeated any number of times for credit.
Description: This first semester course (of the sequence ELI 1 & 3) offers spoken American English for the non-native speaker of English. Special emphasis is placed on listening comprehension, fluency practice, oral communication activities, language learning strategies, and cultural awareness.

ELI 2 - Reading and Writing American English
Credits: 3
Class hours: 3 lecture
Prereq: Acceptable TOEFL score.
Comments: May be repeated any number of times for credit.
Description: This first semester course (of the sequence ELI 2 & 4) for non-native speakers of English focuses on reading comprehension skills, writing strategies and skills, vocabulary development, interpersonal communication skills, and cross-cultural understanding.

ELI 3 - Understanding and Speaking American English
Credits: 3
Class hours: 3 lecture
Prereq: Acceptable TOEFL score.
Comments: May be repeated any number of times for credit.
Description: This second semester course (of the sequence ELI 1 & 3) offers further practice in spoken American English for the non-native speaker of English. Special emphasis is placed on listening comprehension, fluency practice, and other oral communication activities. F, S

ELI 4 - Reading and Writing American English
Credits: 3
Class hours: 3 lecture
Prereq: Acceptable TOEFL score.
Comments: May be repeated any number of times for credit.
Description: This second semester course (of the sequence ELI 2 & 4) for non-native speakers of English provides further practice in reading comprehension skills, writing strategies and skills, vocabulary development, interpersonal communication skills, and cross-cultural understanding. F, S

ENTREPRENEURSHIP (ENT)

ENT 125 - Starting a Business
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher or concurrent enrollment in ENG 21 and ENG 22.
Description: This course surveys the business environment, establishing a firm, decision-making processes, marketing assessments, financing, operations considerations, and government regulations. It also covers development of a business plan. It is designed for those who wish to start or are currently operating their own business. F

ENT 130 - Marketing for the Small Business
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100.
Description: This course covers key concepts and issues underlying the modern practice of marketing for the small business. The course provides a clear understanding of marketing's role in the management of a small business including marketing terminology, consumer-oriented approach to marketing, channels of distribution, marketing research, concepts and practices of retailing, wholesaling, and physical distribution, marketing communication, personal selling, and marketing organization. F

ENT 150 - Basic Accounting and Finance for Entrepreneurs
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for MATH 24 or higher.
Description: This course introduces accounting concepts and principles, procedures, and systems for the entrepreneur. Application skills include recording, summarizing, reporting, analyzing, and using accounting information for the small business. The development of a financial plan for a small business will incorporate the basic concepts pertaining to financial statements and financial planning. F
FACILITIES ENGINEERING TECHNOLOGY (FENG)

FENG 20 - Facility Safety and Accident Prevention
Credits: 1
Class hours: 1 lecture
Description: This is an introductory course on facility maintenance safety, including the effect it has on productivity and employee morale. The course includes application of a safety program into basic accident prevention. Students will learn and evaluate various federal (Occupational Safety and Health Administration OSHA), state, and local laws governing safety. Topics include hazardous chemicals, fall protection, electrical safety, and drugs in the workplace. F

FENG 21 - Introduction to Building Maintenance
Credits: 3
Class hours: 1 lecture and 4 lecture/lab
Prereq: “C” or higher in CARP 20B.
Description: This course in general building and facilities maintenance covers carpentry skills in blueprint reading, measuring, framing, and exterior and roof finishes. This course also covers masonry skills in blueprint reading, brick size and texture, types of walls, foundations, anchors, concrete mixes, forms, stone, and plaster. Other topics include troubleshooting, preventative maintenance, and safety. F

FENG 22 - Interior Finishing
Credits: 1
Class hours: 2 lecture/lab
Prereq: “C” or higher in CARP 20B.
Description: This course provides an overview of interior finishes including general painting and wall coverings installation, as well as installation and finishing of drywall and suspended ceilings. Included are installation techniques and the selection of materials for various interior trim, including doors, windows, and baseboard. S

FENG 23 - Plumbing Basics and Repair
Credits: 2
Class hours: 4 lecture/lab
Prereq: “C” or higher in CARP 20B.
Description: This course provides an overview of the plumbing systems and the materials, tools, and techniques used in the repair and maintenance of the fixtures and appliances found in a building. Included are safety precautions, tool selection, and an introduction to the codes that apply to a plumbing system. F, S

FENG 30 - Basic Fundamentals of Air Conditioning and Refrigeration
Credits: 3
Class hours: 2 lecture and 3 lab
Prereq: Qualified for ENG 21 and MATH 22. “C” or higher in ELEC 20. Comments: Credit by exam is not an available option.
Description: This class offers the basic principles and fundamentals of air conditioning and refrigeration. The course is designed to expose students to the methods of maintaining, diagnosing, and minor repairing of domestic and commercial air conditioning/refrigeration systems. F

FENG 40 - Commercial Refrigeration and Air Conditioning Diagnostics
Credits: 3
Class hours: 2 lecture and 2 lecture/lab
Prereq: “C” or higher in FENG 30 and ELEC 41.
Description: This course builds on the skills acquired in the FENG 30 Basic Air Conditioning and Refrigeration course. This develops advanced skills for technicians, air conditioning and refrigeration helpers, and an introduction to mechanical engineering. This course covers the performance evaluation on working systems under various conditions along with developing refrigerant diagnostic skills. EPA Recovery Certification is required. S

FENG 56 - Solar Thermal Systems I
Credits: 3
Class hours: 2 lecture and 2 lecture/lab
Prereq: “C” or higher in FENG 23.
Description: This course focuses on the installation, components, and theory of residential domestic solar hot water systems. Students will engage in hands-on activities, as well as individual and team assignments. Students must have the ability to climb ladders, work at a height of ten feet off of the ground, operate soldering torches, work in a hot water environment, work productively both individually and in teams, and be able to lift 50 pounds in weight.

FENG 80 - Introduction to Zero Waste Strategies for Facility Operations
Credits: 3
Class hours: 6 lecture/lab
Prereq: Qualified for MATH 24.
Description: This is an introductory course exploring the theories, concepts, and applications of emerging technologies and strategies currently demonstrated in the field of solid waste management for Facility Engineering and Maintenance program. The course will introduce students to project-based activities utilizing Zero Waste strategies and practices for solid waste management. Material and resource recovery will be examined with an emphasis on contemporary and sustainable industry practices.

FENG 99V - Special Studies
See explanation under the heading of Special Studies.

FRENCH (FR)

FR 101 - Elementary French I
Credits: 4
Class hours: 4 lecture
Prereq: Qualified for ENG 21.
Comments: The laboratory is part of the class.
Description: This course is an introduction to the French language emphasizing conversation, listening, grammar, reading, and writing. F

FR 102 - Elementary French II
Credits: 4
Class hours: 4 lecture
Prereq: “C” or higher in FR 101.
Comments: The laboratory is part of the class.
Description: This course is a continuation of FR 101: Conversation, listening, grammar, reading, and writing. S
**GEOLOGY (GG)**

**Effective Through Fall 2015**

**GG 101 - Introduction to Geology (DP)**

Credits: 4

Class hours: 3 lecture and 3 lab

**Prereq:** Qualified for MATH 26 and ENG 100; or qualified for MATH 25.

**Comments:** The laboratory is part of the class.

**Description:** This course is a study of the principles of physical geology, the composition and structure of the earth, and the processes shaping the earth’s surface. We’ll study geology as it affects our lives and shapes our landscape including volcanoes, earthquakes, tsunamis, and other processes such as weathering and mountain building that evolve or act over extremely long time periods. The course also explores the very nature of science and scientific inquiry through the unifying theory of plate tectonics, the most recent and perhaps most dramatic example of new evidence and understanding revolutionizing a scientific discipline.

There are two field trips.

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**Effective Spring 2016**

**GG 101L - Introduction to Geology Lab (DY)**

Credits: 1

Class hours: 1 lab

**Prereq:** Qualified for MATH 26 and ENG 100; or qualified for MATH 25.

**Description:** GG 101L explores basic procedures of geologic investigations into the structure and properties of Earth and its geologic processes. Two field trips may be required.
### HAWAIIAN (HAW)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Class Hours</th>
<th>Prereq</th>
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<td>HAW 101</td>
<td>Elementary Hawaiian I</td>
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<td>4 lecture</td>
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<td>Intermediate Hawaiian I</td>
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<td>Intermediate Hawaiian II</td>
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<td>HAW 211</td>
<td>Introduction to Hawaiian Conversation</td>
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<td>3 lecture</td>
<td>&quot;C&quot; or higher in HAW 202.</td>
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<td>HAW 212</td>
<td>Introduction to Hawaiian Composition</td>
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<td>HAW 261</td>
<td>Hawaiian Literature in English (DL)</td>
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<td>3 lecture</td>
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<td>and sayings. The emphasis will be on the</td>
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<td>various modes of native Hawaiian literature</td>
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<td>be presented in English translation.</td>
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<td>HAW 262</td>
<td>Survey of Hawaiian Writings (DL)</td>
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<td>different styles and modes of native Hawaiian</td>
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# HAWAIIAN STUDIES (HWST)

## HWST 107 - Hawai‘i: Center of the Pacific (DH)

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** Qualified for ENG 22.  
**Description:** This course is an introduction to the unique aspects of Hawai‘i and Hawaiian culture in relation to the larger Pacific including origins, language, religion, land, art, history, and current issues.  
**F, S**

## HWST 111 - The Hawaiian `Ohana (DH)

**Credits:** 3  
**Class hours:** 3 lecture  
**Description:** This course presents Hawaiian values through the traditional family system. Ancestral family practices will be investigated and compared with current Hawaiian lifestyles and values.  
**F**

## HWST 128 - Hula and Chant (DA)

**Credits:** 3  
**Class hours:** 2 lecture and 3 lab  
**Comments:** The laboratory is part of the class.  
**Description:** An introduction to hula and chant covering the fundamentals of traditional dance and traditions, chant, protocol, and language.  
**F**

## HWST 177 - Hawaiian Music in Transition (DA)

**Credits:** 3  
**Class hours:** 3 lecture  
**Description:** This course studies musical traditions in Hawai‘i from pre-contact to the present. It includes indigenous Hawaiian music, its acculturated forms and contemporary trends, and non-Hawaiian music in Hawai‘i. Students will consider aspects of musical style, instruments used, composition, teaching and performance practice, the role of music in society, and repertoire. No musical background is necessary.  
**S**

## HWST 199V - Special Studies

See explanation under the heading of Special Studies.

## HWST 251 - Mahi`ai Kalo (Taro Cultivation)

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** Qualified for ENG 100.  
**Description:** For the past 2,000 years taro, or kalo, has been the main staple and most important food of the Hawaiian people. It has also played a very important role in the beliefs and daily lives of Hawaiians. This course will study the cultural link between the Hawaiians and kalo through the study of traditional cultivation, maintenance, and processing methods used by the Hawaiians. This will occur in conjunction with hands-on experience.  
**F, S**

## HWST 270 - Hawaiian Mythology

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** "C" or higher in both HWST 107 and HAW 101 or approval of instructor.  
**Description:** An introduction to Hawaiian mythology and mo‘olelo as a basis of understanding (or a reflection) of Hawaiian culture, values, metaphor, and worldviews. This course will investigate and analyze oral and written Hawaiian literary sources and the roles of akua, `aumakua, kupua and kanaka.

