Course Descriptions

Accounting

ACC 200 : Introduction to Accounting I

Introduction to managerial and financial accounting and methods used to record and report managerial and financial information to decision makers internal and external to the firm.

Credits 3

Lecture Hours 3

Recommended Preparation

Placement into ENG 100W or higher.

Course Outcomes

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

ACC 201 : Introduction to Financial Accounting

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

Credits 3

Lecture Hours 3

Prerequisites

Placement into ENG 100 or equivalent

Course Outcomes

- Describe and understand the nature, environment and role of accounting as it relates to individuals, business organizations, and the business community.
- Analyze, record and report the business activities and transactions of a service and/or merchandising type organization using generally accepted accounting principles (GAAP).
- Understand and describe what internal controls are, including its basic components and limitation, and apply internal control activities in the control of cash and merchandising transactions.
- Apply GAAP in accounting for financial assets and liabilities including, but not limited to, short-term financial assets, inventories, long-term assets, and current liabilities.

ACC 202 : Introduction to Managerial Accounting

An introduction to managerial accounting methods for evaluating performance including cost accounting, budgeting, break-even analysis, ratio analysis, standard cost systems, and reporting for internal decision making.

Credits 3

Lecture Hours 3

Prerequisites

ACC 201 with "C" or better.

Course Outcomes

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

ACC 210 : Introduction to Accounting II

Introduction to managerial and financial accounting and methods used to record and report managerial and financial information to decision makers internal and external to the firm. Part II.

Credits 3

Lecture Hours 3

Recommended Preparation

Placement into ENG 100W or higher.

Prerequisites

A grade of C or better in ACC 200.

Course Outcomes

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

ACC 252 : Using Quickbooks® in Accounting

ACC 252 provides "hands-on" approach to computerized accounting using QuickBooks®. This course applies previously acquired accounting skills and knowledge in a computerized environment to setup and maintain accounting records. Emphasis will be placed on the application of QuickBooks® to the accounting cycle. This course also presents the basic concepts of an accounting information system and methods to document such systems. The course content of ACC 252 prepares students for the QuickBooks® Certification Examination.

Credits 3

Lecture Hours 3

Recommended Preparation

Students should have basic computer skills such as internet navigation and basic PC operation. To gain these skills, students can take ICS 100 or ICS 101.

Prerequisite Courses

ACC 201

Prerequisites

Credit or concurrent enrollment in ACC 201 or consent of instructor.

Course Outcomes

- Apply fundamental accounting principles to set up and maintain records using QuickBooks.
- Apply fundamental accounting principles to set up, evaluate, and communicate business performance based on various reports.
- Demonstrate effective communication and teamwork skills.

ACC 255 : Using Excel® in Accounting

ACC 255 provides hands-on training in the use of spreadsheets to solve accounting problems. Coursework involves application of previously acquired accounting skills and knowledge with emphasis on financial and managerial accounting. This course also reviews basic database concepts, and introduces basic Data Analytics concepts and applications in accounting.

Credits 3

Lecture Hours 3

Recommended Preparation

Students should have basic computer skills such as internet navigation and basic PC operation. To gain these skills, students can take ICS 100 or ICS 101.

Prerequisite Courses

ACC 201

Prerequisites

Credit for or concurrently enrolled in ACC 201 or the consent of instructor.

Course Outcomes

- Compile financial data utilizing an electronic spreadsheet, and generate accurate and relevant output.
- Analyze results of accounting problems and use the results to propose business recommendations.
- Explain basic database and data analytics concepts and their applications in accounting.
- Demonstrate effective communication and teamwork skills.

Agriculture

AG 93V : Cooperative Education

This course provides college credit for compensated work experience to reinforce knowledge and skills learned in coursework for the Agricultural Technology Program. Related instruction may be provided as appropriate. Seventy-five hours of work per semester is required for each credit earned. Repeatable to a total of 4 credits that may be applied to the AS degree, 1 credit applicable toward Certificate of Completion.

Credits 1-4

Prerequisites

Open to Agriculture majors only. Instructor's permission is required.

Course Outcomes

- Demonstrate the utilization of course work in the field.

AG 100 : Agriculture Orientation: Careers

Familiarizes students with different agricultural operations in Hawai'i through lectures, guest speakers and fieldtrips.

Credits 1

Lecture Hours 1

Course Outcomes

- Describe various careers in agriculture.
- Identify positive and negative aspects of various agriculture careers.

AG 120 : Plant Science

The study of plant science, morphology, anatomy, physiology classification, growth, growth regulators, and propagation. Students are required to write a 10 to 15 page research report.

Credits 3

Lab Hours 2

Lecture Hours 2

Designation

DB

Course Outcomes

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

AG 132 : Integrated Pest Management

Strategies of integrated pest management; biological and cultural pest controls, weed control, disease control, insect control.

Credits 3

Lecture Hours 3

Course Outcomes

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

AG 149 : Plant Propagation

Introduction to the principles and practices of propagation of fruit, vegetable, and ornamental crops by seed, cuttings, grafting, budding, layering and division.

Credits 3

Lecture Hours 3

Recommended Preparation

12th Grade reading level.

Course Outcomes

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

AG 152 : Orchid Culture

An extensive study of orchid identification, breeding, growth, and culture. Students are required to write a 10 to 15 page research report.

Credits 3

Lecture Hours 3

Designation

DB

Course Outcomes

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

AG 170 : Introduction to Aquaponics

The course covers aquaculture, hydroponics, aquaponics, sustainable aquatic feed production, renewable local seeding technologies and micronutrient supplementation, fish and plant physiology, renewable energy systems, water catchment and conservation techniques, and best aquaponic food safety practices. The basic physical and biological principles governing sustainable farm and agribusiness operations are emphasized.

Credits 4

Lab Hours 3

Lecture Hours 3

Recommended Preparation

AG 120 and IS 201.

Course Outcomes

- Design and construct a basic aquaponic system that uses all three grow-out technologies (nutrient film technique, ebb and flow, and floating raft) either alone or in combination.
- Apply best aquaculture practices for culturing fishes in an aquaponic setting.
- Identify the water quality parameters and manage them in order to maximize fish, plant and microbial outputs in an aquaponic setting.
- Use best agricultural practices for plant crop production in an aquaponic setting. Prepare seedlings for planting, harvest produce, stagger production of both plant and fish, and apply food safety procedures.

AG 171 : Farm Renewable Energy Systems

This course explores the various renewable energy systems potentially employable on small farms. Topics such as solar, solar thermal, wind, micro-hydraulic, biomass, and hybrid technologies are covered in the course.

Credits 3

Lecture Hours 3

Course Outcomes

- Evaluate photovoltaic systems applicable to small farms
- Evaluate solar thermal applications for small farms
- Evaluate biomass systems applicable to small farms
- Evaluate wind systems for small farms
- Evaluate micro-hydraulic systems for small farms
- Evaluate hybrid system applications for small farms

AG 192V : Special Topics in Agriculture

Topics related to diversified agriculture chosen by the Instructor. Course content may vary. May be repeated up to 5 credits with different topics.

Credits 1-4

Lecture Hours 1

Course Outcomes

- Identify the important concepts and facts presented for the topic (s) under examination.
- Make inferences and draw conclusions from the topic (s) under discussion.
- Develop skills appropriate to the topic (s) under discussion.
- Gain a higher appreciation for the human endeavor of agriculture.
- Gain a higher awareness of the potential career paths that this special topic course in agriculture covers.

AG 202 : Agriculture, Environment, and Society

The goal of this course is to establish foundational knowledge of agroecosystems. Emphasis is on the interrelationship among the crop plants, essential plant nutrients, social factors, and cultural practices. Key goals are to introduce students to the broad range of topics covered within agroecosystems, as well technical writing in agricultural science, and oral discussion and argument.

Credits 3

Lecture Hours 3

Designation

DB

Recommended Preparation

A grade of C or better in ENG 100

Course Outcomes

- Analyze and interpret information from technical and non-technical sources, with an emphasis on scientific articles.
- Discuss interrelationship between plants and animals, and the socio-economic importance of them to humans.
- Describe the relationship(s) between agriculture, society and the environment.
- Describe the concept of agroecosystems and form critical questions for in-class discussion.

AG 202L : Agriculture, Environment, and Society Laboratory

The goal of this course is to establish foundational knowledge of agroecosystems. Emphasis is on the interrelationship among the crop plants, essential plant nutrients, social factors, and cultural practices. Key goals are to introduce students to the broad range of topics covered within agroecosystems, as well as field and laboratory investigations in agroecology.

Credits 1

Lab Hours 3

Designation

DY

Recommended Preparation

Grade of C or better in ENG 100.

Prerequisites

Grade of C or better or concurrent enrollment in AG 202.

Course Outcomes

- Use the scientific method of inquiry to investigate ecological concepts and principles in an agricultural setting.
- Prepare written objective reports describing and interpreting experimental and observational results.
- Conduct experiments that evaluate the application of ecological concepts and principles to the design and management of sustainable food systems.

AG 235 : Irrigation Principles and Design

Fundamentals of irrigation principles, plant, soil, water relationships, soil moisture sensing devices, delivery systems, set up of drip, sprinkler, and surface irrigation systems. Use of chemigation.

Credits 3

Lecture Hours 3

Recommended Preparation

Credit in Math 22, 24, 25, 26, 28, 29, 75X or higher.

Course Outcomes

- Determine water requirements for plant growth.
- Describe soil water concepts.
- Select the appropriate irrigation method and components for the situation.
- Design a basic drip and sprinkler irrigation system.
- Trouble shoot irrigation problems.

Animal Sciences

ANSC 140 : Introduction to Veterinary Technology

This course introduces students to the field of veterinary technology and describes the responsibilities and expectations for students enrolled in the program. Topics include: roles of the veterinary team members, legal and ethical aspects of veterinary practice, breeds of companion animals, safety, sanitation and waste-disposal protocols, and career fields in veterinary medicine.

Credits 3

Lecture Hours 3

Prerequisites

Registration in or a grade "C" or better in ANSC 142 and ANSC 142L. Credit for or placement in ENG 100 and MATH 101. Confirmed attendance to Windward CC veterinary technology information session.

Course Outcomes

- Describe the roles and legal boundaries of veterinary health care team members and discuss the legality of the veterinary- client-patient relationship.
- Identify and describe common workplace hazards, including zoonotic diseases.
- Establish and maintain appropriate sanitation, nosocomial, and waste-disposal protocols.
- Identify common breeds of companion animals.

ANSC 142 : Anatomy and Physiology of Domestic Animals

Introduction to the anatomy and physiology of domestic animals. Compares the anatomy and function of major body systems for the cat, dog and horse, with lesser emphasis on birds, reptiles and amphibians. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields.

Credits 3

Lecture Hours 3

Designation

DB

Prerequisites

Registration in or a grade "C" or better in ANSC 140 and ANSC 142L. Credit for or placement in ENG 100 and MATH 101. Confirmed attendance to Windward CC veterinary technology information session.

Course Outcomes

- Discuss the chemical building blocks of major biological molecules.
- Describe the link between cells, tissues, organs, and organ systems.
- Contrast the structure and function of major body systems (e.g., skeletal, circulatory, respiratory, and reproductive) among companion animals and selected livestock species.
- Explain how disease and disorders disrupt the homeostasis of each of the above body systems and discuss how common veterinary medical treatments are used to restore homeostasis.

ANSC 142L : Anatomy of Domestic Animals Laboratory

Laboratory to accompany ANSC 142. This course is designed to acquaint the student with the body systems of common domestic species (e.g., cats, dogs, horses and birds) through dissections, examinations of models, laboratory exercises, and other hands-on activities. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Registration in or a grade "C" or better in ANSC 140 and ANSC 142. Credit for or placement in ENG 100 and MATH 101. Confirmed attendance to Windward CC veterinary technology information session.

Course Outcomes

- Identify and describe the anatomy of the major body systems for cats, dogs and horses using prepared slides, skeletons, models and dissections.
- Use standard anatomical terms to describe body directions, regions and sectioning planes.
- Identify major anatomical landmarks used to assess patient health during physical exams.
- Demonstrate proficiency at the use of the microscope as a clinical instrument.

ANSC 143 : Medical Dosages and Calculations for Veterinary Technicians

Introduction to Medical Dosages and Calculation for Veterinary Technicians. This course is designed to present the information commonly referred to as posology, which is defined as the study of dose and dosage in the field of applied pharmacology. This course will include, but not be limited to, the following: general mathematics used by veterinary medical personnel involved in calculating dosages of common drugs, reading drug orders and labels, and calculating intravenous fluid rates. Students will learn systems of measure, drug orders, drug concentration, conversions and different methods of dose calculations. The goal of this course is that each student be confident and capable of calculating correct drug doses regardless of the physical form of the medication. This course requires a strong background in algebra, the metric system, and an understanding of word problems. It is intended for students entering veterinary technology, veterinary assisting or other animal-related fields.

Credits 3

Lecture Hours 3

Designation

FQ

Recommended Preparation

Grade of C or better in MATH 25, 26, 28, 29, 75X or higher or equivalent, satisfactory math placement test score.

Prerequisites

Enrolled as a Veterinary Assisting Program student; Placement in Eng 100 and Math 100 level courses.

Course Outcomes

- Convert between standard and imperial units.
- Calculate correct medication and drug dosages for patients based on weight.
- Calculate appropriate Intravenous fluid drip rate.

ANSC 151 : Clinical Laboratory Techniques

Provides students with the background knowledge needed to perform and interpret laboratory techniques commonly used in veterinary practice. Topics include: Homeostatic relationships, cytology, histology, parisitology and clinical physiology of major body systems. Includes a discussion of common disorders affecting major body systems and the techniques used for diagnosis. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields.

Credits 3

Lecture Hours 3

Designation

DB

Prerequisites

A grade of "C" or better in ANSC 142 and 142L.

Corequisites

Registration in ANSC 151L.

Course Outcomes

- Describe the procedures for safely collecting specimens from domestic animals.
- Discuss the clinical tests performed in hematology, urinalysis, clinical chemistries, and cytology.
- Compare the technologies used by automated hematology and blood chemistry machines and discuss their impacts on the accuracy and reliability of test results.
- Recognize accurate vs. erroneous results in order to provide maximum diagnostic benefit.

ANSC 151L : Clinical Laboratory Techniques Lab

Laboratory to accompany ANSC 151. Provides students with the knowledge and skills necessary to perform common veterinary lab tests including urinalysis, hematology, blood chemistry, cytology and parasitology. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

A grade of "C" or better in ANSC 142 and ANSC 142L.

Course Outcomes

- Properly package, handle and store specimens for laboratory analysis.
- Demonstrate proficiency in the use of veterinary lab equipment (e.g. microscopes, blood chemistry analyzers, centrifuges, and refractometers).
- Determine proper maintenance and quality control procedures necessary to ensure accurate results.
- Properly carry out analysis of laboratory specimens, including urinalysis, CBC, blood chemistry and common cytological and parasitological procedures.
- Use critical thinking to analyze and interpret clinical data to determine if a need exists for additional laboratory tests that will provide useful diagnostic information.

ANSC 152 : Companion Animal Diseases and Nutrition

An introduction to the common diseases and medical care of companion animals. Topics include identification, clinical signs and symptoms, and treatment of diseases affecting companion animals. This course is intended for students entering veterinary technology or other animal-related fields.

Credits 3

Designation

DB

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses.

Course Outcomes

- Describe the common diseases of companion animals and identify the life stage at which the disease typically occurs.
- List the clinical signs and tests used in the diagnosis of common companion animal diseases.
- Explain the medical treatments for common companion animal diseases.
- Communicate the information that a client or owner would need in the event that a pet was diagnosed with a specific disease.

ANSC 153 : Companion Animal Nursing and Nutrition

An introduction to the husbandry and medical care of companion animals. Topics include: safe animal handling techniques, medical records and obtaining patient information, nursing tasks such as bandaging, administering medications, and sample collection. This class also discusses nutritional requirements of dogs and cats in all life stages and toxic substances. This course is intended for students entering veterinary technology, veterinary assisting, or other animal-related fields.

Credits 3

Lecture Hours 3

Prerequisites

Grade "C" or better in ANSC 142 and in ANSC 142L.

Course Outcomes

- Discuss energy and nutrient requirements for various life stages of companion animals and list substances that, when ingested, result in toxicity
- Describe how animal anatomy and physiology are integrated with animal behavior; compare normal, abnormal, and aggressive animal behavior; and discuss low-stress animal handling techniques
- Outline nursing procedures such as basic patient care and grooming, bandaging, sample collection, and administering medications and treatments

ANSC 153L : Companion Animal Nursing Lab

This course provides students with hands-on training in basic companion-animal exam and nursing skills. Topics include: animal restraint methods, medical charting and patient exam procedures, specimen collection, administration of medications, grooming and husbandry. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields.

Credits 1

Lab Hours 3

Prerequisites

Grade "C" or better in ANSC 142 and ANSC 142L.

Course Outcomes

- Safely and effectively restrain companion animals
- Gather subjective and objective patient information efficiently
- Perform venipuncture and collect diagnostic samples of skin, blood, urine, and feces
- Perform basic grooming such as bathing, nail trims, and ear cleaning
- Apply emergency splints and bandages & administer medications by various routes (IV, IM, SQ, & PO)

ANSC 190 : Veterinary Clinical Practices and Internship I

Practical animal experience at veterinary clinics, zoos, research labs or other animal facilities. Topics covered may include restraint procedures, veinipuncture, vital signs assessment, radiological techniques, veterinary business and front-office procedures, routine nursing care and animal husbandry. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields. Students participating in ANSC 190 are required to show proof of current health insurance and obtain a professional liability policy through their internship supervisor.

Credits 3

Internship Hours 9

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses.

Course Outcomes

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

ANSC 191 : Veterinary Office and Computer Skills

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

Credits 3

Lecture Hours 3

Prerequisites

Registration in or a grade "C" or better in ANSC 142 and ANSC 142L. Credit for or placement in ENG 100 and MATH 101. Confirmed attendance to Windward CC veterinary technology information session.

Course Outcomes

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

ANSC 252 : Diagnostic Imaging for Veterinary Technicians

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

Credits 3

Lecture Hours 3

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses.

Corequisites

Concurrent enrollment in ANSC 252L.

Course Outcomes

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

ANSC 252L : Diagnostic Imaging for Veterinary Technicians Lab

This lab trains students to safely and effectively use x-ray technology to obtain diagnostic radiographs of the skeletal- and soft anatomy of companion animals.

Credits 1

Lab Hours 3

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses

Corequisites

Concurrent enrollment in ANSC 252.

Course Outcomes

- Utilize radiographic equipment to expose and develop radiographic films in order to create diagnostic radiographic images.
- Properly label and file radiographic films and complete radiographic logs and reports.
- Utilize radiographic contrast agents to produce diagnostic images of urinary and GI organs.
- Perform radiographic techniques utilized in screening for canine hip dysplasia.
- Demonstrate proper maintenance and troubleshooting of radiographic equipment.
- Position companion animals safely and humanely for radiographic studies.

ANSC 253 : Applied Pharmacology for Veterinary Technicians

This course is designed to give students a practical knowledge of drugs used in veterinary medicine. Topics include drug classification, methods of action, calculations, administration, effects and side effects. Also includes a discussion of client education, drug safety, and federal regulations governing the purchase and storage of controlled drugs. Upon successful completion, students will be able to properly calculate, dispense, and administer medications, recognize adverse reactions and maintain pharmaceutical inventory and administrative records. This course is intended for students entering veterinary technology, veterinary assisting, or other animal-related fields.

Credits 3

Lecture Hours 3

Designation

DB

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses.

