Course Descriptions
COURSE DESCRIPTIONS

In this section, you will find courses of instruction listed alphabetically by department. Not all courses are offered every semester. To find out if a course is offered during a particular semester, you need to check the current Schedule of Classes. Schedules are available at Student Services, the Library, and the Business Office.

WHAT IS A COURSE ALPHA?
It is an abbreviation of a subject area. In this example, ETRO means “electronics.” As you look through the course descriptions, it may seem as if the alphas are not in order. They are in order if you think of the words meant by the alpha. For example, ART comes before ABRP. Remember that ABRP means “Auto Body Repair and Painting” so it comes after ART.

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.

WHAT DOES A COURSE NUMBER MEAN?
100 and above
These courses are applicable toward a baccalaureate degree as well as toward an associate degree and certificate programs. They carry college transfer credit.

20 through 99
These courses may be used toward a degree or certificate from Kaua‘i Community College, but they generally are not applicable for credit toward a baccalaureate degree.

ETRO 241 - Electronics Circuit Analysis
Credits: 4
Class hours: 4 lecture
Prereq: “C” or higher in ETRO 122 and ETRO 122L
Coreq: ETRO 241L
Comments: Credit by exam is not an available option.
Description: This course will familiarize the student with a wide variety of circuit configurations and their characteristics. Basic knowledge about amplifiers, power supplies, oscillators, pulse circuits, and modulators is included.

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 Hōkūle‘a, Hawai`i Loa, and Makali`i. In addition, the student will understand and appreciate the cultural impact of long distance voyaging.
DEFINITIONS OF WORDS USED IN COURSE DESCRIPTIONS:

**Corequisite**  
A course which must be taken in conjunction with and during the same semester 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.

**Split-Level Course**  
Split-level courses developed out of a concern to offer a wider range of courses to students enrolling in non-transfer courses. Such courses are offered at the transfer and the non-transfer levels at the same time. For example, Speech 20 and Speech 151 are offered concurrently.

The course content is the same in both levels, but course requirements differ. If you enroll in Speech 151, you need to meet course requirements not expected of Speech 20; for example, you might complete special projects or term papers or take more comprehensive examinations.

Split-level courses with a course number of 100 or higher apply toward A.A. Degree requirements; they also can be used toward an A.S. Degree, a Certificate of Completion, or a Certificate of Attendance. Those split-level courses numbered below 100 meet the requirements for the A.S. Degree, the Certificate of Achievement, and the Certificate of Completion.

**Writing Intensive**  
Since writing helps students both to learn and to communicate, the College course offers a variety of writing intensive (WI) courses. Instructors work with students on writing related to course topics. Transferable writing intensive courses can be used to help meet the University of Hawai’i System’s requirements for graduation. Students are encouraged to take their assigned introductory-level writing courses before enrolling in WI courses. Students develop strength in writing skills as well as learn course content and understand how to apply what they learn through writing. Students also satisfy degree requirements if they transfer to UH Manoa, which requires a minimum of 5 writing intensive courses.

**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.
ACCOUNTING

(ACC)

ACC 124B - Principles of Accounting I, Part I
Credits: 2
Class hours: 3 lecture and 2 lecture/lab (8 weeks)

Recommended: Acceptable reading and writing placement test scores or concurrent enrollment in ENG 22 or higher

Comments: Credit by exam is not an available option.

Description: Introduction to the basic structure of accounting, including basic accounting principles and practices relating to a sole proprietorship service business. Upon with "C" or higher in this course, the student should be able to demonstrate an understanding of the procedures involved in the basic accounting cycle and apply those procedures to the recording and reporting of accounting data at the introductory level.

ACC 124C - Principles of Accounting I, Part II
Credits: 2
Class hours: 3 lecture and 2 lecture/lab (8 weeks)

Prereq: "C" or higher in ACC 124B

Comments: Credit by exam is not an available option.

Description: Introduction to the basic accounting principles and practices relating to a sole proprietorship retail merchandising business. Topics include the use of specialized journals, general and subsidiary ledgers, and financial statements. Also introduces banking transactions and payroll accounting.

ACC 125 - Principles of Accounting II
Credits: 4
Class hours: 3 lecture and 2 lecture/lab

Prereq: "C" or higher in ACC 124C

Comments: Credit by exam is not an available option.

Description: A continuation of financial accounting with emphasis of the reporting for specific assets and liabilities and accounting for corporations and partnerships. Upon with "C" or higher in this course, the student should be able to list the various accounting principles and concepts; and apply basic accounting procedures and reporting requirements at the introductory level.

ACC 126 - Principles of Accounting III
Credits: 4
Class hours: 3 lecture and 2 lecture/lab

Prereq: "C" or higher in ACC 125

Comments: Credit by exam is not an available option.

Description: 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 with "C" or higher in 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.

ACC 128 - Practical Accounting Applications
Credits: 3
Class hours: 3 lecture

Prereq: "C" or higher in ACC 125 or ACC 201

Comments: Credit by exam is not an available option.

Description: A practical accounting course in which students will apply previously acquired accounting skills and knowledge to set up and maintain accounting records using publisher's manual practice set and integrated accounting software. Topics include processing journal entries, general ledger, accounts receivable, accounts payable, inventory, payroll, financial statement analysis, and conversion to an automated system.

ACC 132 - Payroll and Hawai`i General Excise Taxes
Credits: 3
Class hours: 3 lecture

Prereq: "C" or higher in ACC 124C

Comments: Credit by exam is not an available option.

Description: An introduction to the principles, procedures, and terminology for business applications of payroll accounting methods; Federal and State payroll records and forms; Hawai`i general excise tax; and use tax law.

ACC 134 - Income Tax Preparation
Credits: 3
Class hours: 3 lecture

Prereq: "C" or higher in ACC 124C

Comments: Credit by exam is not an available option.

Description: An introduction to principles, procedures, terminology, and application of the Federal and Hawai`i tax laws for individuals and sole proprietorships.

ACC 201 - Introduction to Financial Accounting
Credits: 3
Class hours: 3 lecture

Prereq: Acceptable reading and writing placement test score or concurrent enrollment in ENG 22 or higher

Description: Introduction to accounting theory and methods used to record and report financial information according to generally accepted accounting principles.

ACC 202 - Introduction to Managerial Accounting
Credits: 3
Class hours: 3 lecture

Prereq: "C" or higher in ACC 125 or ACC 201

Description: Introduction to the methods for evaluating financial performance including cost accounting, budgeting, break even analysis, ratio analysis, and cash flow analysis. Also includes principles and procedures relating to partnership and corporation accounting and manufacturing accounting.

AGRICULTURE

(AG)

AG 22 - Soil Technology
Credits: 3
Class hours: 2 lecture and 3 lab

Comments: Credit by exam is not an available option.

Description: In this course, students study the physical properties of soils; soil surveys and land layout; soil formation and classification; soil testing; fertilization practices; soil and water relationships; use of time; soil preparation; and irrigation practices.
AG 41 - Plant Disease and Pest Control
Credits: 3
Class hours: 2 lecture and 3 lab
Comments: Credit by exam is not an available option.
Description: Students survey the principles involved in controlling plant diseases and pests. The class includes study of bacteria, fungi, nematodes, insects, and weeds. Students learn proper and safe methods of mixing sprays and dusts. Legal aspects of the control of plant diseases and pests are explored.

AG 92 - Selected Topics in Agriculture
Credits: 1
Class hours: 3 lecture/lab (5 weeks)
Comments: Credit by exam is not an available option.
Description: This course offers selected topics in agriculture that meet local interests. The course is intended for individuals in business, resort maintenance personnel, plantation workers, and others interested in agricultural topics. The specific content of each topic is varied to meet the needs of specific locality or conditions. Available topics include:
- F - Maile and Mokihana
- G - Agricultural Product Packaging
- H - Identification of plants in the Hawaiian landscape
- I - Propagation of plants in the Hawaiian landscape
- J - Soils and plant nutrition
- K - Insect, weeds, and disease identification
- N - Vegetables for home use (home gardening)
- P - Pesticide application and safety
- Q - Interiorscapes
- R - Tropical fruits and nuts

ANTHROPOLOGY (ANTH)

ANTH 20 - Survey of Anthropology
Credits: 3
Class hours: 3 lecture
Comments: Split-level: ANTH 150
Description: Students explore the science of humanity: the evolution, distribution, and development of human beings and their culture through fossil, archaeological, and ethnographic records.

ANTH 25 - Survey of Cultural Anthropology
Credits: 3
Class hours: 3 lecture
Comments: Split-level: ANTH 200
Description: This course offers an orientation to the nature of human culture. It includes basic concepts for analyzing cultural behavior.

ANTH 150 - Human Adaptations
Credits: 3
Class hours: 3 lecture
Comments: Split-level: ANTH 20
Description: Students explore the science of humanity: the evolution, distribution, and development of human beings and their culture through fossil, archaeological, and ethnographic records.

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

ANTH 200 - Cultural Anthropology
Credits: 3
Class hours: 3 lecture
Comments: Split-level: ANTH 25
Description: This course offers an orientation to the nature of human culture. It includes basic concepts for analyzing cultural behavior.

ANTH 205 - Legends and Myths
Credits: 3
Class hours: 3 lecture
Recommended: ANTH 150 or ANTH 200
Description: This course involves students in the study of folklore and investigation of the function of folktales, legends, and myths.

ANTH 210 - Archaeology
Credits: 3
Class hours: 3 lecture
Recommended: ANTH 150 or ANTH 200
Description: Students explore the prehistory of the human species. The course surveys methods and techniques used in the study of prehistoric culture.

ANTH 210 - Prehistory of Hawai'i
Credits: 3
Class hours: 3 lecture
Recommended: ANTH 210 or HWST 231K
Description: The development of prehistoric Hawaiian culture is explored through legendary, archaeological, ethnographic, and historical resources.

ART (ART)

ART 101 - Introduction to the Visual Arts
Credits: 3
Class hours: 3 lecture
Description: Through lectures and demonstrations, this course explores the nature of the visual arts and their expression in various forms.

ART 107 - Introduction to Photography
Credits: 3
Class hours: 6 lecture/lab
Description: Students study the elements and principles of photography through lectures, demonstrations, and projects. The course assumes no prior knowledge of photography. Each student must have a light meter and camera with adjustable shutter speed and aperture setting.
ART 110 - Introduction to Raku
Credits: 3
Class hours: 5 lecture/lab
Description: This class introduces students to the ancient technique of low-fired pottery as developed in Kyoto, Japan. Students are involved in the complete process from hand-building to glaze development to kiln firing.

ART 111 - Introduction to Watercolor Painting
Credits: 3
Class hours: 2 lecture and 4 lab
Description: This course introduces students to watercolor materials and techniques.

ART 112 - Introduction to Computer Art
Credits: 3
Class hours: 2 lecture and 4 lab
Description: In this course, the student experiences the computer as an artist’s tool. The technology, vocabulary, and procedures of computer produced images are explored.

ART 113 - Introduction to Drawing
Credits: 3
Class hours: 2 lecture and 4 lab
Description: This course involves students in two-dimensional visualization and rendering of forms, spaces, and ideas through a variety of approaches and media.

ART 123 - Introduction to Painting
Credits: 3
Class hours: 2 lecture and 4 lab
Description: This course explores the theory and practice of painting. Basic material and technical procedures are addressed.

ART 170 - Introduction to Western Art
Credits: 3
Class hours: 3 lecture
Comments: Split-level: ART 70
Description: This course offers broad coverage of major developments in the arts of Europe and America from the Neolithic period to the present.

ART 180 - Introduction to Eastern Art
Credits: 3
Class hours: 3 lecture
Comments: Split-level: ART 80
Description: This course covers the major developments in the fine arts of Asia including painting, sculpture, and architecture. Emphasis is on the fine arts of India, China, and Japan.

ART 210 - Intermediate Raku
Credits: 3
Class hours: 6 lecture/lab
Prereq: “C” or higher in ART 110
Description: This course continues exploration of the techniques introduced in ART 110. Emphasis is placed on glaze refinement (quality and colors), kiln design, and alternate firings (introduction of reduction firing techniques).

ART 211 - Intermediate Watercolor
Credits: 3
Class hours: 2 lecture and 4 lab
Prereq: “C” or higher in ART 111
Description: This course provides continued study of basic techniques presented in ART 111 together with intensive application. The student is encouraged to develop a personal style in the medium of watercolor.

ART 213 - Intermediate Drawing
Credits: 3
Class hours: 2 lecture and 4 lab
Prereq: “C” or higher in ART 113
Description: This course involves students in extending skills developed in ART 113. It focuses on drawing concepts unique to this century.

ART 223 - Intermediate Painting
Credits: 3
Class hours: 2 lecture and 4 lab
Prereq: “C” or higher in ART 113
Description: This course provides continuing study of basic techniques presented in ART 113. Emphasis is on abstraction and no representation painting.

ART 227 - Oriental Brush Painting
Credits: 3
Class hours: 2 lecture and 4 lab
Description: Brush techniques in classical painting and calligraphy are offered in this course.

ART 228 - Chinese Landscape Painting
Credits: 3
Class hours: 2 lecture and 4 lab
Prereq: “C” or higher in ART 227
Comments: May be repeated three times for credit.
Description: This course offers studio practice in the concepts and techniques of Chinese landscape painting.

ART 243 - Intermediate Ceramics: Hand Building
Credits: 3
Class hours: 2 lecture and 4 lab
Prereq: ART 105
Description: Students explore the development of sculptural concepts using hand building techniques.

ART 244 - Intermediate Ceramics: Wheel Throwing
Credits: 3
Class hours: 2 lecture and 4 lab
Prereq: “C” or higher in ART 105
Comments: May be repeated once for credit.
Description: Students experience the development of vessel and sculptural concepts using wheel throwing techniques.

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

ASTRONOMY (ASTR)

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

AUTO BODY REPAIR AND PAINTING (ABRP)

ABRP 19 - Introduction to Auto Body Repair
Credits: 2
Class hours: 8 lecture/lab (7.5 weeks)
Comments: Credit by exam is not an available option. May be repeated any number of times for credit.
Description: This course introduces students to the theory of auto body repair. It offers limited manipulative training in metal work, patch work, and fender repair including the proper use of hand tools.
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.

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.

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.

ABRP 41 - Auto Body II
Credits: 7
Class hours: 3 lecture/12 lab
Prereq: "C" or higher in ABRP 20 and ABRP 40
Comments: Credit by exam is not an available option.
Description: Major topics covered in this course include the theory and practice of aligning frames and the proper use of frame correctional equipment and gauges. Students also receive instruction in shop management, problem analysis, and estimation.

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.

Courses currently being revised; curriculum approval pending
See program description on page 55
Target delivery dates: Spring 2004 - Spring 2005

Non-Structural Analysis and Repair II
Description: This course is designed to teach the student conventional and unitized body construction. The emphasis will be placed on repairing auto panels and the manufacturers’ specifications.

Painting and Refinishing: Surface and Prep/Safety
Description: This course is designed to teach the student techniques and methods of preparing the Auto Body surface for painting. The emphasis will be placed on different methods of preparing a surface for painting to include chemical, mechanical and physical means. Safety precautions will be emphasized throughout the training.

Structural Analysis Damage Repair/Frames
Description: This course provides the student practical applications in frame inspection, measurement and repair. Welding applications will be used as needed. The emphasis of this course is on straightening and aligning frames to manufacturer’s specifications.

Plastics and Adhesives I
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 automobiles. Safety during the mixing and handling of these chemicals will be emphasized. Identification of when and what type of substance to use for repair, how it is applied, and how the various plastics are used by manufacturer’s in their designs will be taught.

Structural Analysis Repair/Unibody
Description: This course provides the student practical applications in unibody inspection, measurement and repair. Welding applications will be used as needed. The emphasis of this course is on straightening and aligning the unibody of manufacturer’s specifications and the replacement of fixed glass.

Non-Structural Analysis Damage Repair III
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.

Painting and Refinishing: Spray Gun Operation I
Description: This course is designed to teach the student techniques and methods of painting the auto body. The emphasis will be placed on paint mixing, matching of colors and different types of paint, and the operations of a variety of spray guns used in the auto body industry.

Plastics and Adhesives II
Description: This course is designed to teach the student the techniques and methods of repairing flexible and rigid plastic parts of domestic and foreign manufactured automobiles. Safety during the mixing and handling of these chemicals will be emphasized.

Painting and Refinishing: Spray Gun Operation II
Description: This course is designed to teach the student techniques and methods of painting the auto body. The 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.
**Structural Analysis Damage Repair/Peripheral Components**

*Description:* This course provides the student 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. The emphasis of this course is on properly repairing to manufacturer's specifications.

**Painting and Refinishing: Problem Solving**

*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.