## HWST 278 - Hawaiian Astronomy and Weather Relating to Polynesian Voyaging (DH)

**Credits:** 3  
**Class hours:** 3 lecture/week plus a two-week visitation of the host country  
**Prereq:** Approval of instructor.  
**Recommended:** "C" or higher in HAW 261, HIST 284, HWST 107, HWST 111, Hawaiian Language courses, Spanish or French if appropriate to the country being visited.  
**Description:** Investigating Polynesian connections through life experiences. This is a study abroad course in which the student will experience the interconnectedness of the peoples and cultures of Polynesia through cultural immersion. Studies will begin on the home campus and culminate with a visit to the host country.

## HWST 281 - Hawaiian Astronomy

**Credits:** 4  
**Class hours:** 3 lecture and 2 lecture/lab  
**Prereq:** "C” or higher in HWST 107.  
**Description:** An introduction to Hawaiian medicinal herbs including the basic philosophy and strictness in adhering to protocol, with discussion, identification, and utilization of various methods and techniques of extraction used by Hawaiians in preparing native and hānai herbs (hānai: exotic herbs adopted into the culture) for curing diseases.

## HWST 290 - Rediscovering Polynesian Connections (DH)

**Credits:** 3  
**Class hours:** 3 lecture/week plus a two-week visitation of the host country  
**Prereq:** Approval of instructor.  
**Recommended:** "C” or higher in HAW 261, HIST 284, HWST 107, HWST 111, Hawaiian Language courses, Spanish or French if appropriate to the country being visited.  
**Description:** Investigating Polynesian connections through life experiences. This is a study abroad course in which the student will experience the interconnectedness of the peoples and cultures of Polynesia through cultural immersion. Studies will begin on the home campus and culminate with a visit to the host country.

## HWST 295 - Hawaiian Medicinal Herbs I: La`au Lapa`au

**Credits:** 3  
**Class hours:** 2 lecture and 2 lecture/lab  
**Prereq:** "C” or higher in HWST 107.  
**Description:** An introduction to Hawaiian medicinal herbs including the basic philosophy and strictness in adhering to protocol, with discussion, identification, and utilization of various methods and techniques of extraction used by Hawaiians in preparing native and hānai herbs (hānai: exotic herbs adopted into the culture) for curing diseases.

## HWST 298 - Hawaiian Medicinal Herbs II: La`au Lapa`au

**Credits:** 3  
**Class hours:** 2 lecture and 2 lecture/lab  
**Prereq:** "C” or higher in HWST 107.  
**Description:** Advanced study and preparation of Hawaiian and hānai herb combinations to address health and wellness.

## HWST 299V - Special Studies

See explanation under the heading of Special Studies.
HEALTH
(HLTH)

HLTH 140 - Introduction to Human Body Systems and Related Medical Terminology
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 102.
Description: This course provides students with an introduction to the medical terminology related to human body systems. Normal anatomy and function, pathology, and related medical tests and procedures will also be explored. F, S

HLTH 145 - Introduction to Healthcare
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in HLTH 140. Qualified for ENG 21.
Description: This course provides an introduction to health care and health professions. It focuses on the concepts of effective communication, emergency preparedness, and protective practices to prevent illness and injury. Professional ethics will also be discussed.

Effective Through Fall 2015
HLTH 155 - Introduction to the Study of Diseases
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in HLTH 140.
Description: This course provides an introduction to the general concepts and characteristics of disease processes. Etiology, signs and symptoms, as well as diagnostic tests and treatments of selected diseases from major body systems will be discussed. F, S

Effective Spring 2016
HLTH 155 - Introduction to the Study of Diseases
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in HLTH 140. Qualified for ENG 100.
Description: This course provides an introduction to the general concepts and characteristics of disease processes. Etiology, signs and symptoms, as well as diagnostic tests and treatments of selected diseases from major body systems will be discussed.

HLTH 240 - Medical Law and Professional Ethics
Credits: 2
Class hours: 2 lecture
Prereq: “C” or higher in HLTH 155.
Description: This course focuses on the legal implications and ethical considerations that impact health care. Students will analyze medical legal issues and relate ethical concepts to the professional practice of an allied health professional. S

HLTH 285 - Human Nutrition
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in HLTH 155. Qualified for ENG 100.
Description: This course provides students with an introduction to Human Nutrition from a scientific and cultural perspective. The basic components of nutrition and a healthy diet are explored. Food sustainability and food politics are introduced. Sustainable diet planning with a cultural perspective is discussed. Basic research methodology is examined.
HEALTH, PHYSICAL EDUCATION, AND RECREATION (HPER)

HPER 100 - Health, Wellness, and Fitness
Credits: 2
Class hours: 1 lecture and 2 lecture/lab
Prereq: Qualified for ENG 21.
Description: In this course, students develop an understanding of the concepts of health, wellness, and physical fitness as these concepts relate to their lifestyles. Students will explore the progression of conditioning exercises and activities that develop and maintain physical fitness, and lifestyle choices that maintain health and wellness. This course will take place in both the classroom and lab setting. F, S

HPER 108 - Beginning Yoga
Credits: 2
Class hours: 4 lecture/lab
Comments: May be repeated for a maximum of 2 credits.
Description: This course will focus on the practice of Hatha yoga. General philosophy, history, and benefits toward wellness will be included. The primary emphasis will be on the performance of asanas (postures) and pranayamas (breathing exercises), along with emphasis on yamas (ethical principles), niyamas (personal conduct), and dhyana (meditation) in order to improve overall wellness. F, S

HPER 130 - Beginning Tennis
Credits: 1
Class hours: 2 lecture/lab
Comments: May be repeated for a maximum of 2 credits.
Description: Students will develop the fundamental skills of tennis for singles and doubles competition. F, S

Effective Through Fall 2015
HPER 131 - Intermediate Tennis
Credits: 1
Class hours: 2 lecture/lab
Prereq: “C” or higher in HPER 130.
Comments: May be repeated for a maximum of 2 credits, and unlimited for non-credit.
Description: This course is designed to provide students with the opportunity to refine basic tennis skills and focus on more advanced technical skills. There will be an emphasis on court strategy for singles and doubles.

Effective Spring 2016
HPER 131 - Intermediate Tennis
Credits: 1
Class hours: 2 lecture/lab
Prereq: “C” or higher in HPER 130.
Comments: May be repeated for a maximum of 2 credits, and unlimited for non-credit.
Description: This course is designed to provide students with the opportunity to refine basic tennis skills and focus on more advanced technical skills. There will be an emphasis on court strategy for singles and doubles.

Effective Spring 2016
HPER 137 - Basketball
Credits: 1
Class hours: 2 lecture/lab
Comments: May be repeated for a maximum of 2 credits.
Description: This course will focus on the basic knowledge and practice of the fundamental skills of basketball with emphasis on offensive and defensive strategies.

HPER 137 - Basketball
Credits: 1
Class hours: 2 lecture/lab
Comments: May be repeated for a maximum of 2 credits.
Description: This course will focus on the basic knowledge and practice of the fundamental skills of basketball with emphasis on offensive and defensive strategies.

Effective Through Fall 2015
HPER 132 - Advanced Tennis
Credits: 1
Class hours: 2 lecture/lab
Prereq: “A” in HPER 131.
Recommended: United States Tennis Association (USTA) rating of 3.5 or higher.
Comments: May be repeated any number of times for credit.
Description: Students will learn additional skills of tennis needed for advanced competition with emphasis on singles and doubles strategies. S

Effective Spring 2016
HPER 132 - Advanced Tennis
Credits: 1
Class hours: 2 lecture/lab
Prereq: “B” or higher in HPER 131.
Recommended: United States Tennis Association (USTA) rating of 3.5 or higher.
Comments: May be repeated for a maximum of 2 credits.
Description: This course will focus on students learning additional skills of tennis needed for advanced competition with emphasis on singles and doubles strategies. Emphasis is on development of total fitness and more advanced play for leisure use.

Effective Spring 2016
HPER 137 - Basketball
Credits: 1
Class hours: 2 lecture/lab
Comments: May be repeated any number of times for credit.
Description: This course introduces the student to the proper lifting mechanics and benefits of weight training. Emphasis will be placed on conditioning, myths, and facts related to weight training. F, S

Effective Through Fall 2015
HPER 152 - Weight Training
Credits: 1
Class hours: 2 lecture/lab
Comments: May be repeated any number of times for credit.
Description: This course introduces the student to the proper lifting mechanics and benefits of weight training. Emphasis will be placed on conditioning, myths, and facts related to weight training. F, S
HEALTH, PHYSICAL EDUCATION, AND RECREATION (HPER) • continued

HPER 160 - Fitness Boot Camp
Credits: 1
Class hours: 2 lecture/lab
Recommended: Medical clearance.
Comments: May be repeated for a maximum of unlimited credits.
Description: This course will focus on the development and maintenance of the following components of fitness: muscular endurance, strength, cardiovascular fitness, balance, speed, and coordination. General fitness concepts to improve each component of fitness, nutrition, and weight management will be included. The primary emphasis is helping reduce the risk of functional decline and improve overall performance in everyday activities.

HPER 171 - Intermediate Yoga
Credits: 2
Class hours: 4 lecture/lab
Prereq: "C" or higher in HPER 108 (Beginning Yoga) or approval of instructor.
Recommended: 1) Medical Clearance if you have not been regularly active. 2) Consistent and recurring participation in a Yoga practice.
Comments: May be repeated for a maximum of 4 credits.
Description: This course will focus on corrective work and improvement of basic poses, as well as intermediate poses, meditation, breathing, and relaxation techniques in Hatha Yoga with independent, group, and personalized training. Students will study yoga history, philosophy, and understand how to apply principles of yoga into a healthy lifestyle.

HPER 195 - Modern Health: Personal and Community
Credits: 2
Class hours: 2 lecture
Prereq: Qualified for ENG 102.
Description: This course introduces the concepts of personal, physical, and emotional health. Community health and the evaluation of health-related information will also be discussed.

HPER 270 - Personal Trainer
Credits: 2
Class hours: 4 lecture/lab
Prereq: Qualified for ENG 22 and MATH 75.
Recommended: BLS - CPR Certification.
Description: This course focuses on applied kinesiology, exercise physiology, and nutrition. Functional screening and application to training programs will also be discussed. With completion of the course, the students will be eligible to take the ACE Personal Trainer Certification Exam and become effective personal trainers.
HIST 151 - World History to 1500 (FGA)
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100.
Description: A global and historical survey focusing on human societies and cross-cultural interactions to 1500 C.E. History 151 is the first half of a two-semester series of courses that cover human history from our origins through the twentieth century. This course provides a survey of world history from the prehistoric era to 1500 C.E. with an emphasis on the development of complex societies and enduring historical trends. F, S, Su

HIST 152 - World History Since 1500 (FGB)
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100.
Description: A global and historical survey focusing on human societies and cross-cultural interactions since 1500 C.E. History 152 is the second half of a two-semester series of courses that cover human history from our origins through the twentieth century. This course provides a survey of world history since 1500 C.E. with an emphasis on the growth of and response to global empires, as well as the major revolutions which characterize the modern world. F, S, Su

HIST 241 - History of Asia to 1500 (DH)
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100.
Description: This is the first in a two-semester series of courses that provide a survey of the history of East, Southeast, and South Asia from the earliest times to the modern era. History 241 will examine the history of Asia from the prehistoric era through 1500 CE. It includes a broad survey of major historical figures, events, and developments in India, China, Korea, and Japan. Students will examine a number of interrelated processes—the origins of civilizations, the formation and disintegration of great empires, the evolution of ruling classes, the growth and spread of religions, as well as nomadic-sedentary relations.