Course Outcomes

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

ANSC 258 : Clinical Laboratory Techniques II

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

Credits 3

Lecture Hours 3

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses

Corequisites

ANSC 258L

Course Outcomes

- Distinguish different types of bacteria and the methods used to identify common bacteria in veterinary medicine.
- Identify and describe the life cycle of select internal and external parasites of companion animals, livestock, & exotic species.
- Compare the different aspects of the immune system and discuss immunologic testing commonly performed in veterinary medicine. .

ANSC 258L : Clinical Laboratory Techniques II Lab

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

Credits 1

Lab Hours 3

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses

Co-Requisite Courses

ANSC 258

Course Outcomes

- Properly package, handle and store specimens for laboratory analysis.
- Perform parasitological tests to identify select internal and external parasites of veterinary medicine.
- Collect, culture, and identify bacteria from animal tissues and perform sensitivity testing.
- Perform a postmortem examination of a non-preserved animal.

ANSC 261 : Anesthesiology and Dentistry for Veterinary Technicians

This course will focus on dental anatomy, common dental diseases, and basic dental procedures. Topics will include proper charting, routine periodontal care, anesthesia, patient monitoring, analgesia, post-op concerns, and homecare for clients. Dental equipment and instruments will be reviewed in preparation for the concurrent lab (ANSC 261L).

Credits 3

Lecture Hours 3

Designation

DB

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses

Corequisites

Co-registration in ANSC 261L.

Course Outcomes

- Explain all aspects of anesthetic monitoring.
- Understand the proper operation of anesthetic delivery equipment and monitoring instruments.
- Understand and integrate all aspects of patient management for common dental procedures in companion animal species.
- Identify and provide appropriate instruments, supplies and environment to maintain asepsis during dental procedures.
- Understand the principles of routine dental care and be able to make recommendations to pet owners.
- Recognize the levels of periodontal disease and how it affects a patient's overall health.
- Identify normal dental anatomy of common veterinary species.

ANSC 261L : Anesthesiology and Veterinary Dentistry for Veterinary Technicians Lab

This course will focus on the clinical skills necessary for safe and effective anesthesia and dental prophylaxis of companion animal patients (dogs and cats). Skills such as intravenous catheter placement, endotracheal intubation, patient preparation and monitoring, and dental prophylaxis under general anesthesia will be stressed. The use and side effects of commonly used sedatives, analgesics and anesthetics will be covered. Postoperative procedures include patient monitoring and charting as well as client education for postoperative care.

Credits 2

Lab Hours 6

Designation

DY

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses

Corequisites

Co-registration in ANSC 261.

Course Outcomes

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

ANSC 262 : Clinical Procedures for Large Animals

The student will learn techniques in large animal restraint, husbandry and clinical procedures and be provided some introduction to relevant large animal diseases. Biosecurity and public health will be discussed as they apply to large animal health care and husbandry. The course is appropriate for those entering animal husbandry, veterinary assisting, veterinary technology or animal science fields.

Credits 3

Lecture Hours 3

Designation

DB

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses

Corequisites

ANSC 262L

Course Outcomes

- Describe common zoonotic diseases of large animals as they apply to animal health and public safety.
- Discuss biosecurity and isolation procedures necessary in livestock operations.
- Describe the signs and treatment for common diseases of large animals.
- Explain anesthetic, surgical, dental, and recovery procedures for large animals.

ANSC 262L : Clinical Procedures for Large Animals Lab

The student will learn techniques in large animal restraint, husbandry and clinical procedures and be provided some introduction to relevant large animal diseases. Biosecurity and public health will be discussed as they apply to large animal health care and husbandry. The course is appropriate for those entering animal husbandry, veterinary assisting, veterinary technology or animal science fields.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses

Co-Requisite Courses

ANSC 262

Course Outcomes

- Safely and successfully restrain various species of livestock for medical examination and procedures.
- Medicate, bandage, groom, and feed large animals.
- Successfully perform diagnostic sampling and imaging tasks on large animals.

ANSC 263 : Exotic and Laboratory Animal Procedures

Introduction to the husbandry, care and use of exotics and laboratory animals. Includes discussion in common diseases, biosecurity, and public health as they apply to a wide variety of species, including those found in Hawaii and beyond. This course is intended for students entering lab animal medicine, veterinary technology, veterinary assisting or other animal-related fields.

Credits 3

Lecture Hours 3

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses.

Course Outcomes

- Comply with national and institutional regulations regarding the housing, care, and use of laboratory animals.
- Recognize of exotic and lab animal species and describe the signs and treatments for common diseases of lab animals.
- Describe common zoonotic diseases of exotics and lab animals as they apply to animal health and public safety.

ANSC 263L : Exotic and Laboratory Animal Procedures Lab

Laboratory to accompany ANSC 263. Provides student training in restraint and handling, health assessment, and nursing skills of exotic and laboratory animal species. This course is intended for students entering lab animal medicine, veterinary technology, veterinary assisting or other animal-related fields.

Credits 1

Lab Hours 3

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses.

Course Outcomes

- Safely and humanely restrain common exotic and lab animals for procedures.
- Administer drugs and medications using appropriate sites and routes (IV, IM, SQ and Oral Dosing) to exotic and lab animal species.
- Humanely collect blood samples from exotics and lab animal species.
- Identify and describe the anatomy of the major body systems for exotic mammalian and avian species using skeletons and models.
- Explain anesthetic and recovery procedures in exotics and lab animal species.

ANSC 266 : Veterinary Clinical Practices & Internship II

A continuation of ANSC 190, this course provides veterinary technology students with additional practical experience in a clinical setting. Topics covered include: advanced sample collection & handling techniques, dentistry, administration of medications, anesthesiology & surgical assisting, and advanced nursing techniques. Emphasis is placed on integrating classroom learning with practical work experience.

Credits 3

Internship Hours 9

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses.

Course Outcomes

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

ANSC 271 : Anesthesiology and Surgical Nursing for Veterinary Technicians

This course will focus on the clinical skills necessary for safe and effective anesthesia and surgery of companion animal patients (dogs and cats). Skills such as intravenous catheter placement, proper endotracheal intubation, patient and surgical site preparation, and patient monitoring under general anesthesia will be stressed. The use and side effects of commonly used sedatives, analgesics and anesthetics will be covered. Postoperative procedures include patient monitoring and charting as well as client education for postoperative care.

Credits 3

Lecture Hours 3

Designation

DB

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses

Corequisites

Co-registration in ANSC 271L

Course Outcomes

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

ANSC 271L : Anesthesiology and Surgical Nursing for Veterinary Technicians Lab

This course will focus on the clinical skills necessary for safe and effective anesthesia and surgery of companion animal patients (dogs and cats). Skills such as intravenous catheter placement, proper endotracheal intubation, patient and surgical site preparation, and patient monitoring under general anesthesia will be stressed. The use and side effects of commonly used sedatives, analgesics and anesthetics will be covered. Postoperative procedures include patient monitoring and charting as well as client education for postoperative care.

Credits 2

Lab Hours 6

Designation

DY

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses

Corequisites

Co-registration in ANSC 271.

Course Outcomes

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

ANSC 290 : Veterinary Technician Exam Review

This course prepares students for the Veterinary Technician National Exam (VTNE). Topics include test-taking strategies, formation of a study plan, and a review of topics from previous veterinary technology courses. Students enrolled in this course will develop essential test-taking skills by completing practice exams covering all major topics of the Windward CC veterinary technology curriculum.

Credits 1

Lecture Hours 1

Prerequisites

Admission in the Veterinary Technology Program and a grade of "C" or better in all completed ANSC courses.

Course Outcomes

- Develop an appropriate study plan and essential test-taking skills to prepare for the VTNE.
- Identify areas of competence as well as topics which require further study.

Anthropology

ANTH 151 : Emerging Humanity

This course is an introduction to human biological evolution and the archaeology of culture in the world prior to AD 1500.

Credits 3

Lecture Hours 3

Designation

FGA

Course Outcomes

- Explain how archaeologists gather and use evidence about the past to describe human evolution, cultural change, and environmental relationships.
- Describe human evolution, applying the theory of natural selection to explain major morphological transitions of the lineage.
- Discuss the prehistoric and historic relationship(s) among human biology, culture, and environment and compare them to modern environmental challenges.

ANTH 152 : Culture and Humanity

Introduction to cultural anthropology. This course explores how humans create, understand, order and modify their natural, social, supernatural and physical environments, and make meaning and order.

Credits 3

Lecture Hours 3

Designation

FGB

Course Outcomes

- Identify how cultural perspectives and social norms are socially and historically constructed.
- Apply anthropological perspectives to critically analyze current social issues.
- Describe anthropological research methodologies and collect and analyze ethnographic data.
- Apply anthropological perspectives and research methods to careers and research outside of the discipline.

ANTH 175 : Polynesian Surf Culture

Provides students with an understanding of surf culture in the Pacific Basin. Environmental and cultural factors are assessed in relation to surfing's development in Polynesia, integration into Hawaiian culture, decline due to Western influence, and revitalization as a modern recreational activity. The modern surfing industry is also assessed through a cultural perspective that analyzes business practices utilized by surfing organizations today.

Credits 3

Lecture Hours 3

Designation

DS

Recommended Preparation

Concurrent enrollment in ANTH 175L

Course Outcomes

- Discuss environmental and cultural factors affecting the development of surfing in Polynesia.
- Discuss how surfing has evolved due to western influence and modern popular culture.
- Discuss modern social and legal issues relating to surfing.

ANTH 175L : Surf Culture Field Lab

Complements the lecture materials presented in the ANTH 175. Provides students with an understanding of surf culture in the Pacific Basin using Oʻahu as a model for understanding ancient and modern surfing culture in Hawaiʻi. Field activities include surfing demonstrations and instruction, opportunities to speak with local cultural informants, and fieldtrips to various museums to learn about Hawaiʻi's surfing heritage. A coastal tour of Oʻahu will be made to study the history of several major surf breaks.

Credits 1

Lab Hours 3

Designation

DS

Prerequisite Courses

ANTH 175

Prerequisites

Credit for or registration in ANTH 175.

Course Outcomes

- Discuss environmental and cultural factors affecting the development of surfing in Polynesia.
- Discuss principles of anthropology as they apply to the creation and shaping of surfing culture.
- Discuss modern social and legal issues relating to surfing.

ANTH 210 : Archaeology

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

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Categorize and evaluate the cultural and environmental processes which shape the archaeological record.
- Demonstrate and compare the major methods used by archaeologists in the field and in the laboratory to discover, excavate, date and interpret human cultural materials. Be able to evaluate the validity and usefulness of the various methods with relationship to actual sites.
- Examine the major explanatory concepts and theories in archaeology, and analyze how they are used to develop an understanding of development, change and diversity in prehistoric human groups.
- Analyze examples from specific areas with an emphasis on Hawaiʻi to explore how archaeology has been used/misused to develop scientific and popular views of prehistory.
- Examine and evaluate major issues in Hawaiʻi in modern archaeology, especially as they Cultural Resource Management.
- Discuss the ethical, legal and social implication of archaeological work especially in relation to NAGPRA and how these issues relate to current debates in Hawaiʻi.

ANTH 296 : Special Topics in Anthropology

Students will investigate important topics, issues, or subfields within the discipline of Anthropology. May be repeated up to 9 credits with different topics.

Credits 3

Lecture Hours 3

Prerequisites

"C" or better in ANTH 151 or ANTH 152

Course Outcomes

- Identify the important concepts and facts particular to the selected course topic.
- Analyze and interpret the nature and significance of the selected course topic.
- Investigate connections between the selected course topic and contemporary events and issues.

Aquaculture

AQUA 106 : Small Scale Aquaculture

Survey of possibilities of small scale aquaculture. Application of basic biological and ecological concepts and theories to the selection, planning and design of small scale aquaculture systems.

Credits 3

Lecture Hours 3

Designation

DB

Recommended Preparation

Registration in AQUA 106L.

Course Outcomes

- Describe past and present aquaculture technologies.
- Plan and design a small scale aquaculture system.
- Select appropriate small scale aquaculture organisms.
- Determine the optimal conditions for cultivating small scale aquaculture organisms.
- Develop a small-scale aquaculture husbandry and management plan.
- Evaluate the economic feasibility of developing a small-scale aquaculture system.

AQUA 106L : Small Scale Aquaculture Laboratory

Companion laboratory to AQUA 106, Small Scale Aquaculture. Practical, hands-on experiences in small scale aquaculture. Laboratory/field trip class.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in AQUA 106.

Course Outcomes

- Construct and operate different kinds of small-scale aquaculture systems.
- Identify and classify common species of aquaculture organisms.
- Identify anatomical (internal and external) features of aquaculture organisms.
- Operate a small-scale aquaculture system to successful harvest of target species.
- Monitor culture conditions (physical, chemical and biological) in small-scale aquaculture systems.
- Demonstrate techniques for the cultivation of live food cultivation.
- Demonstrate techniques for the reproduction of aquaculture species.

AQUA 110 : Introduction to Algae Cultivation

An introduction to algal biology and sustainable cultivation for both limu (macroalgae) and microalgae. Students are introduced to water and nutrient cycling, water testing methods, algae anatomy and chemical structure as they relate to potential products from algae. Student will engage in a deep dive into photosystems and photosynthesis is also provided. In addition, a practical focus on water pumping and filtration systems, carpentry and plumbing will be taught.

Credits 3

Lecture Hours 3

Designation

DB

Course Outcomes

- Identify and describe the major algae groups used in sustainable commercial applications.
- Apply cell biology and chemistry to algae cultivation.
- Describe basic operations of algae cultivation facilities.
- Indicate how to create and maintain a safe working environment.

AQUA 110L : Introduction to Algae Cultivation Lab

An introduction to algal biology and sustainable cultivation. Students are introduced to media preparation, sterile technique, culture inoculation, and microscopy through hands on instruction/experiential learning activities. Students scale-up from isolated strains to 10-liter photobioreactors. Standard monitoring equipment is also introduced for the analysis of water and media chemistry, monitoring algal growth rates, and troubleshooting. Data collection, record keeping, and safety are emphasized throughout the course. If possible, students will be exposed to algae cultivation facilities in operation.

Credits 1

Lab Hours 3

Designation

DY

Prerequisite Courses

AQUA 110

Prerequisites

Grade of C or better or registration in AQUA 110.

Course Outcomes

- Demonstrate the proficiency in microscopy
- Isolate an algae colony from a mixed population
- Prepare media and cultivate algae up to 10 L
- Use analytical instrumentation to monitor an algae/limu culture
- Operate basic lab equipment used in algae production facilities and lab safety

AQUA 201 : The Hawai'i Fishpond

An introduction into the history, development, biology and ecology, management, restoration, and future of Hawaiian fishponds. This course will study traditional Hawaiian fishponds, merging traditional knowledge with the principles of modern Western science.

Credits 3

Lecture Hours 3

Designation

DB

Recommended Preparation

Registration in AQUA 201L.

Course Outcomes

- Explain the process and philosophical basis of scientific inquiry.
- Distinguish between the types of traditional Hawaiian fishponds, the history of their construction and use throughout the Hawaiian Islands, how and where they were constructed, their operation and management, their characteristics, and their biota.
- Describe the oceanography, biology and ecology of Hawaiian fishponds.
- Describe the basic principles of aquaculture, including pond dynamics, feeding regimes, cultivated species propagation and growth, disease management, production, harvesting and maintenance.
- Discuss the status of Hawaiian fishponds in modern times, including their restoration and their future.

AQUA 201L : The Hawai'i Fishpond Lab

An introduction into the history, development, biology and ecology, management, restoration, and future of Hawaiian fishponds. This course will study traditional Hawaiian fishponds, merging traditional knowledge with the principles of modern Western science.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in AQUA 201 or consent of instructor.

Course Outcomes

- Use the scientific method of inquiry to study a Hawaiian fishpond.
- Apply the concepts learned in AQUA 201 to an experimental and hands-on observational setting.
- Use analytical tools and instruments to study the oceanography, biology and ecology of Hawaiian fishponds.
- Collect, reduce, and interpret data.
- Prepare written objective reports describing and interpreting experimental and observational results.
- Identify and classify common fishpond species.
- Design a Hawaiian fishpond.
- Manage all aspects of a Hawaiian fishpond.

Art

ART 101 : Introduction to the Visual Arts

Art101 is an introductory course that focuses on the question "What is the nature of visual art?" and the forms and conditions under which art is expressed. Projects will be required. Independent field trips to art galleries may be required.

Credits 3

Lecture Hours 3

Designation

DA

Course Outcomes

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

ART 104D : Introduction to Printmaking/Screen Printing

Studio experience mainly for non-majors. An introduction to printmaking providing experience in the development of skills used in designing for screen printing on paper. Includes skill in photo screening. May be repeated up to 6 credits.

Credits 3

Studio Hours 6

Designation

DA

Course Outcomes

- Demonstrate a knowledge and understanding of the elements of art, principles of design, and the creative process.
- Select and use screen printing materials.
- Complete the creative problem-solving process, from planning and discovery to implementation and evaluation.
- Examine the process of integrating content and meaning with visual form in the screen printing process.

ART 105B : Introduction to Ceramics–handbuilding

Studio experience mainly for no majors. An introduction to clay as an art medium. Emphasis on basic handbuilding techniques, three-dimensional concepts in clay, glazing, decorating and firing kilns. NOTE: Art Majors: ART 105B and ART 105C must both be taken to receive equivalency at UH Mānoa as an art elective. Liberal Arts Students: ART 105B or ART 105C will transfer to fulfill the Humanities DA core requirements.

Credits 3

Studio Hours 6

Designation

DA

Course Outcomes

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

ART 105C : Introduction to Ceramics–wheelthrowing

Studio experience mainly for non-majors. Introduction to the potter's wheel. Emphasis on techniques of forming basic wheelthrown shapes on the electric or kick wheel. Emphasis also on decorating, glazing, and firing of ceramic pieces. NOTE: Art Majors: ART 105B and ART 105C must both be taken to receive equivalency at UH Mānoa as an art elective. Liberal Arts Students: ART 105B or ART 105C will transfer to fulfill the Humanities DA core requirements.

Credits 3

Studio Hours 6

Designation

DA

Course Outcomes

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

ART 107 : Introduction to Photography

Studio experience mainly for non-majors. An introduction to black and white photography emphasizing a variety of picture-making techniques. Student must have film camera with adjustable shutter speeds and aperture settings.

Credits 3

Studio Hours 6

Designation

DA

Course Outcomes

- Perform and apply basic photographic techniques such as single lens reflex camera operation, black and white film processing and darkroom print enlargement.
- Apply the fundamental visual, design and camera optical principles.
- Discuss the traditions and history of photography.
- Experiment with the creative problem-solving process: from planning and discovery to implementation and evaluation.
- Develop strong communication skills to effectively critique and analyze photographic imagery.

ART 107D : Intro to Digital Photography

ART 107D is an introduction to digital photography using digital cameras and basic image editing software that emphasizes a variety of picture-making techniques, including the technical and aesthetic considerations needed for artistic expression and entry into photographic professions or the digital media workplace. Examines the broad functions of digital photography within contemporary society and cultivates understanding in the language of image making, equally relevant for both makers and consumers. Student must have access to a digital camera with manual control over shutter speeds and aperture settings. Studio experience for Art majors and non-majors.

Credits 3

Studio Hours 6

Designation

DA

Course Outcomes

- Operate a digital camera in manual mode to understand how to create a properly exposed, properly focused, "intended" image.
- Discuss how photographic traditions and history inform our present-day approach to digital photography as a means of visual communication.
- Use industry-standard photo editing software for the editing and output of images.
- Present photographs that use aesthetic principles and means to express your feelings and/or ideas based on project concepts and prompts.

ART 108 : Elementary Studio: Drawing and Painting

Art 108 is a studio course, which includes drawing and an introduction to acrylic painting techniques, with an emphasis on acrylic painting. Course content will also emphasize composition and color theory. May be repeated up to 6 credits.