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**AUTOMOTIVE MECHANICS TECHNOLOGY (AMT)**

**AMT 16 - Car Care**

*Credits:* 1  
*Class hours:* 1 lecture/lab hour (semester); 2 lecture/lab hours (8 weeks)  
*Recommended:* Open to all students; not recommended for automotive majors  
*Comments:* Credit by exam is not an available option. May be repeated any number of times for credit.  
*Description:* This class 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.

**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 presents elementary principles involved in the operation and maintenance of an automobile. Units include lubrication and service; wheel and tire service; wheel-bearing service; battery service; and brake, cooling, exhaust, fuel, and ignition systems.

**AMT 20 – Introduction to Automotive Technology**

*Credits:* 2  
*Class hours:* 1 lecture and 3 lab  
*Prereq:* Placement into ENG 21 or higher and MATH 50 or higher  
*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.

**AMT 30 - Automotive Engine Overhaul**

*Credits:* 8  
*Class hours:* 4 lecture and 8 lab  
*Prereq:* Acceptable placement test score. (Early admit students—spring semester only).  
*Comments:* Credit by exam is not an available option.  
*Description:* The theory, operation, diagnosis of mechanical conditions, and practical overhaul procedures of the internal combustion gasoline engine are studied in this class. Students receive training in the use of specialized and precision measuring instruments.

**AMT 40B – Fuel Systems**

*Credits:* 3  
*Class hours:* 1 lecture and 4 lab (semester); 3 lecture and 10 lab (6 weeks)  
*Prereq:* Acceptable placement test score.  
*Comments:* Credit by exam is not an available option.  
*Description:* In this course, students learn elementary theories and practical skills in servicing the fuel and emission systems including the electronic fuel control system.

**AMT 40E – Electrical/Electronics**

*Credits:* 2  
*Class hours:* 1 lecture and 3 lab  
*Prereq:* Placement into ENG 21 or higher and MATH 50 or higher  
*Description:* This course will provide students with fundamental principles of automotive electricity and electronics. Practical skills to diagnose, test, and service battery and lighting systems are covered. Testing and repair of electrical safety devices, wiring, connectors and relays are also covered.

**AMT 53 - Brakes**

*Credits:* 3  
*Class hours:* 1 lecture and 6 lab  
*Prereq:* Placement in ENG 21 or higher and MATH 50 or higher  
*Comments:* Credit by exam is not an available option.  
*Description:* This course covers 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 disk brakes are covered. Repair and service techniques of the complete brake system are demonstrated.

**AMT 55 - Suspension, Steering, and Alignment**

*Credits:* 4  
*Class hours:* 2 lecture and 6 lab  
*Prereq:* Placement in ENG 21 or higher and MATH 50 or higher  
*Comments:* Credit by exam is not an available option.  
*Description:* The operation, construction, design, maintenance, and repair of suspension and steering systems in the modern automobile. Modern four-wheel alignment is also covered.

**AMT 60 - Diagnostic and Repair**

*Credits:* 8  
*Class hours:* 4 lecture and 8 lab  
*Prereq:* Completion of AMT major courses  
*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 are exposed to different types of live jobs to build self-confidence, improve approach to troubleshooting, and improve skills of the trade with emphasis on accuracy, neatness, and speed.
### AMT 80 - Small Engine Repairs
**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. The course emphasizes safety, tool use and identification, and the general construction and repair of small gasoline engines. An overview of job opportunities and skills required is included.

### AMT 88 - Motorcycle Repair I
**Credits:** 2  
**Class hours:** 1 lecture and 2 lab  
**Comments:** Credit by exam is not an available option.  
**Description:** This is a basic course in the theory of operation and repair procedures of two- and four-stroke motorcycles.

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

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

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**Courses currently being revised; curriculum approval pending**

See program description on page 58

### AMT 30A – Engines I
**Credits:** 5  
**Class hours:** 2 lecture and 9 lab  
**Prereq:** Placement in ENG 21 or higher and MATH 50 or higher  
**Comments:** Credit by exam is not an available option.  
**Description:** The theory of operation, maintenance, diagnosis, and practical repair procedures of cylinder heads, timing systems (belts and chains), and cooling systems are covered in this class.

### AMT 40B – Fuel and Emissions
**Credits:** 3  
**Class hours:** 1 lecture and 6 lab  
**Prereq:** Placement in ENG 21 or higher and MATH 50 or higher  
**Comments:** Credit by exam is not an available option.  
**Description:** In this course, students learn elementary theories and practical skills in servicing fuel and emission systems including electric fuel pumps. Diagnosis, repair, overhaul of carburetors and mechanical fuel injections systems are covered. Diagnosis and repair of injectors (electronic) are also covered.

### AMT 40D – Engine Performance I
**Credits:** 3  
**Class hours:** 1 lecture and 6 lab  
**Prereq:** Placement in ENG 21 or higher and MATH 50 or higher and "C" or higher in AMT 20, AMT 40E, AMT 40B 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.

### AMT 40F – Electrical/Electronics II
**Credits:** 2  
**Class hours:** 1 lecture and 3 lab  
**Prereq:** AMT 40D, AMT 40B and AMT 41  
**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 DVOM's are covered.

### AMT 40H – Engine Performance II
**Credits:** 5  
**Class hours:** 2 lecture and 9 lab  
**Prereq:** Placement in ENG 21 or higher and MATH 50 or higher and "C" or higher in AMT 40E, AMT 40B and AMT 41  
**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 DVOM's are covered.

### AMT 40G – Electrical/Electronics III
**Credits:** 2  
**Class hours:** 1 lecture and 3 lab  
**Prereq:** Placement in ENG 21 or higher and MATH 50 or higher and "C" or higher in AMT 40E  
**Comments:** Credit by exam is not an available option.  
**Description:** Essential theories and practical skills in servicing starting systems, charging systems and batteries.

### AMT 41 – Ignition Systems
**Credits:** 2  
**Class hours:** 1 lecture and 3 lab  
**Prereq:** Placement in ENG 21 or higher and MATH 50 or higher and "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, its components and their function. 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.

### AMT 43 – Heating and Air Conditioning
**Credits:** 4  
**Class hours:** 2 lecture and 6 lab  
**Prereq:** Placement in ENG 21 or higher and MATH 50 or higher  
**Comments:** Credit by exam is not an available option.  
**Description:** This class provides technical information and manipulative skills necessary for entrance into the automotive heating and air conditioning field. Air conditioning servicing and diagnostics using approved recovery and/or recycled equipment are covered. Training is also provided on the function of the vacuum, electrical, refrigeration, and computer control circuits.
BIOL 100 – Human Biology
Credits: 3
Class hours: 3 lecture
Prereq: ENG 22 or placement in ENG 100
Coreq: BIOL 100L
Description: This general science course emphasizes basic science concepts by studying human anatomy and physiology. The course introduces students to the structure and function of cells, tissues, organs, and systems of the human body. This course includes a study of the disease process and recent scientific advances.

BIOL 100L – Human Biology Laboratory
Credits: 1
Class hours: 3 lab
Prereq: “C” or higher in ENG 22 or placement in ENG 100
Coreq: BIOL 100
Description: 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.

BIOL 110V - Projects in Biology
Credits: 1-2
Class hours: Meetings arranged
Prereq: “C” or higher in BIOL 101; or BOT 101; or ZOOL 101; and approval of instructor
Comments: May be repeated once for credit.
Description: 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 procedure and adaptation, or construction of apparatus used in the course.

BIOL 123 - Introduction to Science: Hawaiian Environment
Credits: 3
Class hours: 3 lecture
Coreq: BIOL 123L
Description: Characteristics of science and interaction with society illustrated by topics in geology, meteorology, oceanography, and biology of the Hawaiian Islands.

BIOL 123L - Hawaiian Environment Science Lab
Credits: 1
Class hours: 3 lab
Coreq: BIOL 123
Description: Laboratory experiments to complement the 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
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in CHEM 151 or CHEM 161
Coreq: BIOL 171L
Description: Introductory biology for all life science majors. The areas studied will include cell structure and chemistry, growth, reproduction, genetics, evolution, viruses, bacteria, and simple eukaryotes.

BIOL 171L - Introduction to Biology Laboratory I
Credits: 1
Class hours: 3 lab
Coreq: BIOL 171
Comments: Credit by exam is not an available option.
Description: The laboratory complements BIOL 171 lecture and is intended to provide laboratory experiences that focus on organic molecules, cell structure, cell functions, and genetics.

BIOL 172 - Introduction to Biology II
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in BIOL 171 and BIOL 171L
Coreq: BIOL 172L
Description: BIOL 172 is a continuation of BIOL 171 emphasizing anatomy, physiology, and systematics of plants and animals to include behavior, ecosystems, populations, and communities.

BIOL 172L - Introduction to Biology Laboratory II
Credits: 1
Class hours: 3 lab
Coreq: BIOL 172
Comments: Credit by exam is not an available option.
Description: This laboratory complements BIOL 172 lecture and 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
Credits: 3
Class hours: 2 lecture and 3 lab
Prereq: Placement in ENG 100, MATH 27, and the ability to do moderate hiking and outdoor activity.
Recommended: “C” or higher in a biological science course and laboratory (BOT 101, BOT 130/130L, BIOL 123/123L, SCI 121/121L)
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: Placement in MATH 24 or higher
Comments: Credit by exam is not an available option.
Description: This course is an introduction to reading and understanding plans and specifications for residential and other small buildings. Students study visualization and the various symbols, legends, abbreviations, and dimensioning techniques used in blueprints. Topics include civil, structural, architectural, mechanical, electrical, and landscape drawings. Other topics include the specifications, construction materials, and construction methods.

BLPR 40 - Advanced Blueprint Reading and Estimates
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in BLPR 22
Comments: Credit by exam is not an available option.
Description: This is an introductory course in construction estimating and bidding using plans and specifications. Topics include construction contracts, types of estimates, cost accounting, and construction costs. The class also includes measurement of quantities and construction work from plans as well as specifications and pricing the work.

BOTANY (BOT)

BOT 20 - Beginning Botany
Credits: 4
Class hours: 3 lecture and 3 lab
Comments: Split-level: BOT 101. Credit by exam is not an available option.
Description: This introduction to basic botanical principles includes the anatomy, morphology, physiology, evaluation, life cycles, ecology, and genetics of seed plants. Principles of molecular and cellular biology, non technical plant identification, and plant propagation are also studied. The laboratory is part of the class.

BOT 101 - General Botany
Credits: 4
Class hours: 3 lecture and 3 lab
Comments: Split-level: BOT 20. Credit by exam is not an available option.
Description: This course covers the structure, growth, function, and evolution of plants and their relationship to the environment and human activities. The laboratory is part of the class.

BOT 105 - Ethnobotany
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
Credits: 3
Class hours: 3 lecture
Coreq: BOT 130L
Recommended: Placement in ENG 21 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
Credits: 1
Class hours: 3 lab
Coreq: BOT 130
Recommended: Placement in ENG 21 and MATH 24
Description: BOT 130L is a one-credit laboratory science course designated to accompany BOT 130. If successfully completed for grade, it can fulfill the laboratory course requirement for the Natural Sciences.

BOT 160 - Identification of Tropical Plants
Credits: 2
Class hours: 2 lecture
Description: This is a non-technical course in the identification of common plants of the tropics.

BUSINESS EDUCATION (BUS)

BUS 55 - Computational Problems in Business
Credits: 3
Class hours: 3 lecture
Prereq: Acceptable English and math placement test scores
Recommended: Placement in ENG 21 and ENG 22 and MATH 24
Description: Basic math applications to business problems. Reviews fundamental arithmetic processes including fractions, decimals, and percents. Emphasizes business applications in finance, merchandising, and accounting.

BUS 115 - Principles of Finance
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in ACC 124B and ACC 124C
Recommended: Placement in ENG 21 and
Description: This survey of business finance includes planning and managing assets; planning the financial structure; management of short-, intermediate-, and long-term funds; and valuing business enterprises.

BUS 120 - Principles of Business
Credits: 3
Class hours: 3 lecture
Description: Foundations of the social, legal, competitive, and economic environment of business organizations within a capitalist society and within the international marketplace. Fundamentals of the importance of the internal organizational structure, effective information systems, planning, management, and how the key functions of business organizations, such as human resources administration, labor management relations, marketing, finance, insurance, and accounting operate within organizations.
BUS 121B – Customer Service – Basic Concepts
Credits: 1
Class hours: 1 lecture
Recommended: Placement in ENG 22 or higher
Description: This course covers basic customer service concepts. Intended to both transfer information and enhance attitude, this course introduces the evolution and importance of Customer Service. It examines behavior styles and dissatisfied/difficult customers, and explores service recovery and customer loyalty. It constructs a framework for interpreting customer needs and exceeding customer expectations.

BUS 130 - Business Communications: Oral
Credits: 3
Class hours: 3 lecture
Comments: Credit by exam is not an available option.
Description: This course gives students an opportunity to develop competence in oral communications within an organizational context. Emphasis is placed upon interviewing and conference discussion, including participation and leadership in groups. Students are involved in personal presentations, including explaining, reporting, briefing, and selling ideas.

BUS 143 – Professional Employment Preparation
Credits: 1
Class hours: 1 lecture (15 weeks) or 2 lecture (8 weeks)
Prereq: "C" or higher in ENG 22 or acceptable reading and writing placement test scores
Recommended: "C" or higher in concurrent enrollment in OAT 121
Description: Facilitates employment search by emphasizing professional techniques and standards in the preparation of application forms, resumes, cover letters, and employment interviews. Students will wear appropriate interview attire. Covers information and skills needed for professional telephone personality.

BUS 143 – WI (Writing Intensive)/ Professional Employment Preparation
Credits: 1
Class hours: 1 lecture (15 weeks) or 2 lecture (8 weeks)
Prereq: “C” or higher in ENG 22 or acceptable reading and writing placement test scores
Recommended: "C" or higher in concurrent enrollment in OAT 121
Description: Facilitates employment search by emphasizing professional techniques and standards in the preparation of application forms, resumes, cover letters, and employment interviews. Students will wear appropriate interview attire. Covers information and skills needed for professional telephone personality.

BUS 143 – WI (Writing Intensive) / Business Communications: Written
(Meets graduation requirement for BUS 209 at the College of Business, UH Manoa.)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100
Comments: Credit by exam is not an available option.
Description: Students review and refine basic and advanced writing techniques required to produce polished, professional business writing. Attention is given to proper format and content for resumes, reports, letters, and memos.

BUS 157 - Business Communications: Written
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 22 or higher; or acceptable reading and writing placement test scores
Comments: Credit by exam is not an available option.
Description: Students explore and demonstrate skills and techniques for effective business writing. Use word processing software to facilitate message creation and revision.

BUS 175 - Business Communications: Written
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 22 or higher; or acceptable reading and writing placement test scores
Comments: Credit by exam is not an available option.
Description: Students review and refine basic and advanced writing techniques required to produce polished, professional business writing. Attention is given to proper format and content for resumes, reports, letters, and memos.

BUS 175 - WI (Writing Intensive) / Business Communications: Written
(Meets graduation requirement for BUS 209 at the College of Business, UH Manoa.)
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100
Comments: Credit by exam is not an available option.
Description: Students review and refine basic and advanced writing techniques required to produce polished, professional business writing. Attention is given to proper format and content for resumes, reports, letters, and memos.

BUS 193V - Cooperative Education
Credits: 1-3
See explanation under the heading of Cooperative Education.

BUSINESS LAW (BLAW)

BLAW 200 - Legal Environment of Business
Credits: 3
Class hours: 3 lecture
Description: 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, personal property, and the sale of personal property. Emphasis is placed on the Uniform Commercial Code.

BUSINESS MACHINES (BMAC)

BMAC 20C - Electronic Calculators
Credits: 1
Class hours: 1 lecture and 2 lecture/lab
Description: This laboratory course covers the basic operational procedures of electronic calculators, including practical applications in solving business mathematics problems.

CARPENTRY (CARP)

CARP 19 - Minor Home Repairs and Maintenance
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: This is an introductory course for homeowners. Students learn the theories and manipulative skills involved in the proper use of hand tools and machinery dealing with the repair and maintenance of a cottage, including practical experience in performing typical minor home repairs. Safety is stressed.

CARP 19B - Minor Home Repairs and Fabrication
Credits: 2
Class hours: 3 lecture/lab
Prereq: “C” or higher in CARP 19
Comments: Credit by exam is not an available option. May be repeated any number of times for credit.
Description: This is an advanced course for homeowners. Students learn the theories and manipulative skills involved in the proper use of hand tools and machinery dealing with the repair and fabrication of various segments of a home. Safety is stressed.
Carpentry Technology

**Carpentry Technology (CARP)**

- **CARP 20 - Introduction to Carpentry**
  - **Credits:** 11
  - **Class hours:** 5 lecture and 18 lab
  - **Prereq:** Placement in ENG 22 or higher and MATH 50 or higher
  - **Comments:** Credit by exam is not an available option.
  - **Description:** An introductory course in carpentry technology. Proper use, care, and maintenance of hand tools, industrial grade portable tools, and various shop equipment. The study of construction materials, hardware, and fastening methods. Safety precautions stressed.