HIST 242 - History of Asia since 1500 (DH)
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100.
Description: The second in a two-semester series of courses that provide a survey of the history of East, Southeast, and South Asia from the earliest times to the modern era. History 242 will examine the history of Asia from the year 1500 through the present. It includes a broad survey of major historical figures, events, and developments in India, China, Korea, and Japan. Students will examine a number of interrelated processes: technological change, the impact of Western imperialism, the growth of Asian nationalism, and the transition to a modern world.

HIST 250 - Film and World History Since WWII (DH)
Credits: 3
Class hours: 3 lecture
Comments: Cross-listed with ART 250
Description: This course examines historical events, from WWII until the present, through cinema. Significant events and turning points will be discussed, including the attack on Pearl Harbor, the Holocaust, and the Cold War. Films from around the world will be examined for their context in history, as well as for their inherent cinematic qualities. The course will examine how cinema has influenced world events, as well as how world events have shaped the direction of cinema. S

HIST 281 - Introduction to American History (DH)
Credits: 3
Class hours: 3 lecture
Description: This course surveys United States history from the earliest European settlements through the Civil War. F

HIST 282 - Introduction to American History II (DH)
Credits: 3
Class hours: 3 lecture
Description: This course surveys the United States from the reconstruction period to the present. S

HIST 284 - History of the Hawaiian Islands (DH)
Credits: 3
Class hours: 3 lecture
Description: This survey of the history of Hawai‘i from the late prehistoric period to the present emphasizes the cross-cultural nature of island society. S

HIST 284K - History of Kaua‘i (DH)
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100.
Description: A history of the island of Kaua‘i from the prehistoric period to the present. F

HORT 200 - Introduction to Horticulture (DB & DY)
Credits: 3
Class hours: 2 lecture and 2 lecture/lab
Prereq: "C" or higher in BOT 101 or SCI 121/121L.
Description: This course is an introduction to horticultural crop science with emphasis on plant structure and function, and environmental factors that affect plant growth. The class will cover the horticultural industry, horticultural crop families, growing systems, soil preparation and fertility, soil and water management, plant breeding and varieties, identifying and controlling pests, regulating plant growth, harvesting, value-added applications, and marketing. F, S

Effective Spring 2016
HORT 200 - Introduction to Horticulture (DB & DY)
Credits: 3
Class hours: 2 lecture and 2 lecture/lab
Description: This course is an introduction to horticultural crop science with emphasis on plant structure and function, and environmental factors that affect plant growth. The class will cover the horticultural industry, horticultural crop families, growing systems, soil preparation and fertility, soil and water management, plant breeding and varieties, identifying and controlling pests, regulating plant growth, harvesting, value-added applications, and marketing.
**HOSPITALITY AND TOURISM (HOST)**

**HOST 101 - Introduction to Hospitality and Tourism**

*Credits: 3  
Class hours: 3 lecture  
Description: This course builds and maintains the critical skills and understanding necessary to be a dynamic and successful member of today’s rapidly-growing service economy. Individuals who work with customers will gain insight into customer service behavior and attitudes and develop strategies to create positive customer relationships encountered in various job situations. Students will gain an understanding of Hawai’i’s travel industry and the strategies and skills related to career success and customer satisfaction in the hospitality industry. F, S*

**HOST 125 - Service Excellence**

*Credits: 3  
Class hours: 3 lecture  
Description: This course builds and maintains the critical skills and understanding necessary to be a dynamic and successful member of today’s rapidly-growing service economy. Individuals who work with customers will gain insight into customer behavior and attitudes and will develop strategies to create positive customer relationships encountered in various situations on the job. F, S*

**HOST 150 - Housekeeping Operations**

*Credits: 3  
Class hours: 3 lecture  
Prereq: “C” or higher in HOST 101.  
Description: This course is the study of the practical applications of professional housekeeping operations including the functions of management, interdepartmental relationships, and preventive maintenance practices required to assure quality service. S*

**HOST 152 - Front Office Operations**

*Credits: 3  
Class hours: 3 lecture  
Prereq: “C” or higher in HOST 101.  
Comments: Credit by exam is not an available option.  
Description: This course studies the philosophy, theory, equipment, and current operating procedures of a hotel front office. It concentrates on the human relations skills necessary for effective guest and employee relations and the technical skills necessary to operate a manual, mechanical, or computerized front office operation. F*

**HOST 154 - Food and Beverage Operations**

*Credits: 3  
Class hours: 3 lecture  
Description: This course introduces the basic principles of marketing, menu planning, service styles, nutrition, sanitation and safety, purchasing, and control systems as they apply to food and beverage management in an operational setting. The class provides practical applications to effectively manage resources for food and beverage industry operations. S*

**HOST 199V - Special Studies**

*See explanation under the heading of Special Studies.*

**HOST 290 - Hospitality Management**

*Credits: 3  
Class hours: 3 lecture  
Prereq: Qualified for ENG 100. “C” or higher in HOST 101.  
Description: This course examines the management process in hospitality operations, focusing on the managerial functions of planning, organizing, staffing, directing, and controlling to bring about organizational effectiveness. Scenarios, case studies, and an industry-based project will reinforce management principles. F, S*

**HOST 293V - Cooperative Education**

*Credits: 1-3  
Class hours: 1 credit = 75 hours of work experience, 2 credits = 150 hours of work experience, 3 credits = 225 hours of work experience  
Prereq: Hospitality and Tourism major. Department approval. “C” or higher in HOST 101 and HOST 125.  
Description: Cooperative Education is a supervised field experience that is related to the student’s major or career goals. The experience will enable the student to apply knowledge and skills learned in coursework to the work environment. F, S*
ICS 100 - Computing Literacy and Applications
Credits: 3
Class hours: 3 lecture
Comments: Credit by exam is not an available option.
Description: This course is an introductory survey of computers and their role in the information world emphasizing computer terminology, hardware, and software. Students will receive opportunities for hands-on experience using applications software which may include spreadsheets, word processing, presentations, communications, and databases.

ICS 101 - Digital Tools for the Information World
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100 and MATH 103, “C” or higher in ICS 100, or acceptable math placement test score.
Comments: The laboratory is part of the class. Credit by exam is not an available option.
Description: Hands-on computer class with emphasis on producing professional-level documents, spreadsheets, presentations, databases, and webpages for problem solving. Includes concepts, terminology, and a contemporary operating system.

ICS 111 - Introduction to Computer Science I
Credits: 4
Class hours: 3 lecture and 3 lab
Prereq: “C” or higher in ICS 101.
Comments: The laboratory is part of the class. Credit by exam is not an available option.
Description: This course is intended for Computer Science majors and all others interested in the first course in programming. This course is an overview of the fundamentals of computer science emphasizing problem solving, algorithm development, implementation, and debugging/testing using an object-oriented programming language.

ICS 120V - Projects in Computer Science and Programming
Credits: 1-2
Class hours: 3-6 lab
Prereq: “C” or higher in ICS 101.
Comments: Credit by exam is not an available option. May be repeated once for credit.
Description: Primarily for students with strong interest in computers and computer programming. Involves materials and techniques beyond that used in the regular computer science courses. Individual work on problem solving by computer.
### INTERDISCIPLINARY STUDIES (IS)

**IS 50 - Summer Bridge**  
**Credits:** 2  
**Class hours:** 2 lecture  
**Description:** IS 50: Summer Bridge is meant to help prepare students for their first semester at KCC. This course includes the study of resources available to students at KCC, college-level study skills, non-cognitive affective success skills, and the use of technology to create, manage, and share files.

**IS 99V - Special Studies**  
See explanation under the heading of Special Studies.

**IS 103 - Introduction to College**  
**Credits:** 3  
**Class hours:** 3 lecture  
**Description:** Introduction to College is a comprehensive first-year experience course for incoming and returning new students. In IS 103, students will develop, practice, and refine success techniques for college, including methods to enhance self-esteem, motivation, goal setting, time management and career exploration, scheduling, study habits and skills, dealing with the unexpected, understanding college culture and using resources, test-taking skills, written and oral communication, research skills, computer literacy, critical thinking, team building, and networking within the college community.  

**IS 199V - Special Studies**  
See explanation under the heading of Special Studies.

### JAPANESE (JPNS)

#### JPNS 101 - Elementary Japanese I  
**Credits:** 4  
**Class hours:** 4 lecture  
**Comments:** The laboratory is part of the class.  
**Description:** This course is an introduction to the Japanese language emphasizing conversation, listening, grammar, reading, and writing.  

#### JPNS 102 - Elementary Japanese II  
**Credits:** 4  
**Class hours:** 4 lecture  
**Prereq:** "C" or higher in JPNS 101 or placement test score demonstrating equivalent knowledge and skills.  
**Comments:** The laboratory is part of the class.  
**Description:** This is the second semester of an intermediate course in spoken and written Japanese.

#### JPNS 201 - Intermediate Japanese I  
**Credits:** 4  
**Class hours:** 4 lecture  
**Prereq:** "C" or higher in JPNS 102 or placement test score demonstrating equivalent knowledge and skills.  
**Comments:** The laboratory is part of the class.  
**Description:** This is the first half of an intermediate course in spoken and written Japanese. As a second-year course, it emphasizes reading and writing. Students are expected to have an active knowledge of both Hiragana and Katakana.

#### JPNS 202 - Intermediate Japanese II  
**Credits:** 4  
**Class hours:** 4 lecture  
**Prereq:** "C" or higher in JPNS 201 or placement test score demonstrating equivalent knowledge and skills.  
**Comments:** The laboratory is part of the class.  
**Description:** This is the second semester of an intermediate course in spoken and written Japanese.

#### JPNS 299V - Special Studies  
See explanation under the heading of Special Studies.

#### JPNS 202 - Intermediate Japanese II  
**Credits:** 4  
**Class hours:** 4 lecture  
**Prereq:** "C" or higher in JPNS 201 or placement test score demonstrating equivalent knowledge and skills.  
**Comments:** The laboratory is part of the class.  
**Description:** This is the second semester of an intermediate course in spoken and written Japanese.

#### JPNS 199V - Special Studies  
See explanation under the heading of Special Studies.

#### JPNS 201 - Intermediate Japanese I  
**Credits:** 4  
**Class hours:** 4 lecture  
**Prereq:** "C" or higher in JPNS 102 or placement test score demonstrating equivalent knowledge and skills.  
**Comments:** The laboratory is part of the class.  
**Description:** This is the first half of an intermediate course in spoken and written Japanese. As a second-year course, it emphasizes reading and writing. Students are expected to have an active knowledge of Hiragana, Katakana, and approximately 50 to 80 Kanji.

### JPNS 202 - Intermediate Japanese II  
**Credits:** 4  
**Class hours:** 4 lecture  
**Prereq:** "C" or higher in JPNS 201 or placement test score demonstrating equivalent knowledge and skills.  
**Comments:** The laboratory is part of the class.  
**Description:** This is the second semester of an intermediate course in spoken and written Japanese.