Credits 3

Studio Hours 6

Designation

DA

Course Outcomes

- Comprehend and use basic drawing techniques to create finished drawings.
- Use appropriate acrylic painting and color techniques to make finished paintings.
- Evaluate the creative problem-solving process to complete a final composition.
- Evaluate and critique works of art by using art terminology.
- Distinguish seeing from looking.
- Create a personal drawing and painting style through art practice and theory.

ART 111 : Introduction to Watercolor Painting

Art 111 is an introduction to watercolor painting materials and techniques. May be repeated up to 6 credits.

Credits 3

Studio Hours 6

Designation

DA

Recommended Preparation

ART 101 and ART 113.

Course Outcomes

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

ART 112 : Introduction to Digital Art

ART 112 is a studio introduction to digital technology and its applications to the production of visual art. Emphasis will also be placed on developing an aesthetic criteria for evaluation.

Credits 3

Studio Hours 6

Designation

DA

Recommended Preparation

ART 115, ICS 100.

Course Outcomes

- Create original digital graphic artwork using appropriate design principles, elements of art, vocabulary, digital graphic software, and digital graphical technological processes.
- Apply problem-solving techniques to develop art projects according to specifications, and critique and defend own artwork.
- Use the vocabulary and technological processes of digital graphics.
- Demonstrate basic animation principles and skills.

ART 113 : Introduction to Drawing

Art113 is an introduction to the materials and techniques of drawing, focusing online drawing, rendering, and the use of perspective. This course will include the study of the drawings of old and modern masters. May be repeated up to 6 credits.

Credits 3

Studio Hours 6

Designation

DA

Recommended Preparation

ART 101.

Course Outcomes

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

ART 114 : Introduction to Color

Art 114 is an introductory course focusing on color theory and the application of color as related to studio art practice.

Credits 3

Studio Hours 6

Designation

DA

Recommended Preparation

ART 101.

Course Outcomes

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

ART 115 : Introduction to 2D Design

Art 115 is an introductory course, which focuses on the basic design concepts, elements and principles of art. This course emphasizes projects in basic two-dimensional design.

Credits 3

Studio Hours 6

Designation

DA

Recommended Preparation

ART 101.

Course Outcomes

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

ART 116 : Introduction to Three-Dimensional Composition

Focuses on building three-dimensional structures and basic sculptural forms using various approaches and materials, as well as the designing of creative environments. The student's awareness of the natural order and the aesthetic aspect of design is broadened and the student learns the use of texture, volume, color, temperature, proportion, space, time and movement in a three-dimensional form.

Credits 3

Studio Hours 6

Designation

DA

Course Outcomes

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

ART 123 : Introduction to Oil Painting

Art 123 is an introduction to the materials and techniques of oil painting. Classical painting techniques will be emphasized. May be repeated up to 6 credits.

Credits 3

Studio Hours 6

Designation

DA

Recommended Preparation

ART 101, 113 and 114.

Course Outcomes

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

ART 126 : 3D Computer Graphics I

This course explores introductory level conceptual and technical topics in 3D computer graphics. Autodesk Maya and related applications will be utilized to develop projects which integrate 3D modeling, UV layout, texture mapping, lighting, and rendering. (Cross-listed as CM 126)

Credits 3

Studio Hours 6

Designation

DA

Recommended Preparation

Algebra, Geometry

Prerequisites

A grade of C or better in ART 112 or consent of instructor.

Course Outcomes

- Develop 3D models and related art assets using introductory level technical skills, procedures, and production methodologies.
- Employ the vocabulary of 3D computer graphics to define creative objectives and evaluate outcomes.
- Apply knowledge of contemporary industry responses to 3D computer graphics in the development of 3D models and related art assets.
- Apply knowledge of the theory, history and principles of design and animation in the creation of new media art.
- Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.

ART 131 : Introduction to Fused Glass

Introduction to expressive explorations in the use of kiln-formed, fusible-sheet glasses and enameling on glass.

Credits 3

Studio Hours 6

Designation

DA

Course Outcomes

- Demonstrate the basic skills of glass fusing using float glass, Spectrum 96 fusible glass, high temperature glass enamels, and Bullseye fusible glass
- Design, cut, assemble and fire fused glass
- Apply knowledge of programming and firing of the kiln controller computer

ART 175 : Survey of Global Art

Art produced in Asia, Africa, Native America, Europe, and the Pacific Islands, from prehistory to the 15th century. Religious and philosophical ideas expressed in architecture, painting, prints, sculpture, applied art, body art, and textiles.

Credits 3

Lecture Hours 3

Designation

FGA

Course Outcomes

- Distinguish how art expresses world views and reflects societies' organization and interaction with other cultures.
- Analyze art through religious, political, and economic factors that have shaped culture in different parts of the globe at different times.
- Analyze a work of art through the recognition of elements of style.

ART 176 : Survey of Global Art II

Art produced in Asia, Africa, Native America, Europe, and the Pacific Islands, from the 15th century to the present. Religious and philosophical ideas expressed in architecture, painting, prints, sculpture, applied art, body art, and textiles.

Credits 3

Lecture Hours 3

Designation

FGB

Course Outcomes

- Distinguish how art expresses worldviews and reflects societies' organization and interaction with other cultures
- Analyze art through religious, political, and economic factors that have shaped culture in different parts of the globe at different times.
- Analyze a work of art through the recognition of elements of style.

ART 189 : Introduction to Hawaiian Art

An integrated beginning studio art course, which offers students the opportunity to understand and express Hawaiian cultural perspective through contemporary visual arts activities.

Credits 3

Designation

DA

Recommended Preparation

HAW 101 or one semester high school Hawaiian.

Course Outcomes

- Demonstrate a basic understanding of the historical and formal qualities of objects produced by Hawaiians through pre-contact, post-contact, and contemporary times.
- Demonstrate a basic understanding of art making as a means of contemporary notation, conceptualization and visual organization.
- Develop an appreciation of Hawaiian art, the variety and richness of its art forms and the cultural significance inherent in its production.
- Demonstrate how the Hawaiian language informs the process of art making and offers insights into the metaphorical nature intrinsic in Hawaiian art.
- Use various art making techniques and processes to explore personal imagery.
- Collaborate with others to make creative decisions.

ART 202 : Introduction to Digital Imaging

Combined theory and practice examining major techniques, concepts, and aesthetics in contemporary digital image production. Direct studio experience in essential software, printing techniques and hardware necessary in producing the gallery quality inkjet print.

Credits 3

Designation

DA

Prerequisites

Grade of "C" or better in Art 107 and Art 113, or consent from instructor.

Course Outcomes

- Produce informed images utilizing knowledge and understanding of the history of photography.
- Produce gallery quality archival pigment prints in versions and editions.
- Demonstrate competency in both raster and vector based imaging software.

ART 207 : Intermediate Photography: Black and White

Basic techniques and aesthetics of black and white photography; the camera as a tool for communication and self expression. Student must have a film camera with adjustable shutter speeds and aperture settings. Up to 6 credits applicable toward A.A. degree.

Credits 3

Studio Hours 6

Designation

DA

Prerequisite Courses

ART 107

Prerequisites

Credit for ART 107 or consent of instructor.

Course Outcomes

- Perform and apply intermediate photographic techniques with camera operations; black and white film processing; darkroom print enlargement and manipulation; and systems of exposure and development for film.
- Show proficiency in skills and concepts relative to the practice of photography as a means of visual communication and self-expression.
- Be able to discuss the traditions and history of photography.
- Demonstrate intermediate level proficiency in the creative problem-solving process; personal insight; craftsmanship; and technical, aesthetic and critical concepts.
- Demonstrate strong communication skills by effectively critiquing and analyzing photographic imagery.

ART 208 : Intermediate Photography: Color Studio

Color in photography emphasizing communication and self-expression. Lectures, demonstrations and projects. Student must have film camera with adjustable shutter speeds and aperture settings.

Credits 3

Studio Hours 6

Designation

DA

Prerequisite Courses

ART 101

ART 107

Prerequisites

Credit for ART 101 and 107, or consent of instructor.

Course Outcomes

- Conceptualize an idea and translate it photographically into a visual form.
- Use different color films and development procedures to convey and express different photographic aesthetics.
- Express through refined photographic techniques your ideas, feelings and/or concepts.
- Produce photographic prints that require proficient skill in darkroom techniques.

ART 213 : Intermediate Drawing

Art 213 is a continuation and development of drawing ideas and skills introduced in Art 113. A variety of materials, techniques and concepts are explored, particularly pertaining to drawing concepts unique to the 20th century. Portraiture will also be introduced. May be repeated up to 6 credits.

Credits 3

Studio Hours 6

Designation

DA

Recommended Preparation

ART 101 and ART 113.

Course Outcomes

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

ART 214 : Introduction to Life Drawing

Art 214 is an introductory figure drawing course. Anatomical construction, light, space, diagrammatic analysis, and thematic content will be studied through the drawing process. May be repeated up to 6 credits.

Credits 3

Studio Hours 6

Designation

DA

Recommended Preparation

ART 101 and 213.

Prerequisites

Credit for ART 113 or consent of instructor.

Course Outcomes

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

ART 220 : The Windward Atelier (AKA Atelier Hawai'i) Intensive Study in Drawing and Painting

Art 220 is an intensive course of study in the classical techniques of drawing and painting. Cast drawing, portraiture and figure painting will be the focus of instruction. The Windward Atelier is designed primarily for those students who have some prior studio experience in drawing; however, students of all skill levels are welcome.

Credits 6

Studio Hours 12

Designation

DA

Course Outcomes

- Develop observational drawing and painting skills using classical measuring and sighting techniques, mapping, and memory to make accurate depictions from plaster casts and the live figure model.
- Perceive, key, and record values accurately and effectively in observational drawings and paintings.
- Execute the painting processes, from preliminary drawings and canvas preparation to the completion of a painting, including the proper use and care of the painter's studio implements.
- Discuss and critique work based on classical drawing and painting concepts and techniques.

ART 223 : Intermediate Painting

Survey of late 19th and early 20th century studio practice. Completion of paintings which concentrate on historical styles as well as on a more personal direction. May be repeated for up to 6 credits.

Credits 3

Studio Hours 6

Designation

DA

Prerequisites

Credit for ART 123 or consent of instructor.

Course Outcomes

- Create paintings that exhibit a working knowledge of recent developments in the pictorial structure of paintings.
- Understand and use the dynamic organization of pattern, two and three dimensional space and rhythmic demands of the "flat" picture plane.
- Confidently paint shape, edges, color relationships and space with increased sensitivity.
- Develop original and personal concepts and techniques.
- Demonstrate an understanding of the technical aspect of the painting process.
- Develop the language skills used in the critical evaluation of paintings.

ART 224 : Painting from Life

Art 224 is a survey of the figurative tradition of painting, using the model as the primary subject matter. This course is an intensive studio experience of painting from the model. May be repeated up to 6 credits.

Credits 3

Studio Hours 6

Designation

DA

Prerequisites

Credit for ART 123 and 214, or consent of instructor.

Course Outcomes

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

ART 243 : Intermediate Ceramics–handbuilding

Development of handbuilding techniques, sculptural and vessel concepts, and surface treatment and glazing. May be repeated up to 6 credits. NOTE: Art Majors: ART 243 and 244 must both be taken to receive equivalency at UH Mānoa as ART 242, Introduction to Ceramics.

Credits 3

Studio Hours 6

Designation

DA

Recommended Preparation

ART 101, 116.

Prerequisites

Credit for ART 105B or consent of instructor.

Course Outcomes

- Demonstrate an understanding of the three basic hand- building techniques and the potential of each as structural and decorative elements.
- Demonstrate an understanding of two different clay bodies and their potential as structural and decorative elements.
- Demonstrate an awareness of the varieties of materials and techniques of the glazing and firing processes.
- Demonstrate innovative and inventive problem-solving through creative decision-making and insightful articulation of finished ceramic vessels and sculptural forms.
- Demonstrate an ability to generate creative ideas through three-dimensional visualization techniques.
- Demonstrate an understanding of color and color theory as it relates to three-dimensional form in the use of glazes and oxides.
- Demonstrate an understanding of historic and contemporary examples of hand built ceramics.
- Demonstrate an understanding of drawing as a tool for conceptualization and documentation of personal imagery and technical investigation of the ceramic process.
- Demonstrate an appreciation for and awareness of ceramic objects.
- Demonstrate an awareness of the visual elements and the design principles while creating ceramic vessels and sculptural forms.
- Demonstrate an ability to articulate the concepts and intent of a completed piece.

ART 244 : Intermediate Ceramics–wheelthrowing

Development of wheelthrowing techniques, vessel and structural concepts, and surface treatment and glazing. May be repeated up to 6 credits. NOTE: Art Majors: ART 243 and 244 must both be taken to receive equivalency at UH Mānoa as ART 242, Introduction to Ceramics.

Credits 3

Studio Hours 6

Designation

DA

Recommended Preparation

ART 101, 105B, 116.

Prerequisites

Credit for ART 105C, or consent of instructor.

Course Outcomes

- Demonstrate through completed projects, a basic proficiency in wheel throwing techniques.
- Demonstrate an understanding of color and color theory through the use of various decorated techniques: slips, oxides, engobes, stains, and glazes.
- Demonstrate an understanding of clay bodies, oxidation and reduction firing, and of the basic chemical compositions of glazes.
- Demonstrate an awareness of the visual elements and the design principles while creating ceramic vessels and sculptural forms.
- Demonstrate innovative and inventive problem solving, through creative decision-making and insightful articulation of finished ceramics vessels and sculptural forms.
- Demonstrate an ability to generate creative ideas through three-dimensional visualization techniques.
- Demonstrate an understanding of drawing as a tool for conceptualization and documentation of personal imagery and technical investigation of the ceramic process.
- Demonstrate an understanding of historic and contemporary examples of wheel made ceramics.
- Demonstrate an ability to articulate the concepts and intent of a finished ceramic object.

ART 251 : Mold Making for Ceramics and Sculpture

ART 251 is an introduction to mold making techniques and their application in the creation of functional ceramics and sculptural objects. Emphasis on the fabrication of various types of plaster molds from original and "found" objects, pressing and casting forms from molds in clay and other non-metal media, and various finishing techniques including glazing and firing. May be repeated up to 6 credits.

Credits 3

Studio Hours 6

Designation

DA

Recommended Preparation

ART 101, ART 105B, 105C, or ART 116

Course Outcomes

- Select, fabricate, and employ various mold types in the making of functional ceramics and sculptural objects.
- Design and produce original objects in clay and other materials to be used as mold patterns.
- Produce finished functional and artistic objects that explore the possibilities of mold made forms.

ART 253 : Sculpture–figure Modeling

Modeling the human figure in clay, with emphasis on the basic skeletal structure and muscles in relation to surface modulation, proportion, volume and gesture. May be repeated up to 6 credits.

Credits 3

Studio Hours 6

Designation

DA

Course Outcomes

- Demonstrate through finished sculpture, an understanding of figure and portrait modeling, mold-making, fabrication, and the casting process and materials.
- Demonstrate an understanding of drawing as a tool for conceptualization and documentation of personal imagery.
- Demonstrate an awareness of historic and contemporary examples of sculpture.
- Perceive and sculpt volume and mass with increased sensitivity and personal confidence.
- Trust one's own decisions, insights, and perceptions during the creative problem-solving process.
- Demonstrate an ability to articulate the concepts and intent of a finished sculpture.

ART 260 : Gallery Design and Management

Design theory and techniques for presentation of art work and mounting an exhibition. May be repeated up to 6 credits.

Credits 3

Studio Hours 6

Designation

DA

Course Outcomes

- Plan and install an art display using the appropriate skills and techniques of gallery design and management.
- Evaluate spatial relationships, design principles and color theory as related to gallery displays and discover the role intuition plays in the arts and gallery design.
- Critique and evaluate works of art and presentation by using art terminology.
- Prepare publicity related to gallery practice to include press releases and gallery invitations.
- Generate a portfolio documenting art exhibitions in our local community.

ART 269V : Study Abroad (Designated Region, Variable Credit)

An on-site study of the art/architecture of a designated location(s), using lectures and discussions and/or an art studio medium as a tool to analyze, understand and appreciate the development of this region's art/architecture.

Credits 1-6

Designation

DH

Prerequisites

Meet with instructor for approval.

Course Outcomes

- Become more informed about the peoples and culture of the designated locations visited.
- Become aware of Internationalism and an interdependency of cultures.
- Understand the development of ceramic art and/or architecture of the designated locations visited.
- Use group discussions, essays and examinations, and a visual studio process as a tool to analyze, understand and sensitively appreciate and appraise forms and structures of the art studied.

Astronomy

ASTR 110 : Survey of Astronomy

Introduction to the astronomical universe for non-science students.

Credits 3

Lecture Hours 3

Designation

DP

Course Outcomes

- Outline the development of astronomy from ancient times to present and explain the role of the scientific method in this historic context.
- Describe and explain the apparent motions of the celestial bodies, especially as related to naked-eye observations.
- Identify the appropriate instruments used by astronomers to understand the universe.
- Outline the origins of our solar system and appraise the leading cosmological theories of the origin of the universe.
- Describe the physical and chemical properties of the objects in our solar system and apply the concept of comparative planetology.
- Describe the physical and chemical nature of stars, and especially our sun, and apply the astronomical techniques used to measure stellar properties.
- Outline the evolutionary stages in a star's life and compare and contrast the structure of our Milky Way and other galaxies.
- Apply astronomical concepts to the search for extraterrestrial life.

ASTR 110L : Survey of Astronomy Lab

Demonstration of astronomical principles through laboratory observations and analysis of astronomical data. Not required for ASTR 110.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in ASTR 110 or consent of instructor.

Course Outcomes

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

ASTR 130 : Introduction to Archaeoastronomy

Introduction to the interdisciplinary study of cultures and astronomy for non-science majors. Topics include naked-eye astronomy, myths and rituals, calendar systems, architectural alignments and navigation.

Credits 3

Lecture Hours 3

Designation

DP

Recommended Preparation

ASTR 110.

Course Outcomes

- Describe and explain the observable daily motions of celestial bodies.
- Identify the phases of the moon and explain what causes them.
- List some cultural associations of the planets.
- Identify and use measurement tools for determining astronomical alignments.
- Illustrate how astronomical knowledge can be used in navigation.
- Compare and contrast how different cultures used astronomical knowledge.
- Assess the strengths and weaknesses of an interpretation of evidence from an archaeoastronomy site.
- Explain how culture and science are interrelated.

ASTR 170 : Introduction to Rocketry

This is a general introductory course to rocket science. Principles of propulsion, aerodynamics, and safety protocols for design and ground operations are stressed.

Credits 3

Lecture Hours 3

Designation

DP

Recommended Preparation

Math 82

Course Outcomes

- Demonstrate a solid understanding of propulsive methods, especially as pertains to space.
- Solve applicable problems of space craft kinematics, dynamics, and energy considerations.
- Apply the laws of planetary motion and celestial mechanics.
- Outline the historical development of manned and unmanned space flight.
- Identify and describe the appropriate instruments, detectors and space probes used by astronomers and space scientists to explore the solar system, especially in the area of remote sensing.
- Discuss the future of space colonization and exploitation.

ASTR 180 : Planetary Astronomy

A survey of modern solar system astronomy with emphasis on the underlying physical principles. Topics discussed include the celestial sphere and aspects of the night sky, the structure and evolution of the Sun's planetary system, comparative planetology, and theories of the formation of planetary systems. Intended for science majors and prospective science teachers.

Credits 3

Lecture Hours 3

Designation

DP

Recommended Preparation

The student should have a good operational familiarity with high school algebra.