- **CARP 22 - Concrete Form Construction**
  - **Credits:** 11
  - **Class hours:** 5 lecture and 18 lab
  - **Prereq:** Placement in ENG 22 or higher and MATH 50 or higher
  - **Comments:** Credit by exam is not an available option.
  - **Description:** A course in the theory and practice of concrete form construction, including forms for footings, walls, beams, stairs, and above-grade slabs. Other topics include the study of concrete and concrete products, form construction terminology, form materials, and methods. Projects include on site building foundation layout using the transits and levels. Safety practices in form construction are stressed.

- **CARP 41 - Interior and Exterior Wall Framing**
  - **Credits:** 11
  - **Class hours:** 5 lecture and 18 lab
  - **Prereq:** Placement in ENG 22 or higher and MATH 50 or higher
  - **Comments:** Credit by exam is not an available option.
  - **Description:** A course on the theory and practice in construction of framing walls, partitions, rough openings, floors, exterior and interior wall coverings, ceilings, and moldings. Other topics include truss design, roof framing methods and construction, and quantity and cost estimates. Safety is discussed and stressed throughout the course.

- **CARP 42 - Finishing**
  - **Credits:** 11
  - **Class hours:** 5 lecture and 18 lab
  - **Prereq:** Placement in ENG 22 or higher and MATH 50 or higher
  - **Comments:** Credit by exam is not an available option.
  - **Description:** A course in the principles of finishing carpentry and joinery; methods and materials used to finish the interior of a house are covered. Topics include door frame layout and construction, door and window installation and trim, cabinet construction and installation, and stairs construction.

- **CARP 93V - Cooperative Education**
  - **See explanation under the heading of Cooperative Education.**

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

Chemistry

**Chemistry (CHEM)**

- **CHEM 151 - Elementary Survey of Chemistry**
  - **Credits:** 3
  - **Class hours:** 3 lecture
  - **Prereq:** “C” or higher in MATH 24
  - **Coreq:** CHEM 151L
  - **Description:** An introduction to the basics of college chemistry. Topics include measurement, atomic, quantum, chemical bonding theories, stoichiometry, chemical reactions, thermochemistry, and gaseous, liquid, and solid states.

- **CHEM 151L - Survey of Chemistry Laboratory**
  - **Credits:** 1
  - **Class hours:** 3 lab
  - **Coreq:** CHEM 151
  - **Description:** This survey of general principles and descriptive chemistry is intended for students with no previous background in chemistry. Topics include atoms and molecules; moles and formulas; properties of solids, liquids, and gases; enthalpy and entropy; acids and bases; chemical composition; stoichiometry; and equilibria.

- **CHEM 152 – Survey of Organic and Bioorganic Chemistry**
  - **Credits:** 3
  - **Class hours:** 3 lecture
  - **Prereq:** “C” or higher in CHEM 151 and placement in ENG 100
  - **Description:** A one-semester course that provides basic information on the structure, nomenclature, properties and reactions of organic and biochemical compounds emphasizing their practical importance.

- **CHEM 161 - General Chemistry I**
  - **Credits:** 3
  - **Class hours:** 3 lecture
  - **Prereq:** “C” or higher in MATH 25 or equivalent
  - **Coreq:** CHEM 161L
  - **Description:** An introduction to the basics of college chemistry. Topics include chemical measurements, atomic, quantum, chemical bonding theories, stoichiometry, chemical reactions, thermochemistry, and gaseous, liquid, and solid states.

- **CHEM 161L - General Chemistry Laboratory I**
  - **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.

- **CHEM 162 - General Chemistry II**
  - **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.

- **CHEM 162L - General Chemistry Laboratory II**
  - **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 laboratory.
COMMUNICATION (COM)

COM 210 - Intercultural Communication
Credits: 4
Class hours: 3 lecture and 2 lab
Comments: Credit by exam is not an available option. A two-night campout is included.
Description: This interdisciplinary course deals with cultural differences and the way these differences disrupt communication between people of varying cultural backgrounds. The course explores ways of broaching cultural barriers and building a new cross-cultural framework of ideas and attitudes. The workshop format includes discussion groups, brief lectures, audio-visual materials, and group field assignments.

COOPERATIVE ARTS AND SCIENCES EDUCATION (CASE)
CASE 193-293 - Cooperative Education
Credits: 1-3
See explanation under the heading of Cooperative Education.

COOPERATIVE EDUCATION
Cooperative Education
Credits: 1-3
Class hours: 1 hour per week with coordinator and 75 hours work experience for each credit
Prereq: Approval of coordinator and instructor
Comments: May be repeated with approval of coordinator and instructors.
Description: This cooperative education course provides on-the-job work experience with participating agencies in business, industry, and government. Cooperative Education is open to qualified majors in business, trade technology, and liberal arts. Work hours, job placement, and wages are arranged by the coordinator and instructors. (One credit requires a minimum of 75 hours of work experience per semester.)
ABRP 93, AMT 93, and CARP 93 are for trade technology majors.
BUS 193 is for business majors.
CASE 193 and 293 (Cooperative Arts and Sciences Education) generally involve career exploration and career development experiences.
FSER 193 is for visitor industry (Food Services) majors.
HOPE 193 is for visitor industry (Hotel Operations) majors.
HORT 193 is for liberal arts students generally involving career exploration in areas related to agriculture and horticulture.

DRAFTING (DRAF)
DRAF 19 - Basic Drafting
Credits: 3
Class hours: 2 lecture and 3 lab
Prereq: Placement in MATH 24 or higher and ENG 21 or higher
Comments: Credit by exam is not an available option.
Description: This course provides a comprehensive study of basic drafting techniques, materials, tools, and processes. Students develop skill in projections, sections, pictorial drawings, lettering, and dimensioning.

DRAF 20 - Introduction to Drafting
Credits: 4
Class hours: 2 lecture and 6 lab
Prereq: "C" or higher in DRAF 19; or high school mechanical drawing; and MATH 24 or higher and ENG 21 or higher
Comments: Credit by examination is not an available option.
Description: This class is a comprehensive study of the fundamentals of drafting, residential building construction, and common architectural drawings. Topics include drafting equipment, lettering, line work, symbolizing, dimensioning, projections, sectioning, pictorial drawing, architectural representation, and the nature and scope of the drafting profession.

DRAF 26 - Construction Materials I
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in DRAF 20
Comments: Credit by exam is not an available option.
Description: This course provides a survey of the materials used in construction, their nature, characteristics, variety, and uses. Also covered in this course are materials and methods of light building construction.

EAST ASIAN LANGUAGE AND LITERATURE (EALL)
EALL 272 - Japanese Literature in Translation-Modern
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in ENG 100
Recommended: "C" or higher in ENG 100
Description: This survey of modern Japanese literature begins with the Meiji era (1868) and extends to the present. Knowledge of Japanese language is not required.

E-COMMERCE (ECOM)
ECOM 100 - Introduction to E-Commerce
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in OAT 121 or ICS 100 and ENG 22 or higher
Recommended: Working knowledge of personal computer systems and ability to operate standard web browsers and use email comfortably.
Description: Introduction to the technology and history of the Internet and its uses as an electronic commerce media from informational websites to full online retail systems. Included in this introductory survey course will be analysis and evaluation of retail and business-to-business Internet-based systems. Course work includes web page design and the construction of a business-style website.

ECONOMICS (ECON)
ECON 18B - Consumer Economics: The Marketplace
Credits: 1
Class hours: 3 lecture/lab (5 weeks)
Description: This course explores the marketplace in terms of advertising, gyps and frauds, and safeguards for shoppers.

ECON 18C - Consumer Economics: Money Management
Credits: 1
Class hours: 3 lecture/lab (5 weeks)
Description: This course offers money management in terms of earning, spending (borrowing and the use of credit), saving, and investing (securities and insurance).
ECON 18D - Consumer Economics: Estate Planning
Credits: 1
Class hours: 3 lecture/lab (5 weeks)
Description: This course provides information for planning for the disposal of possessions after death.

ECON 120 - Introduction to Economics
Credits: 3
Class hours: 3 lecture
Description: This survey of the principles of economics equally emphasizes microeconomic and macroeconomic theory. Analysis of current economic problems with special attention placed on policy alternatives for solution to these problems is part of the course.

ECON 130 - Principles of Economics
Credits: 3
Class hours: 3 lecture
Description: This course provides an opportunity to 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. Special emphasis is placed on the analysis of contemporary issues such as pollution, discrimination, professional sports, and poverty.

ECON 131 - Principles of Economics
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in ECON 130
Description: This analysis of functioning economic systems emphasizes forces determining levels and changes of national income and employment. Basic economic institutions, such as markets, money, bank, labor organizations, and corporations are explored.

EDUCATION (ED)

ED 105 - Introduction to Early Childhood Education
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in ENG 21 or ENG 22
Description: This introductory course explores the historical roots and fundamental principles in early childhood care/programs, the variety and scope of programs in the community, issues confronting the field, and career options.

ED 115 - Health Safety and Nutrition for the Young Child
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in ENG 21 or ENG 22
Description: This course provides the student in the Early Childhood Education program with the theoretical and practical knowledge of methods for establishing a healthy and safe environment for the young child. The course includes an introduction to the nutritional needs of the child and the basic growth and development patterns in children.

ED 131 - Early Childhood Development: Theory Into Practice
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in ENG 21 or ENG 22
Description: Principles of human development from conception through early childhood are covered in this course. The interrelation of physical, cognitive, emotional, and social aspects of the individual and how development affects expectations of and relationship to the individual child are included.

ED 140 - Guidance of Young Children in Group Settings
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in ENG 21 or ENG 22
Description: This basic course addresses positive ways to support children’s social-emotional development from birth to age eight. The focus is on adult-child and child-child interactions and relationships.

ED 191B - Early Childhood Work Practicum
Credits: 3
Class hours: 15 practicum
Prereq: "C" or higher in ED 140, ED 115 and ED 192; and a completed affiliation agreement with practicum site.
Coreq: ED 191C
Comments: May be repeated until 12 credits are earned. Responsibilities to increase with each repeat.
Description: This supervised work experience provides individualized in-service training in education.

ED 191C - Early Childhood Discussion Practicum
Credits: 1
Class hours: 1 lecture
Coreq: ED191B
Comments: May be repeated.
Description: This seminar course is designed to provide an opportunity for the student to discuss problems experienced in the work practicum and other courses. The course includes counseling, guidance, problem solving, and evaluating experiences.

ED 192 - Beginning Preschool Lecture/Laboratory
Credits: 2
Class hours: 4 lecture/lab
Prereq: "C" or higher in ED 192 and ED 131 and ED 105
Coreq: ED 191B
Comments: May be repeated.
Description: This course applies theories of child development to a laboratory setting.

ED 195 - Intermediate Preschool Lecture/Laboratory
Credits: 4
Class hours: 8 lecture/lab
Prereq: "C" or higher in ED 115, ED 140 and ED 192
Description: This course applies theories of child development to a laboratory setting.

ED 234 - Observation and Assessment
Credits: 2
Class hours: 2 lecture
Prereq: "C" or higher in ED 192
Description: In this course, students develop advanced skills in methods of observing and recording behavior and assessing children and environments.
ED 245 - Child, Family, and Community
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in ENG 21 or ENG 22
Description: The central focus of this course is on developing skills for establishing effective relationships between the early childhood professional and families of the children with whom the professional is working.

ED 252 - Early Childhood Curriculum: Communication
Credits: 2
Class hours: 2 lecture
Prereq: "C" or higher in or concurrent enrollment in ED 131; or PSY 220 and ED 140
Description: This course provides a theoretical base from which to design, plan, implement, and evaluate experiences and activities that enhance communications skills development in young children.

ED 253 - Early Childhood Curriculum: Physical
Credits: 2
Class hours: 2 lecture
Prereq: "C" or higher in or concurrent enrollment in ED 131; or PSY 220 and ED 140
Description: This course provides a theoretical base from which to design, plan, implement, and evaluate experiences and activities that enhance the physical development of young children.

ED 255 - Early Childhood Curriculum: Creative
Credits: 2
Class hours: 2 lecture
Prereq: "C" or higher in or concurrent enrollment in ED 131; or PSY 220 and ED 140
Description: This course offers the opportunity to design, plan, implement, and evaluate experiences and activities that enhance the creative development of young children.

ED 266 - Cognitive Development Through Integration
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in or concurrent enrollment in two curriculum courses
Description: This course provides a theoretical base from which to design, plan, implement, and evaluate integrated experiences and activities that enhance the cognitive development of young children.

ED 280 - Administration in Early Childhood Education
Credits: 3
Class hours: 3 lecture
Prereq: 9 credits of Early Childhood Education courses
Description: This course covers the philosophy and goals, organizational structure, and basic managerial information involved in operating a quality child care center for children and employees. The course is designed primarily for present or prospective administrators or employees of child care centers.

ED 290C - Advance Preschool Lecture/Laboratory
Credits: 4
Class hours: 8 lecture/lab
Prereq: "C" or higher in ED 195 or ED 191B
Description: This final laboratory experience enables students to put into practice the theories, attitudes, and skills gained in lecture courses at an increasing level of achievement.

ELE 20 - Electrical Fundamentals
Credits: 4
Class hours: 4 lecture
Comments: Credit by exam is not an available option.
Description: This course introduces the concepts and theories of electricity. Basic physics of electricity, electrical units and nomenclature, circuit computations, basic circuit configurations, magnetism, and electromagnetism are included.

ELE 22 - Wiring Materials and Methods
Credits: 6
Class hours: 12 lecture/lab
Prereq: "C" or higher in ELEC 20
Comments: Credit by exam is not an available option.
Description: Students develop knowledge and manipulative skills in the use of basic hand tools, power tools, equipment, and various hardware encountered in electrical work. Laboratory exercises provide the “hands-on” experience and skills to solve applied problems in electrical installations.

ELE 30 - Electrical Installation Theory I
Credits: 4
Class hours: 4 lecture
Prereq: "C" or higher in ELEC 20 and ELEC 22
Comments: Credit by exam is not an available option.
Description: This course offers instruction in basic and advanced residential wiring with emphasis on the National Electrical Code and the principles of residential blueprint reading.

ELE 32 - Electrical Installation Laboratory I
Credits: 6
Class hours: 12 lecture/lab
Prereq: "C" or higher in ELEC 20 and ELEC 22
Comments: Credit by exam is not an available option.
Description: This course offers basic and advanced knowledge in residential wiring techniques. Laboratory exercises are designed to give students practical experience in different wiring techniques and methods.

ELE 40 - Electrical Installation Theory II
Credits: 4
Class hours: 4 lecture
Prereq: "C" or higher in ELEC 30 and ELEC 32
Comments: Credit by exam is not an available option.
Description: In this course, students gain knowledge and experience in the more complex commercial and industrial wiring techniques, with emphasis on the National Electrical Code and the principles of commercial and industrial blueprint reading.
ELEC 42 - Electrical Installation Laboratory II
Credits: 6
Class hours: 12 lecture/lab
Prereq: "C" or higher in ELEC 30 and ELEC 32
Comments: Credit by exam is not an available option.
Description: This course is designed to advance the student's skill and knowledge of electrical installation techniques and methods to a higher level. The class includes methods and techniques in the more complex commercial and industrial wiring.

ELEC 44 - AC/DC Systems and Equipments
Credits: 4
Class hours: 4 lecture
Prereq: "C" or higher in ELEC 40 and ELEC 42
Comments: Credit by exam is not an available option.
Description: This course is designed to advance the student into the electrical principles of AC and DC circuits and equipment. Emphasis is placed on the generation; transmission; application; instrumentation; and calculation of AC and DC power, theory, and characteristics of AC and DC machinery.

ELEC 46 - Alternating Current Systems and Machinery
Credits: 6
Class hours: 12 lecture/lab
Prereq: "C" or higher in ELEC 40 and ELEC 42
Comments: Credit by exam is not an available option.
Description: Supervised lab activities combine trade practices and related technical instruction to provide the most effective means of developing mechanical and manipulative skills. Emphasis is placed on methods of maintenance and repair of electrical equipment.

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: Placement in ENG 21, ENG 22, ENG 100, and MATH 100
Comments: Credit by exam is not an available option.
Description: This course is an introduction to DC, AC, semi-conductor, and digital electronics including characteristics, applications, power supplies, and amplifiers. The course also includes the use of the oscilloscope and meters.

ETRO 120 - Electronics I
Credits: 5
Class hours: 5 lecture
Prereq: Acceptance into Electronics program
Coreq: ETRO 120L
Comments: Credit by exam is not an available option.
Description: This class offers the basic theory of electricity from the atomic theory to filter circuits. It also includes Ohm's Law, DC and AC circuits, network analysis, sinusoidal and non-sinusoidal voltages and current, resonant circuits, and meters.