### JPNS 199V - Special Studies  
See explanation under the heading of Special Studies.

#### JPNS 201 - Intermediate Japanese I  
**Credits:** 4  
**Class hours:** 4 lecture  
**Prereq:** "C" or higher in JPNS 102 or placement test score demonstrating equivalent knowledge and skills.  
**Comments:** The laboratory is part of the class.  
**Description:** This is the first half of an intermediate course in spoken and written Japanese. As a second-year course, it emphasizes reading and writing. Students are expected to have an active knowledge of Hiragana, Katakana, and approximately 50 to 80 Kanji.

#### JPNS 202 - Intermediate Japanese II  
**Credits:** 4  
**Class hours:** 4 lecture  
**Prereq:** "C" or higher in JPNS 201 or placement test score demonstrating equivalent knowledge and skills.  
**Comments:** The laboratory is part of the class.  
**Description:** This is the second semester of an intermediate course in spoken and written Japanese.

#### JPNS 199V - Special Studies  
See explanation under the heading of Special Studies.
**MACHINE SHOP**  
(MACH)

**MACH 19 - Introduction to Machine Shop**

**Credits:** 3  
**Class hours:** 1 lecture and 4 lab  
**Comments:** Credit by exam is not an available option. May be repeated any number of times for credit.

**Description:** An introduction to basic machine tools, precision measurements, bench layout techniques, and industrial safety. Theory and practices of drill press, lathe operations, milling, and boring machines are covered with emphasis on automotive engine machine work.

**MACH 99V - Special Studies**

See explanation under the heading of Special Studies.

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**JOURNALISM**  
(JOUR)

**JOUR 205 - News Writing**

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** “B” or higher in ENG 22.  
**Description:** This introduction to the theoretical and practical aspects of news writing includes technical, legal, and procedural considerations. It provides practical experience in news reporting and news writing.  
**F, S**

**JOUR 285V - Newspaper Laboratory**

**Credits:** 1-3  
**Class hours:** 3-9 lab  
**Prereq:** "C" or higher in JOUR 205. Approval of instructor.  
**Comments:** May be repeated any number of times for credit.

**Description:** Students in this course produce a campus newspaper. Production steps include interviewing, writing copy, editing, and layout.  
**F, S**

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**LINGUISTICS**  
(LING)

**LING 102 - Introduction to the Study of Language (DH)**

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** Qualified for ENG 100.  
**Description:** This course offers an overview of linguistic study, introducing students to linguistic principles and terminology applicable to all languages. In exploring the nature and function of human languages, the course examines how language is used, how it is acquired, how it changes over time, how it is patterned, how it is represented and processed in the brain, and how it affects culture and history. Major concerns, discoveries, methods, and controversies in this exciting field are discussed.  
**F, S**

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**MANAGEMENT**  
(MGT)

**MGT 120 - Principles of Management**

**Credits:** 3  
**Class hours:** 3 lecture  
**Comments:** Credit by exam is not an available option.

**Description:** This course introduces the functions of management from an organizational viewpoint: planning, organizing, directing, and controlling. Contemporary studies that relate to communication, motivation, leadership styles, and decision making will be included.  
**F, S**

**MGT 122 - Human Relations in Business**

**Credits:** 3  
**Class hours:** 3 lecture  
**Comments:** Credit by exam is not an available option.

**Description:** This course gives students an opportunity to understand and utilize human relations concepts as they apply to the business environment. Areas included are morale, personal efficiency, leadership, personality, motivation, and communication.  
**F, S**
MARE 171 - Introduction to Marine Biology I (DB)

Credits: 3
Class hours: 3 lecture
Coreq: CHEM 151 (or CHEM 161) and MARE 171
Recommended: ENG 100 or equivalent
Comments: Cross-listed with BIOL 171.
Description: MARE 171 Introduction to Marine Biology I is an introductory biology course with a marine emphasis for all life science majors. Cell structure and chemistry; growth, reproduction, genetics, evolution, viruses, bacteria, and simple eukaryotes.  

MARE 171L - Introduction to Marine Biology Laboratory I (DY)

Credits: 1
Class hours: 3 lab
Coreq: CHEM 151 (or CHEM 161) and MARE 171
Comments: Cross-listed with BIOL 171L.
Description: The laboratory complements MARE 171 and must be taken concurrently with the lecture. It is intended to provide laboratory experiences that focus on organic molecules, cell structure, cell functions, and genetics.  

MARE 172 - Introduction to Marine Biology II (DB)

Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in MARE 171 and 171L.
Coreq: MARE 172L
Comments: This course is cross-listed with BIOL 172.
Description: BIOL/MARE 172 is a continuation of BIOL/MARE 171 emphasizing anatomy, physiology, and systematic of plants and animals to include behavior, ecosystems, populations, and communities.  

MARE 172L - Introduction to Marine Biology Laboratory II (DY)

Credits: 1
Class hours: 3 lab
Coreq: MARE 172
Comments: This course is cross-listed with BIOL 172L.
Description: This laboratory complements the MARE/BIOL 172 lecture and must be taken concurrently with the lecture. It is intended to provide laboratory experiences that focus on a systemic study of the anatomy and physiology of plants and animals, and how they interact in populations, ecosystems, and communities.  

MKT 130 - Principles of Retailing

Credits: 3
Class hours: 3 lecture
Description: This course provides an introductory view of retailing and its relative position in the marketing chain. The primary emphasis is on the basic functions of a retail store, including finance and control, operations, personnel, merchandising, and sales promotion.  

MATH 21 - Basic Math and Pre-Algebra

Class hours: 3 lecture and 2 lecture/lab
Credits: 4

Description: This course allows students to investigate real-life situations and to recognize the importance of mathematics in their own lives. Topics of study include basic arithmetic, basic geometry and statistics, the real number system, variables and algebraic expressions, ratios and proportions, and simple linear equations. The primary focus of this course is to motivate and prepare students for algebra and beyond. Study skills are incorporated to improve student success in college. F, S

MATH 22 - Pre-Algebra

Credits: 3
Class hours: 3 lecture
Prereq: Acceptable math placement test score.

Recommended: Concurrent enrollment in MATH 99V (1 cr.).

Description: This course prepares students for elementary algebra, technical mathematics, and/or select program requirements. Topics include operations with rational numbers, an introduction to variables, expressions and equations, as well as ratios, proportions, percents and applications. F, S

MATH 24 - Elementary Algebra I

Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in MATH 21 or MATH 22; or acceptable math placement test score.

Comments: Credit by exam is not an available option.

Description: This is the first course in a two-semester sequence of Elementary Algebra courses. Instruction includes units on the real number system, linear equations and inequalities in one variable, linear equations and inequalities in two variables, systems of linear equations in two and three variables, and introduction to functions. F, S, Su

MATH 25 - Elementary Algebra II

Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in MATH 24 or MATH 75; or acceptable math placement test score.

Comments: Credit by exam is not an available option.

Description: This course covers intermediate topics in elementary algebra. Topics include properties of exponents; operations on polynomials; factoring; rational expressions and equations; roots and radicals; and quadratic equations. F, S, Su

MATH 26 - Elementary Algebra

Credits: 5
Class hours: 5 lecture
Prereq: “C” or higher in MATH 21 or MATH 22; or acceptable math placement test score.

Description: This course covers elementary algebra topics. Topics include operations with real numbers; linear equations and inequalities; graphing; linear systems, properties of exponents; operations on polynomials; factoring; rational expressions and equations; radical expressions and equations; quadratic equations; and applications. F, S

MATH 26 - Elementary Algebra

Credits: 5
Class hours: 5 lecture
Prereq: “C” or higher in MATH 21 or MATH 22; or acceptable math placement test score.

Description: This course covers elementary algebra topics. Topics include operations with real numbers; linear equations and inequalities; graphing; linear systems, properties of exponents; operations on polynomials; factoring; rational expressions and equations; radical expressions and equations; quadratic equations; and applications. F, S

MATH 50 - Technical Mathematics

Credits: 3
Class hours: 3 lecture
Prerequisite: Qualified for MATH 22 or acceptable math placement test score.

Description: This class offers the basic principles of algebra, geometry, and trigonometry as related to the solution of practical problems encountered in the various trade technical areas. F

MATH 75 - Fundamentals of Mathematics

Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in MATH 21, MATH 22, or acceptable math placement test score.

Description: This course prepares students for MATH 100, MATH 111, and MATH 115. Course topics include ratio and percent, unit conversion, graphs and charts, basic algebra, solving linear equations, and working with formulas with special emphasis on problem solving. F, S

MATH 99V - Special Studies

See explanation under the heading of Special Studies.

MATH 100 - Survey of Mathematics (FS)

Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in MATH 25 or MATH 26, or MATH 75; or acceptable math placement test score (A55 or higher).

Comments: Not recommended for science and engineering majors.

Description: This course offers a non technical survey of mathematical concepts and techniques enjoying applications in the daily life of our society. Topics chosen are from the areas of arithmetic, algebra, computers, geometry, logic, probability, and statistics. F, S

MATH 22; or acceptable math placement test score (A55 or higher).
### MATH 103 - College Algebra (FS)

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** "C" or higher in MATH 25 or MATH 26, or acceptable math placement test score.  
**Description:** This course is a continuation from elementary algebra. Topics of study include exponents; algebraic equations and inequalities; absolute value; polynomials, rational, radical, exponential and logarithmic functions; conic sections; systems of equations and inequalities; matrices and determinants.  

### MATH 111 - Math for Elementary Teachers I

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** "C" or higher in MATH 25 or MATH 26 or MATH 75; or acceptable math placement test score; and qualified for ENG 100.  
**Comments:** This course is intended for prospective elementary education majors only.  
**Description:** This course teaches students to communicate and represent mathematical ideas, how to solve problems, and how to reason mathematically. Material covered includes operations and their properties, sets, counting, patterns, and algebra.  

### MATH 112 - Math for Elementary Teachers II (FS)

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** "C" or higher in MATH 111.  
**Comments:** This course is intended for prospective elementary education majors only.  
**Description:** This course deals with representations of and operations on the natural numbers, integers, rational numbers, and real numbers. It also explores properties of those operations.  

### MATH 115 - Introduction to Statistics and Probability (FS)

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** "C" or higher in MATH 25 or MATH 26; or MATH 75; or acceptable math placement test score.  
**Description:** This course 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.  

### MATH 135 - Pre-Calculus: Elementary Functions

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** "C" or higher in MATH 103 or qualified placement test score (COMPASS minimum of 75 in Algebra or 56 in College Algebra).  
**Description:** Students in this course study the operations with, the inverse of, and the multiple representations of functions, including but not limited to linear; quadratic; polynomial; rational; exponential; and logarithmic. Appropriate use of technology is incorporated to enhance the conceptual understanding of mathematics. This course is recommended to students who are pursuing further studies in business, engineering, mathematics and/or sciences.  

### MATH 140 - Pre-Calculus: Trigonometry and Analytic Geometry (FS)

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** "C" or higher in MATH 135.  
**Description:** The second part of the Pre-Calculus sequence, this course includes a study of trigonometry, analytic geometry and applications.  