Course Outcomes

- Outline the development of planetary astronomy from ancient times to present and explain the role of the scientific method in this historic context.
- Describe the major geological and atmospheric features of the objects in our Solar System.
- Describe the physical and chemical properties of the objects in our solar system and apply the concept of comparative planetology.
- Outline the origins of our Solar System and formulate models that explain the different physical and chemical characteristics of objects within the Solar System.
- Describe the properties of our Sun and their effects on objects in the Solar System.
- Outline techniques for discovering extrasolar planets and extraterrestrial life.

ASTR 181 : Stellar Astronomy

A survey of modern stellar, galactic, and extragalactic astronomy, with emphasis on the underlying physical principles. Topics covered include stellar structure, interstellar environments and the formation of stars, stellar evolution and death, the structures of galaxies, and cosmology. Intended for science majors and prospective science teachers. The student should have a good operational familiarity with high school algebra.

Credits 3

Lecture Hours 3

Designation

DP

Recommended Preparation

The student should have a good operational familiarity with high school algebra; credit in ASTR 110 and/or ASTR 180.

Course Outcomes

- Outline the development of stellar astronomy from ancient times to present and explain the role of the scientific method in this historic context.
- Identify the appropriate instruments used by astronomers to understand the universe and describe the nature of electromagnetic radiation and its role in deciphering the mysteries of stellar astronomy.
- Describe the physical and chemical nature of stars, and especially our sun, and apply the astronomical techniques used to measure stellar properties.
- Outline the evolutionary stages in a star's life, including the role of the interstellar medium.
- Compare and contrast the structure of our Milky Way and other galaxies.
- Outline and appraise the leading cosmological theories of the origin of the universe.
- Apply astronomical concepts to the search for extraterrestrial life.

ASTR 250 : Observational Astronomy

An introduction to the tools and techniques of observational astronomy: astronomical time and coordinate systems, photometric systems and magnitudes, principles of telescopes and their operation, introduction to modern astronomical instruments, analysis of astronomical data. Includes planetary, solar and stellar observations.

Credits 3

Lecture Hours 3

Designation

DP

Recommended Preparation

Student should have operational familiarity with high school algebra and basic trigonometry.

Prerequisites

Credit for ASTR 110; or ASTR 180 and ASTR 181

Course Outcomes

- Use appropriate celestial charts and astronomical time system to identify and locate celestial objects, such as stars, nebulae, galaxies, planets, satellites and asteroids.
- Describe the primary functions of an astronomical telescope and major detectors, such as spectrometers and photometers.
- Apply basic principals in planetary remote sensing and image processing.
- Outline astronomical techniques involved in observing planetary and stellar objects, such as variable stars, asteroids and the Sun and Moon.
- Compare and contrast the research involved in optical, radio, infrared and cosmic ray astronomy.
- Use appropriate techniques to analyze astronomical data.

ASTR 250L : Observational Astronomy Lab

A lab course in modern observational astronomy, with emphasis on "hands-on" use of instruments to acquire data with research-grade telescopes at the college's Lanihuli Observatory. Remote telescope observations may also be used. Students will gain on-site observing experience with CCD photometry and spectroscopy through direct acquisition and data analysis using modern laboratory data reduction software. Applications to planetary, solar, stellar and, where possible, galactic astrophysics will be covered.

Credits 1

Lab Hours 3

Designation

DY

Recommended Preparation

Student should have operational familiarity with high school algebra and basic trigonometry.

Prerequisites

Credit or current enrollment in ASTR 250

Course Outcomes

- Use appropriate celestial charts and astronomical time system to identify and locate celestial objects, such as stars, nebulae, galaxies, planets, satellites and asteroids.
- Describe the fundamentals optics and telescopic observations.
- Operate and make observations with optical, radio and cosmic ray telescopes.
- Apply basic principals in planetary remote sensing and image processing using both real-time observations and archived data.
- Apply the techniques of astrophotography and spectrometry.
- Use appropriate techniques to analyze astronomical data.

ASTR 281 : Space Explorations

Current topics in planetary exploration, extraterrestrial life, and space resources and colonization.

Credits 3

Lecture Hours 3

Designation

DP

Prerequisites

Credit for ASTR 110 or consent of instructor.

Course Outcomes

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

ASTR 294V : Special Topics in Astronomy

This course covers current topics in astronomy. The course is designed to have variable credit to coincide with the rigor of the topic. May be repeated up to 8 credits with different topics. A course description will be presented in the schedule of classes.

Credits 1-4

Lecture Hours 1

Designation

DP

Prerequisites

Credit for ASTR 110 or consent of instructor.

Course Outcomes

- Identify the important concepts and facts presented for the topic under examination.
- Make inferences and draw conclusions from the special topics under discussion.
- Apply skills appropriate to the topic under discussion.
- Evaluate the science and technology of astronomy and space science.

Atmospheric Sciences

ATMO 101 : Introduction to Weather and Climate

Introductory (DP) Diversification Physical Science course for all undergraduates in any major. A non-mathematical introduction to basic atmospheric variables, Earth's past climates, global warming, air pollution, El Nino, hurricanes, tornadoes, and forecasting weather in Hawai'i.

Credits 3

Lecture Hours 3

Designation

DP

Course Outcomes

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

Biochemistry

BIOC 106 : Ono Cooking and Food Science

This course is designed to integrate the science of food with the chemical, physical, and biological nature of food. It will incorporate Hawaiian resources and sustainability. The overall goal of this course is to enhance students' understanding of the science of food using the home kitchen to demonstrate the principles of chemistry, biology, and physics of food through videos, meetings, inquiry-based activities, and a student-designed research project.

Credits 3

Lecture Hours 3

Designation

DP

Recommended Preparation

High school chemistry and algebra.

Course Outcomes

- Describe the fundamental molecules that provide the structure, function, and chemical/physical properties of foods;
- Describe the microbiology and biotechnology in food systems;
- Apply food science principles;
- Describe the local resources that can be used in preparing or preserving food.

BIOC 106L : Ono Cooking and Food Science Laboratory

This laboratory course is designed to illustrate fundamental techniques in the chemical, physical, and biological nature of food through experimentation. It will incorporate Hawaiian resources and sustainability. The overall goal of this course is to enhance students' understanding of the science of food.

Credits 1

Lab Hours 3

Designation

DY

Recommended Preparation

A passing grade in high school chemistry and algebra, or by instructor approval.

Prerequisites

Grade of C or better or registration in BIOC 106.

Course Outcomes

- Discuss the relationship between food composition, molecular properties, and food characteristics.
- Apply the scientific method.
- Demonstrate the proper use of standard tools of a scientist.
- Transform food through chemical and physical processes.

BIOC 141 : Fundamentals of Biochemistry

Biological chemistry focusing on the integration of concepts from general, inorganic, and biochemistry and their application to living systems. Satisfies the one-semester chemistry requirement for pre-nursing and pre-dental hygiene majors.

Credits 3

Lecture Hours 3

Designation

DP

Prerequisites

"C" or better in MATH 25, 26, 28, 29, 75X or higher.

Course Outcomes

- Utilize precise chemical language to effectively communicate biochemical and allied health- related concepts and results.
- Analyze and apply appropriate procedures for solving biochemical and allied health-related calculations involving solids, liquids, gases, and solutions.
- Relate the location of an element in the periodic table to its electronic structure and chemical reactivity.
- Describe ionic and covalent bonding theories and apply them to the construction of proper Lewis structures and prediction of molecular characteristics.
- Relate biochemical and allied health-related concepts, theories and laws to everyday phenomena.

Biology

BIOL 100 : Human Biology

Introduction to structure and functions of cells, tissues, organs, and systems of the human body. Topics related to physical fitness, nutrition, health, and disease. Not intended for science majors. Students who have received credit for or are currently enrolled in ZOOL 101 may not receive credit for BIOL 100.

Credits 3

Lecture Hours 3

Designation

DB

Course Outcomes

- Use scientific reasoning to answer a question about phenomena in our natural universe or to determine the validity of a scientific claim.
- Distinguish between living things and inanimate objects.
- Relate cell structure and function to the architecture and functioning of the human body.
- Use information about the form (anatomy) and function (physiology) of the human body to make effective decisions about human health.
- Describe the interrelationships between humans and their environments.

BIOL 100L : Human Biology Laboratory

Laboratory to accompany BIOL100 (Human Biology). Emphasizes the application of the scientific method, basic laboratory methods and procedures in biology, and facts and principles of human anatomy and physiology.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in BIOL 100 or equivalent preparation or consent of instructor.

Course Outcomes

- Use the scientific method of inquiry to investigate biological phenomena.
- Apply the concepts learned in BIOL 100 to an experimental and hands-on observational setting.
- Collect, reduce, and interpret biological data.
- Prepare written objective reports describing and interpreting experimental and observational results.
- Demonstrate the use of some of the standard tools of the biological scientist, such as microscopes, scales, spectrophotometers, computers, and other analytical tools.
- Apply the standard analytical procedures needed to study human biology, such as dissection, separation of biological compounds, microscopic examination of cells and tissues, membrane transport mechanisms, energy metabolism, genetics, digestion and nutrition, excretion, skeletal muscle physiology, cardiovascular function, nervous system function, respiration, and blood analyses.
- Recognize and identify basic human tissue types and their distinguishing characteristics.
- Demonstrate basic knowledge of anatomy (structure) and physiology (function) of the fetal pig (using preserved specimens) and human body (using models and figures).

BIOL 101 : Biology and Society

BIOL 101 introduces students to the process of science through the biological sciences including the historical development of scientific concepts and the interaction of society with science. BIOL 101 is primarily designed to serve non-science majors and presents a broad survey of biology with special emphasis on its relevance in our everyday lives.

Credits 3

Lecture Hours 3

Designation

DB

Recommended Preparation

High school chemistry, CHEM 100, or a higher-level chemistry course; concurrent enrollment in BIOL 101L; placement in ENG 100

Course Outcomes

- Distinguish science as a way of knowing from other epistemological systems.
- Describe the historical development of the discipline of biology into what it is today, relating the contributions made by significant individuals and concepts of the past to modern biology.
- Explain the major integrating principles of biology, including, but not limited to the chemical basis for life, energy acquisition and utilization, cell theory, evolution, and inheritance.
- Describe the origin, history and organization of the diversity of life on Earth.
- Describe how living systems function as emergent properties of the organizational levels within the hierarchy of life from atoms to the biosphere.
- Present informed, rational and objective opinions on biologically-related issues important to human society.

BIOL 101L : Biology and Society Lab

BIOL 101L is a laboratory to accompany BIOL 101 Biology and Society. The course includes laboratory and computer exercises, field trips and research projects to explore questions in biology.

Credits 1

Lab Hours 3

Designation

DY

Recommended Preparation

High school chemistry, CHEM 100, or a higher-level chemistry course; placement in ENG 100; placement in MATH 100.

Prerequisite Courses

BIOL 101

Prerequisites

Credit for or concurrent enrollment in BIOL 101.

Course Outcomes

- Apply scientific methods and research procedures to investigate questions related to biology.
- Employ proper techniques and procedures for biological investigations
- Research, evaluate and present scientific information as relevant to issues in biology and society.
- Solve problems in genetics and inheritance.
- Identify the major systematic groups to which living things belong.

BIOL 124 : Environment and Ecology

A study of human ecology through the analysis of the interrelationships between science and technology, the means these provide for manipulation of environment and the effects of this manipulation on the environment and on human populations. Lecture/field trip course designed for non-science majors.

Credits 3

Lecture Hours 3

Designation

DB

Course Outcomes

- Explain the process and philosophical basis of scientific inquiry.
- Describe the basic principles of ecology, including population ecology, community ecology, and ecosystem function.
- Describe the characteristics of the major biomes and ecosystems of the Earth.
- Describe the interrelationships between land, sea, the atmosphere and the living things that occupy these environments.
- Discuss the role that humans play in affecting the characteristics of the environment.
- Evaluate current environmental issues and problems including the solutions and management practices that have been used or offered to address these issues and problems.

BIOL 124L : Environment and Ecology Lab

Companion laboratory class to BIOL 124, Environment and Ecology. This class, providing hands-on experience in the laboratory and in the field, enhances the student's understanding of basic environmental science and ecological concepts presented in BIOL 124.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in BIOL 124 or consent of instructor.

Course Outcomes

- Use the scientific method of inquiry to investigate environmental phenomena.
- Apply the concepts learned in BIOL 124 to an experimental and hands-on observational setting.
- Collect, reduce, and interpret biological data.
- Prepare written objective reports describing and interpreting experimental and observational results.
- Demonstrate the use of some of the standard tools of the environmental scientist, such as microscopes, scales, spectrophotometers, various environmental meters, and basic statistical procedures.
- Apply the standard analytical procedures needed to study the environment, such as soil analyses, water quality determinations, stream bioassessments, and quantitative resource inventories.
- Conduct experiments that evaluate how environmental factors affect living organisms.

BIOL 171 : Introduction to Biology I

First semester of introductory biology for all life science majors. Topics include: Overview of the science of biology; Cell structure, chemistry, growth, and reproduction; Classical, chromosomal and molecular genetics; Evolution, phylogeny and systematics; and Biology and diversity of viruses and bacteria.

Credits 3

Lecture Hours 3

Designation

DB

Recommended Preparation

High school chemistry or college chemistry and registration in BIOL 171L.

Course Outcomes

- Develop and evaluate a scientific hypothesis.
- Describe cell structure and function.
- Describe how genetic characteristics are passed from generation to generation and how they are manifested into the characteristics of the whole organism.
- Explain how the process of biological evolution influenced the history of life on our planet.
- Classify living things into a hierarchical system of groups based upon morphology, genetics, and phylogeny.
- Describe the characteristics, systematics, and biology of viruses and bacteria.

BIOL 171L : Introduction to Biology I Lab

Laboratory to accompany BIOL 171.

Credits 1

Lab Hours 3

Designation

DY

Recommended Preparation

High school chemistry or college chemistry.

Prerequisites

Credit for or registration in BIOL 171

Course Outcomes

- Use the scientific method of inquiry to investigate biological phenomena.
- Apply the concepts learned in BIOL 171 to an experimental and hands-on observational setting.
- Collect, reduce, and interpret biological data.
- Prepare written objective reports describing and interpreting experimental and observational results.
- Demonstrate the use of some of the standard tools of the biological scientist, such as microscopes, scales, spectrophotometers, computers, and other analytical tools.
- Apply the standard analytical procedures of biology, such as chromatography, biochemical analyses, preparation of materials for microscopic examination, culture techniques, and statistical procedures (descriptive statistics and hypothesis testing).

BIOL 172 : Introduction to Biology II

Continuation of BIOL 171. Topics include: Origin of eukaryotic organisms, their general characteristics, life cycles, systematics and evolution; Anatomy, physiology and classification of higher plants; Anatomy, physiology, behavior and classification of animals; and Basic ecological principles.

Credits 3

Lecture Hours 3

Designation

DB

Recommended Preparation

Concurrent enrollment in BIOL 172L

Prerequisites

Credit for BIOL 171

Course Outcomes

- Contrast the general characteristics, life cycles, evolution and systematics of eukaryotic organisms.
- Describe the detailed biology of higher plants.
- Describe the detailed biology of animals.
- Explain how interacting environmental factors (physical, chemical and biological) determine the distribution and abundance of living things.

BIOL 172L : Introduction to Biology II Lab

Laboratory to accompany BIOL 172.

Credits 1

Lab Hours 3

Designation

DY

Recommended Preparation

High school biology and college level reading and writing skills.

Corequisites

BIOL 172.

Course Outcomes

- Use the scientific method of inquiry to investigate biological phenomena.
- Apply the concepts learned in BIOL 172 to an experimental and hands-on observational setting.
- Collect, reduce, and interpret biological data.
- Prepare written objective reports describing and interpreting experimental and observational results.
- Apply standard analytical procedures for the comparative study of plants and animals, such as the handling of living and preserved materials for study, dissection procedures, preparation of materials for microscopic examination, and use of dichotomous keys.
- Identify the diagnostic anatomical features of organisms representing major groups of plants and animals.
- Identify the major systematic groups to which specimens of plants and animals belong.

BIOL 200 : Coral Reefs

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

Credits 3

Lecture Hours 3

Designation

DB

Course Outcomes

- Explain the process and philosophical basis of scientific inquiry.
- Distinguish between living things and inanimate objects.
- Describe the classification of living things, the kinds of criteria used to classify them, and the formal protocol in naming them.
- Demonstrate an understanding of the biology of corals (e.g., systematics & classification, soft tissue morphology and cytology, skeletal morphology, endosymbiosis with zooxanthellae, modes of feeding, reproduction, environmental factors that influence growth and distribution, and evolution) with an emphasis on Hawaiian corals.
- Describe the ecological relationships among the living components of coral reef communities and their interactions with the physical environment.
- Describe the types of reefs and the processes that create and shape them.
- Describe the resources that coral reefs provide, especially to Pacific island nations and states.
- Describe the impacts of human activities on coral reefs and the significance of these impacts to Pacific island nations and states.

BIOL 200L : Coral Reef Laboratory and Field Studies

Laboratory and field studies of the biology, ecology, and geology of stony corals and the reef structures they build; companion course to BIOL 200.

Credits 1

Lab Hours 3

Designation

DY

Recommended Preparation

High school biology and algebra.

Prerequisites

Credit for or registration in BIOL 200 or consent of instructor

Course Outcomes

- Use the scientific method of inquiry to investigate biological phenomena.
- Apply the concepts learned in BIOL 200 to an experimental and hands-on observational setting.
- Collect, reduce, and interpret biological data.
- Prepare written objective reports describing and interpreting experimental and observational results.
- Demonstrate the use of some of the standard tools of the biological scientist, such as microscopes, scales, spectrophotometers, computers, and other analytical tools.
- Demonstrate the use of specialized tools and methods frequently used in the study of corals and coral reefs.

BIOL 265 : Ecology and Evolutionary Biology

Principles of ecology and evolution for life science majors stressing integrated approach and recent advance.

Credits 3

Lecture Hours 3

Designation

DB

Prerequisites

Credit for BIOL 171/171L and 172/172L; or one year of introductory college biology plus labs; or equivalent preparation; or consent of the instructor

Corequisites

BIOL 265L; or consent of instructor

Course Outcomes

- Apply the appropriate terminology when describing, explaining, and applying ecological theory.
- Summarize abiotic environmental features including climate, soil and geographical structure.
- Identify the biological and physical structures of ecosystems, major biogeochemical cycles, and energy flow.
- Examine the basic principles of population dynamics including birth and mortality rates, population growth models, life history strategies, competition and carrying capacity.
- Define the interactions within communities including interspecific competition, predation, and mutualism.
- Describe the evolutionary adaptations of organisms to their environment.
- Give examples of evolutionary principles that produced unique island communities.
- Evaluate the impact of habitat alteration and destruction, loss of biodiversity, and effects of alien species.
- Interpret and produce tabular and graphical representations of information, including tables, graphs, and maps.
- Locate and critique the value of printed and online resources.
- Evaluate the consequences of population growth, increased resource use and pollution on global ecosystems.

BIOL 265L : Ecology and Evolutionary Biology Lab

Laboratory to accompany BIOL 265.

Credits 1

Lab Hours 3

Designation

DY

Recommended Preparation

ICS 101 or ICS 105B-E; or familiarity with spreadsheets, word processing, and Internet browsers.

Corequisites

BIOL 265; or consent of the instructor.