ETRO 120L - Electronics I Laboratory
Credits: 2
Class hours: 6 lab
Prereq: "C" or higher in ETRO 120 and ETRO 120L
Coreq: ETRO 120
Comments: Credit by exam is not an available option.
Description: This class provides laboratory experiments demonstrating the principles studied in ETRO 120.

ETRO 121 - Electronic Fabrication and Assembly
Credits: 2
Class hours: 4 lecture/lab
Prereq: Acceptance into Electronics program
Comments: Credit by exam is not an available option.
Description: This course is an introduction to the manufacturing, installation, and repair techniques currently used by the electronics industry. Projects include soldering, desoldering, cabling, wire harnessing, wire wrapping, metal work, and PCB manufacturing.

ETRO 122 - Electronics II
Credits: 5
Class hours: 5 lecture
Prereq: "C" or higher in ETRO 120 and ETRO 120L
Coreq: ETRO 122L
Comments: Credit by exam is not an available option.
Description: This course provides the basic principles of vacuum tubes; semi-conductor devices; integrated circuits; and the applications to power supplies, amplifiers, oscillators (sinusoidal and non-sinusoidal), and basic logic circuits.

ETRO 122L - Electronics II Laboratory
Credits: 2
Class hours: 6 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 125 - Advanced Electronics Fabrication and Assembly
Credits: 2
Class hours: 4 lecture/lab
Prereq: "C" or higher in ETRO 121
Comments: Credit by exam is not an available option.
Description: In this class, students must pass the department's soldering certification test and learn advanced techniques including
PCB rework/repair and surface mount technology. They then must design, fabricate, assemble, and document an electronics project using project management software, CAD, word processing, and a spreadsheet.

**ETRO 140B - Cisco Networking 1**

**Credits:** 3  
**Class hours:** 6 lecture/lab  
**Recommended:** Basic computer skills, introductory electronics

**Description:**  
This course presents an introduction to local and wide area networking. Networking theory, architecture, hardware, and software will be discussed in reference to the OSI Reference Model. Participants learn basic computer fundamentals, network topologies, cabling standards, routing, subnetting, routing protocols, network media, LAN design, network management and electrical and safety considerations. The course content will be delivered by CAI and lectures. Hands-on experience will be gained through organized lab activities.

The student will be expected to maintain a journal and do a power point presentation on an assigned topic.

A final exam and a final lab exam will test exit competencies.

**ETRO 140C Cisco Networking 2**

**Credits:** 3  
**Class hours:** 6 lecture/lab  
**Prereq:** "C" or higher in ETRO 140B

**Description:**  
This course presents an introduction to Wide Area Networks (WANs) and basic router configuration. Topics covered include the Network layer, Cisco IOS software user interface, router startup and setup configuration, configuring router interfaces with IP, and routing protocols. The course content will be delivered by CAI and lectures. Hands-on experience will be gained through organized lab activities.

The student will be expected to maintain a journal and do a power point presentation on an assigned topic.

A final exam and a final lab exam will test exit competencies.

**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 is an introduction to number systems, codes, logic gates, boolean algebra, and ICs used in digital circuits. In addition to the study and use of flip flops, registers, counters, decoders, and multivibrators; analog-to-digital/digital-to-analog interfacing and microprocessor fundamentals are studied.

**ETRO 143L - Digital Electronics Laboratory**

**Credits:** 1  
**Class hours:** 3 lab  
**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 building and testing digital electronics and computer circuits.

**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  
**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.

**ETRO 240B – Cisco Networking 3**

**Credits:** 3  
**Class hours:** 6 lecture/lab  
**Prereq:** "C" or higher in ETRO 140C

**Description:** This course provides a foundation in LAN design and implementation. Topics include switched and virtual LANs, configuring Cisco routers to support Novell networks and IGRP, and implementing access lists for security and traffic control. The course content will be delivered by CAI and lectures. Hands-on experience will be gained through organized lab activities.

The student will complete a Threaded Case Study design project and will do a class presentation.

A journal will also be required. A final exam and a final lab exam will test exit competencies.

**ETRO 240C - Cisco Networking 4**

**Credits:** 3  
**Class hours:** 6 lecture/lab  
**Prereq:** "C" or higher in ETRO 240B

**Description:** This course covers the fundamentals of Wide Area Networking. Topics include WAN frame encapsulation, link options, WAN design and router configuration for PPP, ISDN and frame relay. The course content will be delivered by CAI and lectures. Hands-on experience will be gained through organized lab activities.

The student will be expected to maintain a journal and do a presentation on a Threaded Case Study project.

A final exam and a final lab exam will test exit competencies.

**ETRO 241 - Electronics Circuit Analysis**

**Credits:** 4  
**Class hours:** 4 lecture  
**Prereq:** "C" or higher in ETRO 122 and ETRO 122L  
**Coreq:** ETRO 241L  
**Comments:** Credit by exam is not an available option.

**Description:** This course will familiarize the student with a wide variety of circuit configurations and their characteristics. Basic knowledge about amplifiers, power supplies, oscillators, pulse circuits, and modulators is included.
ETRO 241L - Electronics Circuit Analysis Laboratory
Credits: 2
Class hours: 6 lab
Prereq: “C” or higher in ETRO 122 and ETRO 122L
Coreq: ETRO 241
Comments: Credit by exam is not an available option.
Description: This laboratory course allows the student to apply circuit theory learned in ETRO 241. Amplifier, power supply, pulse, and modulation circuits presented in ETRO 241 lectures will be built and tested so that students may gain a working knowledge of these circuits.

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 hold a valid CCNA certification
Description: This course covers advanced configuration of routing protocols including RIP, IGRP, EIGRP, OSPF and BGP for LANs and WANs. VLSM, route summarization and optimization, network security, DHCP, NAT, default routing, and connecting autonomous systems will also be covered. The course content will be delivered by classroom lectures and online lessons. Hands-on experience will be gained through organized lab activities.

ETRO 257 – RF Communications
Credits: 4
Class hours: 8 lecture/lab
Prereq: “C” or higher in ETRO 122/122L
Description: The study of 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 and circuits. RF communications theory will be reinforced in lab with practical hands-on experience.

ETRO 270 – Network Operating Systems I
Credits: 3
Class hours: 6 lecture/lab
Prereq: “C” or higher in ETRO 140B
Description: This course presents the students with an introduction to the Microsoft Windows Operating System. The course focuses on the installation, configuration, implementation and administration of a Windows Server Network.

ETRO 275 - Fundamentals of LINUX
Credits: 3
Class hours: 6 lecture/lab
Prereq: “C” or higher in ICS 101
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-based system.

ETRO 280 - Microprocessor Architecture, Programming, and Interfacing
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ETRO 143, ETRO 143L, and ICS 111
Comments: Credit by exam is not an available option.
Description: A 6800 microprocessor trainer is used to introduce microprocessor architecture, interfacing, and machine language programming. Memory, interfaces, I/O devices, and interrupt processed I/O are covered. Students design and build an I/O interface which they control using machine language programs. CAI and trainer systems utilizing the 8085, 8088, and 8086 microprocessors are also used.

ETRO 287 - Computer Systems and Networking
Credits: 3
Class hours: 3 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 layer OSI model.

ETRO 287L - Computer Systems and Networking Laboratory
Credits: 1
Class hours: 3 lab
Prereq: “C” or higher in ETRO 280
Coreq: ETRO 287
Comments: Credit by exam is not an available option.
Description: This course offers the student the opportunity to study the operation of microcomputer systems by building a microcomputer. DOS and Windows operating systems are installed and the systems are used for computer interfacing and data acquisition. Students then create peer-to-peer and then client-server systems using the computer they built. File servers, hubs, switches and routers, and network maintenance and management are also included.

ENERGY (ENRG)

ENRG 197 – Energy Technologies
Credits: 3
Class hours: 3 lecture
Recommended: ENG 21
Description: This introductory course in energy technologies will include fossil fuel, wind, photovoltaic, and other forms of energy production applications. This course covers appropriate energy terminology, concepts, designs and applications.
ENGLISH (ENG)

**ENG 18 - Reading Essentials**
Credits: 3  
Class hours: 3 lecture  
Prereq: Acceptable reading placement test score  
Recommended: ENG 19  
Description: This course provides practice in building the essential reading skills needed to understand academic texts. Students will develop comprehension, speed, and critical reading skills. Comprehension and speed, vocabulary building, and critical reading skills are emphasized.

**ENG 19 - Writing Essentials**
Credits: 3  
Class hours: 3 lecture  
Prereq: Acceptable reading and writing placement test scores  
Recommended: ENG 18  
Description: This course concentrates on developing the paragraph: topic sentence, organization, and support. It builds vocabulary and improves skills of punctuation, grammar, spelling, and structure.

**ENG 21 - Introduction to College Reading**
Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in ENG 18 or acceptable reading and writing placement test score  
Description: This course emphasizes improving literal, interpretive, and critical reading comprehension. Attention is given to developing a flexible reading rate and building vocabulary.

**ENG 22 - Introduction to Composition**
Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in ENG 19 and ENG 21 or concurrent enrollment in ENG 21 or acceptable reading and writing placement test scores  
Description: Students practice elements of the writing process including development and organization of ideas, revising, and editing.

**ENG 26 - Survey of Literature of the Pacific**
Credits: 3  
Class hours: 3 lecture  
Comments: Split-level: ENG 261  
Description: This class is an introduction to reading and interpreting literature of and about Pacific cultures including Hawai`i. Students analyze historical, geographical, and cultural influences.

**ENG 100 - Composition I**
Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in ENG 22 or acceptable reading and writing placement test scores  
Description: Introduction to the rhetorical, conceptual, and stylistic demands of writing at the university level; instruction in the composing process, research strategies, and writing from sources.

**ENG 102 - College Reading Skills**
Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in ENG 21 or acceptable reading and writing placement test scores  
Description: This course provides an opportunity to improve in college reading skills. Comprehension and speed, vocabulary building, and critical reading skills are emphasized.

**ENG 104 - Introduction to Creative Writing**
Credits: 3  
Class hours: 3 lecture  
Prereq: Acceptable reading and writing placement test scores  
Description: This course is an introduction to the art and craft of writing poems, 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 higher or acceptable reading and writing placement test scores  
Description: This class 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 199V - Special Studies**
Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in ENG 100  
Description: Additional study of rhetorical, conceptual, and stylistic demands of writing; instruction further develops the writing and research skills covered in Composition I.

**ENG 215 - Composition II**
Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in ENG 100  
Description: This course is an introduction to the rhetorical, conceptual, and stylistic demands of writing at the university level; instruction in the composing process, research strategies, and writing from sources.

**ENG 250 - American Literature**
Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in ENG 100  
Description: Students read works by representative American writers from the colonial period to the present including women and ethnic authors.

**ENG 251 - British Literature to 1800**
Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in ENG 100  
Description: This course introduces students to representative literature from the Old English, medieval, renaissance, and neo-classical periods. Students have the opportunity to practice reading to understand and appreciate literature.

**ENG 252 - British Literature After 1800**
Credits: 3  
Class hours: 3 lecture  
Prereq: "C" or higher in ENG 100  
Description: This course provides an opportunity to read works by major authors from Romantic, Victorian, and Modern periods. Students have the opportunity to practice reading to understand and appreciate literature.

**ENG 253 - World Literature to 1600**
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 254 - World Literature
After 1600
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 1600 to the present.

ENG 255 - Short Story and Novel
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
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
Credits: 3
Class hours: 3 lecture
Recommended: “C” or higher in ENG 100
Description: This second semester course (of the sequence ELI 1 and ELI 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.

ENG 261 - Literature of the Pacific
Credits: 3
Class hours: 3 lecture
Recommended: “C” or higher in ENG 100
Comments: Split-level: ENG 26
Description: This course offers opportunity for analysis and appreciation of two genres of fiction; the short story and the novel.

ENG 264 - World Literature
Description: Students study world literature and cultural influences.

ENG 265 - Short Story and Novel
Description: Students analyze historical, geographical, and cultural influences.

ENG 266 - Drama and Poetry
Description: Students read literary works by women or authors and their works: novels, short stories, poems, autobiographies, etc.

ENG 267 - Literature by Women
Description: Students study world literature and cultural influences.

ENG 268 - World Literature
Description: Students study world literature and cultural influences.

ENGLISH LANGUAGE INSTITUTE
(ELI)

ELI 1 - Understanding and Speaking American English
Credits: 3
Class hours: 3 lecture
Prereq: Acceptable TOEFL score
Description: This first semester course (of the sequence ELI 1 and ELI 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
Description: This second semester course (of the sequence ELI 2 and ELI 4) 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.

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 and ELI 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.

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 and ELI 4) 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.

FACILITIES ENGINEERING TECHNOLOGY
(FENG)

FENG 30 - Basic Fundamentals of Air Conditioning and Refrigeration
Credits: 3
Class hours: 2 lecture and 3 lab
Prereq: “C” or higher in BLPR 22, ETRO 18, and ELEC 20, and PHYS 50 and WELD 17 or concurrent enrollment in PHYS 50 and WELD 17
Comments: Credit by exam is not an available option.
Description: This first semester course offers introduction to the fundamental 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.

FENG 60 - Design and Drafting With CADD
Credits: 3
Class hours: 2 lecture and 3 lab
Prereq: Any high school mechanical drawing course
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.

FENG 99V - Special Studies
See explanation under the heading of Special Studies.
**FOOD SERVICES (FSER)**

**FSER 100 – Introduction to Food Service**

**Credits:** 5  
**Class hours:** 3 lecture and 6 lab  
**Description:** This will provide an overview of the rapidly growing food service industry from “fast foods” to “haute cuisine.” Students will be able to explore occupational opportunities with emphasis on attitudes required of a person seeking employment in the food service industry. This course will offer students training in short order, pantry, bulk cookery, and cafeteria-style cooking.

**FSER 101 – Introduction to Hospitality for the Food Service Industry**

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** “C” or higher in or concurrent enrollment in ENG 21  
**Description:** This course provides an overview of the travel industry and related businesses, including the analysis of links between hotel, food, transportation, recreation, and other industries comprising tourism. Students will identify job qualifications, professional standards, communication skills, and attitudes essential for successful workers in the food service industry.

**FSER 102 – Introduction to Short Order Cookery & Baking**

**Credits:** 5  
**Class hours:** 2 lecture/lab and 12 lab  
**Recommended:** ENG 21 or higher  
**Description:** This course will provide an overview of the rapidly growing food service industry from “fast foods” to “haute cuisine.” Students will be able to explore occupational opportunities with emphasis on attitudes required of a person seeking employment in the food service industry. Students will be introduced to food preparation history, terminology, legal aspects, and emerging industry trends. Laboratory experiences will assist students in developing accepted techniques in fundamentals of baking and short order cookery.

**FSER 103 - Sanitation and Safety**

**Credits:** 2  
**Class hours:** 2 lecture  
**Recommended:** ENG 21 or higher  
**Description:** The study and application of principles and procedures on sanitation and safety in the hospitality industry. This course includes the study of food-borne 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.

**FSER 110 - Fundamentals of Cookery**

**Credits:** 4  
**Class hours:** 3 lecture/lab and 20 lab (8 weeks)  
**Prereq:** “C” or higher or concurrent enrollment in FSER 103; and placement in ENG 21 or higher and MATH 24 or higher  
**Prereq and/or Coreq:** “C” or higher in FSER 103, or concurrent enrollment in FSER 103  
**Comments:** Credit by exam is not an available option.  
**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.

**FSER 119 - Intermediate Cookery**

**Credits:** 5  
**Class hours:** 2 lecture, 4 lecture/lab, and 18 lab (8 weeks)  
**Prereq:** “C” or higher in FSER 110  
**Comments:** Credit by exam is not an available option.  
**Description:** This course applies the basic concepts, skills and techniques taught in FSER 110 to short-order cookery, including breakfast cookery, as found in 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.

**FSER 120 – Menu Merchandising**

(Not offered until spring 2005)  
**Credits:** 2  
**Class hours:** 2 lecture  
**Prereq:** “C” or higher in BUS 55 or MATH 50H or higher and ENG 21 or higher  
**Description:** 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.

**FSER 122 - Fundamentals of Baking**

**Credits:** 5  
**Class hours:** 2 lecture, 4 lecture/lab, and 18 lab (8 weeks)  
**Prereq:** “C” or higher in FSER 212  
**Description:** This course provides instruction in the study and development of basic skills in baking as practiced and required in the food service industry. Theory and laboratory work will provide the student with knowledge and skills in the preparation of breakfast breads, pastries, bread and rolls.