### MATH 140X - PreCalculus (FS)

**Credits:** 4  
**Class hours:** 4 lecture  
**Prereq:** "C" or higher in MATH 103, or acceptable placement score.  
**Description:** Successful completion of MATH 140X will provide students with essential precalculus skills needed in Calculus. Topics of study include but are not limited to functions, with special attention to polynomials, rational, exponential, logarithmic, and trigonometric functions; plane trigonometry; polar coordinates; matrices; and conic sections.  

### MATH 205 - Calculus I (FS)

**Credits:** 4  
**Class hours:** 4 lecture  
**Prereq:** "C" or higher in MATH 140 or acceptable placement test score.  
**Comments:** Credit by exam is not an available option.  
**Description:** This course offers the opportunity to study differential calculus and its applications, and introduces integration. Applications of calculus to physics, chemistry, engineering, biology, economics, and other fields will be studied. Differential calculus is used to study situations as they change, and to find best-case scenarios such as maximum profit.  

### MATH 206 - Calculus II (FS)

**Credits:** 4  
**Class hours:** 4 lecture  
**Prereq:** "C" or higher in MATH 205.  
**Comments:** Credit by exam is not an available option.  
**Description:** This course offers the opportunity to study integral calculus, transcendental functions, and series representation of functions. Applications include finding the balancing point of an object, computing the force on submerged objects, and modeling population growth, radioactive decay, and the temperature of a heating or cooling object.  

### MATH 231 - Calculus III

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** "C" or higher in MATH 206 or equivalent.  
**Description:** MATH 231 covers vector algebra, vector-valued functions, differentiation of functions of several variables, and optimization.  

### MATH 232 - Calculus IV

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** "C" or higher in MATH 231 or equivalent.  
**Description:** MATH 232 covers multiple integrals; line integrals and Green's Theorem; surface integrals, and Stokes's and Gauss’s Theorems.
MEDICAL ASSISTING (MEDA)

MEDA 105 - Introduction to Medical Assisting
Credits: 3
Class hours: 3 lecture
Prereq: Admission into the Medical Assisting program.
Description: This course provides an introduction to medical assisting. It focuses on the concepts of effective communication and protective practices related to health and safety to prevent illness and injury. Basic nutritional concepts and therapeutic diets will also be discussed.  

MEDA 120 - Clinical Medical Assisting I
Credits: 3
Class hours: 2 lecture and 3 lab
Prereq: Admission into the Medical Assisting program.
Description: This course introduces the basic clinical skills and procedures required to function as a medical assistant. Topics include integrated clinical procedures, and assisting with specialty exams and procedures.  

MEDA 123 - Clinical Medical Assisting II
Credits: 3
Class hours: 2 lecture and 3 lab
Prereq: "C" or higher in MEDA 120 and MEDA 176.
Coreq: MEDA 220
Description: This course introduces basic specimen collection techniques including the preparation and examination of samples for diagnostic purposes. Advanced techniques and procedures for specialty examinations in the ambulatory care setting will also be included.  

MEDA 143 - Administrative Medical Assisting I
Credits: 3
Class hours: 2 lecture and 3 lab
Prereq: Admission into the Medical Assisting program.
Description: This course introduces basic concepts of administrative medical assisting including client scheduling, maintaining of client records, and medical insurance. Communication and confidentiality in relation to administrative duties will also be discussed.  

MEDA 165 - Administrative Medical Assisting II
Credits: 2
Class hours: 2 lecture
Prereq: "C" or higher in MEDA 143.
Description: This course focuses on the concepts of administrative medical assisting including medical office coding, billing, insurance claims processes, and human resource management.  

MEDA 176 - Administration of Medications
Credits: 3
Class hours: 2 lecture and 3 lab
Prereq: Admission into the Medical Assisting program.
Description: This course will provide an introduction to basic pharmacology and medication administration. Students will learn the basic classification of medications and use applied mathematics and clinical techniques to safely prepare and administer medications in a medical office setting.  

MEDA 210 - Medical Assisting Certification Review
Credits: 1
Class hours: 1 lecture
Prereq: "C" or higher in MEDA 120, MEDA 143, and MEDA 176 or approval of instructor.
Description: This course focuses on reviewing medical assisting concepts in preparation for a medical assistant certification exam. Certification test taking skills and preparation will also be discussed.  

MEDA 220 - Medical Assisting Externship
Credits: 4
Class hours: 12 lab
Prereq: "C" or higher in MEDA 120 and MEDA 176.
Coreq: MEDA 123
Description: This course will provide students with supervised clinical experience and the opportunity to integrate medical assisting skills into a real life setting. Clinical experiences will take place in medical offices.  

MICROBIOLOGY (MICR)

MICR 130 - General Microbiology (DB)
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100. "C" or higher in MATH 24.
Coreq: MICR 140
Description: This introductory course is oriented toward medical microbiology and the study of microorganisms with emphasis on bacteria. It includes microbial metabolism, genetics, immunology, selected topics in applied microbiology, viruses, antibiotics, and microbial diseases.  

MICR 140 - Microbiology Laboratory (DY)
Credits: 2
Class hours: 4 lecture/lab
Prereq: "C" or higher in or concurrent enrollment in MICR 130.
Coreq: MICR 130
Comments: Credit by exam is not an available option.
Description: This course provides laboratory exercises that demonstrate fundamental principles of microbiology. The class is primarily for students in health sciences.  

156
MUS 121B - Elementary Voice Class (DA)
Credits: 2
Class hours: 1 lecture and 2 direct method
Description: This course of beginning voice instruction emphasizes proper breathing and vocal placement. The primary objective of the course is to free the voice. F, S

MUS 121C - Elementary Piano Class (DA)
Credits: 2
Class hours: 1 lecture and 2 direct method
Description: This course provides beginning piano instruction teaching students basic keyboard skills and concepts of melody, rhythm, harmony, and form. The study of popular music and classical music of the 18th through 20th centuries is included. F, S

MUS 121D - Elementary Guitar (DA)
Credits: 1
Class hours: 2 direct method
Description: This is an introductory classroom instruction in the art of classic guitar playing. It will deal with solo and ensemble performance, technique, music reading, interpretation, stage etiquette, and music literature. F, S

MUS 121F - Elementary Slack Key Guitar (DA)
Credits: 1
Class hours: 2 direct method
Description: This course takes up the fundamentals of slack key playing. The emphasis is on slack key techniques using the standard G and double slack key tunings. Reading of tablature and the counting of basic rhythms will also be covered. No prior training in any style of guitar playing is required. Students must provide their own guitars. F, S

MUS 122B - Intermediate Voice Class (DA)
Credits: 2
Class hours: 1 lecture and 2 direct method
Prereq: "C" or higher in MUS 121B.
Description: This course is a continuation of MUS 121B and develops principles of voice production, correct voice placement, breath control, vocal range, diction, dynamics, phrasing, interpretation, and stage presence. Students perform songs of various styles. F, S

MUS 122C - Intermediate Piano Class (DA)
Credits: 2
Class hours: 1 lecture and 2 direct method
Prereq: "C" or higher in MUS 121C.
Description: This course is a continuation of MUS 121C to develop more complex keyboard skills and concepts of melody, rhythm, harmony, and form. It includes popular music and classical music of the 18th through 21st centuries. F, S

MUS 150 - Introduction to Band (DA)
Credits: 1
Class hours: 2 lecture/lab
Prereq: Approval of instructor.
Recommended: Experience with instrumental performance.
Comments: May be repeated any number of times for credit.
Description: This course covers the performance of band literature with emphasis on excellence in musical performance and development of professional musicianship. Class members will participate in rehearsals and concerts. F, S

MUS 201 - Vocal Ensemble (DA)
Credits: 2
Class hours: 1 lecture and 2 direct
Comments: May be repeated any number of times for credit.
Description: Study and performance of choral literature from Renaissance to present. A capella and choral/instrumental repertoire. F, S

MUS 202 - College Band (DA)
Credits: 1
Class hours: 2 lecture/lab
Prereq: Approval of instructor.
Recommended: Approval of instructor.
Comments: May be repeated any number of times for credit.
Description: This course is the opportunity for orchestral musicians to perform repertoire ranging from Renaissance and Baroque to contemporary popular music. F, S

MUS 203G - College Orchestra (DA)
Credits: 1
Class hours: 2 lecture/lab
Prereq: Approval of instructor.
Recommended: Minimum of one year’s study on an instrument and experience in reading music.
Comments: May be repeated any number of times for credit.
Description: This course provides an opportunity for orchestral musicians to perform repertoire ranging from Renaissance and Baroque to contemporary popular music. F, S

MUS 204 - Jazz Ensemble (DA)
Credits: 1
Class hours: 2 lecture/lab
Prereq: Approval of instructor.
Recommended: Audition.
Comments: May be repeated any number of times for credit.
Description: This course covers the performance of stage band literature from swing to contemporary periods. Students will study jazz concepts, including improvisation. Public performances are required. F, S

MUS 166 - Survey of Folk, Pop, and Rock Music (DA)
Credits: 3
Class hours: 3 lecture
Comments: No music background is required.
Description: This course features folk, pop, and rock music of the 20th century. Students look at important styles, composers, and performers in a historical framework. F, S

MUS 199V - Special Studies
See explanation under the heading of Special Studies.
MUS 220 - Musical Theatre (DA)
Credits: 3
Class hours: 3 lecture
Description: This course provides students with the opportunity to study vocal and theatrical technique in a musical theatre context.

MUS 253 - Basic Experiences of Music (DA)
Credits: 3
Class hours: 3 lecture
Description: This course is an introduction to the components of music, specifically, time, pitch, media, musical expression, and form, and how these interact with each other to comprise a musical experience. The means through which these components will be explored are singing; using rhythm instruments; playing recorder, ukulele, bells, piano, and other classroom instruments; listening as a primary means of engaging the musical mind; movement as a primary means of engaging the kinesthetic and body senses; performing from notation; noting music; and analyzing music aurally and from score.

MUS 254 - Songwriting and Transcription (DA)
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in MUS 253.
Description: The course is divided into three parts, and each part constitutes approximately one-third of the semester. Part I focuses on developing aural skills (recognition and notation of intervals, rhythm, and harmony) and the setting of text and music. Part II is a study of standard song structures, harmonic progressions, and notation with the Sibelius music software. Part III will be devoted to song composition. The student will compose at least four songs and note them with the Sibelius music software.

NURSING (NURS)

NURS 12 - Diseases, Special Diets, and Medications
Credits: 2
Class hours: 2 lecture
Prereq: Qualified for ENG 21.
Recommended: Licensed Nurse Aide.
Comments: Credit by exam is not an available option.
Description: This course prepares the student to observe the signs and symptoms of disease, make medications available, and prepare special diets.

NURS 13 - Specialized Populations, Communication, and Rehabilitation
Credits: 1
Class hours: 1 lecture
Prereq: Qualified for ENG 21.
Recommended: Licensed Certified Nurse Aide.
Comments: Credit by exam is not an available option.
Description: This course prepares adult residential care home (ARCH) operators to observe the resident for signs and symptoms of common diseases, and to identify the operator’s role in the care of specialized populations.

NURS 14 - Regulations, Accounts, and Community Resources
Credits: 1
Class hours: 1 lecture
Prereq: Qualified for ENG 21.
Recommended: Licensed Certified Nurse Aide.
Comments: Credit by exam is not an available option.
Description: This course prepares adult residential care home (ARCH) operators to implement specified regulations of Chapter 11-100.1, to implement simple accounting records, and to identify community resources available to residents and operators.