Course Outcomes

- Use the scientific method of inquiry to investigate ecological and evolutionary phenomena.
- Apply the concepts learned in BIOL 265 to an experimental and hands-on observational setting.
- Apply standard analytical procedures for the study of evolution and ecology. These include the following areas of study: experimental design and set-up; descriptive statistics and hypothesis testing; age structure of a natural population; sampling and describing population attributes; sampling, describing, and quantifying the flora, fauna, and relevant abiotic characteristics of a terrestrial habitat; plant competition; optimal foraging theory; sampling and describing community characteristics and functions; primary productivity; natural selection; colonization and adaptive radiation of Hawaiian flora and fauna; taxonomy, systematics, and phylogenetics.
- Collect, reduce, and interpret ecological and evolutionary data.
- Prepare written objective reports describing and interpreting experimental and observational results.

BIOL 275 : Cell and Molecular Biology

Integrated cell and molecular biology for life science majors. Modern advances in recombinant DNA technology.

Credits 3

Lecture Hours 3

Designation

DB

Prerequisites

"C" or better in BIOL171/171L and CHEM 272/272L or consent of instructor

Corequisites

BIOL275L or consent of instructor.

Course Outcomes

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

BIOL 275L : Cell and Molecular Biology Lab

Laboratory for cell and molecular biology.

Credits 1

Lab Hours 3

Designation

DY

Recommended Preparation

ICS 101 or ICS 105B-E, calculus or algebra.

Corequisites

BIOL 275; or consent of the instructor.

Course Outcomes

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

Botany

BOT 101 : General Botany

Introduction to plant structure, function, reproduction, and evolution; plants in relation to the environment and human activities. Lecture course.

Credits 3

Lecture Hours 3

Designation

DB

Corequisites

Registration in BOT 101L

Course Outcomes

- Discuss basic concepts of plant morphology, anatomy, physiology, cytology, taxonomy and genetics.
- Discuss life cycles of division in Thallophyta, Bryophyta, Pteridophyta and Spermatophyta.
- Discuss interrelationship between plants and animals, and socio-economic importance of plants on humans.
- Discuss plant biotechnology.

BOT 101L : General Botany Lab

Lab observations and experiments illustrating basic principles of plant biology.

Credits 1

Lab Hours 3

Designation

DY

Recommended Preparation

High School Biology DY

Prerequisites

Credit for or registration in BOT 101.

Course Outcomes

- Operate dissecting and compound microscopes.
- Cultivate and maintain the growth of plants.

BOT 105 : Ethnobotany

The scientific study of the interaction between human culture and plants, including the interrelationship of botany, socio-economics, belief systems and history that have shaped the cultural uses of plants in Hawai‘i, as well as Asia or the Pacific. Lecture/field trip course with service-learning option.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Identify plants of major importance in various aspects of Hawaiian, Asian and Pacific Island cultures.
- Utilize the plants for food, medicine, and other material goods.

BOT 111 : Introduction to Algae

This course will cover what algae are, why they are important, and why we are interested in them for both their environmental benefit, as well as their use for products. Students will explore the vast diversity of algae including the characteristics and applications of some of the main types of algae that are in commercial use today. Students will learn about algal ecology and how interactions with the environment, including pest and predators, affect algal productivity. Students will examine the processes of algae bio-manufacturing including production processes, as well as some of the products, benefits, and challenges that impact our ability to make commercially viable products from algae. Repeatable up to 6 credits.

Credits 3

Lecture Hours 3

Designation

DB

Course Outcomes

- Identify and describe the major algae groups.
- Explain algal diversity and ecology.
- Describe the basics of algae biomanufacturing.
- Identify and describe the major algae groups used in sustainable commercial applications.

BOT 130 : Plants in the Hawaiian Environment

Introduction to the evolution of plant communities and species of Hawaiian ecosystems; ecological interactions; observations, identification and systematics of native and introduced flora.

Credits 3

Lecture Hours 3

Designation

DB

Prerequisites

Credit for or registration in BOT 130L

Course Outcomes

- Discuss geological history of the Hawaiian Islands and natural history of plants in Hawai‘i.
- Discuss the arrival, establishment, major evolutionary trends and adaptive radiation of some of the surviving native species.
- Discuss natural and human-mediated changes in the ecosystems, plant succession, and interaction between native and introduced species of plants.
- Discuss botanical terminology for use in identifying native Hawaiian plants.

BOT 130L : Plants in the Hawaiian Environment Lab

BOT 130L focuses on observations of Native Hawaiian plant species, populations and communities as they interact in the natural environment and studies the unique characteristics of the plants through lab observations.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in BOT 130

Course Outcomes

- Mastering botanical terminology for use in identifying Native Hawaiian plants
- Analyzing the environmental factors that affect the plant dispersal and establishment, adaptation and diversification.

BOT 160 : Identification of Tropical Plants

Nontechnical course in identification of common plants of tropics, including native and introduced flora.

Credits 3

Lecture Hours 3

Designation

DB

Course Outcomes

- Operate dissecting microscopes.
- Recognize unique vegetative and generative characteristics of plant families.
- Use manuals, flora and monographs to identify plants.
- Prepare herbaria.

BOT 192V : Special Topics in Plant Science

Topics from diverse fields in plant science, and chosen by the Instructor. Course content may vary. May be repeated.

Credits 1-4

Lecture Hours 1

Course Outcomes

- Identify the important concepts and facts presented for the topic (s) under examination.
- Make inferences and draw conclusions from the topic (s) under discussion.
- Develop skills appropriate to the topic (s) under discussion.
- Gain a higher awareness of the potential career paths that this special topic course covers.

BOT 199 : Independent Study

Credits 2-3

BOT 205 : Ethnobotanical Pharmacognosy

A study of medicinal plants of Hawai'i, their characteristics, plant extraction, isolation and identification of their chemical constituents for possible uses in pharmaceuticals or in their natural state, and bioproduct manufacturing. This course is designed to train students for careers in plant and medical biotechnology. Lecture and laboratory/fieldtrip course.

Credits 4

Lab Hours 3

Lecture Hours 3

Designation

DB

DY

Recommended Preparation

High school biology, chemistry and math.

Prerequisites

Credit for or registration in any of these courses: BOT 101, BOT 105, BOT 130, MICR 130, MICR 140, BIOL 172/172L, CHEM 152/152L or consent of instructor.

Course Outcomes

- Discuss theories and principles in the study of medicinal and nutritious plants.
- Discuss ethics, intellectual property rights and conservation of traditional knowledge.
- Perform Laboratory activities: plant extraction, distillation, bioassay tests, analysis of chemical constituents for possible uses in pharmaceuticals and nutraceutical products.
- Produce lab reports using the standard scientific format.

BOT 210 : Phytobiotechnology

Introduction to practical aspects of Plant Biotechnology. Topics include micropropagation techniques, such as plant tissue, cell and protoplast cultures: DNA-based technologies, such as DNA extraction, DNA sequencing, PCR; and methods of plant genetic engineering. This course is designed to train students for careers in advanced agriculture technology and industry.

Credits 4

Lab Hours 3

Lecture Hours 3

Designation

DB

DY

Recommended Preparation

High school biology or chemistry, MATH 24.

Prerequisites

Credit for or registration in BOT 101, or AG 152, or MICR 130 and MICR 140, or BIOL 171 and 171L. Placement into MATH 100 or higher.

Course Outcomes

- Apply the principles of genetics.
- Discuss and perform experiments including plant/bacterial/ human DNA/protein electrophoresis, Southern and Western blots, plant genetic engineering using biolistic bombardment and bacterial gene transformation.
- Apply bioinformatics and DNA sequencing.
- Discuss bioethical issues, risks and benefits of biotechnology.
- Produce lab reports using the standard scientific format.

Business

BUS 120 : Principles of Business

Surveys the fundamentals of the American business enterprise. Examines the foundations and responsibilities of accounting, business, management, finance, marketing, and the business environment.

Credits 3

Lecture Hours 3

Recommended Preparation

Credit for ENG 21 and ENG 22 , or ENG 23 or higher.

Course Outcomes

- Demonstrate qualitative understanding of the impact of external factors on business decisions relative to the accomplishment of the mission and objectives of an organization.
- Demonstrate qualitative understanding of various forms of business ownership to determine their appropriateness relative to an organization's resources, goals, and objectives.
- Demonstrate qualitative understanding of various business functions and practices and their impact on the successful operation of a business.
- Demonstrate qualitative understanding of the impact of business decisions on the external environment.

BUS 122 : Introduction to Entrepreneurship

This course covers the basic economic and business principles regarding small-scale business enterprises. Focusing on the creation of a business plan, topics include researching and evaluating resources, planning, marketing, cultivating money resources, and understanding key concepts in law, budgeting, financial statements, and business documentation.

Credits 3

Lecture Hours 3

Recommended Preparation

BUS 120 and placement into ENG 100.

Course Outcomes

- Develop a comprehensive business plan for a future business enterprise.
- Apply fundamental economic, financial, and organizational principles that govern the operation of business.
- Work collaboratively in a group setting to cultivate entrepreneurship and develop solutions to economic issues.

BUS 122B : Introduction to Entrepreneurship: Sustainable Agriculture

This course is a specialized section of Introduction to Entrepreneurship that focuses on sustainable agriculture. The course will cover the basic economic and business principles regarding small-scale business enterprises connected to agriculture, with a particular focus on sustainable agriculture in Hawai'i. With a focus on the creation of a business plan, topics include researching and evaluating resources, planning, marketing, cultivating money resources, and understanding key concepts in law, budgeting, financial statements, and business documentation.

Credits 3

Lecture Hours 3

Recommended Preparation

BUS 120 and placement into ENG 100.

Course Outcomes

- Develop a comprehensive business plan for a future business enterprise.
- Apply fundamental economic, financial, and organizational principles to the operation of a sustainable agriculture business.
- Work collaboratively in a group setting to cultivate entrepreneurship and develop solutions to economic issues.
- Apply general entrepreneurial concepts to sustainable agriculture practices in Hawai'i.

BUS 123 : Small Business Marketing

This course will complement Windward CC's BUS 120 Introduction to Marketing course by allowing students to further develop the marketing plan section of the overall business plan that is created in BUS 120. This course will explore the sociological aspects of media and marketing; how psychology affects marketing; the effectiveness of different business structures; organizational behavior and psychology; and the economic impacts and influences of marketing/advertising.

Credits 3

Lecture Hours 3

Recommended Preparation

BUS 120 and Placement into ENG 100W.

Course Outcomes

- List the major influences on consumer behavior as mediated by internal perceptual, cognitive, and social psychological processes.
- Demonstrate the use of research and computer tools necessary for consumer market research, product development and consumer satisfaction assessments.
- Describe the industrial/organizational factors that impact the consumer including corporate leadership and strategic organizational change management.
- Apply basic understanding of social media as a form of social influence on consumer behavior and market research.
- Evaluate and Explain (the) sources of external influence such as cultural, environmental, and sustainability factors on globalization/localization of purchases and consumer decision making.

Business Law

BLAW 200 : Legal Environment of Business

Introduction to the legal environment of business operations with particular attention to business law and ethics and to principles of law relating to contracts, agency, partnerships, and corporations.

Credits 3

Lecture Hours 3

Recommended Preparation

A grade of C or higher in ENG 100.

Course Outcomes

- Summarize the American system of justice and jurisprudence, and its evolution, and effectively use its concepts, terminology, and procedures.
- Explain how laws are made, implemented, interpreted and enforced by the three branches of government at the national, state and local levels.
- Examine, explain and apply basic principles of law, including contracts, torts, real and personal property, business organizations, agency, employment, products and consumer protection, environmental law, and anti-trust, etc.
- Discuss how business and legal disputes arise and are avoided and/or resolved, including informal processes and alternative dispute resolution.
- Participate in ethical decision-making, taking into account various legal, business and ethical approaches, philosophies and codes.

Business Technology

BUSN 121 : Introduction to Word Processing

The course covers proper keyboarding techniques; word processing concepts (Microsoft® Word); and document formatting of letters, memos, tables, reports, and email. Basic file management and operating system functions are included. Keyboarding speed and accuracy are emphasized.

Credits 3

Lecture Hours 3

Recommended Preparation

Credit for ENG 23 or higher.

Course Outcomes

- Input information (alphabetic, numeric, and symbolic) using proper techniques with accuracy
- Use the computer's operating system to manage documents and folders
- Produce basic mailable business documents in a timely manner using word processing software

Chemistry

CHEM 100 : Chemistry and Society

Introduction to chemistry for non-science majors. Discussion of basic chemistry concepts and their application to everyday life. Provides a survey of basic concepts and applications of chemistry with emphasis on the role of chemistry in the real world. This is suitable for students who have little or no background in chemistry and serves to fulfill a general education physical science core course for the nonscience major or as a preparatory course for CHEM 151 or BIOC 141.

Credits 3

Lecture Hours 3

Designation

DP

Course Outcomes

- Describe the relationship between properties and structure of matter.
- Name chemicals, balance chemical and nuclear equations.
- Identify the types of chemical reactions (i.e. acid-base, redox, nuclear) and their applications to everyday lives.
- Explain the chemistry of household chemicals, and the composition of air and water.

CHEM 100L : Chemistry and Society Lab

Experiments in everyday chemistry.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in CHEM 100.

Course Outcomes

- Identify/locate laboratory safety equipment and apply laboratory safety procedures.
- Construct molecular models to determine molecular shape and properties.
- Assemble apparatus to perform common laboratory techniques to verify fundamental chemistry principles in everyday life.
- Make and record accurate observations and precise quantitative measurements.
- Synthesize conclusions based on observations and data in a formal laboratory report.
- Identify sources of error in laboratory experiments.

CHEM 151 : Elementary Survey of Chemistry

Provides the student with an adequate background in the fundamentals of chemistry. Covers the basic language and quantitative relationships of chemistry, including atomic structure, chemical bonding, structure-property relationships, chemical reactions. Prerequisite to CHEM 152 for majors in medical technology and nursing and other allied health and science-related fields, or can be taken as a preparatory course for CHEM 161.

Credits 3

Lecture Hours 3

Designation

DP

Prerequisites

Credit in MATH 24, 25, 26, 28, 29, 75X or higher, and placement in ENG 23 or higher.

Course Outcomes

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

CHEM 151L : Elementary Survey of Chemistry Lab

Experiments introducing laboratory techniques and illustrating chemical principles; supplemented by films, demonstrations, and problem sessions.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in CHEM 151.

Course Outcomes

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

CHEM 152 : Survey of Organic and Bioorganic Chemistry

Structure, nomenclature, properties and reactions of organic compounds will be studied with emphasis on those compounds of practical importance in life science and related fields.

Credits 3

Lecture Hours 3

Designation

DP

Prerequisites

Credit for CHEM 151 or equivalent or consent of instructor.

Course Outcomes

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

CHEM 152L : Survey of Organic and Bioorganic Chemistry Laboratory

Techniques of preparation, purification, and identification of organic compounds.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for CHEM 151L and credit for or registration in CHEM 152.

Course Outcomes

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

CHEM 161 : General Chemistry I

Basic principles of inorganic chemistry with an emphasis on problem solving. First course of a two-course sequence designed to meet the one-year General Chemistry requirement for pre-med, science and engineering majors. Topics include chemical calculations, electronic structure, chemical bonding, states of matter and solutions.

Credits 3

Lecture Hours 3

Designation

DP

Recommended Preparation

Student should have taken high school chemistry, CHEM 100, or CHEM 151.

Prerequisites

A grade of "C" or better in Math 103 or higher, or placement into Math 135 or consent of instructor

Corequisites

Registration in CHEM 161L.

Course Outcomes

- Use the mole concept in solving stoichiometry problems involving solids, liquids, gases and solutions.
- Balance chemical equations, classify reactions, identify and analyze the role of the chemicals involved in chemical reactions.
- Predict the behavior of gases while undergoing changes in volume, pressure, temperature and quantity.
- Manipulate thermochemical equations and calculate the amount of energy involved in chemical reactions.
- Predict physical and chemical properties of elements based on electronic structure and location in the Periodic Table.
- Predict physical and chemical properties of compounds based on chemical bonding, geometry and intermolecular interactions.

CHEM 161L : General Chemistry I Lab

Laboratory experiments illustrating fundamental principles of chemistry.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in CHEM 161.

Course Outcomes

- Apply laboratory safety procedures and respond to hazards.
- Use molecular and crystal models, perform common laboratory techniques competently and computer-based experiments to verify chemistry laws on stoichiometry, thermochemistry, behavior of gases and liquids.
- Apply and articulate the scientific method by preparing lab reports using the standard scientific format.
- Make and record precise measurements, calculate results using significant figures, standard deviations and identify sources of error in laboratory experiments.
- Express in writing core chemistry principles, results of experiments and do critical thinking by synthesizing conclusions based on observations and data.

CHEM 162 : General Chemistry II

Second course of a two-course sequence designed to meet the one-year General Chemistry requirement for pre-med, science and engineering majors. Topics include thermochemistry, kinetics, acid-base equilibrium, solubility equilibrium and electrochemistry. Emphasis on problem solving.

Credits 3

Lecture Hours 3

Designation

DP

Prerequisites

A grade of "C" or better in CHEM 161, credit for or registration in MATH 135, or consent of instructor

Corequisites

CHEM 162L.

Course Outcomes

- Predict properties of pure substances using phase diagrams.
- Predict properties (boiling point, melting point, osmotic pressure, vapor pressure) of solutions based on concentration.
- Determine reaction rate law and calculate rate constants and half-life based on experimental data.
- Calculate the equilibrium concentration of chemicals in solution involved in precipitation, and acid-base and reactions.
- Predict spontaneous reactions based on enthalpy and entropy considerations.
- Determine the electrochemical potential of redox reactions.

CHEM 162L : General Chemistry II Lab

Laboratory experiments illustrating fundamental principles of chemistry.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in CHEM 162.

Course Outcomes

- Develop an appreciation for the methods of scientific inquiry through computer-based laboratory experiments showing real-time data.
- Apply knowledge to determine molar mass of unknown substance using freezing point depression data of solution.
- Calculate chemical reaction rate and constant using graphing analysis.
- Predict the effects of concentration and temperature changes on equilibrium mixtures using Le Chatelier's principle.
- Determine whether equilibrium is established and calculate equilibrium concentrations/constants and cell potentials.
- Apply and articulate the scientific method by preparing lab reports using the standard scientific format. Express in writing core chemistry principles, results of experiments and do critical thinking by synthesizing conclusions based on observations and data.

CHEM 272 : Organic Chemistry I

This is the first semester course in organic chemistry intended for science majors. Topics to be covered include structure, properties, nomenclature, reactions, reaction mechanisms, stereochemistry and spectroscopy of alkanes, alkenes, alkynes, alkyl halides, alcohols and their applications to biology.

Credits 3

Lecture Hours 3

Designation

DP

Prerequisites

A grade of "C" or better in CHEM 162 or consent of instructor.

Course Outcomes

- Discuss the bonding and structure of organic compounds.
- Name various organic compounds using IUPAC rules and diagram their structures.
- Use stereochemical concepts in understanding physical and chemical properties.
- Identify chemical structure and physical chemical properties.
- Explain the relationship between structure and physical chemical properties.
- Predict reaction products, deduce starting materials and diagram reaction mechanism.
- Cite applications and important role of organic reactions in biology.

CHEM 272L : Organic Chemistry I Lab

Laboratory principles of Organic Chemistry I, the first semester course in organic chemistry intended for science majors. Topics to be covered include structure, properties, nomenclature, reactions, reaction mechanisms, stereochemistry and spectroscopy of alkanes, alkenes, alkynes, alkyl halides, alcohols and their applications to biology.

Credits 2

Lab Hours 5

Designation

DY

Prerequisites

A grade of "C" or better or registration in CHEM 272 or consent of instructor.

Course Outcomes

- Perform and develop skills in organic chemistry laboratory methods and techniques used in separation and purification.
- Determine the chemical identity of some organic chemicals through their properties.
- Keep complete and accurate records, manipulate data for mathematical calculations, including reactant recovery and percent yield.
- Apply laboratory safety and safety disposal of waste procedures that can be used in all future laboratory experiences.
- Gain experience in conducting synthesis and functional group conversion.
- Interpret experimental data and formulate conclusions as evidenced in laboratory reports.