**FSER 128 – Dining Room and Beverage Service**

(Not offered until spring 2005)  
**Credits:** 5  
**Class hours:** 2 lecture, 4 lecture/lab, and 18 lab (8 weeks)  
**Prereq and/or Coreq:** Concurrent enrollment or “C” or higher in FSER 103  
**Description:** The study and application of the variety of service styles 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.

**FSER 185 - Culinary Nutrition**

**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** Acceptable placement test scores or concurrent enrollment in ENG 21 or higher and MATH 24 or higher  
**Description:** The 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.
FSER 193V - Cooperative Education
Credits: 1-3
See explanation under the heading of Cooperative Education.

FSER 209 – Garde Manger
Credits: 4
Class hours: 3 lecture/lab and 18 lab (8 weeks)
Prereq: “C” or higher in FSER 193V
Comments: Formerly FSER 283
Description: A study of the basic garde manger principles as well as the functions and duties of the department as it relates to and integrates with other kitchen operations. The preparation of specialty items such as aspics, chaud-froids, forcemeat, pates, terrines, galantines, mousses, as well as ice sculpturing, tallow sculpturing and vegetable carving will be covered in this eight-week modular course.

FSER 212 – Continental Cuisine
Credits: 5
Class hours: 2 lecture, 4 lecture/lab, and 18 lab (8 weeks)
Prereq: “C” or higher in FSER 119
Comments: Formerly FSER 206
Description: This course expands on the skills gained in the Fundamentals and Intermediate Cookery courses (FSER 110 and 119), 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, and presentation techniques for American, French, Russian, and buffet service. Laboratory work in the college fine dining restaurant emphasizes station organization and culinary experience.

FSER 216 – Asian Pacific Cuisine
Credits: 5
Class hours: 2 lecture, 4 lecture/lab, and 18 lab (8 weeks)
Prereq: “C” or higher in FSER 212
Description: A study of Chinese, Japanese, Thai, Vietnamese, Filipino and Pacific-Islander cuisines. This course includes an overview of the history, culture, and foods of Asia and their influence on the foods of Hawai‘i, emphasizes the culinary traditions, artistry, and special uses of fruits, vegetables, spices, herbs and cooking ingredients commonly used in Asian and Pacific-Islander cuisines.

FSER 241 – Hospitality Purchasing and Cost Control
Credits: 4
Class hours: 3 lecture and 3 lab
Prereq: “C” or higher in ENG 21 or higher; and MATH 50H or higher
Comments: Formerly FSER 230
Description: 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.

FSER 294 – Food Service Practicum
(Not offered until spring 2005)
Credits: 5
Class hours: 2 lecture, 4 lecture/lab, and 18 lab (8 weeks)
Prereq: “C” or higher in FSER 216
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 design, 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.

FRENCH (FR)
FR 101 - Elementary French I
Credits: 4
Class hours: 3 lecture and 3 lab
Prereq: “C” or higher in ENG 21 or higher
Comments: The laboratory is part of the class.
Description: This introductory survey of French literature includes selections of drama, poetry, essays, short stories, and novels. Lectures, discussions, and reports focus on characteristics and themes in French literature. The course is conducted in English.

FR 102 - Elementary French II
Credits: 4
Class hours: 3 lecture and 3 lab
Prereq: “C” or higher in FR 101
Comments: The laboratory is part of the class.
Description: This review and continuation of topics covered in French 101 includes an understanding of the culture and life of the French people.

FR 201 - Intermediate French I
Credits: 3
Class hours: 3 lecture and 2 lab
Prereq: “C” or higher in FR 201
Comments: The laboratory is part of the class.
Description: This course provides the first semester of intermediate reading, conversation, and composition in French.

FR 202 - Intermediate French II
Credits: 3
Class hours: 3 lecture and 2 lab
Prereq: “C” or higher in FR 201
Comments: The laboratory is part of the class.
Description: This course provides the second semester of intermediate reading, conversation, and composition in French.

FR 261 - French Literature in English
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 100
Description: This introductory survey of French literature includes selections of drama, poetry, essays, short stories, and novels. Lectures, discussions, and reports focus on characteristics and themes in French literature. The course is conducted in English.
GEOGRAPHY (GEOG)

GEOG 101 - Man's Natural Environment
Credits: 3
Class hours: 3 lecture
Coreq: GEOG 101L
Description: This course surveys the natural environments, including distribution and interrelationships of climate, vegetation, soils, and landforms. Laboratory problems in map interpretation and environmental analysis are part of the course.

GEOG 101L - Natural Environment Laboratory
Credits: 1
Class hours: 3 lab
Prereq: Placement in ENG 100
Coreq: GEOG 101
Description: This course is a science laboratory for Physical Geography that explores analysis of experimental methodology and data associated with interdisciplinary sciences studied in geosystems such as climatology, meteorology, geomorphology, edaphology, cartography, etc.

GEOG 102 - World Regional Geography
Credits: 3
Class hours: 3 lecture
Description: This course examines the geography of the world's major cultural regions. Emphasis is placed on graphic aspects of contemporary economic, social, and political conditions.

GEOG 267 - Introduction to Geography of Hawai'i and The Pacific
Credits: 3
Class hours: 3 lecture
Description: This course offers an opportunity to study the physical characteristics of the Pacific and its islands. The culture, politics, economy, and geography of Melanesia, Micronesia, and Polynesia are explored.

GEOLOGY and GEOPHYSICS (GG)

GG 101 - Introduction to Geology
Credits: 4
Class hours: 3 lecture and 3 lab
Comments: The laboratory is part of the class.
Description: Students explore the principles of physical geology, the composition and structure of the earth, its evolution over geologic time, and the processes shaping the earth's crust.

HAWAIIAN (HAW)

HAW 101 - Elementary Hawaiian I
Credits: 4
Class hours: 3 lecture and 3 lab
Comments: The laboratory is part of the class.
Description: This course provides an introduction to the Hawaiian language. Students learn basic structures with an emphasis on listening, comprehension, speaking, reading, and writing. Language laboratory drill is included.

HAW 102 - Elementary Hawaiian II
Credits: 4
Class hours: 3 lecture and 3 lab
Prereq: "C" or higher in HAW 101
Comments: The laboratory is part of the class.
Description: This is the second semester of an elementary course in Hawaiian. Emphasis is placed on listening, comprehension, speaking, reading, and writing. Language laboratory drill is included.

HAW 201 - Intermediate Hawaiian
Credits: 4
Class hours: 3 lecture and 3 lab
Prereq: "C" or higher in HAW 102
Comments: The laboratory is part of the class.
Description: This first half of an intermediate course in Hawaiian continues development of listening, speaking, reading, and writing the Hawaiian language. Language laboratory drill is included.

HAW 202 - Intermediate Hawaiian II
Credits: 4
Class hours: 3 lecture and 3 lab
Prereq: "C" or higher in HAW 201
Comments: The laboratory is part of the class.
Description: This second half of an intermediate course in Hawaiian continues development of listening, speaking, reading, and writing the Hawaiian language. Language laboratory drill is included.

HAW 221 - Introduction to Hawaiian Conversation
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in HAW 202
Description: This course provides practice for control of spoken Hawaiian. Further development of vocabulary enables more accurate, mature expression.

HAW 222 - Introduction to Hawaiian Composition
Credits: 3
Prereq: "C" or higher in HAW 202
Description: This course provides systematic practice for control of written Hawaiian. A variety of situations are introduced in which the student will use written Hawaiian as the medium of communication, providing for further development of vocabulary and grammatical elements for accurate, mature expression.

HAW 261 - Hawaiian Literature in English
Credits: 3
Class hours: 3 lecture
Description: This survey of traditional Hawaiian myths, legends, chants, and sayings is conducted in English.

HAW 262 - Survey of Hawaiian Writings
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in HAW 202 or ability to read and write Hawaiian
Description: This course surveys of selected Hawaiian writings from both the 19th and 20th centuries. Various literary modes of native Hawaiian literature and writings are presented in the original Hawaiian rather than English translation.
HAWAIIAN STUDIES (HWST)

HWST 107 - Hawai‘i: Center of the Pacific
Credits: 3
Class hours: 3 lecture
Description: This course introduces the unique aspects of Hawai‘i and Hawaiian culture in relation to the larger Pacific, including origins, language, religion, land, art, and history.

HWST 111 - The Hawaiian Ohana
Credits: 3
Class hours: 3 lecture
Description: This course presents Hawaiian values through the traditional family system. Ancestral family practices are investigated and compared with current Hawaiian lifestyles and values.

HWST 128 – Hula and Chant
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.

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

HWST 231K - Topics in Hawaiian Culture: Kaua‘i and Ni‘ihau
Credits: 3
Class hours: 3 lecture
Description: This class introduces students to particular aspects of Hawaiian society, traditional literature, Hawaiian place names and their proper meaning and pronunciation, and Hawaiian material culture as works of art.

HWST 232 - Oral Arts and Traditions
Credits: 3
Class hours: 3 lecture
Description: This class surveys the relationship of Hawaiians to their language arts. Students examine cultural concepts that lead to the creation of myths, chants, songs, and dance. The art of Hawaiian storytelling and the composition of Hawaiian poetry are also studied. The course is conducted in English.

HWST 251 - Mahi‘ai Kalo (Taro Cultivation)
Credits: 3
Class hours: 3 lecture
Prereq: Placement in ENG 100 or HWST 107
Description: Placement in ENG 100 or HWST 107
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.

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 Hōkūle‘a, Hawai‘i Loa, and Makali‘i. In addition, the student will understand and appreciate the cultural impact of long distance voyaging.

HWST 284 - Investigating Polynesian Connections
Credits: 3
Class hours: 3 lecture
Recommended: Placement in ENG 100 or HWST 107
Description: Placement in ENG 100 or HWST 107
Description: An investigation of the Polynesian connections between Hawai‘i and its neighbors through travel and contact. This course will provide the student with a general understanding of the game.

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

HEALTH, PHYSICAL EDUCATION, AND RECREATION (HPER)

HPER 101 - Physical Fitness
Credits: 1
Class hours: 2 lecture/lab
Comments: May be repeated any number of times for credit.
Description: In this course, students develop an understanding of the modern concepts of physical fitness as they explore the progression of conditioning exercises and activities that develop and maintain physical efficiency.

HPER 103 - Beginning Swimming
Credits: 1
Class hours: 2 lecture/lab
Comments: May be repeated any number of times for credit.
Description: In this course, students develop an understanding of the modern concepts of physical fitness as they explore the progression of conditioning exercises and activities that develop and maintain physical efficiency.

HPER 110 - Beginning Golf
Credits: 1
Class hours: 2 lecture/lab
Comments: May be repeated any number of times for credit.
Description: In this course, students develop an understanding of the modern concepts of physical fitness as they explore the progression of conditioning exercises and activities that develop and maintain physical efficiency.

HPER 115 - Bowling
Credits: 1
Class hours: 2 lecture/lab
Comments: May be repeated any number of times for credit.
Description: Students explore the fundamentals of bowling, including rules, etiquette, approach, execution, and spare pickups.
### HPER 120 - First Aid and CPR

**Credits:** 1  
**Grading:** Credit/no credit  
**Class hours:** 1.5 hours/week for 16 weeks or 3 hours/week for 8 weeks  
**Description:** This course will introduce students to standard first aid procedures and describe immediate care given in case of accident, sudden illness, or other medical emergency. The course will explain procedures to stop bleeding, treat poisoning, restore breathing, immobilize broken bones, and administer CPR.

### HPER 130 - Beginning Tennis

**Credits:** 1  
**Class hours:** 2 lecture/lab  
**Comments:** May be repeated any number of times for credit.  
**Description:** This course provides instruction in the fundamentals of tennis, including rules, scoring, etiquette, grip, forehand and backhand strokes, serving, volleying, and singles and doubles play.

### HPER 131 - Intermediate Tennis

**Credits:** 1  
**Class hours:** 2 lecture/lab  
**Prereq:** "C" or higher in HPER 130  
**Comments:** May be repeated any number of times for credit.  
**Description:** Students in this class concentrate on corrective work in three basic strokes: forehand, backhand, and the volley. They also apply spin in the basic strokes and develop advanced strategies in singles and doubles play.

### HPER 132 - Advanced Tennis

**Credits:** 1  
**Class hours:** 2 lecture/lab  
**Prereq:** "C" or higher in HPER 130  
**Comments:** May be repeated any number of times for credit.  
**Description:** This course provides advanced instruction in the various strokes of tennis: forehand, backhand, and the volley. They also explore advanced court strategies in singles and doubles play.

### HPER 135 - Volleyball

**Credits:** 1  
**Class hours:** 2 lecture/lab  
**Comments:** May be repeated any number of times for credit.  
**Description:** In this course, students practice the fundamentals of offensive and defensive team play.

### HPER 137 - Basketball

**Credits:** 1  
**Class hours:** 2 lecture/lab  
**Comments:** May be repeated any number of times for credit.  
**Description:** Fundamentals of basketball, including dribbling, passing, shooting, and rebounding, are covered in this class. Individual defensive and offensive maneuvers, two- and three-person plays, and team offense and defense are also developed.

### HPER 150 - Advanced Racquetball

**Credits:** 1  
**Class hours:** 2 lecture/lab  
**Comments:** May be repeated any number of times for credit.  
**Description:** This course trains students in the history and philosophy of racquetball, including rules, scoring, etiquette, equipment, and regulations. Students explore various techniques and methods of training with resistance as well as muscular stretching and warming-up techniques.

### HPER 152 - Weight Training

**Credits:** 1  
**Class hours:** 2 lecture/lab  
**Comments:** May be repeated any number of times for credit.  
**Description:** This course trains students in the kinesiology of weight lifting and training. Students explore various techniques and methods of training with resistance as well as muscular stretching and warming-up techniques.

### HPER 153 - Weight Training Lab

**Credits:** 1  
**Class hours:** 2 lecture/lab  
**Comments:** May be repeated any number of times for credit.  
**Description:** This course trains students in the kinesiology of weight lifting and training. Students explore various techniques and methods of training with resistance as well as muscular stretching and warming-up techniques.

### HPER 154 - Beginning Karate

**Credits:** 1  
**Class hours:** 2 lecture/lab  
**Comments:** May be repeated any number of times for credit.  
**Description:** Through a brief introduction to the history and philosophy of karate, students develop an understanding and appreciation of this martial art. They are also introduced to the art of karate.

### HPER 164 - Beginning Karate

**Credits:** 1  
**Class hours:** 2 lecture/lab  
**Comments:** May be repeated any number of times for credit.  
**Description:** This course trains students in the history and philosophy of karate, including rules, scoring, etiquette, equipment, and regulations. Students explore various techniques and methods of training with resistance as well as muscular stretching and warming-up techniques.

### HPER 190 - Beginning Racquetball

**Credits:** 1  
**Class hours:** 2 lecture/lab  
**Comments:** May be repeated any number of times for credit.  
**Description:** In this course, racquetball history, theory, terminology, play, rules and regulations, etiquette, equipment, basic shot-making, and single and doubles play are introduced. Emphasis is placed on the fundamentals of racquetball, involving mechanics, consistency, control, and power.

### HPER 195 - Modern Health: Personal and Community

**Credits:** 2  
**Class hours:** 2 lecture  
**Description:** Students explore the concepts and analysis of mental/ emotional health, family living, and scientific health information relating to personal and community health.
HORTICULTURE
(HORT)

HORT 193V - Cooperative Education
Credits: 1-3
See explanation under the heading of Cooperative Education.

HORT 264 - Plant Propagation
Credits: 3
Class hours: 2 lecture and 3 lab
Prereq: "C" or higher in BOT 101
Comments: Credit by exam is not an available option.
Description: This course provides theory-oriented information as well as practicum-oriented exercises relating to the various aspects of plant propagation. Propagation of tropical and subtropical plants is emphasized.

HOTEL OPERATION
(HOPE)

HOPE 120 - Introduction to the Hospitality Industry
Credits: 3
Class hours: 3 lecture
Description: Students examine the historical development, organizational structure, career preparation, future trends, human relations and other auxiliary departments of the lodging and food and beverage segments of the hospitality industry at the regional, national, and international levels. The class surveys the travel, tour, retail, and recreational segments to ensure global perspective. Students also explore the implications of culture, service, and the Aloha Spirit in the creation and delivery of hospitality.

HOPE 124 - Food and Beverage Operations
Credits: 3
Class hours: 3 lecture
Description: An introduction to the 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 includes the study and practical application of food and beverage management techniques to effectively manage resources: money, personnel, food and beverage products, and time.

HOPE 125 - Exceptional Guest Service
Credits: 3
Class hours: 3 lecture
Description: Students examine the origin, relevance, and application of emerging service concepts as they relate to Hawai`i’s travel industry. The class constructs representative profiles of the Hawai`i visitor based on life status and inclinations. Students also explore and experiment with conditioning exercises in the formation of an outstanding service attitude.