NURS 23 - School Health Aide Level I
Credits: 3
Class hours: 2 lecture and 3 lab
Prereq: High School diploma or its equivalent, current First Aid and CPR certificates.
Description: This course prepares entry level school health aides to function successfully in the school health environment. Students will learn to provide culturally sensitive and competent care to elementary, middle and high school students. Successful completion of the course will enable students to apply for a School Health Aide I position with the Hawai‘i Department of Education (DOE).

NURS 99V - Special Studies
See explanation under the heading of Special Studies.

NURS 100 - Nurse Aide
Credits: 6
Class hours: 4 lecture and 6 lab
Prereq: Qualified for ENG 21.
Comments: Successful completion leads to Certificate of Competence. Credit by exam is not an available option.
Description: This course provides training for entry-level nurse aide care. Online lecture utilizing the University of Hawai‘i’s web-based course platform is combined with face-to-face laboratory and clinical experiences. This course prepares nurse aides for employment under the supervision of a licensed practical nurse, registered nurse, or physician in nursing homes, assisted living centers, clinics, hospitals, and home settings.

NURS 199V - Special Studies
See explanation under the heading of Special Studies.

NURS 203 - General Pharmacology
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in ZOOL 142 and ZOOL 142L. Qualified for MATH 100.
Description: This course discusses drugs with an emphasis on sites and mechanisms of action, toxicity, fate, and uses of major therapeutic agents. This class is intended for students in health sciences and related fields.

NURS 210 - Health Promotion Across the Lifespan
Credits: 9
Class hours: 3 lecture and 18 lab
Prereq: Admission into the Career Ladder Nursing Program.
Coreq: NURS 211 and NURS 212
Description: This course focuses on identifying needs of the total person across the lifespan in a wellness/health promotion model of care. It introduces


NURSING (NURS) • continued

the roles of the nurse, nursing code of ethics, and the nursing process with emphasis on learning self-health and client health practices. To support self-health and client health practices, students learn to access research evidence about healthy lifestyle patterns and risk factors for disease/illness, apply growth and development theory, interview clients in a culturally sensitive manner, and work as members of a multidisciplinary team utilizing reflective thinking and self-analysis.  

NURS 211 - Professionalism in Nursing I

Credits: 1
Class hours: 1 lecture
Prereq: Admission into the Career Ladder Nursing Program.
Coreq: NURS 210 and NURS 212
Description: This first level course focuses on the history of nursing practice and education. Ethical and legal aspects as well as professional responsibilities in the practice of nursing are emphasized.

NURS 212 - Pathophysiology

Credits: 3
Class hours: 3 lecture
Prereq: Admission into the Career Ladder Nursing Program.
Coreq: NURS 210 and NURS 211
Description: This course will introduce nursing students to pathophysiological concepts which serve as a foundation to understanding the basis of illness and injury and their corresponding spectrum of human response. These concepts will serve as a foundation for the formulation of clinical decisions and care planning.

NURS 220 - Health and Illness I

Credits: 10
Class hours: 4 lecture and 18 lab
Prereq: “C” or higher in NURS 210.
Description: This course provides an opportunity for students to develop their assessment skills and utilize common nursing interventions for clients with illnesses common across the lifespan in communities in Hawai‘i. The client and family’s understanding and acceptance of their illness coupled with clinical practice guidelines and evidence-based research are used to guide clinical judgment in nursing care. Roles of the interdisciplinary team and legal aspects of delegation are explored in the context of nursing care. The cultural, ethical health policy and healthcare delivery system are explored.

NURS 230 - Clinical Immersion I

Credits: 4
Class hours: 1 lecture and 9 lab
Prereq: “C” or higher in NURS 220 and PHRM 203.
Description: This course focuses on monitoring a variety of subjective and objective data, identifying obvious patterns and deviations, and developing a prioritized intervention plan for specific populations. In this course, students will implement new nursing skills with supervision, develop their own beginning leadership abilities, and acknowledge delegation as a needed modality to improve client care.

NURS 259 - Basic ECG Interpretation for Health Care Providers

Credits: 2
Class hours: 2 lecture
Prereq: Concurrent enrollment in the Nursing program, licensed Registered Nurse, Emergency Medical Technician, or approval of instructor.
Comments: Credit by exam is not an available option.
Description: This course develops nursing theory related to the accurate interpretation of cardiac rhythms and arrhythmias on the 12 lead electrocardiogram (ECG). The focus is on the cardiac conduction system, electrophysiology, and a systematic approach to the interpretation and treatment of cardiac rhythms and arrhythmias.

NURS 275 - NCLEX Review

Credits: 2
Class hours: 2 lecture
Prereq: “C” or higher in NURS 320 or approval of instructor.
Description: This course provides an opportunity for synthesis and evaluation of professional nursing practice essential to care of clients and to assist in achieving successful completion of the NCLEX board exam and licensure requirements. Emphasis is placed on refinement of critical thinking, communication skills, and the integration of a range of therapeutic interventions into nursing practice, including those appropriate to individual clients, their families/significant others, and relevant population-based groups.

NURS 277 - International Nursing

Credits: 2
Class hours: 4 lecture/lab
Prereq: Application and approval of instructor.
Comments: May be repeated for a maximum of 2 credits.
Description: This course explores the healthcare system in Japan and how it has changed since WWII. Students will travel to Japan to experience, compare, and contrast the healthcare with/between US/Hawaii and Japan (Nagasaki or Okinawa). Students will explore effects of WWII, then and currently, on the people of Japan and themselves.

NURS 299V - Special Studies

See explanation under the heading of Special Studies.

NURS 301 - Introduction to Evidence-Based Practice and Health Promotion

Credits: 3
Class hours: 3 lecture
Prereq: Nursing program approval.
Description: This course provides a transition for nurses into the Hawai‘i Statewide Nursing Consortium (HSNC) model of teaching and learning with an introduction to the competencies and concepts. Students learn to access research evidence to support their practice, explore personal and professional goals, and work as members of a multidisciplinary team utilizing reflective thinking and self-analysis.

NURS 320 - Health and Illness II

Credits: 10
Class hours: 4 lecture and 18 lab
Prereq: “C” or higher in NURS 230.
Description: This course focuses on the nursing care and health promotion for maternal-newborn and pediatric clients and families in the acute care and community settings. Students will learn to utilize family theories and assessment tools when providing culturally sensitive, client-centered care.
NURSING
(NURS) • continued

NURS 360 - Health and Illness III
Credits: 9
Class hours: 3 lecture and 18 lab
Prereq: "C" or higher in NURS 320.
Coreq: NURS 362
Description: This course builds on Health and Illness I and II, focusing on more complex and/or unstable patient care situations some of which require strong recognition skills and rapid decision-making. The evidence base supporting appropriate focused assessment and effective, efficient nursing intervention are explored. Lifespan and developmental factors, cultural variables, and legal aspects of care frame the ethical decision-making employed in patient choices for treatment or palliative care within the acute care, psychiatric, and home health settings. Case scenarios incorporate prioritizing care needs, delegation and supervision, family and patient teaching for discharge planning, home health care, and/or end of life care.  

NURS 362 - Professionalism in Nursing II
Credits: 1
Class hours: 1 lecture
Prereq: "C" or higher in NURS 320.
Coreq: NURS 360
Description: The focus will be on nursing responsibility with regard to current issues in nursing and health care. Included will be the nurse's role as a contributing member of the profession and the community. The theoretical basis for designing and implementing systems of nursing at the beginning level of patient management in an institutional setting will be examined. Principles of organizational structure, leadership, decision-making, priority setting, and change will be discussed.  

OCEANOGRAPHY
(OCN)

OCN 101 - Introduction to Marine Option Program
Credits: 1
Class hours: 1 lecture
Prereq: Qualified for ENG 100.
Description: The course provides statewide information to students interested in learning more about the ocean and freshwater systems by becoming involved in the Marine Option Program (MOP). The course will review the requirements of the MOP Certificate of Completion, explore opportunities for internships, research projects, and careers dealing with water environments. The course will also present guidelines in proposal writing, project implementation, data collection and interpretation, report preparation, and formal project presentation.  

OCN 120 - Global Environmental Challenges (DP)
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 22 and MATH 24 or 26.
Description: This course focuses on scientific approaches to evaluating human-caused environmental challenges and their potential solutions.  

OCN 199V - Marine Research and Directed Reading
Credits: 1-4
Class hours: 3 hours (1 credit), 5 hours (2 credits), 7 hours (3 credits), or 9 hours (4 credits)
Prereq: "C" or higher in OCN 101 and OCN 201. Approval of instructor.
Comments: May be repeated for a maximum of 8 credits.
Description: This course provides an opportunity for students to design and carry out marine-related internships, practica, research projects, or field experience on or off campus under the supervision of a faculty member and the guidance of a science mentor. It includes a project proposal, research, data collection and analysis, a final report, and an oral presentation. A project worth 3 credits is required for the Marine Option Program (MOP) Academic Subject Certificate.  

OCN 201 - Science of the Sea (DP)
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100 and MATH 24.
Description: This is a survey course of the ocean involving the study of the geological, physical, chemical, and biological properties of the ocean. A number of subjects are studied to include the ocean basin, seawater properties, currents, waves, tides, marine organisms, and the ecological principles of man and the sea.  

160
PHARMACOLOGY
(PHRM)

PHRM 203 - General Pharmacology
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in ZOOL 142 and ZOOL 142L. Qualified for MATH 100.
Description: This course discusses drugs with an emphasis on sites and mechanisms of action, toxicity, fate, and uses of major therapeutic agents. This class is intended for students in health sciences and related fields. F, S

PHILOSOPHY
(PHIL)

PHIL 100 - Introduction to Philosophy (DH)
Credits: 3
Class hours: 3 lecture
Description: In this course, students will be introduced to the nature of philosophical inquiry by considering some of the most fundamental questions that can be asked about the nature of reality, human beings and our knowledge of both: Does god exist? Do human beings have free will? What's the essence of personal identity? What does it mean to have knowledge? Can we know anything at all? Do human beings have an obligation to act morally? What makes a particular action moral or immoral? Is it morally permissible for a woman to have an abortion? Do the citizens of wealthier nations have a moral obligation to help end extreme poverty and world hunger? F, S

PHIL 101 - Morals and Society (DH)
Credits: 3
Class hours: 3 lecture
Description: In this course, students will be introduced to the nature of philosophical inquiry by considering some of the most fundamental questions in moral philosophy: Do human beings have an obligation to act morally? Where do our moral principles come from? Are there objective moral truths? What makes a particular action moral or immoral? Is it morally permissible for a woman to have an abortion? When, if ever, is the government justified in moral censorship? What sort of sexual behavior is morally permissible? Do the citizens of wealthier nations have a moral obligation to help end extreme poverty and world hunger? F, S, Su

PHIL 110 - Introduction to Logic (FS)
Credits: 3
Class hours: 3 lecture
Description: In this course, students will be introduced to the nature, application and evaluation of correct reasoning. Primary attention will be devoted to developing each student's critical thinking skills by means of analyzing and evaluating arguments. Logic is an analytic tool that can be applied to any intellectual endeavor in which people attempt to give reasons to support conclusions. However, it is especially useful in fields such as philosophy, law, mathematics and computer science. F, S, Su

PHIL 204 - Film and Philosophy (DH)
Credits: 3
Class hours: 3 lecture
Description: In this course, students will watch a selection of movies and analyze them in light of the various philosophical ideas that they explore. Primary attention will be devoted to identifying, considering and evaluating these philosophical ideas, the ways they are artistically presented in film and their connections to both traditional philosophical problems and each student's personal world and life view. One overriding theme of the course will be a focus on the philosophy of human nature and the so-called "fragile human condition."