CHEM 273 : Organic Chemistry II

This is the second semester course in organic chemistry intended or science majors. Topics to be covered include structure, properties, nomenclature, reactions, reaction mechanisms, stereochemistry and spectroscopy of conjugated systems, aromatic compounds, aldehydes, ketones, carboxylic acids and their derivatives, enols, enolates and their applications to biology.

Credits 3

Lecture Hours 3

Designation

DP

Prerequisites

A grade of "C" or better in CHEM 272 or consent of instructor.

Course Outcomes

- Discuss the bonding and structure of organic compounds.
- Name various organic compounds using the IUPAC rules and diagram their structures.
- Use stereochemical concepts in understanding physical and chemical properties of organic compounds.
- Identify chemical structure based on spectroscopic data.
- Explain the relationship between structure and physical and chemical properties of organic compounds.
- Predict reaction products, deduce starting materials and diagram reaction mechanisms.
- Cite applications and the important role of organic reactions in biology.

CHEM 273L : Organic Chemistry II Lab

Laboratory principles of Organic Chemistry II, the second semester course in organic chemistry intended for science majors. Topics to be covered include techniques, synthesis, qualitative organic analysis and applications of spectroscopy.

Credits 1

Lab Hours 4

Designation

DY

Prerequisites

A grade of "C" or better in CHEM 272L and a grade of "C" or better or registration in CHEM 273 or consent of instructor.

Course Outcomes

- Perform and develop skills in organic chemistry laboratory methods and techniques used in separation and purification.
- Determine the chemical identity of some organic chemicals through their properties.
- Keep complete and accurate records, manipulate data for mathematical calculations, including reactant recovery and percent yield.
- Apply laboratory safety procedures, including safe disposal of waste.
- Gain experience in organic synthesis and functional group conversion.
- Interpret experimental data and formulate conclusions as evidenced in laboratory reports.

Civil Engineering

CE 270 : Applied Mechanics I

This course is a study of equilibrium of rigid bodies under the action of forces and the application of the principles of mechanics to solve static problems in engineering.

Credits 3

Lecture Hours 3

Designation

DP

Prerequisites

Physics 170; credit for or registration in MATH 243 (formerly MATH 231) or consent of instructor

Course Outcomes

- Solve problems involving forces, resultant and static equilibrium and their application to rigid bodies.
- Analyze equilibrium of rigid bodies in two and three dimensions.
- Solve problems involving center of gravity, centroids, couples, and moments of inertia.
- Analyze engineering structures subjected to concentrated loads, distributed loads, and frictional forces.
- Utilize abstract thinking and analytical reasoning in the analysis of word problems dealing with mechanical structures.
- Apply calculation techniques to dynamic problems in engineering.

Community Health Work

CHW 101 : Community Health Worker Fundamentals

Identifies the roles that Community Health Workers play in Hawai'i and the broader public health system and introduces the attitudes, skills and knowledge of the profession.

Lecture Hours 3

Prerequisites

Placement into ENG 100X.

Course Outcomes

- Develop communication and interpersonal skills through interactions with fellow students, clients, and professionals in the community.
- Develop professional skills and identify best practices for use with various populations and in diverse human service settings.
- Use critical thinking, problem solving, and research skills to evaluate the social conditions of vulnerable populations and identify potential advocacy strategies.

CHW 135 : Health Promotion and Disease Prevention

Explores the role Community Health Workers play in health promotion and disease prevention. Introduces the major causes of premature mortality and morbidity, behavioral and environmental contributions to illness and injury, and strategies for promoting health, wellness, and risk reduction. Provides opportunities to practice developing and teaching health promotion/disease prevention classes.

Credits 3

Lecture Hours 3

Prerequisites

Grade of C or better in CHW 101, or instructor consent.

Course Outcomes

- Identify health promotion strategies and their rationale.
- Examine major behavioral and environmental risk factors for illness, disease, and injury.
- Apply concepts and practice teaching skills to promote healthy behaviors and prevent chronic disease.
- Access and analyze health information.

CHW 140 : Introduction to Counseling & Interviewing

Offers a basic introduction to counseling theory and practice for those interested in working in helping professions. Provides opportunities to practice skills through role-playing.

Lecture Hours 3

Recommended Preparation

Credit for CHW 101

Prerequisites

Placement into ENG 100X.

Course Outcomes

- Use critical thinking and problem solving skills to improve personal wellbeing and enhance professional potential.
- Demonstrate attitudes, skills and knowledge of best practice strategies appropriate to a variety of populations in diverse human service settings.
- Identify vulnerable populations and the social conditions that contribute to their vulnerability, and consider advocacy strategies to help alleviate those conditions.
- Engage in civic activities that assist in the development of self-awareness and influence the development of professionalism.

CHW 141 : Case Management

Provides knowledge and practical skills to become a competent case manager in health and human services agencies. Students apply the Ecological Model, Strengths Perspective, and effective interviewing skills to case management tasks including intake, assessment, service planning, care coordination, discharge planning, and referral. Explores individual and community capacity building, cultural competence, professional ethics and boundaries.

Credits 3

Lecture Hours 3

Prerequisites

Grade of C or better in CHW 140, or instructor consent

Course Outcomes

- Apply the Ecological Model, Strengths Perspective and Patient-Centered Care in case management tasks with people of diverse backgrounds and needs.
- Identify, demonstrate and evaluate the attitudes, skills and knowledge (ASK) required to effectively engage individuals in case management services.
- Explain and apply professional, ethical and cultural considerations in case management activities.

CHW 145 : Community Health Worker Practicum

Students will complete 225 practicum hours over the semester. Practicum hours include preparation of resume, letter of introduction, researching agencies and interviewing for placement. (225 hours Clinical Instruction)

Credits 4

Prerequisites

Grade of C or better in HSER 140 and ENG 100, or instructor consent.

Course Outcomes

- Develop interpersonal skills that build appropriate, collaborative, respectful relationships with fellow students, clients and professionals in the community.
- Perform to reflect the attitudes, skills and knowledge of best practice strategies across a variety of populations in diverse human service settings.
- Identify vulnerable populations and the social conditions that contribute to their vulnerability and consider advocacy strategies to help alleviate those conditions.
- Develop self-awareness of person values, interpersonal styles, strengths and challenges that influence the development of professionalism.

Creative Media

CM 120 : Introduction to Digital Video

Students will develop basic skills in video production.

Credits 3

Lecture Hours 2

Designation

DA

Course Outcomes

- Demonstrate basic knowledge and skills of digital video production including operating a digital video camera and sound recording kit.
- Demonstrate the ability to edit a video project in a digital non-linear system.
- Apply effective storytelling skills through the use of basic cinematography concepts, composition, light and movement.
- Produce videos that meet industry standards and ethics.

CM 126 : 3D Computer Graphics I

This course explores introductory level conceptual and technical topics in 3D computer graphics. Autodesk Maya and related applications will be utilized to develop projects which integrate 3D modeling, UV layout, texture mapping, lighting, and rendering. (Cross-listed as ART 126)

Credits 3

Studio Hours 6

Designation

DA

Recommended Preparation

Algebra, Geometry

Prerequisites

A grade of C or better in ART 112 or consent of instructor.

Course Outcomes

- Develop 3D models and related art assets using introductory level technical skills, procedures, and production methodologies.
- Employ the vocabulary of 3D computer graphics to define creative objectives and evaluate outcomes.
- Apply knowledge of contemporary industry responses to 3D computer graphics in the development of 3D models and related art assets.
- Apply knowledge of the theory, history and principles of design and animation in the creation of new media art.
- Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.

CM 142 : Introduction to Video Game Design

This course offers an introduction to the fundamentals of video game and application design, development, and deployment through project-based challenges that culminate in a publishable application.

Credits 3

Lecture Hours 2

Course Outcomes

- Design and execute a coding project for publication on the public iOS/Android/PC market.
- Identify and apply good industry practices for project and time management as well as technical skill in completing coding projects.
- Communicate and collaborate in a group professional team environment.

CM 204C : Introduction to Creative Writing (Screenwriting)

CM 204C Introduction to Creative Writing (Screenwriting) introduces students to the basic practices and principles of screenwriting. (Cross-listed as ENG 204C)

Credits 3

Lecture Hours 3

Designation

DA

Recommended Preparation

Students should possess a strong foundational knowledge of grammar, word usage, and punctuation. Additionally, students must be able to accept constructive criticism from peers and the instructor.

Prerequisites

Grade of "C" or better in ENG 100, or consent of instructor.

Course Outcomes

- Create original short screenplays that include screenwriting format, devices, and conventions.
- Propose and employ feedback in the writing workshop model.
- Enter screenplays for local and/or national contests and/or productions.

CM 220 : Intermediate Digital Video

Students will develop intermediate skills in video production and apply them to creating videos for publication on the web and other distribution platforms. Repeatable for up to 6 credits.

Credits 3

Lecture Hours 2

Designation

DA

Prerequisites

A grade of C or better in CM 120 or consent of instructor.

Course Outcomes

- Produce videos that meet industry standards and ethics.
- Generate original story ideas.
- Demonstrate appropriate proficiency in cinematography, sound recording and editing skills.
- Analyze videos produced by the mass media.

CM 223 : Introduction to Acting for Camera

An introduction to acting techniques for film, TV production, and other camera-based media. Repeatable up to 6 credits. (Cross-listed as THEA 223)

Credits 3

Lecture Hours 3

Designation

DA

Recommended Preparation

THEA 101, 221, and 222.

Prerequisites

Grade of C or better in THEA 221.

Course Outcomes

- Demonstrate the skill of acting by using the camera lens to convey story.
- Illustrate the complexities of character within a given text.
- Analyze performances for television and film for quality and desired effect on the audience.

CM 240 : Introduction to Digital Music Production

Introduction to digital music and sound production on the Macintosh platform: MIDI sequencing, audio recording, music arranging, editing, mixing and mastering; preparing audio files for CD, video and web applications; sound synthesis and programming using virtual instruments. (Cross-listed as MUS 240.)

Credits 3

Lecture Hours 3

Designation

DA

Recommended Preparation

Basic Keyboard (piano) skills, computer (Mac) skills.

Prerequisites

MUS 108, 121 (alpha) or 253; or consent of instructor.

Course Outcomes

- Use MIDI sequencing and audio recording software, and/or notation software, as tools for music composition, arranging and performance.
- Apply basic skills in MIDI sequencing and editing, and digital audio recording and editing to audio mixing and mastering projects.
- Prepare audio files for CD burning, and video and web applications.
- Apply understanding of sound synthesis to create original sounds for music projects.
- Transfer skills to other MIDI sequencing and digital audio software programs across PC and Mac platforms.

CM 242 : Video Game Design II

This course picks up where CM 142 left off. In addition to creating games at a higher technical and aesthetic standard, presentation skills (as in "presentation to potential investors") are emphasized. May be repeatable up to 6 credits.

Credits 3

Lecture Hours 3

Designation

DA

Recommended Preparation

Algebra, Geometry, Trigonometry, basic Javascript, basic C# scripting.

Prerequisites

A grade of C or better in CM 142

Course Outcomes

- Create, work and write basic 3D assets in Unity 3D and programming scripts applicable to gaming in C# language.
- Publish games to mobile and web platforms.
- Identify game design elements in order to offer constructive critique to existing games.
- Express ideas to "potential investors" using clear, concise and persuasive speech and presentation skills and identify the function and expectations of people in roles within a professional Game Design and Development team.

CM 255 : Introduction to Cinema and Digital Media

The course is an in-depth study of the process and art of cinematic storytelling. We will watch, discuss, analyze, read and write about films, television programs and/or online video with a critical eye to understanding cinematic storytelling and its various elements such as mise-en-scene, cinematography, editing and sound.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Analyze and write about films using the language and grammar of cinema.
- Identify methods of expressing meaning through mise-en- scene, shot composition, camera angles, camera movements, lighting, editing, sound and music.
- Plan, visualize and tell a cinematic story using a storyboard and shot list.

CM 271 : Games and Gaming in Society

This survey study of games and gaming in human culture and society brings together various methodologies and conceptual tools.

Credits 3

Lecture Hours 3

Course Outcomes

- Analyze the connection between gaming and larger political, social, and psychological patterns in society.
- Conduct surveys and interviews with populations of gamers and major figures in current gaming trends.
- Calculate mathematical probabilities of success or failure in various games.
- Design an effective, balanced game that speaks to a population of gamers.

CM 272 : Concepts in Game Design

This course introduces students to concepts in game design, and cultivates their ability to create and produce games.

Credits 3

Lecture Hours 2

Prerequisites

Grade of C or better in CM 271

Course Outcomes

- Analyze Game Mechanics
- Evaluate Market Trends in Gaming
- Design Games Prototypes

CM 280 : Book Production: Pueo Literary and Art Journal

This course is intended to acquaint students with the theory, practice, and skills required to publish a book (Pueo Literary and Art Journal), and, by extension, enable students to participate in the production of any small publication such as magazines, handbooks, manuals, brochures, flyers, newsletters, etc. To varying degrees over two semesters, the course covers planning, publicity, selection, editing, proofreading, layout, production, distribution, and celebration. Six credits may be applied to the AA degree. (Cross-listed as ENG 280.)

Credits 3

Lecture Hours 3

Designation

DA

Prerequisites

Grade of "C" or better in Eng 100 or consent of instructor.

Course Outcomes

- Evaluate how audience, purpose, and mode of publication affect publication design.
- Employ skills such as editing, proofreading, design, and layout.
- Participate in imaginative and creative collaboration in the production of a journal that maintains high standards.

CM 286 : Multimedia News Production

Students will develop intermediate skills in video journalism and produce video and multimedia news stories about campus and community events and issues for publication on the Ka Ohana website and other distribution platforms. Repeatable for up to 6 credits. (Crosslisted as JOUR 286.)

Credits 3

Lecture Hours 2

Designation

DA

Prerequisites

Credit for CM 120 or JOUR 120; or consent of instructor.

Course Outcomes

- Produce various news videos independently or in groups that meet professional journalistic standards and can be published on the Ka Ohana website.
- Generate story ideas; research, gather and organize information; work collaboratively with editors and reporters; follow through on assignments; and meet deadlines.
- Develop basic knowledge and skills of digital video production including cinematography, sound and editing.
- Critically analyze news videos produced by the mass media.

CM 295A : Careers in Video Game Design

This capstone course covers the basic business, legal and ethical issues related to careers in video game design. May be repeated up to 6 credits.

Credits 3

Lecture Hours 3

Designation

DA

Prerequisites

A grade of C or better or registration in CM 242, or consent of instructor.

Course Outcomes

- Describe the basic s of intellectual property law as it applies to video games.
- Produce a marketing plan for a video game.
- Identify distribution options for a video game.

CM 295B : Careers in Filmmaking

This capstone course covers the basic business, legal and ethical issues related to careers in filmmaking. May be repeated up to 6 credits.

Credits 3

Lecture Hours 3

Designation

DA

Prerequisites

A grade of C or better or registration in CM 220, or consent of instructor.

Course Outcomes

- Describe the basic s of intellectual property law as it applies to films.
- Produce a fundraising plan for a short film.
- Produce a marketing plan for a short film.
- Identify distribution options for a short film.

Dance

DNCE 121 : Beginning Ballet

Introduction to classical ballet technique. May be repeated up to 9 credits.

Credits 3

Lecture Hours 3

Designation

DA

Course Outcomes

- Correctly define ballet terminology.
- Execute proper ballet technique.
- Perform ballet routines.

DNCE 122 : Continuing Beginning Ballet

Continuation of beginning classical ballet technique. May be repeated up to 9 credits.

Credits 3

Lecture Hours 3

Designation

DA

Prerequisites

Grade of "C" or better in DNCE 121 or consent of instructor.

Course Outcomes

- Demonstrate correct usage of ballet terminology and core concepts
- Execute proper ballet technique
- Perform ballet routines

DNCE 131 : Beginning Modern Dance

Introduction to modern dance technique. May be repeated up to 9 credits.

Credits 3

Lecture Hours 3

Designation

DA

Course Outcomes

- Correctly define modern dance terminology
- Demonstrate kinesthetic proficiency in modern dance technique through performance
- Demonstrate conceptual understanding of contemporary modern dance technique

DNCE 132 : Continuing Beginning Modern Dance

Continuation of beginning modern dance technique. May be repeated up to 9 credits.

Credits 3

Lecture Hours 3

Designation

DA

Prerequisites

Grade of "C" or better in DNCE 131 or Instructor consent.

Course Outcomes

- Discuss concepts in modern dance utilizing proper terminology
- Develop kinesthetic proficiency in contemporary modern dance technique
- Perform modern dance choreography

DNCE 221 : Low Intermediate Ballet

Low intermediate ballet technique. Maybe repeated up to 9 credits.

Credits 3

Lecture Hours 3

Designation

DA

Prerequisites

Grade of "C" or better in DNCE 122 or instructor's consent.

Course Outcomes

- Discuss Core Concepts in Ballet Using Proper Ballet Terminology
- Execute Intermediate Level Ballet Techniques
- Perform Intermediate Level Choreography

DNCE 231 : Low Intermediate Modern Dance

Low intermediate modern dance technique. May be repeated up to 9 credits.

Credits 3

Lecture Hours 3

Designation

DA

Prerequisites

Grade of "C" or better in DNCE 132 or Instructor consent.

Course Outcomes

- Discuss concepts in modern dance utilizing proper terminology
- Develop kinesthetic proficiency in contemporary modern dance technique
- Perform modern dance choreography

DNCE 252 : Applied Dance

This course provides individual instruction in dance, covering intermediate and advanced performance techniques taught to each student's individual level. Applied dance is a performance course. The emphasis will be toward developing performing skills from a wide range of methods and training. The goal is to facilitate student dancers in attaining a level of confidence and skill that allows for consistently powerful and effective performances. This course may be repeated for up to 4 credits. (1 hour Individual Instruction)

Credits 1-4

Designation

DA

Prerequisite Courses

DNCE 121

DNCE 131

Prerequisites

A grade of C or better in DNCE 121 or DNCE 131.

Course Outcomes

- Incorporate theoretical concepts in dance peformance.
- Perform dance choreography.
- Demonstrate professional performance practices.

DNCE 270 : Dance Performance

DNCE 270 is a performance course designed to enhance and develop students' dance skills through the staging of selected dance pieces either as individual pieces or as part of a larger production project.

Credits 3

Studio Hours 6

Designation

DA

Prerequisites

Grade of C or better in DNCE 121 or 131, or Instructor's consent

Course Outcomes

- Demonstrate selected dance and theatre etiquette and protocol.
- Identify selected theatre and dance terminology.
- Perform dances demonstrating application of physical and interpretative skills
- Analyze dance for performance through evaluation and review.

Earth Science

ERTH 101 : Introduction to Geology

The natural physical environment; the landscape; rocks and minerals, rivers and oceans; volcanism, earthquakes and other processes inside the Earth; effects of human use on the Earth and its resources. Field trip.

Credits 3

Lecture Hours 3

Designation

DP

Course Outcomes

- Explain the relevance of geology and geophysics to human needs, including those appropriate to Hawai‘i, and be able to discuss issues related to geology and its impact on society and planet Earth.
- Apply technical knowledge of relevant computer applications, laboratory methods, and field methods to solve real-world problems in geology and geophysics.
- Use the scientific method to define, critically analyze, and solve a problem in earth science.
- Reconstruct, clearly and ethically, geological knowledge in both oral presentations and written reports.
- Evaluate, interpret, and summarize the basic principles of geology and geophysics, including the fundamental tenets of the sub-disciplines, and their context in relationship to other core sciences, to explain complex phenomena in geology and geophysics.