HOPE 140 - Front Office Operations
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in HOPE 120
Comments: Credit by exam is not an available option.
Description: The study of the philosophy, theory, equipment, and current operating procedures of a hotel front office, concentrating 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.

HOPE 150 - Housekeeping Operations
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in HOPE 120
Description: The study of the cleaning techniques, equipment, and procedures used in housekeeping operations. Emphasis is on practical applications, the supervision and management functions, interdepartmental relationships, and preventive maintenance practices.

HOPE 193V - Cooperative Education
Credits: 1-3
See explanation under the heading of Cooperative Education.

INFORMATION AND COMPUTER SCIENCE (ICS)

ICS 100 - Computing Literacy and Applications
Credits: 3
Class hours: 3 lecture
Comments: Credit by exam is not an available option.
Description: This non-technical introduction to computers and their uses in today’s society provides students with an understanding of basic computer concepts, terminology, and current events. Students are involved in “hands-on” experience with word processing, spreadsheets, database software, electronic-mail, and telecommunications.

ICS 101 - Tools for the Information Age
Credits: 4
Class hours: 3 lecture and 3 lab
Prereq: "C" or higher in ENG 22 and MATH 27
Comments: The laboratory is part of the class. Credit by exam is not an available option.
Description: This course presents fundamental concepts and terms of computer technology, basic hardware components, systems software, application software, computer technology trends, and impact of computers on individuals and society. Application software is used for problem solving. The laboratory is part of the class.

ICS 111 - Introduction to Computer Science
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 presents an introduction to computer programming. Emphasis is on structured programming, problem solving, algorithm development, computer language coding, implementation, and testing/debugging. The programs are implemented in a structured language. The course meets the Association for Computing Machinery-Computer Science (ACM-CS I) course standards.

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: This course is primarily for students with a strong interest in computers and computer programming. The class involves materials and techniques beyond those used in the regular computer science courses. Students work individually and develop programs that solve a variety of problems.
INTERDISCIPLINARY STUDIES
(IS)

IS 97 – Success Strategies
Credits: 3
Class hours: 3 lecture
Description: A one-semester course designed to help students develop attitudes, knowledge, and competencies to make their college experience successful, meaningful, and significant. Four major components are interwoven throughout the course: 1) Self-Development Activities, 2) Career Exploration, 3) Learning Skills, 4) Computer Training.

IS 105 - Career Exploration and Planning
Credits: 2
Class hours: 3 lecture (10 weeks)
Description: This course is designed to assist students in making acceptable and satisfying career choices and/or related major or program of student. Using methods of self-evaluation and inventories, students will identify their interests, values, abilities, and skills. Students will also learn goal setting and decision-making techniques relating to career planning.

JAPANESE
(JPNS)

JPNS 101 - Elementary Japanese I
Credits: 4
Class hours: 3 lecture and 3 lab
Comments: The laboratory is part of the class.
Description: This course provides an introduction to listening, speaking, reading, and writing Japanese. Basic grammatical patterns are introduced. The course is designed for beginning students.

JPNS 102 - Elementary Japanese II
Credits: 4
Class hours: 3 lecture and 3 lab
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 elementary course in spoken and written Japanese. As a first-year course, it emphasizes the spoken language, but increasing attention is given to reading and writing. Students are expected to have an active knowledge of both Hiragana and Katakana.

JPNS 201 - Intermediate Japanese I
Credits: 4
Class hours: 3 lecture and 3 lab
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 and approximately 50 to 80 Kanji.

JPNS 202 - Intermediate Japanese II
Credits: 4
Class hours: 3 lecture and 3 lab
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.

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.

JOUR 285V - Newspaper Laboratory
Credits: 1-3
Class hours: 3-9 lab
Prereq: "C" or higher in JOUR 205
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.

LAW
(LAW)

LAW 100 - Introduction to Law
Credits: 3
Class hours: 3 lecture
Description: This course provides an introduction to basic areas of law which affect society on a day-to-day basis. Trespass, negligence, liability, slander and libel, labor, family and criminal law procedure, constitutional law, the philosophy of law, and other legal areas of everyday concern are included.

LEARNING SKILLS
(LSK)

LSK 101 - Learning to Learn
Credits: 3
Class hours: 3 lecture
Prereq: Transfer-level student
Coreq: Concurrent enrollment in two other courses requiring application of course principles.
Description: This course provides students with a set of analytical thinking skills and study skills, which are immediately applied to other course work. These strategies and their application take the mystery out of how to learn successfully as students become more actively involved in their own learning. Skills include: reading, writing, listening, inner dialogue, information mapping, key word diagrams, task management, learning new vocabulary, stress management, and preparing for and taking exams.

LINGUISTICS
(LING)

LING 102 - Introduction to the Study of Language
Credits: 3
Class hours: 3 lecture
Description: This course explores the characteristics and processes of language. Concepts include language structure, processing, acquisition, variation, and history, as well as brain functioning and nonverbal forms of communication.
MA CHINE SHOP
(MACH)

MACH 19 - Introduction to Machine Shop
Credits: 3
Class hours: 5 lecture/lab
Comments: Credit by exam is not an available option. May be repeated any number of times for credit.
Description: This is an introduction to basic machine tools, precision measurements, bench layout techniques, and industrial safety. Students are involved in theory and practice in the operation of the drill press, machine lathe, and milling and boring machines. This course emphasizes automotive engine machine work.

MACH 22 - Machine Processes
Credits: 3
Class hours: 5 lecture/lab
Prereq: “C” or higher in MACH 19 and WELD 17
Comments: Credit by exam is not an available option. May be repeated any number of times for credit.
Description: This combination course is designed to provide additional experience in a general machine/welding shop. Students gain basic technical information and develop skills in the operation of hand and power tools, layout techniques, lathe operation, vertical and horizontal milling machine, and drill press operations. Basic manipulative skills in oxyacetylene, gas, shielded metal arc welding, and gas tungsten are also stressed.

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 provides an introduction to management organizing and structural design, human factors in organizing and planning elements of decision making, measuring and controlling, and supervising.

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.

MATHematics
(MATH)

MATH 22 - Pre Algebra
Credits: 3
Class hours: 3 lecture
Prereq: Acceptable math placement test score
Description: A review of arithmetic, introduction to basic geometry and statistics, the concept of variables, signed numbers, order of operations, absolute values, algebraic expressions, solving equations with one variable, exponents, ratios and proportions, measurements, square roots, and solving word problems. The language of mathematics and experiential activities will be incorporated into the curriculum.

MATH 24 - Elementary Algebra I
Credits: 3
Class hours: 3 lecture
Prereq: Acceptable math placement test score
Comments: Credit by exam is not an available option.
Description: This course is an introduction to basic algebra topics. It is the first course in a two-semester sequence of elementary algebra courses. Instruction includes units on operations with signed numbers, linear equations and inequalities in one variable, the coordinate plane, and linear systems in two variables.

MATH 25 - Elementary Algebra II
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in MATH 24 or acceptable math placement test score
Comments: Credit by exam is not an available option.
Description: This course is a continuation of basic algebra topics. It is the second course in a two-semester sequence of elementary algebra courses. Instruction includes units on exponents, polynomials, factoring, rational expressions and equations, radical expressions and equations, and quadratic equations.

MATH 27 - Intermediate Algebra
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in MATH 25 or acceptable math placement test score
Description: This course provides a review of topics in elementary algebra and an introduction to complex numbers. Other topics include exponents, radicals, polynomials, graphing, and systems of equations.

MATH 50 - Technical Mathematics I
Credits: 3
Class hours: 3 lecture
Prereq: 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.

MATH 50H - Technical Mathematics I: Food Service
Credits: 3
Class hours: 3 lecture
Prereq: Acceptable math placement test score
Description: This course applies and relates mathematical skills to the solution of food service problems: adjusting and costing recipes, calculating yields, markups, business forms and reports, financial statements, interest, taxes, and scheduling.

MATH 55 - Technical Mathematics II
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in MATH 24 or MATH 25
Description: In this course, students explore basic numerical trigonometry and further applications of algebra and geometry related to problems encountered in electricity.

MATH 58 - Technical Mathematics III
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in MATH 25
Description: This course is an introduction to the mathematical theories of functions and graphs, trigonometry, systems of equations, logarithms and exponentials, computer number systems, and Boolean algebra as applied to electronics.
MATH 100 - Survey of Math
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in MATH 135 and acceptable math placement test score
Comments: Available option.
Description: This course offers a nontechnical survey of mathematical concepts and techniques enjoying applications in the daily life of our society. Topics chosen are from areas of arithmetic, algebra, computers and computing, geometry, logic, probability, and statistics.

MATH 115 - Statistics
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in MATH 135 and acceptable math placement test score
Description: This course offers study of methods of presenting or describing data, methods of making decisions or predictions in the face of uncertainty, rules of probability, drawing inferences and making generalizations from samples, and testing hypotheses.

MATH 135 - Pre-Calculus: Elementary Functions
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in MATH 27
Description: This course is the first part of the pre-calculus sequence. It offers the study of elementary functions, including linear, quadratic, polynomial, rational, exponential, and logarithmic functions.

MATH 140 - Pre-Calculus: Trigonometry and Analytic Geometry
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in MATH 135
Description: This course is the second part of the pre-calculus sequence. Study includes trigonometry, analytic geometry, and applications.

MATH 205 - Calculus I
Credits: 4
Class hours: 4 lecture
Prereq: Four years of high school mathematics including trigonometry; or college algebra and trigonometry; or "C" or higher in MATH 135 and MATH 140
Comments: Credit by exam is not an available option.
Description: This course offers an opportunity to study the intuitive treatment of limit, continuity, derivative, differentiation of polynomial, and trigonometric and exponential functions, and their inverse applications.

MATH 206 - Calculus II
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 an opportunity to study the intuitive treatment of the integral; integration of polynomial, trigonometric, and exponential functions and their inverses; techniques of integration; series; and applications.

MICROBIOLOGY (MICR)

MICR 130 - General Microbiology
Credits: 3
Class hours: 3 lecture
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
Credits: 2
Class hours: 4 lecture/lab
Prereq: "C" or higher in MICR 130
Comments: Credit by exam is not an available option.
Description: This course provides laboratory exercises that illustrate fundamental principles of microbiology. The class is primarily for students in health sciences.

MUSIC (MUS)

MUS 103B - Music Reading: Church Hymns
Credits: 2
Class hours: 1 lecture and 2 lab
Prereq: Four years of high school mathematics including trigonometry; or college algebra and trigonometry; or "C" or higher in MATH 135 and MATH 140
Comments: Credit by exam is not an available option.
Description: This course offers an opportunity to study the intuitive treatment of limit, continuity, derivative, differentiation of polynomial, and trigonometric and exponential functions, and their inverse applications.

MUS 106 - Introduction to Music
Credits: 3
Class hours: 3 lecture
Description: In this class, students learn how to listen to music with understanding. Students survey the elements, styles, and forms of music from Renaissance through Contemporary periods. The course is geared to the listener with no previous music background.

MUS 121B - Elementary Voice
Class I
Credits: 2
Class hours: 1 lecture and 2 direct method
Description: Beginning voice instruction assists students in steps of voice production, breathing, correct voice placement, diction, and stage presence. Students perform songs of various styles.

MUS 121C - Elementary Piano Class
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. Study of popular music and classical music of the 18th through 20th centuries is included.

MUS 121D - Elementary Guitar Class
Credits: 2
Class hours: 1 lecture and 2 direct method
Description: Fundamental guitar-playing techniques. Emphasis on classical principles including chording, strumming, finger-picking, note-reading. Folk guitar, Hawaiian slack-key, and jazz accompanying will also be introduced.

MUS 121F - Elementary Slack Key Guitar
Credits: 2
Class hours: 1 lecture and 2 direct method
Description: Students learn the fundamentals of slack key guitar playing. This course for beginners emphasizes slack key techniques: standard G and double slack key tunings; the reading of tablature; and the counting of basic rhythms. No prior training in any style of guitar playing is required.
MUS 122B - Elementary Voice
Class II
Credits: 2
Class hours: 1 lecture and 2 direct method
Prereq: "C" or higher in MUS 121B
Description: This continuation of MUS 121B 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.

MUS 122C - Elementary Piano
Class II
Credits: 2
Class hours: 1 lecture and 2 direct method
Prereq: "C" or higher in MUS 121C
Description: This continuation of MUS 121C further develops keyboard skills, including both reading and playing by ear. Expansion of repertoire explores a variety of styles, including classical, pop, jazz, and rock.

MUS 166 - Survey of Folk, Pop, and Rock Music
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 an historical framework.

MUS 177 - Music in Hawai'i
Credits: 3
Class hours: 3 lecture
Comments: No music background is necessary.
Description: Students examine the musical traditions in Hawai'i from pre-Captain Cook to the present. The course includes indigenous Hawaiian music, its acculturated forms and contemporary trends, and non-Hawaiian music in Hawai'i. Aspects of musical style, instruments used, composition, teaching and performance practice, the role of music in society, and repertoire are considered.

MUS 188 - Songwriting and Transcription
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in MUS 108
Description: This course explores songwriting techniques and notation as well as transcription of popular songs using current lead-sheet format. There is an emphasis on developing aural perception and correct notational skills.

MUS 201 - Vocal Ensemble
Credits: 2
Class hours: 1 lecture and 2 lab
Prereq: Experience with instrumental performance and approval of instructor
Comments: May be repeated any number of times for credit.
Description: This course offers an opportunity to study and perform choral literature from the Renaissance to the present. A cappella and choral/instrumental repertoire are included.

MUS 202 - Community College Band
Credits: 2
Class hours: 1 lecture and 2 lab
Prereq: Experience with instrumental performance and approval of instructor
Comments: May be repeated any number of times for credit.
Description: This course involves the performance of band literature. Emphasis is placed on excellence in musical performance and development of professional musicianship. Class members participate in class activities, sectional rehearsals, and concerts.

MUS 203G - Instrumental Ensemble: String
Credits: 1
Class hours: 2 lecture/lab
Prereq: Minimum of one year's study on instrument and ability to read music
Comments: May be repeated any number of times for credit.
Description: This course provides opportunity for string instrumentalists in a performance group. Repertoire ranges from Renaissance and Baroque to contemporary popular music.

MUS 203N - Mixed Instrument Ensemble
Credits: 1
Class hours: 2 lecture/lab
Prereq: Minimum of one year's study on instrument and ability to read music
Comments: May be repeated any number of times for credit.
Description: This course provides opportunity for instrumentalists to work in a performance group. Repertoire ranges from Renaissance and Baroque to contemporary music.

MUS 203R - Instrumental Ensemble: Brass
Credits: 1
Class hours: 2 lecture/lab
Prereq: Minimum of one year's study on instrument and ability to read music
Comments: May be repeated any number of times for credit.
Description: This course provides opportunity for brass instrumentalists to work in a performance group. Repertoire ranges from Renaissance and Baroque to contemporary popular music.

MUS 204 - Stage Band
Credits: 2
Class hours: 1 lecture and 2 direct method
Prereq: Audition and approval of instructor
Comments: May be repeated any number of times for credit.
Description: This course involves the performance of stage band literature from swing to contemporary periods. Study of jazz concepts includes improvisation. Public performances are required.

MUS 220 – Musical Theatre
Credits: 3
Class hours: 3 lecture
Description: This class provides training in the fundamentals of vocal and theatrical performing for musical theatre.

MUS 253 - Basic Experiences of Music
Credits: 3
Class hours: 3 lecture
Description: Music fundamentals for classroom teachers is an engagement in the practice of 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; notating music, and analyzing music aurally and from score. Additionally, the creative use of the components as a means of understanding music will be utilized.

**NURSING (NURS)**

**NURS 11 - CHO: Basic Care Module**

Credits: 4

Class hours: 8 lecture and 12 lab (5 weeks)

Prereq: Acceptable placement test score and current First Aid and CPR certification

Comments: Credit by exam is not an available option.

Description: This course prepares adult residential care home operators to provide basic personal care and hygiene and a safe and comfortable environment for their ill, elderly, and disabled residents.

**NURS 12 - CHO: Diseases, Special Diets, and Medicine**

Credits: 1

Class hours: 6.4 lecture/lab (2.5 weeks)

Prereq: Acceptable placement test score

Comments: Credit by exam is not an available option.

Description: This course prepares adult residential care home operators to observe the resident for signs and symptoms of common diseases, to make medications available, and to prepare special diets.

**NURS 13 - CHO: Helping Therapies and Behavior Management**

Credits: 1

Class hours: 6.4 lecture/lab (2.5 weeks)

Prereq: Acceptable placement test score

Comments: Credit by exam is not an available option.

Description: This course prepares adult residential care home operators to assist in the provision of occupational, physical, recreational, and diversional therapy and to identify the operator’s role in fostering mental health and the care of the mentally ill and mentally retarded.