PHIL 207 - Film and Philosophy (DH)
Credits: 3
Class hours: 3 lecture
Description: In this course, students will be introduced to a range of important ideas, arguments and theories advanced by such "modern" (17th-18th century) philosophers as Hobbes, Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, Kant, Nietzsche, etc. Primary attention will be devoted to the so-called "rationalist" and "empiricist" traditions and the way these modern philosophical traditions considered fundamental questions about the nature of reality, human beings and our knowledge of both. Immanuel Kant's important critique of these traditions and the way his ideas influenced the development of subsequent philosophy will also be considered. F

PHIL 211 - Ancient Greek Philosophy (DH)
Credits: 3
Class hours: 3 lecture
Description: In this course, students will be introduced to a range of important ideas, arguments and theories advanced by such ancient Greek philosophers as the so-called Pre-socratics, Socrates, Plato, Aristotle and the Hellenistic Stoics, Epicureans and Skeptics. These thinkers were some of the first in Western history to rationally consider fundamental questions about the nature of reality, human beings and our knowledge of both. Their innovative ideas and wonderful insights influenced the development of all subsequent philosophy still continue to fascinate, challenge and instruct even the best modern minds. F, S

PHIL 213 - Modern Philosophy (DH)
Credits: 3
Class hours: 3 lecture
Description: In this course, students will be introduced to a range of important ideas, arguments and theories advanced by such "modern" (17th-18th century) philosophers as Hobbes, Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, Kant, Nietzsche, etc. Primary attention will be devoted to the so-called "rationalist" and "empiricist" traditions and the way these modern philosophical traditions considered fundamental questions about the nature of reality, human beings and our knowledge of both. Immanuel Kant's important critique of these traditions and the way his ideas influenced the development of subsequent philosophy will also be considered. S
**PHYSICS**

**PHYS 50 - Technical Physics**

**Credits:** 3  
**Class hours:** 3 lecture  
**Comments:** Credit by exam is not an available option.  
**Description:** This course investigates mechanics, problems of matter, heat, sound, and electricity. Emphasis is placed on the practical applications of physics in industry.

**PHYS 101 - Career and Technical Education Physics**

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** Qualified for MATH 25.  
**Description:** This course investigates the nature of science and selected topics among linear and rotational mechanics, problems of matter, energy, optics, pressure, fluids, wave motion, electricity, or magnetism. Basic trigonometry is introduced and used along with introductory algebra to solve problems. Emphasis is placed on practical applications of physics in industry and in everyday life.

**PHYS 151 - College Physics I (DP)**

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** Qualified for MATH 135.  
**Coreq:** PHYS 151L  
**Description:** This course is an introduction to the physical concepts of classical mechanics, fluid dynamics, wave theory, and thermodynamics using algebra and calculus as tools to solve related problems.

**PHYS 151L - College Physics I Laboratory (DY)**

**Credits:** 1  
**Class hours:** 3 lab  
**Prereq:** "C" or higher in or concurrent enrollment in PHYS 151.  
**Coreq:** PHYS 151  
**Comments:** Credit by exam is not an available option.  
**Description:** This course offers elementary experiments in physics correlated with PHYS 151.

**PHYS 152 - College Physics II (DP)**

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** "C" or higher in PHYS 151. "C" or higher in or concurrent enrollment in MATH 140.  
**Coreq:** PHYS 152L  
**Description:** This course is an introduction to the physical concepts of electricity, magnetism, light, and modern physics, using algebra and trigonometry as tools to solve related problems.

**PHYS 152L - College Physics II Laboratory (DY)**

**Credits:** 1  
**Class hours:** 3 lab  
**Prereq:** "C" or higher in or concurrent enrollment in PHYS 152.  
**Coreq:** PHYS 152  
**Comments:** Credit by exam is not an available option.  
**Description:** This course offers elementary experiments in physics correlated with PHYS 152.

**PHYS 170 - General Physics I (DP)**

**Credits:** 4  
**Class hours:** 4 lecture  
**Prereq:** "C" or higher in or concurrent enrollment in MATH 205.  
**Coreq:** PHYS 170L  
**Description:** This course is an introduction to the physical concepts of classical mechanics, fluid dynamics, wave theory, and thermodynamics using algebra and calculus as tools to solve related problems.

**PHYS 170L - General Physics I Laboratory (DY)**

**Credits:** 1  
**Class hours:** 3 lab  
**Prereq:** "C" or higher in or concurrent enrollment in PHYS 170.  
**Coreq:** PHYS 170  
**Comments:** Credit by exam is not an available option.  
**Description:** This course is an introduction to the analysis of experiments in classical mechanics, fluid dynamics, wave theory, and thermodynamics.

**PHYS 272 - General Physics II (DP)**

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** "C" or higher in PHYS 170. "C" or higher in or concurrent enrollment in MATH 206.  
**Coreq:** PHYS 272L  
**Description:** This course is an introduction to the physical concepts of electromagnetism, optics, and quantum physics using algebra and calculus as tools to solve related problems.

**PHYS 272L - General Physics II Laboratory (DY)**

**Credits:** 1  
**Class hours:** 3 lab  
**Prereq:** "C" or higher in or concurrent enrollment in PHYS 272.  
**Coreq:** PHYS 272  
**Comments:** Credit by exam is not an available option.  
**Description:** This course is an introduction to the analysis of experiments in electromagnetism, optics, and quantum physics.
PLANT BIOSCIENCE TECHNOLOGY (PBT)

PBT 100 - Orientation to Hawai‘i Agriculture Industry
Credits: 1
Class hours: 1 lecture
Description: This course includes an independent reading and research; preparation of abstracts, outlines, and resumes; and oral presentation of information on agriculture-related topics.

PBT 141 - Integrated Pest Management (DB)
Credits: 3
Class hours: 2 lecture and 2 lecture/lab
Prereq: "C" or higher in BOT 101 or SCI 121/121L.
Description: This course includes an introduction to the principles involved in the control of plant pests including diseases, insects, mites, nematodes, and weeds. Various methods of controlling pests, including the correct method of selecting and applying pesticides will be covered. A presentation on one example of Integrated Pest Management will be required.

Effective Through Fall 2015
PBT 204 - Fundamentals of Tropical Soil Science (DP & DY)
Credits: 4
Class hours: 3 lecture and 3 lab
Prereq: "C" or higher in CHEM 151/151L or CHEM 161/161L.
Description: This course covers the origin, development, properties, classification, use, and management of soils with emphasis on applications in the tropics. The lecture and laboratory for PBT 204 are combined.

Effective Spring 2016
PBT 204 – Fundamentals of Tropical Soil Science (DP & DY)
Credits: 4
Class hours: 3 lecture and 3 lab
Prereq: Qualified for MATH 25.
Description: This course covers the origin, development, properties, classification, use, and management of soils with emphasis on applications in the tropics. The lecture and laboratory for PBT 204 are combined.

PBT 264 - Introduction to Horticulture and Plant Propagation
Credits: 3
Class hours: 2 lecture and 2 lecture/lab
Prereq: "C" or higher in HORT 200.
Description: This is an introductory course in the principles and practices of plant propagation. Studies include seed and vegetative propagation of fruit, vegetable, and ornamental crops. Methods of propagation include: seed, cutting, grafting, air layering, and division.

Effective Through Fall 2015
PBT 275 - Introduction to Crop Improvement (DB)
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in BOT 101 or SCI 121/121L.
Description: This course includes fundamentals of genetic theory using biotechnological procedures in insect and plant pathogen control and plant and animal breeding as practical applications.

Effective Spring 2016
PBT 275 - Introduction to Crop Improvement (DB)
Credits: 3
Class hours: 3 lecture
Prereq: 1) "C" or higher in either BOT 101, HORT 200, or SCI 121/121L and 2) qualified for MATH 25.
Description: This course includes fundamentals of genetic theory using biotechnological procedures in insect and plant pathogen control and plant and animal breeding as practical applications.

PBT 290V - Plant Biology and Tropical Agriculture Internship
Credits: 1-3
Class hours: 75 or more hours of work (1 credit), 150 hours or more of work (2 credits), or 225 hours or more of work (3 credits)
Prereq: Approval of instructor.
Comments: May be repeated for a maximum of 12 credits. The Plant Biology and Tropical Agriculture ASNS, AS, and CA require 3 credits of PBT 290V which may be accumulated over multiple semesters. PBT 290V credits in excess of this amount may be applied as electives.
Description: The course provides credit for supervised experiential learning projects including independent research projects with an instructor and internships with an employer. The nature of the internship or research project is variable but will be designed to provide an opportunity for experiential learning. Students may enroll in 1-3 credits of PBT 290V per semester, depending on project time commitment.
POLITICAL SCIENCE (POLS)

POLS 110 - Introduction to Political Science (DS)
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100.
Description: This course covers the basic concepts associated with political systems, ideologies, institutions, and decision-making agencies. F, S

PSYCHOLOGY (PSY)

PSY 100 - Survey of Psychology (DS)
Credits: 3
Class hours: 3 lecture
Description: This is a foundation course in the concepts and ideas in psychology. Among the areas studied are the development of individual differences; measurement of capacities and abilities; and psychological bases of behavior, including emotions, learning, memory, thinking, and motivation. F, S

PSY 220 - Developmental Psychology (DS)
Credits: 3
Class hours: 3 lecture
Description: This course offers principles of development from conception to death. The focus is on the interrelationship of physical, cognitive, and social-emotional aspects of the individual. F, S

RELIGION (REL)

REL 122 - Greek and Roman Mythology (DL)
Credits: 3
Class hours: 3 lecture
Description: In this course, students will be introduced to the primary narratives that the ancient Greeks and Romans told about their gods, their world and themselves. The emphasis throughout the course will be on reading, analyzing and evaluating the literature of classical Greek and Roman mythology. One overriding theme of the course will be a focus on human nature and the so-called "fragile human condition" as it is portrayed in classical mythology.

REL 150 - Introduction to World Religions (FGC)
Credits: 3
Class hours: 3 lecture
Description: In this course, students will explore the history, literature, beliefs and practices of the world’s major religious traditions in an effort to understand how they shed light on the fabric of reality as well as the nature, meaning and struggles of human existence. Some of the religious traditions that will be considered include Hinduism, Buddhism, Judaism, Christianity and Islam. F, S, Su

REL 205 - Understanding Hawaiian Religion (DH)
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100.
Description: This course is an introductory survey of Hawaiian religious beliefs and practices, from migration to the early contact era. F, S

REL 210 - Christianity (DH)
Credits: 3
Class hours: 3 lecture
Description: In this course, students will be introduced to the historical, literary and theological foundations of Christian thought and practice. Some of the topics that will be considered include: The historical and theological connections between the so-called Old and New Testaments; The person and work of Christ; The doctrines of salvation, the church and the "end times"; The inspiration, reliability and authority of scripture.
SCI 170 - STEMinar: Science, Technology, Engineering, and Mathematics Seminar

Credits: 1
Class hours: 1 lecture
Description: This course primarily explores current topics in science, technology, engineering, and mathematics (STEM) in a seminar format. The course will also cover the process and guidelines of science, careers pathways in STEM, and the role of STEM in our modern economy and society. F

SOC SOCIAL SCIENCE

SSCI 199V - Special Studies
See explanation under the heading of Special Studies.