ERTH 101L : Introduction to Geology Lab

Hands-on study of minerals, rocks, and topographic maps. Examine volcanism, hydrology, coastal processes and hazards, geologic time and earthquakes. Field trips to investigate landslides, beaches and O'ahu geology.

Credits 1

Lab Hours 3

Designation

DY

Course Outcomes

- Explain the relevance of geology and geophysics to human needs, including those appropriate to Hawai'i, and be able to discuss issues related to geology and its impact on society and planet Earth.
- Apply technical knowledge of relevant computer applications, laboratory methods, and field methods to solve real-world problems in geology and geophysics.
- Use the scientific method to define, critically analyze, and solve a problem in earth science.
- Reconstruct, clearly and ethically, geological knowledge in both oral presentations and written reports.
- Evaluate, interpret, and summarize the basic principles of geology and geophysics, including the fundamental tenets of the sub-disciplines, and their context in relationship to other core sciences, to explain complex phenomena in geology and geophysics.

ERTH 102 : Quantifying Global & Environmental Change

Introductory mathematical approaches to quantifying key aspects of global and environmental change. Includes data analysis, graphical representation, and modeling of population growth, greenhouse gas emissions and fate, sustainable resource utilization, and sea-level change.

Lecture Hours 3

Designation

FQ

Course Outcomes

- Explain the relevance of geology and geophysics to human needs, including those appropriate to Hawaii, and be able to discuss issues related to geology and its impact on society and planet Earth.
- Apply technical knowledge of relevant computer applications, laboratory methods, and field methods to solve real-world problems in geology and geophysics.
- Use the scientific method to define, critically analyze, and solve a problem in earth science.
- Reconstruct, clearly and ethically, geological knowledge in both oral presentations and written reports.
- Evaluate, interpret, and summarize the basic principles of geology and geophysics, including the fundamental tenets of the sub-disciplines and their context in relationship to other core sciences, to explain complex phenomena in geology and geophysics.

ERTH 103 : Geology of Hawaiian Islands

Hawaiian geology and geologic processes: origin of Hawaiian Islands, volcanism, rocks and minerals, land forms, stream and coastal processes, landslides, earthquakes and tsunamis, ground water, geologic and environmental hazards. Field trips arranged.

Credits 3

Lecture Hours 3

Designation

DP

Course Outcomes

- explain the relevance of geology and geophysics to human needs, including those appropriate to Hawaii, and be able to discuss issues related to geology and its impact on society and planet Earth.
- Apply technical knowledge of relevant computer applications, laboratory methods, and field methods to solve real-world problems in geology and geophysics.
- Use the scientific method to define, critically analyze, and solve a problem in earth science.
- Reconstruct, clearly and ethically, geological knowledge in both oral presentations and written reports.
- Evaluate, interpret, and summarize the basic principles of geology and geophysics, including the fundamental tenets of the sub-disciplines, and their context in relationship to other core sciences, to explain complex phenomena in geology and geophysics.

ERTH 135 : Natural Disasters and Human History

Examines how natural hazards have affected the course of human culture and societies from pre-history to the present in Hawai'i/Oceania, Asia, Africa, Europe, and the Americas.

Credits 3

Lecture Hours 3

Designation

FGC

Course Outcomes

- Explain the relevance of geology and geophysics to human needs, including those appropriate to Hawai'i, and be able to discuss issues related to natural disasters and their impact on society and planet Earth.
- Apply technical knowledge of relevant computer applications, laboratory methods, and field methods to solve real-world problems in geology and geophysics.
- Use the scientific method to define, critically analyze, and solve a problem in earth science.
- Reconstruct, clearly and ethically, geological knowledge in both oral presentations and written reports.
- Evaluate, interpret, and summarize the basic principles of geology and geophysics, including the fundamental tenets of the sub-disciplines and their context in relationship to other core sciences, to explain complex phenomena in geology and geophysics.

ERTH 210 : O'ahu Field Geology

Field trip and laboratory sessions relating to the Geology of O'ahu.

Credits 1

Designation

DY

Prerequisites

Credit for or registration in ERTH 101, ERTH 103, or consent of instructor.

Course Outcomes

- Understand through field observation, with field and laboratory exercises, geological processes that construct, modify, and destroy the Hawaiian landscape.
- Realize the hazards, mitigation of these hazards and benefits of Hawaiian volcanism, and its relationship to island culture(s).
- Appreciate current research and studies of Hawaiian volcanism through visits to appropriate museums and research laboratories.
- Understand the vastness of geological time applied to Hawai'i, and how time is measured thus the time-scale known.

ERTH 211 : Big Island Field Geology

A four-day field trip on the island of Hawai'i. A survey of Hawaiian volcanic processes is illustrated by studying Kilauea, Mauna Kea, Mauna Loa, Hualalai, and Kohala volcanoes. Students are responsible for air and ground transportation, meals, and lodging.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in ERTH 101, ERTH 103, or consent of instructor. Must have medical clearance.

Course Outcomes

- Understand through field observation, with field and laboratory exercises, geological processes that construct, modify, and destroy the Hawaiian landscape.
- Realize the hazards, mitigation of these hazards and benefits of Hawaiian volcanism, and its relationship to island culture(s).
- Appreciate current research and studies of Hawaiian volcanism through visits to appropriate museums and research laboratories.
- Understand the vastness of geological time applied to Hawai'i, and how time is measured thus the time-scale known.

ERTH 212 : Maui Field Geology

A four-day field trip on the island of Maui. A survey of Hawaiian volcanology and geomorphology illustrated by field studies of Haleakala and West Maui volcanoes. Students are responsible for air and ground transportation, meals, and lodging.

Credits 1

Designation

DY

Prerequisites

Credit for or registration in ERTH 101, ERTH 103, or consent of instructor. Must have medical clearance.

Course Outcomes

- Understand through field observation, with field and laboratory exercises, geological processes that construct, modify, and destroy the Hawaiian landscape.
- Realize the hazards, mitigation of these hazards and benefits of Hawaiian volcanism, and its relationship to island culture(s).
- Appreciate current research and studies of Hawaiian volcanism through visits to appropriate museums and research laboratories.
- Understand the vastness of geological time applied to Hawai'i, and how time is measured thus the time-scale known.

ERTH 213 : Moloka'i, Lana'i, and Kaho'olawe Field Geology

A four-day field trip on the islands of Moloka'i and Lana'i. Field studies of East Moloka'i, West Moloka'i, Makanalua (Kalaupapa) and Lana'I volcanoes, and directed reading on Kaho'olawe volcano. Students are responsible for air and ground transportation, meals, and lodging.

Credits 1

Designation

DY

Prerequisites

Credit for or registration in ERTH 101, ERTH 103, or consent of instructor. Must have medical clearance.

Course Outcomes

- Understand through field observation, with field and laboratory exercises, geological processes that construct, modify, and destroy the Hawaiian landscape.
- Realize the hazards, mitigation of these hazards and benefits of Hawaiian volcanism, and its relationship to island culture(s).
- Appreciate current research and studies of Hawaiian volcanism through visits to appropriate museums and research laboratories.
- Understand the vastness of geological time applied to Hawai'i, and how time is measured thus the time-scale known.

ERTH 214 : Kaua'i and Ni'ihau Field Geology

A four-day fieldtrip on the island of Kaua'I to study the volcanological evolution and continuing geological history of Kaua'i and Ni'ihau volcanoes. Students are responsible for air and ground transportation, meals, and lodging.

Credits 1

Designation

DY

Prerequisites

Credit for or registration in ERTH 101, ERTH 103, or consent of instructor.

Course Outcomes

- Understand through field observation, with field and laboratory exercises, geological processes that construct, modify, and destroy the Hawaiian landscape.
- Realize the hazards, mitigation of these hazards and benefits of Hawaiian volcanism, and its relationship to island culture(s).
- Appreciate current research and studies of Hawaiian volcanism through visits to appropriate museums and research laboratories.
- Understand the vastness of geological time applied to Hawai'i, and how time is measured thus the time-scale known.

Economics

ECON 130 : Principles of Microeconomics

Examination of the decision-making process of both households and firms. Analysis of the functioning of a competitive market system, using supply and demand models and the role of government in cases of market failure.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Translate important microeconomic terms and theories into various forms. Skills needed to achieve this outcome: Writing ability, ability to translate economic terms into their own words and mathematical ability, ability to translate and interpret economic theories in a two dimensional graphical space.
- Explain the basic underpinnings of consumer and producer behavior. Skills needed to achieve this outcome: Research skills, Writing skills, Ability to formulate a hypothesis, and Ability to use the scientific method.

ECON 131 : Principles of Macroeconomics

Examination of the forces determining levels of and changes in national income, employment and the price level, including the role of government through its fiscal and monetary policies.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Translate important macroeconomic terms and theories into various forms. Skills needed to achieve this outcome: Writing ability, ability to translate economic terms into their own words. Mathematical ability, ability to translate and interpret economic theories in a two dimensional graphical space.
- Identify, explore and analyze macroeconomic concepts using economic analysis and research skills. Skills needed to achieve this outcome: Research skills, Writing skills, Ability to formulate a thesis statement, Ability to backup arguments using published research and to cite that research appropriately.

ECON 220 : Introduction to Environmental Economics

Environmental Economics uses the basic tools of economic analysis to focus on issues that pertain to the natural environment and its resources. The central theme is that there are competing demands for our limited natural resources necessitating that difficult choices be made regarding how those resources are used. Topics include global warming, Hawai'i's environment and other current environmental issues as time permits.

Credits 3

Lecture Hours 3

Designation

DS

Recommended Preparation

Credit for Economics 130 or 131 and a course in Environmental Science, or instructor consent.

Course Outcomes

- Explain how prices allocate resources in a free market economy, especially as related to the environment.
- Evaluate the benefits and costs of environmental clean-up
- Contrast free market solutions to environmental clean-up vs. competing views.
- Evaluate outcomes and government policy responses in markets with negative externalities.

Electrical Engineering

EE 160 : Programming for Engineers

Introductory course on computer programming and modern computing environments with an emphasis on algorithm and program design, implementation and debugging. Designed for engineering students, this course includes a hands-on laboratory to develop and practice programming skills.

Credits 4

Lecture Hours 3

Recommended Preparation

ICS 101

Prerequisites

Credit for or registration in Math 140 or consent of instructor

Course Outcomes

- explain the steps involved in the programming process.
- solve simple problems and express those solutions as algorithms.
- use the fundamental techniques of selection, looping, assignment, input, and output to describe the steps the computer takes to solve a problem.
- write algorithms and code in a top-down manner.
- work with arrays in searching and sorting applications.
- work with structures and unions types.
- write, test, and debug small programs.
- write functions and use pointers.
- work with characters and strings.
- work in text based environment like UNIX.
- interface with text base using a GUI interface.

EE 211 : Basic Circuit Analysis I

This is an introductory course covering linear passive circuits, time domain analysis, transient and steady state responses, phasors, impedance and admittance, power and energy, frequency responses, and resonance.

Credits 4

Lecture Hours 3

Designation

DP

DY

Prerequisites

Credit for or registration in MATH 243 (formerly MATH 231) or higher, credit for or registration in PHYS 272, or consent of instructor.

Course Outcomes

- Analyze and assemble basic circuits.
- Describe and analyze the basic functionality of the components of a basic circuit.
- Describe the rudiments of electric power production.

English

ENG 100 : Composition I

This college-level composition course promotes critical reading, the writing process, rhetorical principles, research strategies, and the documentation of sources.

Credits 3

Lecture Hours 3

Designation

FW

Prerequisites

Grade of "C" or better in ENG 22, OR placement into ENG 100, OR grade of "C" or better in ENG 23 and corequisite enrollment in ENG 100W, OR placement and enrollment in co-requisite ENG 100W OR grade of "C" or better in ENG 100W OR approval of designated Language Arts representative.

Corequisites

ENG 100W

Course Outcomes

- Write complex and well-reasoned compositions in language, style, and structure appropriate to particular purposes and audiences.
- Engage in a writing process that includes exploring ideas, considering multiple points of view, developing and supporting a thesis, revising with the help of peer and instructor feedback, editing, and proofreading.
- Find, evaluate, integrate, and properly document information from libraries, the internet, and other sources, with an eye for reliability, bias, and relevance.
- Read for main points, perspective, and purpose, and analyze the effectiveness of a variety of rhetorical strategies in order to integrate that knowledge into their writing.

ENG 100W : Composition I Writing Workshop

This course offers increased student-teacher collaboration on English 100 course content: college-level composition, critical reading, the writing process, rhetorical principles, research strategies, and the documentation of sources. (140 min studio)

Credits 1

Prerequisites

Grade of "C" or better in ENG 23, or placement into ENG 100W, or approval of designated Language Arts representative.

Co-Requisite Courses

ENG 100

Course Outcomes

- Write complex and well-reasoned compositions in language, style, and structure appropriate to particular purposes and audiences.
- Engage in a writing process that includes exploring ideas, considering multiple points of view, developing and supporting a thesis, revising with the help of peer and instructor feedback, editing, and proofreading.
- Find, evaluate, integrate, and properly document information from libraries, the internet, and other sources, with an eye for reliability, bias, and relevance.
- Read for main points, perspective, and purpose, and analyze the effectiveness of a variety of rhetorical strategies in order to integrate that knowledge into their writing.

ENG 200 : Composition II

A writing intensive composition course that furthers the study of rhetorical, conceptual, and stylistic demands of writing. through a variety of assignments, each essay students write will build on the next one, culminating in a final argumentative research paper into which students will incorporate the knowledge they have gained through the writing and research performed during the semester.

Credits 3

Lecture Hours 3

Recommended Preparation

Students should possess a strong foundation in grammar and punctuation; ideally, students will know MLA and/or APA writing styles.

Prerequisites

Grade of "C" or better in ENG 100, or consent of instructor.

Course Outcomes

- Summarize and organize appropriate primary and secondary sources.
- Analyze written arguments and resolutions using Aristotle's rhetorical triangle.
- Evaluate the validity and relevance in a given argument.
- Employ MLA and APA documentation styles in a written research project.

ENG 204A : Introduction to Creative Writing (Fiction)

English 204A Introduction to Creative Writing (fiction) introduces students to the basic practices and principles involved in the writing and publication of short stories and novels.

Credits 3

Lecture Hours 3

Designation

DA

Prerequisites

Grade of "C" or better in ENG 100, or consent of instructor.

Course Outcomes

- View the world as a writer, with an eye for detail and an ear for dialogue.
- Exercise the imagination as a tool for creation.
- Write short stories or novels.
- Submit writing for publication.
- Gain and deliver useful writing feedback.

ENG 204B : Introduction to Creative Writing (Poetry)

English 204B Introduction to Creative Writing (Poetry) introduces students to the basic practices and principles involved in the writing and publication of poems.

Credits 3

Lecture Hours 3

Designation

DA

Recommended Preparation

Students should possess a strong foundational knowledge of grammar, word usage, and punctuation. Additionally, students must be able to accept constructive criticism from peers and the instructor.

Prerequisites

Grade of "C" or better in ENG 100, or consent of instructor.

Course Outcomes

- Create original poems that reflect a skillful use of literary devices, forms, and conventions.
- Analyze poems written by peers and published authors.
- Propose and employ feedback in the writing workshop model.
- Evaluate and submit poems for publication.

ENG 204C : Introduction to Creative Writing (Screenwriting)

English 204C Introduction to Creative Writing (Screenwriting) introduces students to the basic practices and principles of screenwriting. (Cross-listed as CM 204C)

Credits 3

Lecture Hours 3

Designation

DA

Recommended Preparation

Students should possess a strong foundational knowledge of grammar, word usage, and punctuation. Additionally, students must be able to accept constructive criticism from peers and the instructor.

Prerequisites

Grade of "C" or better in ENG 100, or consent of instructor.

Course Outcomes

- Create original short screenplays that include screenwriting format, devices, and conventions.
- Propose and employ feedback in the writing workshop model.
- Enter screenplays for local and/or national contests and/or productions.

ENG 204D : Introduction to Creative Writing: Creative Nonfiction

English 204D Introduction to Creative Writing (Creative Nonfiction) introduces students to the basic practices and principles involved in the writing and publication of creative nonfiction, which includes autobiography, biography, nature and travel writing, cultural criticism, and historical and scientific writing.

Credits 3

Lecture Hours 3

Designation

DA

Recommended Preparation

Students should possess a strong foundational knowledge of grammar, word usage,and punctuation. Additionally, students must be able to accept constructive criticism from peers and the instructor.

Prerequisites

Grade of C or better in ENG 100, or consent of instructor.

Course Outcomes

- Create original works of creative nonfiction that reflect a skillful use of literary devices, forms, and conventions.
- Analyze creative nonfiction written by peers and published authors.
- Propose and employ feedback in the writing workshop model.
- Evaluate and submit work for publication.

ENG 209 : Business Writing

A study of business and managerial writing; practice in writing letters, memos, and reports, including a report requiring research and documentation.

Credits 3

Lecture Hours 3

Prerequisites

Grade of "C" or better in ENG 100.

Course Outcomes

- Compose and edit business messages and reports for specific contexts, audiences, and purposes.
- Conduct business research by gathering and analyzing information, drawing conclusions, documenting sources, and presenting results both in writing and orally.
- Develop collaborative communication and writing skills.
- Proofread and edit business writing for grammatical, spelling, punctuation and mechanical errors.

ENG 271 : Introduction to Literature: Genre

This course introduces students to the study of significant works of literature in selected genres. Emphasis is on discussion of and writing about characteristics and themes of the works. A student may enroll in this course more than one time (for different genres); however, only three credits will be applied toward degree.

Credits 3

Lecture Hours 3

Designation

DL

Prerequisites

A grade of "C" or better in ENG 100.

Course Outcomes

- Use concepts and terminology particular to literary study to analyze and interpret imaginative literary works orally and in writing.
- Respond to a work of literature as an expression of a culture's values and compare those with the student's own.
- Enjoy a more creative, enlightened, and fulfilled life through an appreciation of literature's social, cultural, political, and philosophical themes and techniques.
- Exhibit knowledge about selected writers and their characteristic themes and techniques.

ENG 272 : Introduction to Literature: Culture and Literature

This course introduces students to the study of significant works of literature in selected cultures and cultural formations. Emphasis is on discussion of and writing about characteristics and themes of the works. A student may enroll in this course more than one time (for different cultures); however, only three credits will be applied toward degree.

Credits 3

Lecture Hours 3

Designation

DL

Prerequisites

A grade of "C" or better in ENG 100.

Course Outcomes

- Use concepts and terminology particular to literary study to analyze and interpret imaginative literary works orally and in writing.
- Respond to a work of literature as an expression of a culture's values and compare those with the student's own.
- Enjoy a more creative, enlightened, and fulfilled life through an appreciation of literature's social, cultural, political, and philosophical themes and techniques.
- Exhibit knowledge about selected writers and their characteristic themes and techniques.

ENG 280 : Book Production: Pueo Literary and Art Journal

This course is intended to acquaint students with the theory, practice, and skills required to publish a book (Pueo Literary and Art Journal), and, by extension, enable students to participate in the production of any small publication such as magazines, handbooks, manuals, brochures, flyers, newsletters, etc. To varying degrees over two semesters, the course covers planning, publicity, selection, editing, proofreading, layout, production, distribution, and celebration. Six credits may be applied to the AA degree. (Cross-listed as CM 280.)

Credits 3

Lecture Hours 3

Designation

DA

Recommended Preparation

Willingness to carry out collaborative responsibilities on time and to work cooperatively with others. Strong knowledge of grammar, word usage, and punctuation. Awareness of literary forms and styles. Basic computer skills. An eye for visual detail.

Prerequisites

Grade of "C" or better in ENG 100 or consent of instructor.