**NURS 14 - CHO: Regulations, Accounts, and Community Resources**

Credits: 1

Class hours: 6.4 lecture/lab (2.5 weeks)

Prereq: Acceptable placement test score

Comments: Credit by exam is not an available option.

Description: This course prepares adult residential care home operators to foster the provision of occupational, physical, residential care home operators to assist in the provision of occupational, physical, residential care home operators to assist in the provision of occupational, physical, residential care home operators to observe the resident for signs and symptoms of common diseases, to make medications available, and to identify community resources available to residents and operators.

**NURS 16 - Nurses’ Aide**

Credits: 8

Class hours: 40 lecture/lab (8 weeks)

Comments: Satisfactory completion leads to a Certificate of Completion. Credit by exam is not an available option.

Description: This course provides training in basic nursing procedure for employment in hospitals, nursing homes, private homes, and clinics. Student activities take place in formal classes, supervised laboratory practice, and clinical experience in a hospital setting.

**NURS 99V - Special Studies**

See explanation under the heading of Special Studies.

**NURS 121 - Introduction to Human Structure, Function and Related Terminology**

Credits: 2

Class hours: 2 lecture

Prereq: "C" or higher in ENG 21 or ENG 22

Description: The course is designed to assist the student at an introductory level to relate human structures, processes, pathologies and common medical tests/procedures to acceptable terminology.

**NURS 150 – Nursing and Promotion of Health**

Credits: 3

Class hours: 2 lecture and 3 lab

Description: Introduction to concepts and health care practices related to health maintenance. Survey of the scope of nursing practice in health and illness with particular emphasis on health maintenance. Introduces the nursing model, role of the nurse, and accountability of nursing profession. Open to students interested in health, introductory course for nursing major.

**NURS 151 - Computer Applications in Nursing**

Credits: 3

Class hours: 3 lecture

Prereq: Acceptance into Nursing program

Comments: Credit by exam is not an available option.

Description: This course provides training in basic nursing procedure for employment in hospitals, nursing homes, private homes, and clinics. Student activities take place in formal classes, supervised laboratory practice, and clinical experience in a hospital setting.

**NURS 153 - Nursing Concepts and Skills**

Credits: 9

Class hours: 5 lecture and 12 lab

Prereq: Acceptance into Nursing program

Comments: Credit by exam is not an available option.

Description: This first-level course emphasizes the nursing process, universal self-care needs, and beginning therapeutic care nursing skills. Nursing skills are integrated into laboratory and clinical experiences. Community health agencies are utilized for clinical applications.

**NURS 154 - Family Health Nursing I**

Credits: 2

Class hours: 2 lecture and 6 lab (8 weeks)

Prereq: Satisfactory completion of the first-semester courses; see counselor for specific grade and program requirements

Comments: Credit by exam is not an available option.

Description: This is the first-level offering in a two-course sequence in family health nursing. The nursing process serves as the framework for the study of the family during the childbearing period. Focus is on the normal physiological, psychosocial, cultural, and spiritual needs of the childbearing family (prenatal through puerperium) and general women’s health care issues. Consideration is given to common, uncomplicated health deviations. Emphases are on the application of principles of growth and development, self-care, communication, health education, ethical issues, and professional growth as related to family health nursing.
NURS 155 - Child Health Nursing I
Credits: 2
Class hours: 2 lecture and 6 lab (8 weeks)
Prereq: Satisfactory completion of NURS 154 and the first-semester courses; see counselor for specific grade and program requirements
Comments: Credit by exam is not an available option.
Description: This is the first-level offering in a two-course sequence in the nursing of children. The nursing process serves as the framework for the study of the family during the child rearing period. The focus is on the normal physiological, psychosocial, cultural, and spiritual needs of the child rearing family (infancy through adolescence). Consideration is given to common, uncomplicated health deviations in the infant, child, and adolescent. Emphases are on the application of principles of growth and development, self-care, communication, health education, ethical issues, and professional growth as related to the nursing of children.

NURS 156 - Adult Health Nursing I
Credits: 5
Class hours: 3 lecture and 6 lab
Prereq: Satisfactory completion of first-semester courses; see counselor for specific grade and program requirements
Comments: Credit by exam is not an available option.
Description: This integrated, first-level course in medical-surgical nursing includes concepts in mental health and psychiatric nursing. The primary focus is on the understanding of common physiological and psychosocial needs. Performance of nursing care skills and therapeutic techniques to meet self-care needs (universal, developmental, and health deviation) are included. Nursing skills are integrated into laboratory and clinical experiences.

NURS 157 - Adult Health Nursing II
Credits: 6
Class hours: 5.5 lecture and 32 lab (6 weeks summer session)
Prereq: Satisfactory completion of fall and spring courses; see counselor for specific grade and program requirements
Comments: This course is offered only in the summer. Credit by exam is not an available option.
Description: A first-level course which is a continuation of NURS 156, Adult Health Nursing I. The primary focus is on the common, physiological conditions, performance of nursing care skills, and therapeutic techniques to meet self-care needs (universal, developmental, and health deviation). Emphases are on the student's role as a member of the nursing team, participation in the total nursing process, and proficiency in nursing skills. Nursing skills are integrated into laboratory and clinical experiences.

NURS 158 - Issues and Trends in Nursing I
Credits: 1
Class hours: 1 lecture/lab
Prereq: Satisfactory completion of first-semester courses; see counselor for specific grade and program requirements
Comments: Credit by exam is not an available option.
Description: This course exposes the LPN to the theoretical framework of the KCC Career Ladder Nursing Program. Emphasis is placed on the development of learning skills, knowledge of Orem's theory, and application of the nursing process in order to prepare the student for the second level of the nursing program.

NURS 254 - Family Health Nursing II
Credits: 2
Class hours: 2 lecture and 6 lab (8 weeks)
Prereq: Satisfactory completion of the first-year and summer courses; see counselor for specific grade and program requirements
Comments: Credit by exam is not an available option.
Description: This is the second-level offering in a two-course sequence in family health nursing. The nursing process serves as the framework for the study of the family during the childbearing period. Focus is on the increasingly complex physiological, psychosocial, cultural, and spiritual health deviations of the childbearing family (antenatal through puerperium) and associated nursing interventions. Consideration will be placed on the application of increasingly complex principles of growth and development, self-care, communication, health education, ethical issues, and professional growth as related to family health nursing.

NURS 255 - Child Health Nursing II
Credits: 2
Class hours: 2 lecture and 6 lab (8 weeks)
Prereq: Satisfactory completion of NURS 254 and the first-year and summer courses; see counselor for specific grade and program requirements
Comments: Credit by exam is not an available option.
Description: This is the second-level offering in a two-course sequence in the nursing of children. The nursing process serves as the framework for the study of the family during the child rearing period. Focus is on the increasingly complex physiological, psychosocial, cultural, and spiritual health deviations of the childrearing family (infancy through adolescence) and on

NURS 253 - Mental Health/Psychiatric Nursing
Credits: 4
Class hours: 2 lecture and 6 lab
Prereq: Satisfactory completion of the first-year and summer courses; see counselor for specific grade and program requirements
Comments: Credit by exam is not an available option.
Description: This is a second-level course focusing on the study of fundamental theory and practice of psychiatric-mental health nursing. The practice is concerned with the dynamics of human behavior and the therapeutic, interpersonal relationship of the nurse and the patient, both individually and in groups. Nursing skills are integrated into laboratory and clinical experiences.
associated nursing interventions. Consideration is given to increasingly complex application of principles of growth and development, self-care, communication, health education, ethical issues, and professional growth as related to the nursing of children.

**NURS 257 - Advanced Adult Health Nursing**

**Credits:** 8  
**Class hours:** 3 lecture and 15 lab  
**Prereq:** Satisfactory completion of the first-, second-, summer-, and third-semester courses; see counselor for specific grade and program requirements  
**Comments:** Credit by exam is not an available option.  
**Description:** This second-level course focuses on the nursing care process for meeting the self-care needs of patients experiencing common, complex medical/surgical conditions. Management skills in the care of a group of patients are developed. Clinical experiences are provided in a variety of settings. Course objectives are explored and met through a variety of writing assignments.

**NURS 257B - Advanced Adult Health Nursing**

**Credits:** 10  
**Class hours:** 3 lecture and 21 lab  
**Prereq:** Satisfactory completion of the first-, second-, summer-, and third-semester courses; see counselor for specific grade and program requirements  
**Comments:** Credit by exam is not an available option.  
**Description:** This second-level course focuses on the nursing care process for meeting the self-care needs of patients experiencing common, complex medical/surgical conditions. Management skills in the care of a group of patients are developed. Clinical experiences are provided in a variety of settings. Students have additional opportunity to work with an experienced hospital staff nurse who serves as a preceptor to ease the transition from student to beginning professional nurse. Course objectives are explored and met through a variety of writing assignments.

**NURS 258 - Issues and Trends in Nursing**

**II**

**Credits:** 1  
**Class hours:** 1 lecture  
**Prereq:** Satisfactory completion of the first-, second-, summer-, and third-semester courses; see counselor for specific grade and program requirements  
**Comments:** Credit by exam is not an available option.  
**Description:** This second-level course is a continuation of NURS 158, Issues and Trends in Nursing I. Current issues in nursing and health care are explored. Management theory and skills and the nurse's role as a contributing member to the profession and the community are emphasized. Course objectives are explored and met through a variety of writing assignments.

**NURS 259 - Electrocardiogram Interpretation for Health Care Professionals**

**Credits:** 2  
**Class hours:** 2 lecture  
**Prereq and/or Coreq:** Concurrent enrollment in NURS 257 or Registered Nurse or Emergency Medical Technician or Respiratory Therapist  
**Comments:** Credit by exam is not an available option.  
**Description:** This course develops nursing theory related to the accurate interpretation of cardiac arrhythmias and the 12 lead electrocardiogram (EKG). Focus is on the cardiac conduction system, electrophysiology and a systematic approach to the interpretation and treatment of arrhythmias, acute myocardial infarction, and their complications.

**OCEANOGRAOHY (OCN)**

**OCN 101 - Introduction to Marine Option Program**

**Credits:** 1  
**Class hours:** 1 lecture  
**Recommended:** "C" or higher in ENG 21 or ENG 22 and MATH 24  
**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). It is presented via Hawai‘i Interactive Television System (HITS). The course will review the requirements of the MOP Certificate and explore opportunities for internships, research projects, and careers dealing with water environments. The course will also present the guidelines in proposal writing, project implementation, data collection and interpretation, report preparation and formal project presentation.

**OCN 199V - Marine Research and Directed Reading**

**Credits:** 1-6  
**Class hours:** 3 hours (1 credit), 5 hours (2 credits), 7 hours (3 credits), 9 hours (4 credits), 11 hours (5 credits), 13 hours (6 credits)  
**Prereq:** "C" or higher in OCN 101  
**Comments:** May be repeated any number of times for credit  
**Description:** This course provides an opportunity for students to design and carry out marine and water-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 a formal presentation. A project worth a minimum of three credits is required for a Marine Option Program (MOP) Certificate.

**OCN 201 - Science of the Sea**

**Credits:** 3  
**Class hours:** 3 lecture  
**Recommended:** ENG 100  
**Description:** A survey of the ocean involving the study of the geological, physical, chemical, and biological properties of the ocean. This study includes a number of subjects to include the ocean basin, seawater properties, currents, waves, tides, marine organisms, and the ecological principles of man and the sea.
OFFICE ADMINISTRATION AND TECHNOLOGY

OAT 20 - Basic Keyboarding

Credits: 1
Class hours: 3 lecture and 2 lab (5 weeks)
Description: This basic course in touch-typing teaches students to use a computer keyboard for inputting alphabetic, numeric, and symbolic information to the computer. The class includes coverage of the keyboard, correct fingering, and building speed and accuracy.

OAT 034 - Word Processing

Credits: 2
Class hours: 1 lecture and 2 lecture/lab
Prereq: “C” or higher in OAT 20
Description: An introduction to computer skills using contemporary word processing software. For non-OAT majors.

OAT 121 - Keyboarding

Credits: 3
Class hours: 3 lecture and independent open lab hours required
Description: The course covers: touch operation of alphabetic, numeric, symbol keys, and 10-key numeric keypad; layout characteristics including tabs, indents, horizontal and vertical centering, margins, text enhancements, line spacing, pagination, headers, and footnotes; useful formats including letters, memos, tables, manuscripts, reports, outlines, and templates; basic file management activities of creating, saving, deleting, printing, opening, and closing; composing at the keyboard; and continued skill development. Basic send and receive e-mail features will be introduced. Uses Microsoft Word.

OAT 130 - Information Processing

Credits: 3
Class hours: 3 lecture and independent open lab hours required
Prereq: “C” or higher in OAT 123
Comments: Credit by exam is not an available option.
Description: Course expands students’ concepts of word/information processing and further develops skills. Emphasis on more advanced applications such as outlines; fill-in forms; sorts; macros; styles; and graphics, columns, and other desktop publishing features. Students will prepare documents that are representative of business applications. Uses Microsoft Word.

OAT 043B - Telephone Techniques and Communications

Credits: 1
Class hours: 1 lecture
Recommended: ENG 21 or higher
Description: Develop positive telephone communication skills (professional relationships, a positive image, and reliable customer service). Study how current technology facilitates information processing. Emphasis will be on answering and using the telephone efficiently and courteously and taking messages effectively.

OAT 160B - Beginning Shorthand (Symbolic) I

Credits: 2
Class hours: 4 lecture/lab
Recommended: Minimum typing speed of 35 words per minute
Description: Theory, basic principles, brief forms, phrasing, and simple transcription of Gregg shorthand. Development of reading and writing fluency; writing at a minimum speed of 30 words a minute.

OAT 160C - Beginning Shorthand (Symbolic) II

Credits: 2
Class hours: 4 lecture/lab
Prereq: “C” or higher in OAT 160B
Description: Theory, basic principles, brief forms, phrasing, and simple transcription of Gregg shorthand. Development of reading and writing fluency; writing at a minimum speed of 50 words a minute; transcription rate of 17 words per minute with 95 percent accuracy for mailable copy.

OAT 131 - Information Processing Applications

Credits: 3
Class hours: 3 lecture and independent open lab hours required
Prereq: “C” or higher in OAT 130
Comments: Credit by exam is not an available option.
Description: Students use basic type-oriented design techniques to create and enhance the readability of documents such as letterheads, business cards, flyers, brochures, promotional documents, presentational materials, newsletters, reports, and manuals. Introduces basic web page development. Uses Microsoft Word and PowerPoint.

OAT 13B - Spreadsheet and Database

Credits: 3
Class hours: 3 lecture
Recommended: BUS 55 and OAT 121
Description: Introduces the basic functions of spreadsheet and database programs. Includes the input, retrieval, and processing of alphanumeric data on computerized spreadsheet and database programs. Develops proficiency in designing worksheets and databases.

OAT 140 - Filing

Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in OAT 121, or acceptable placement test score.
Comments: Credit by exam is not an available option.
Description: This course involves alphabetic, numeric, geographic, and subject card and correspondence filing systems. Students also learn the management aspects of information control, classification systems, control of information and records, and micrographics and automation. Includes introduction to database file applications. Uses Microsoft Access.

OAT 180 - Business English and Transcription I

Credits: 2
Class hours: 2 lecture
Prereq: “C” or higher in OAT 123 and ENG 22, or acceptable placement test scores.
Description: Study of grammar, punctuation, and word usage, which provide the basic tools for effective business communication. Use of a transcribing machine is also covered.
OAT 181 - Business English and Transcription II
Credits: 2
Class hours: 2 lecture
Prereq: “C” or higher in OAT 180
Description: English mechanics and punctuation. Application, through machine transcription, of business communications.

OAT 190 – Office Computer Troubleshooting
Credits: 3
Class hours: 2 lecture and 2 lecture/lab
Prereq: “C” or higher in ICS 100 or OAT 121, and ENG 21 or higher
Description: An introductory course in microcomputer system maintenance, hardware components and software. The student will learn hardware troubleshooting, diagnostic procedures and compatibility issues in regard to hardware and software upgrades. This course is intended to familiarize the student with the basic hardware and software configurations of the microcomputer.

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

PHARMACOLOGY (PHRM)

PHRM 203 - General Pharmacology
Credits: 3
Class hours: 3 lecture
Prereq: ZOOL 141 and ZOOL 141L; and ZOOL 142 and ZOOL 142L
Description: In this course, drugs are discussed with an emphasis on sites and mechanisms of action, toxicity, fate, and uses of major therapeutic agents. The class is intended for students in health sciences and related fields.

PHIL 101 -Morals and Society
Credits: 3
Class hours: 3 lecture
Recommended: “C” or higher in ENG 100
Description: This class examines social and individual values, obligations, rights, and responsibilities. Students apply classical ethical theories to contemporary moral issues.