SSCI 250 - Ecology and Society (DS)
Credits: 3
Class hours: 3 lecture
Description: This course is an introduction to human/environment interactions from the perspectives of anthropology, sociology, and political economy as people and societies live within the limits presented by the reality of basic laws of science. The mutual interconnectedness of people and nature will be emphasized. F, S

SOCIOLOGY (SOC)

SOC 100 - Introduction to Sociology (DS)
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100.
Description: Analysis of human behavior and relationships in the context of culture and social structure. Research findings inform the study of social phenomena. Concepts are illustrated with references to relevant contemporary social phenomena. F, S
SPANISH
(SPAN)

SPAN 101 - Elementary Spanish I
Credits: 4
Class hours: 4 lecture
Prereq: Qualified for ENG 21.
Comments: The laboratory is part of the class.
Description: Introduction to the Spanish language emphasizing conversation, listening, grammar, reading, and writing. F

SPAN 102 - Elementary Spanish II
Credits: 4
Class hours: 4 lecture
Prereq: “C” or higher in SPAN 101.
Comments: The laboratory is part of the class.
Description: Continuation of SPAN 101: conversation, listening, grammar, reading, and writing. S

SPAN 199V - Special Studies
See explanation under the heading of Special Studies.

SPAN 201 - Intermediate Spanish I
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in SPAN 102.
Description: Continuation of SPAN 102. Students will refine basic language skills through conversation, listening, and instruction in grammar, reading, and writing. F

SPAN 202 - Intermediate Spanish II
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in SPAN 201.
Description: Continuation of SPAN 201: conversation, listening, and instruction in grammar, reading, and writing. S

SPAN 299V - Special Studies
See explanation under the heading of Special Studies.

SPECIAL STUDIES

Special Studies - 99V, 199V, 299V
Credits: 1-4
Class hours: 3 hours (1 credit), 5 hours (2 credits), 7 hours (3 credits), 9 hours (4 credits)
Prereq: Approval of instructor.
Comments: May be repeated any number of times for credit.
Description: This course provides an opportunity for the student with special interests and abilities in subject areas to meet with a faculty member to discuss and investigate advanced studies, topics, and/or projects beyond those offered in regular courses. The problem and unit credit will be delineated in a proposal submitted by the student working with, and at the discretion of, the instructor. (Note: Special Studies sections will be offered as needed by each discipline and identified by that program’s alpha.)

SPEECH
(SP)

SP 151 - Personal and Public Speaking (DA)
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 22.
Description: This course is an introduction to the fundamentals of speech communication. Students engage in activities to acquire competence in interpersonal, small group, and public communication. F, S, Su

SP 185 - Intercultural Communication (DS)
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100 or “C” or higher in SP 151.
Description: This course analyzes human communication behaviors as well as verbal and nonverbal coding as it has been used and is currently used throughout the world. Students will examine how influences such as economics, science, politics, ecological concerns, social and family structures, and individual personalities affect communication transactions. Students will practice cross-cultural communication skills. F, S

SP 199V - Special Studies
See explanation under the heading of Special Studies.
SPEECH
(SP) (continued)

SP 231 - Performance of Literature (DA)

Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100. "C" or higher in SP 151 or SP 251.
Description: This course introduces the student to the study of literature through performance. The student participates in individual and group presentations of poetry, prose, and drama. The process involved in preparation of a literary piece of performance leads to exploration and discoveries of multiple aesthetic dimensions of literature. Development of speech performance skills, written analysis of literature to be performed, and experience in critiquing presentations are areas stressed in the course. F, S

SP 251 - Principles of Effective Public Speaking (DA)

Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100 or “C” or higher in SP 151.
Description: This is a combined lecture/lab course providing extensive practice in preparing and presenting effective public speeches with special emphasis on organization, outlining, audience analysis, analytical reasoning, and delivery skills. F, S

SP 299V - Special Studies

See explanation under the heading of Special Studies.

SUSTAINABLE SCIENCE MANAGEMENT (SSM)

Effective Through Fall 2015

SSM 101 - Introduction to the Science of Sustainability (FGB)

Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 22 and MATH 26 or MATH 75 or acceptable math placement test score.
Recommended: ENG 100.
Description: This course introduces the science of sustainability including vocabulary and basic concepts in green building, water and wastewater, waste management, food and agriculture, sustainable land use and planning, unique dimensions to island sustainability, transportation, sustainable materials choices and supply chains, energy efficiency, and policy strategies.

Effective Spring 2016

SSM 101 - Sustainability in a Changing World (FGB)

Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 22. Qualified for either MATH 26 or MATH 75.
Recommended: ENG 100.
Description: This course introduces sustainability concepts which have become evident from early human movement toward Industrialization in the 1500s to the present. Examines diverse societal circumstances and approaches in resource use including water, energy, waste, land use, economics, oceans, and others. Introduces fundamental systems approaches to recognize interconnections and ramifications of practices. Identifies global sustainability issues and uses Hawai‘i and island case studies as a means of better understanding their applied relevance.

SSM 110 - Sustainable Water and Waste Management

Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 22 and "C" or higher in MATH 26 or MATH 75 or acceptable math placement test score.
Recommended: ENG 100.
Description: This course explores water, wastewater, and waste management challenges and solutions, with an emphasis regarding issues specific to Hawai‘i. It also examines the sustainable operational management of water, wastewater, and waste systems.

SSM 201 – Sustainable Building Design, Construction, and Operations

Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in SSM 101 and ENRG 101.
Description: This course introduces principles of green building design and operations, including site planning and zoning, construction practices, energy efficiency, economics of green building, benefits and barriers, and the LEED rating system.
THEATRE
(THEA)

THEA 101 - Introduction to Theatre (DA)
Credits: 3
Class hours: 2 lecture and 3 lab
Comments: Credit by exam is not an available option.
Description: This course surveys major forms of Western and Asian theatrical performances. The lab emphasizes viewing performance videos.  

THEA 221 - Beginning Acting (DA)
Credits: 3
Class hours: 3 lecture
Comments: May be repeated for a maximum of 6 credits.
Description: This course is an introduction to acting. Students will practice a variety of individual and group exercises for developing stage performance techniques.  

THEA 222 - Acting II (DA)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in THEA 221 or equivalent training from another institution with approval of instructor.
Comments: This course is repeatable for a maximum of 6 credits.
Description: Students will conduct advanced work in improvisation and character development. Vocal and physical training is emphasized, particularly on scene work. Actors are expected to work together to present scenes to the class.

WELDING
(WELD)

Effective Through Fall 2015

WELD 17 - General Welding
Credits: 2
Class hours: 1 lecture and 2 lab
Comments: Credit by exam is not an available option. May be repeated any number of times for credit.
Description: To develop the manipulative skills of oxy-acetylene welding supplement for the automotive mechanics and auto body and fender majors. To know the safe handling of equipment, maintenance, and develop responsible citizens.  

Effective Spring 2016

WELD 17 - Introduction to Welding
Credits: 2
Class hours: 1 lecture and 2 lecture/lab
Coreq: WELD 18
Description: Introduction to Oxy/Ace and basic arc welding procedures in the workplace in accordance with American Welding Society (AWS) standards. This includes proper safety and handling of welding equipment.

WELD 18 - Shop Tools and Equipment
Credits: 1
Class hours: 1 lecture
Coreq: WELD 17
Description: This course will include instruction on basic hand tools. This course will also introduce proper handling of shop tools and equipment.

WELD 41 - Advanced Welding I
Credits: 3
Class hours: 2 lecture and 2 lecture/lab
Prereq: “C” or higher in WELD 20 and WELD 66.
Comments: May be repeated for a maximum of 6 credits.
Description: This course covers introduction to safe practices, setup, and operation of Gas Tungsten Arc Welding (GTAW) equipment. Our students will use GTAW in steel and aluminum, sheet metal and mild steel plate in flat, butt, and tee positions. We will also cover out of position welding using GTAW or MIG in vertical and overhead positions. Emphasis will be on practice and production of assemblies and coupons to be examined and tested according to Section 8 AWS SENSE QC10.

WELD 99V - Special Studies
See explanation under the heading of Special Studies.
ZOOLOGY (ZOOL)

ZOOL 101 - Principles of Zoology (DB)
Credits: 3
Class hours: 3 lecture
Recommended: Concurrent enrollment in ZOOL 101L.
Description: A general survey of the basic principles of animal biology to include a study of animal classification, structure, development, physiology, reproduction, evolution, behavior, and ecology. F

ZOOL 101L - Principles of Zoology Laboratory (DY)
Credits: 1
Class hours: 3 lab
Prereq: “C” or higher in or concurrent enrollment in ZOOL 101.
Coreq: ZOOL 101
Description: A general survey lab of the basic principles of animal biology to include a study of animal classification, structure, development, physiology, reproduction, evolution, behavior, and ecology. F

ZOOL 141 - Human Anatomy and Physiology I (DB)
Credits: 3
Class hours: 3 lecture
Prereq: Qualified for ENG 100. “C” or higher in CHEM 151 and CHEM 151L or CHEM 161 and CHEM 161L or 2 years of high school science within the last 5 years, including 1 year of high school college-prep chemistry with a “B” or higher and 1 year of college-prep biological science with a “B” or higher.
Coreq: ZOOL 141L
Description: This course is a comprehensive introduction to the structure and function of the human body (endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems), and use of anatomy and physiology terminology and concepts. This course will also develop thinking, reading and writing skills, and problem-solving abilities for students entering health or medically-related fields. F, S

ZOOL 141L - Human Anatomy and Physiology Laboratory I (DY)
Credits: 1
Class hours: 3 lab
Prereq: Qualified for ENG 100. “C” or higher in ZOOL 141 and ZOOL 141L.
Coreq: ZOOL 142
Description: This course is intended to complement the material presented in the ZOOL 141 lectures by giving hands-on experience with anatomical models, organ and whole-animal dissections, physiological and biochemical experiments, and microscopic slides dealing with the following systems: integumentary, skeletal, muscular, and nervous. F, S

ZOOL 142 - Human Anatomy and Physiology II (DB)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ZOOL 141 and ZOOL 141L.
Coreq: ZOOL 142L
Description: This course is the second half of a comprehensive introduction to the structure and function of the human body (endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems), and use of anatomy and physiology terminology and concepts. This course will also develop thinking, reading and writing skills, and problem-solving abilities for students entering health or medically-related fields. F, S

ZOOL 142L - Human Anatomy and Physiology Laboratory II (DY)
Credits: 1
Class hours: 3 lab
Prereq: “C” or higher in ZOOL 141 and ZOOL 141L.
Coreq: ZOOL 142
Description: This course is intended to complement the material presented in the ZOOL 141 lectures by giving hands-on experience with anatomical models, organ and whole-animal dissections, physiological and biochemical experiments, and microscopic slides dealing with the following systems: endocrine, cardiovascular, respiratory, digestive, urinary, and reproductive. F, S