PHIL 102 - Introduction to Philosophy: Asian Traditions
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in ENG 21 or 22; or placement in ENG 100
Description: Issues and problems from Asian perspectives. Focus will be Indian, Chinese, and Japanese traditions.

PHIL 110 - Introduction to Logic
Credits: 3
Class hours: 3 lecture
Recommended: “C” or higher in ENG 100 and placement in MATH 100.
Description: This course provides an introduction to the methods of logic, the use of language, informal mistakes (fallacies) found in argumentation, types of definitions, deduction (including simple symbolic logic), and induction.

PHYSICS (PHYS)

PHYS 100 - Survey of Physics
Credits: 3
Class hours: 3 lecture
Prereq: Acceptable math placement test score (high school algebra)
Coreq: PHYS 100L
Description: This course introduces students to the basic concepts of physics with a minimum use of mathematics.

PHYS 100L - Survey of Physics Laboratory
Credits: 1
Class hours: 3 lab
Coreq: PHYS 100
Comments: Credit by exam is not an available option.
Description: This class provides elementary experiments in physics correlated with PHYS 100.

PHYS 151 - College Physics
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in MATH 27 or concurrent enrollment in MATH 135
Coreq: PHYS 151L
Description: This course is an introduction to the physical concepts of mechanics, heat, and sound. It also explores the solution of such problems using algebra and trigonometry.

PHYS 151L - College Physics Laboratory
Credits: 1
Class hours: 3 lab
Coreq: PHYS 151
Comments: Credit by exam is not an available option.
Description: This class provides elementary experiments in physics correlated with PHYS 151.

PHYS 152 - College Physics
Credits: 3
Class hours: 3 lecture
Prereq: “C” or higher in PHYS 151 and PHYS 151L
Coreq: PHYS 152L
Description: This course is an introduction to the physical concepts of electricity and magnetism, light, modern physics, and to the solution of applications using algebra and trigonometry.

PHYS 152L - College Physics Laboratory
Credits: 1
Class hours: 3 lab
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
Credits: 4
Class hours: 4 lecture
Prereq: "C" or higher or concurrent enrollment in MATH 205
Coreq: PHYS 170L
Description: An introduction to the physical concepts of classical mechanics, wave theory, and thermodynamics, using calculus as a tool to solve related problems.

PHYS 170L - General Physics I Laboratory
Credits: 1
Class hours: 3 lab
Prereq and/or Coreq: "C" or higher in or concurrent enrollment in PHYS 170
Comments: Credit by exam is not an available option.
Description: An introduction to the analysis of experiments in classical mechanics, wave theory, and thermodynamics.

PHYS 272 - General Physics II
Credits: 3
Class hours: 3 lecture
Prereq and/or Coreq: "C" or higher in or concurrent enrollment in PHYS 170 and "C" or higher in MATH 206
Coreq: PHYS 272L
Description: An introduction to the physical concepts of electricity, magnetism, and optics, using calculus as a tool to solve related problems.

PHYS 272L - General Physics II Laboratory
Credits: 1
Class hours: 3 lab
Prereq and/or Coreq: "C" or higher in or concurrent enrollment in PHYS 272
Coreq: PHYS 272
Comments: Credit by exam is not an available option.
Description: An introduction to the analysis of experiments in electricity, magnetism, and optics.

POLITICAL SCIENCE (POL)

POLS 110 - Introduction to Political Science
Credits: 3
Class hours: 3 lecture
Description: This course covers the basic concepts associated with political systems, ideologies, institutions, and decision making. It also surveys the various subfields within the discipline of political science. The methodology of political analysis is included.

PSYCHOLOGY (PSY)

PSY 21 - Introduction to Psychology
Credits: 3
Class hours: 3 lecture
Comments: Split-level: PSY 100
Description: This course provides a broad introduction to 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.

PSY 22 - Introduction to Psychology of Adjustment
Credits: 3
Class hours: 3 lecture
Comments: Split-level: PSY 110
Description: Students explore understanding and improvement of adjustment: needs, frustrations, conflicts, anxiety, and patterns of adjustment. Concepts of mental health are included.

PSY 100 - Survey of Psychology
Credits: 3
Class hours: 3 lecture
Comments: Split-level: PSY 21
Description: This is a 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.

PSY 105 - Human Behavior
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in PSY 21 or PSY 100
Description: This course is an introduction to the theories of behavior, including theoretical as well as practical aids to working in groups. The course is designed primarily for students in the health sciences and related fields.

PSY 110 - Psychology of Adjustment
Credits: 3
Class hours: 3 lecture
Comments: Split-level: PSY 22
Description: Students explore understanding and improvement of adjustment: needs, frustrations, conflicts, anxiety, and patterns of adjustment. Concepts of mental health are included.

PSY 120 - Criminal Behavior
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in PSY 21 or PSY 100 and "C" or higher in or concurrent enrollment in MATH 115
Description: This introduction to the fundamentals of sound experimental research covers the use of statistics in evaluating experimental results and actual experience as subjects and experimenters.

PSY 212 - Introduction to Methods of Psychology
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in PSY 21 or PSY 100
Description: This course provides two approaches to criminal behavior. The theoretical approach includes causal theories of crime or deviant behavior.

PSY 220 - Developmental Psychology
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in PSY 21 or PSY 22
Description: The course provides an introduction to the theories and research on development from conception to death. It also examines the development of individual differences; measurement of capacities and abilities; and psychological bases of behavior, including emotions, learning, memory, thinking, and motivation.

PSY 224 - Psycho-Social Problems and Their Treatment
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in PSY 21 or PSY 100
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.
REAL ESTATE (RE)

RE 100 - Principles of Real Estate
Credits: 3
Class hours: 3 lecture
Comments: Does not satisfy Hawai‘i salesperson licensure education requirements.
Description: This survey of real estate law, finance, appraisal, brokerage, and investments includes ownership interest contracts and open housing laws.

RELIGION (REL)

REL 150 - Introduction to the World’s Major Religions
Credits: 3
Class hours: 3 lecture
Description: This course surveys the development and major features of the world’s major religions: Hinduism, Buddhism, Confucianism and Taoism, Islam, Christianity, and Judaism. Buddhism and Christianity are emphasized because they are the dominant religions of Hawai‘i.

REL 205 – Understanding Hawaiian Religion
Credits: 3
Class hours: 3 lecture
Prereq: "C" or higher in ENG 22 or placement in ENG 100
Description: This course is an introductory survey of Hawaiian religious beliefs and practices, from migration to the early contact era.

SALES AND MARKETING (SMKT)

SMKT 150 - Principles of Personal Selling
Credits: 3
Class hours: 3 lecture
Comments: Credit by exam is not an available option.
Description: Students learn the fundamental principles of selling, with an emphasis on the techniques of selling: the approach, sales presentation, handling of objections, and the close. Sales demonstrations are required.

SCIENCE (SCI)

SCI 097 – Pre-Science
Credits: 3
Class hours: 3 lecture
Description: An introduction to the mathematical and scientific background that students need to succeed in transfer-level science courses.

SCI 121 - Introduction to Science: Biological Science
Credits: 3
Class hours: 3 lecture
Coreq: SCI 121L
Description: This general introduction to the basic concepts of biology is intended to provide the non-science majors with a basic understanding of their own bodies and the environment in which they live.

SCI 121L - Introduction to Science Laboratory: Biological Science
Credits: 1
Class hours: 3 lab
Coreq: SCI 121
Comments: Credit by exam is not an available option.
Description: This laboratory science course is designed to accompany SCI 121.

SCI 122 - Introduction to Science: Physical Science
Credits: 3
Class hours: 3 lecture
Comments: SCI 122L
Description: This course provides an introduction to the characteristics of the physical sciences and the interaction of science with society. Emphasis is placed on physics and chemistry with interdisciplinary applications to astronomy, geology, meteorology, and oceanography.

SCI 122L - Introduction to Physical Science Laboratory
Credits: 1
Class hours: 3 lab
Coreq: SCI 122
Comments: Credit by exam is not an available option.
Description: This class offers an introduction to laboratory techniques using experiments in the physical sciences.

SOCIAL SCIENCE (SSCI)

SSCI 25 - Issues in Ecology
Credits: 3
Class hours: 3 lecture
Comments: Split-level: SSCI 25
Description: This interdisciplinary course is concerned with developing a basic understanding and awareness of environmental issues and problems, their cause, and management alternatives. Students explore social, economic, and political aspects of issues such as pollution, population, and resources.

SSCI 101 - Self-Development
Credits: 3
Class hours: 3 lecture
Description: This exploration of values, needs, feelings, and other non-intellectual aspects of one’s personality helps students gain a higher self-understanding leading to the development of a positive self-image and acceptance of one’s individuality and uniqueness.

SSCI 113 - Group Leadership
Credits: 3
Class hours: 3 lecture
Description: The course provides an opportunity to study leadership and administrative principles and practices in order to develop human dynamics and different types of leadership abilities. Leadership applications involve knowledge in group situations and the principles necessary for effective leadership.

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

SSCI 250 - Ecology and Society
Credits: 3
Class hours: 3 lecture
Comments: Split-level: SSCI 25
Description: This interdisciplinary course is concerned with developing a basic understanding and awareness of environmental issues and problems, their cause, and management alternatives. Students explore social, economic, and political aspects of issues such as pollution, population, and resources.
### SOCIOLGY (SOC)

**SOC 20 - Introduction to Sociology**
- **Credits:** 3
- **Class hours:** 3 lecture
- **Comments:** Split-level: SOC 100
- **Description:** This course analyzes human relationships through the study of organization of society and culture, personality development, and the workings of human groups. Recent changes in society and community life as related to general principles are explored.

**SOC 100 - Survey of General Sociology**
- **Credits:** 3
- **Class hours:** 3 lecture
- **Comments:** Split-level: SOC 20
- **Description:** This course analyzes human relationships through the study of organization of society and culture, personality development, and the workings of human groups. Recent changes in society and community life as related to general principles are explored.

**SOC 210 - Social Problems**
- **Credits:** 3
- **Class hours:** 3 lecture
- **Description:** This course explores representative major problems of society and their relationship to social deviation, cultural patterns, and social change.

**SOC 220 - Marriage and Family**
- **Credits:** 3
- **Class hours:** 3 lecture
- **Description:** This course explores the family as a social institution: family structure and function in various cultures; the family and social change; the cultural context; other social institutions; and individual social experience. A survey of factors leading to success or failure in marriage is included.

**SOC 230 - Race Relations**
- **Credits:** 3
- **Class hours:** 3 lecture
- **Description:** This course involves study of race relations in world perspective; typical situations; conflict and accommodations; caste; prejudice; interracial marriage; and effects upon personality.

### SPANISH (SPAN)

**SPAN 101 – Elementary Spanish I**
- **Credits:** 4
- **Class hours:** 3 lecture and 3 lab
- **Recommended:** Placement in ENG 22 or higher
- **Comments:** The laboratory is part of the class.
- **Description:** Introduction to the Spanish language emphasizing conversation, listening, grammar, reading, and writing.

**SPAN 102 – Elementary Spanish II**
- **Credits:** 4
- **Class hours:** 3 lecture and 3 lab
- **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.

**SPAN 201 – Intermediate Spanish I**
- **Credits:** 3
- **Class hours:** 3 lecture
- **Prereq:** "C" or higher in SPAN 102
- **Comments:** The laboratory is part of the class.
- **Description:** Continuation of SPAN 102. Students will refine basic language skills through conversation, listening, and instruction in grammar, reading, and writing.

**SPAN 202 – Intermediate Spanish II**
- **Credits:** 3
- **Class hours:** 3 lecture
- **Prereq:** A grade of “C” or higher in SPAN 201
- **Comments:** The laboratory is part of the class.
- **Description:** Continuation of SPAN 201: Conversation, listening, and instruction in grammar, reading, and writing.

### 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 20 - Speech Communication**
- **Credits:** 3
- **Class hours:** 3 lecture
- **Comments:** Split-level: SP 151
- **Description:** In this course, students develop competence in oral communication. Emphasis is placed on speechmaking, rather than on fundamentals of speech. Students gain skill in managing ideas from conception to development, organization, and oral presentation.

**SP 151 - Personal and Public Speech**
- **Credits:** 3
- **Class hours:** 3 lecture
- **Comments:** Split-level: SP 20
- **Description:** In this course, students develop competence in oral communication. Emphasis is placed on speechmaking, rather than on fundamentals of speech. Students gain skill in managing ideas from conception to development, organization, and oral presentation.
SP 231 - Performance of Literature  
**Credits:** 3  
**Class hours:** 3 lecture  
**Description:** 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.

SP 233 - Folklore  
**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** "C" or higher in SP 20 or SP 151  
**Description:** Students are introduced to the art of communication through storytelling for entertainment and education. The course includes oral traditions, analysis of story types, techniques of preparation and presentation, and performance.

SP 251 - Principles of Effective Public Speaking  
**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** "C" or higher in ENG 22 or SP 151; or placement in ENG 100  
**Description:** The course provides extensive practice in effective speech composition, support, delivery and critique with a focus on critical thinking, clear reasoning and adaptation to particular speakers, audiences and occasions. Writing will be used as a method of instruction and communication with students.

**THEATRE** *(THEA)*

THEA 101 - Introduction to Drama and Theatre  
**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.

**WELDING** *(WELD)*

WELD 17 - General Welding  
**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:** In this course, students explore elementary oxyacetylene and arc welding, including the safe and proper use of equipment and materials. The class is designed to supplement instruction in related trades.

WELD 20 - Introduction to Welding  
**Credits:** 10  
**Class hours:** 25 lecture/lab  
**Comments:** Credit by exam is not an available option.  
**Description:** In addition to the proper use and care of oxyacetylene welding equipment, students learn methods of welding on horizontal and vertical surfaces to ferrous and non-ferrous metals. The course includes instruction in the proper use and care of hand and power tools, identification of metals, basic welding terminology and welding symbols, and the forging and heat treatment of carbon steel. Students learn the operation and use of various types of arc welding machines, electrode identification, and selection of rods. Safety precautions are stressed.

WELD 41 - Advanced Welding  
**Credits:** 10  
**Class hours:** 25 lecture/lab  
**Prereq:** "C" or higher in WELD 20  
**Comments:** Credit by exam is not an available option.  
**Description:** This course offers the student theory and basic manipulative skills of shield-metal arc welding in flat, overhead, and horizontal positions. Students learn the preparation of common types of weldment joints; basic techniques in stainless steel, pipe, and cast iron welding; and fabrication and the use of fabricating tools and equipment. Students also learn the theory, practice, and application of TIG and MIG welding, including processes, safety, quality control, manipulative skills, and welding of stainless steel and aluminum.

**ZOOGOLOGY** *(ZOOL)*

ZOOL 20 - Beginning Zoology I  
**Credits:** 4  
**Class hours:** 3 lecture and 3 lab  
**Comments:** Credit by exam is not an available option.  
**Description:** This course is a basic introduction to the principles of animal and plant life with an emphasis on biological inquiry, energy flow, evolutionary trends, comparative biology of organ systems, and environmental ecology. The laboratory is part of the class.

ZOOL 101 - Principles of Zoology  
**Credits:** 4  
**Class hours:** 3 lecture and 3 lab  
**Comments:** Credit by exam is not an available option.  
**Description:** A general survey of the basic principles of animal biology, this course includes classification, structure, reproduction, ecology, genetics, and evolution. Emphasis is on the invertebrate animals and their relationship to other living organisms. The laboratory is part of the course.

ZOOL 141 - Human Anatomy and Physiology  
**Credits:** 3  
**Class hours:** 3 lecture  
**Prereq:** "C" or higher in CHEM 151 and CHEM 151L or higher  
**Coreq:** ZOOL 141L  
**Recommended:** ENG 100  
**Description:** This course is an introduction to the structure and function of the human body for students entering health or medically-related fields. This basic course includes a study of the body's embryology, gross anatomy, microanatomy, physiology, homeostatic relationships and the use of anatomy and physiology terms and concepts to develop thinking, reading, and writing skills, and problem-solving abilities. The systems studied include integumentary, skeletal, muscular, cardiovascular, lymphatic and immune, and respiratory.
ZOOL 141L - Human Anatomy and Physiology Laboratory

*Credits:* 1
*Class hours:* 3 lab
*Prereq:* “C” or higher in CHEM 151 and CHEM 151L or higher
*Coreq:* ZOOL 141

*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, cardiovascular, lymphatic and immune, and respiratory.

ZOOL 142 - Human Anatomy and Physiology

*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 (nervous, endocrine, digestive, urinary, reproductive systems) and use of anatomy and physiology terminology and concepts to develop thinking, reading, and writing skills, and problem solving abilities for students entering health or medically-related fields.

ZOOL 142L - Human Anatomy and Physiology Laboratory

*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 142 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: nervous, endocrine, digestive, urinary, and reproductive.