Course Outcomes

- Evaluate how audience, purpose, and mode of publication affect publication design.
- Employ skills such as editing, proofreading, design, and layout.
- Participate in imaginative and creative collaboration in the production of a journal that maintains high standards.

Finance

FIN 150 : Personal Finance

A goal-oriented approach to personal financial management covering budgeting, use of financial institutions, income tax effects and strategies, credit risk management, investment analysis, risks, alternatives, financial products and markets, retirement planning and estate planning. Students will be introduced to various financial planning software programs.

Credits 3

Lecture Hours 3

Recommended Preparation

Grade of C or better in Math 75X or equivalent.

Course Outcomes

- Discuss the financial institution's role in individual personal finance.
- Critique the different types of insurance and their effectiveness in controlling and managing risk.
- Discuss the investment process.
- Utilize software and other financial planning tools.

Food Science and Human Nutrition

FSHN 185 : Human Nutrition

An introductory level biological science course which integrates basic concepts of science with the study of human nutrition. Designed for students who want an introduction to nutrition, as well as those who later choose to major in it.

Credits 3

Lecture Hours 3

Designation

DB

Prerequisites

Placement in ENG 100 and credit in Math 25, 26, 29, or 82 or higher, placement into Math 103 or higher, or consent of instructor.

Course Outcomes

- Describe the six categories of nutrients and evaluate the nutrient adequacy of a diet.
- Identify factors influencing eating habits.
- Correctly interpret and evaluate information on food labels, packages and product advertising based on generally accepted scientific methods and standards.
- Define various types of malnutrition and discuss their causes, cures, and associated health effects.
- Discuss current issues related to the safety of the food supply, using concepts from toxicology.
- Describe physiological changes that occur during the lifecycle and explain the changes in nutrient needs that accompany these changes.
- Discuss various environmental and ecological conditions, which interact with human nutrition, both locally and globally.

Geography & Environment

GEO 101 : The Natural Environment

Survey of the natural environment; distribution and interrelationships of climates, vegetation, soil, and land forms.

Credits 3

Lecture Hours 3

Designation

DP

Course Outcomes

- Describe the components (inputs), processes (actions) and resulting spatial patterns (outputs) of the physical environment (atmosphere, hydrosphere, lithosphere and biosphere) as a system.
- Apply the scientific method, and theories and concepts of geography to explain a physical environment.
- Explain critically the interaction of humans and the physical environment.
- Illustrate how his/her views of the physical environment have (or have not) changed.

GEO 101L : The Natural Environment Laboratory

Analysis by use of maps, air photos, field and laboratory observation, and experimentation. Emphasis on Hawai'i and on human modification of environment. Required field trips during regular class hours.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in GEO 101.

Course Outcomes

- Apply the scientific method to study a physical environment: Define a problem for a study, gather and record data, analyze the data, arrive at appropriate conclusions, and report the findings in written form.
- Use various instruments, such as a compass, GPS unit and thermometer, to gather environmental data.
- Use the metric system, scientific notation, graphs, and geographic and basic statistical measurements.
- Write a lab report using the standard scientific format.

GEO 102 : World Regional Geography

Geography 102 is a survey of the world's major cultural regions. Environmental, cultural, political, and economic characteristics of each region and regional interactions are explored from a geographic perspective.

Credits 3

Lecture Hours 3

Designation

FGB

Course Outcomes

- Demonstrate knowledge of basic geographic terms, locations, concepts, theories, and methodology.
- Demonstrating an understanding of historical, social and environmental processes shaping the world's major cultural regions.
- Apply the knowledge of basic geographic terms, locations, concepts, theories, and methodology to critically explain current world events and issues and daily events.

GEO 151 : Geography and Contemporary Society

Elements of population geography and urban studies, economic geography and resource management; application to current problems of developed and underdeveloped countries.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Describe and map major themes in human society and culture: population, economy, politics, language, religion, customs, and conflict.
- Apply scientific method, and theories and concepts of geography to explain the nature, history, and diffusion of the major themes.
- Synthesize cross-cultural perspectives on current issues in the major themes.
- Communicate the achievement in written form and/or in other artistic expressions such as photograph.

GEO 252 : The Landscape of Japan: Natural, Cultural and Historical

Analyses of ordinary and symbolic landscapes of Japan from natural, cultural and historical perspectives. The course interprets a landscape synthesizing underlying physical, cultural and historical settings of the landscape.

Credits 3

Lecture Hours 3

Designation

DS

Recommended Preparation

Knowledge of Japanese culture and language.

Course Outcomes

- Identify and describe an ordinary or symbolic landscape of Japan
- Describe the natural, cultural, and historical settings of Japan behind the landscape
- Analyze the landscape by applying the natural, cultural, and historical settings.
- Evaluate the landscapes of Japan through using local, national, and global perspectives

Hawaiian Language

HAW 100 : Language in Hawai‘i: A Microcosm of Global Language Issues

Course is a survival kit for life in Hawai‘i and an introduction to Hawaiian and language related issues enhancing communicative experiences in Hawai‘i. An examination of social, cultural, political, and linguistic cross-cultural interaction locally and globally. Taught in English and Hawai‘i Creole English.

Credits 3

Lecture Hours 3

Course Outcomes

- Identify similar and distinctive patterns of development and change within different native/indigenous populations from around the world who have a shared history of colonization and/or occupation, from loss of native language and culture to efforts on behalf of native/indigenous people to revitalize and perpetuate their native language and culture.
- Develop a deeper understanding and appreciation for the local, Hawai‘i community and our diverse backgrounds, cultures, languages, worldviews, and experiences, thus enhancing their communicative experience here in Hawai‘i as well as in their individual home communities and setting the stage for improved relations between diverse groups.
- Make more informed decisions and better judgments about the various cross-cultural issues covered in the course.
- Explain in general the ethnic and linguistic make-up of ancient and modern Hawai‘i and explain how change happened over time.
- Explain and interpret political and social points of view from the native and non-native perspective.
- Read, pronounce, and have a basic understanding of many Hawaiian and Pidgin words, names, and phrases and begin to appreciate multilingualism.

HAW 101 : Elementary Hawaiian I

An elementary course in the Hawaiian language which focuses on rules of grammar, pattern drills, the building of an adequate vocabulary to facilitate conversation, and reading of selected materials at an elementary level.

Credits 4

Lecture Hours 4

Course Outcomes

- Recognize and reproduce the correct pronunciation of consonants, semivowels, vowels, diphthongs, words and names in Hawaiian.
- Demonstrate the ability to comprehend and respond to basic directions, requests, questions and answers.
- Demonstrate the ability to generate basic phrases and sentences for everyday situations with a vocabulary of 400-500 Hawaiian words, plus idiomatic expressions.
- Demonstrate the ability to read and write Hawaiian sentences at an elementary level on subject matter covered in class.
- Speak Hawaiian with the proper inflection, intonation, and rhythm.

HAW 102 : Elementary Hawaiian II

Continuation of HAW 101.

Credits 4

Lecture Hours 4

Prerequisites

Credit for HAW101 or consent of instructor.

Course Outcomes

- Demonstrate the increased ability to comprehend and respond to basic spoken Hawaiian about daily activities, about the student's life and interests and to narrate past, present and future events.
- Demonstrate the increased ability to read and write Hawaiian sentences using more grammatical patterns and a working vocabulary of some 1, 000 words, plus idiomatic expressions.
- Speak Hawaiian with increasing fluency and with correct inflection, intonation and rhythm.

HAW 201 : Intermediate Hawaiian I

Continuation of HAW 102 with emphasis on increasing proficiency in use of major sentence patterns in reading, writing, conversation, and translation.

Credits 4

Lecture Hours 4

Prerequisites

Credit for HAW 102 or consent of instructor.

Course Outcomes

- Demonstrate the ability to comprehend and respond to sentence structures of greater length and complexity on a variety of topics.
- Demonstrate the ability to comprehend, speak, read and write at the intermediate level with a working vocabulary of some 1, 500 words, plus idiomatic expressions.
- Write original expositions and communicate on a variety of topics within the student's experience.

HAW 202 : Intermediate Hawaiian II

Continuation of HAW 201. Further refinement of basic language skills including vocabulary development beyond the 201 level. Increased control over structures and idioms. Includes readings about history, culture, and diverse forms of literature.

Credits 4

Lecture Hours 4

Prerequisites

Credit for HAW 201 or consent of instructor.

Course Outcomes

- Listen and sustain comprehension of connected discourse on a variety of topics.
- Demonstrate oral and written proficiency in grammatical patterns of greater complexity, with a working vocabulary of some 2, 000 words, plus idiomatic expressions.
- Demonstrate the ability to initiate, sustain and close a general conversation with a number of strategies appropriate to a range of circumstances and topics.
- Demonstrate a basic familiarity with Hawaiian verbal art forms; ʻōlelo noʻeau, mele, oli, pule, moʻolelo, and kaʻao.

Hawaiian Studies

HWST 107 : Hawai'i: Center of the Pacific

An introduction to Hawaiʻi and Hawaiian culture in the context of the larger Pacific, including Hawaiian origins, settlement, language, land, history, society, religion and the arts.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Compare and contrast cultures and histories of Pacific island peoples in relation to their languages, religious traditions, artistic expressions, material culture, and political and economic development.
- Identify ways in which the environment has shaped Hawaiian and Pacific island culture.
- Describe the integration of land in Hawaiian culture and the historic changes in the relationship between people and land through written and oral communication.
- Describe aspects of Hawaiian relationship with other groups of people in and outside of Hawaiʻi.
- Identify, access, and evaluate major Hawaiian studies sources.
- Identify implications of the relationships and develop proposals for possible ways to affect positive change.

HWST 110 : Huakaʻi Waʻa: Introduction to Hawaiian Voyaging

This course introduces students to modern Hawaiian canoe voyaging through a beginning examination of the science and narratives of ancient voyaging, the history of the modern revival of voyaging, and the Hawaiian navigator's toolkit.

Credits 3

Lecture Hours 3

Designation

DH

Recommended Preparation

Familiarity with Hawaiian language and culture is helpful but not required.

Course Outcomes

- Show knowledge of location of the Hawaiian islands and island groups of Oceania.
- Explain the various aboriginal and academic narratives relating to the migration to and settlement of Oceania
- Discuss the historical and cultural events leading to the revival and reestablishment of Hawaiian voyaging
- Demonstrate knowledge of the tools contemporary navigators use for open-ocean voyaging

HWST 115 : Moʻokūauhau: Hawaiian Genealogies

This is a course in which students will learn about the centrality of genealogy to Hawaiian history, culture, and family. Students of any ancestry or background will gain value in learning about a central aspect of Hawaiian culture, and in doing research that is geared toward either their own family genealogy or the researching of the genealogies of public figures, or historical figures. Students will be guided through a research process and set of research methodologies for vital statistics, land, tax, census, historical material, and online resources. Students will also learn chiefly and family genealogies of Hawaiʻi, which is a Hawaiian method through which some of the history of Hawaiʻi is also explored. By completion of the semester, students will be expected to assemble a genealogy and family history beyond what they might already have completed before enrollment in this class for either themselves or a public figure cleared by the instructors of this course.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Demonstrate knowledge of the centrality and importance of genealogy to Hawaiian culture.
- Show knowledge of some of the major genealogies of Hawaiian chiefs and large families in Hawaiʻi.
- Demonstrate the ability to conduct research in public and private institutions in Hawai'i, and through the use of internet genealogy web sites.
- Show that they are able to research and construct a genealogy and family history.

HWST 130 : Hula ʻŌlapa: Traditional Hawaiian Dance

In this class students will learn various beginning traditional hula interpretations. Students will be taught the basic footwork and hand gestures of traditional hula accompanied by chanting, Ipu Heke (double gourd) or Pahu (drum). Students may also be required to make accompanying instruments like Ipu (smaller single gourd), Kalaʻau (sticks), ʻIliʻili (stones), and Pūʻili (split bamboo), and learn accompanying oli (chants) under the direction of the class Instructor. Students will be taught different historical aspects of specific hula, associated hula mythology, aliʻi (chiefly) genealogies, plants and place names.

Credits 3

Lab Hours 2

Lecture Hours 2

Designation

DA

Course Outcomes

- Learn a basic understanding of the differences between traditional and more modern styles of hula including the significance of hula as part of Hawaiian culture in traditional times.
- Learn the histories and mythologies behind the creation and performance of various hula.
- Learn how to perform several hula in unison, and the relationship between movements with the significance of lyrical content in a mele or oli combined with the occasions for which one is dancing.
- Learn how to prepare adornments for their specific hula.

HWST 131 : Hula Ōlapa ʻelua: Traditional Hawaiian Dance II

Continuation of HWST 130. In this second class, students will learn intermediate traditional hula interpretations. Foot work and hand gestures of traditional hula will be reinforced accompanied by chanting, Ipu Heke (double gourd) or Pahu (drum). Students will be exposed to chants, and pule of traditional and ceremonial protocols related to the discipline of hula. Students may also be required to make accompanying instruments, like Ipu (smaller single gourd), Kalaʻau (sticks), ʻIliʻili (stones), and Pūʻili (split bamboo) under the direction of the class instructor. Students will be taught different historical aspects of specific hula, associated hula mythology, aliʻi (chiefly) genealogies; plants, and place names.

Credits 3

Lab Hours 2

Lecture Hours 2

Designation

DA

Prerequisites

Credit for HWST 130, and enrollment in or credit for HAW 101 or HWST 107.

Course Outcomes

- Describe and discuss the stories behind the creation and performance of various hula.
- Perform several hula demonstrating the relationship between movements and the significance of lyrical content in mele.
- Prepare and use adornment for specific hula.

HWST 135 : Kālai Lāʻau: Hawaiian Woodwork and Wood Carving

This is a Hawaiian cultural woodwork and wood carving project class. This class will involve the development of two to three introductory woodworking projects of Hawaiian cultural significance or ceremonial use. through this class the students will develop both the skills needed to work effectively and safely with wood, and the cultural knowledge important to the pieces developed. As a project class, there will be specific projects and themes set by the instructor of general Hawaiian cultural interest. Students will learn different aspects and solutions in carving and creating Hawaiian cultural projects.

Credits 3

Studio Hours 6

Designation

DA

Course Outcomes

- Learn to plan and create wood working projects of Hawaiian cultural relevance or significance.
- Gain a deeper insight into Hawaiian cultural use of wood.
- Gain deeper understanding of the cultural significance of the wood-working project the student has undertaken.
- Learn to work with wood in an effective and safe manner.

HWST 136 : Kālai Lāʻau II: Advanced Techniques in Hawaiian Carving

This is a Hawaiian cultural carving class that is a continuation of the themes and techniques learned in HWST 135 Kālai Laʻau. Students will be required to complete at least one large piece and two highly finished smaller pieces. Students will be expected to have a basic understanding of carving upon entering the class and will spend their time fine tuning and working on a larger scale. through this class students will develop skills and techniques with more advanced tools needed to work effectively and safely with wood, bone, and/or stone, and students will acquire the cultural knowledge important to the pieces developed. Students will also learn how to make some of the tools required for use in the class.

Credits 3

Studio Hours 6

Designation

DA

Prerequisites

Credit for HWST 135 with a grade of "B" or better, or consent of the instructor.

Course Outcomes

- Students will plan and complete carving projects using advanced tools on wood, stone, and bone in an effective and safe manner.
- Students will research and analyze Hawaiian cultural use of wood, bone, and stone.
- Students will be able to design, forge and finish a tool for use in carving projects.

HWST 140 : Mahi'ai I: Hawaiian Taro Culture

The first mahiʻai course in a series of four in Hawaiian cultivation practices. Covers the history, lore, and geographically specific methods of mahiʻai. Emphasis on the cultivation of kalo and related staple foods.

Credits 3

Lecture Hours 3

Designation

DH

Recommended Preparation

HWST 107

Course Outcomes

- Tell the Moʻolelo (traditional history) of kalo
- Explain the cultural significance of kalo in Hawaiian culture
- Identify varieties of kalo and their characteristics
- Record and analyze observations of kalo cultivation
- Create papa kuʻi ʻai

HWST 142 : Mahi'ai Kalo II - Traditional and Modern Techniques of Lo'i Kalo Production

This course expands on the traditional Hawaiian kalo growing knowledge covered in the first class to include the ecology of wetland kalo systems, focusing on traditional loʻi techniques, and the integration of nutrient flow analysis through the ahupuaʻa and nutrient management practices for loʻi kalo. Additional emphasis is placed on both scientific and practical approaches. Cooking and eating are used throughout the course to demonstrate linkages between kalo and human nutrition and wellbeing. The course will consist of a mixture of lecture and hands-on field experience.

Credits 3

Lecture Hours 3

Designation

DH

Prerequisites

A grade of C or better in HWST 140 or consent of instructor

Course Outcomes

- Explain traditional Hawaiian and modern technical farming terminology and processes;
- Discuss nutrients, nutrient budgets, or nutrient cycling in loʻi kalo farming;
- Identify major patterns of nutrient flows in ahupuaʻa/watershed systems and the impacts of changes to those patterns.

HWST 215 : Oli Hōlona: Beginning Hawaiian Protocol and Chant

An introduction to beginning Hawaiian protocol(s) and chant. Students will learn types of chants, voice quality, modes of chanting, and their basic elements of place chants at an introductory level.

Credits 3

Lecture Hours 3

Designation

DH

Recommended Preparation

Grade of C or better in HAW 102.

Prerequisites

Grade of C or better in HWST 107 or consent of instructor.

Course Outcomes

- Illustrate the history and types of oli and their role in protocol.
- Demonstrate techniques and performance of basic oli pule and oli mele.

HWST 217 : Understanding Polynesian Religions

This course provides an introduction to the study of Polynesian religions through an exploration of the oral traditions of Hawai'i, Aotearoa (New Zealand), French Polynesia (Tahiti et al .), and Samoa among others. In this class, students will gain a foundational understanding of important religious themes that permeate Polynesia. Main themes include but are not limited to deities' forms & functions, cosmogonies, etiologies, and belief-regulated practices. Additionally, a portion of the semester will focus on belief narratives as vehicles for the transmission of knowledge and the significance of contemporary representation and self-representation of Polynesian religion and culture. This class will use comparative analysis between Hawaiian religion and the religious traditions of Aotearoa, French Polynesia, and Samoa to identify the fundamental concepts needed to understand Polynesian religions and explore how they are interconnected and interwoven into the fabric of our lives today. (Cross-listed as REL 217)

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Identify and describe significant source-language terms, major figures, and stories in Hawaiian and other Polynesian religions
- Identify and describe important themes common to Hawaiian and other Polynesian religions
- Analyze, compare, contrast, major themes common to Hawaiian and other Polynesian religions

HWST 222 : Ma'awe No'eau: Hawaiian Fiber Work

This is a Hawaiian cultural fiber arts project class. This class will involve the development of three to four introductory fiber arts projects of Hawaiian cultural significance or ceremonial use. through this class students will learn how to procure the materials needed to complete various fiber arts projects, including learning related protocol and methods for gathering, understanding of Native Hawaiian gathering rights, and the type of environments in which specific materials grow and can be gathered, Students will develop the skills needed to work effectively and safely with various fiber arts materials on introductory projects, and students will learn the cultural knowledge important to the pieces created. As a project class, there will be specific projects and themes set by the instructor of general Hawaiian cultural interest.

Credits 3

Studio Hours 6

Designation

DA

Course Outcomes

- Plan, create, and finish, in a safe and effective manner, fiber arts projects of Hawaiian cultural relevance or significance.
- Explain issues and history of fiber material use in Hawaiian culture and, observing cultural protocols, apply these to gathering materials for a fiber arts project.

HWST 253 : Kamehameha I and the Hawaiian Kingdom

Kamehameha I, also known as Pai'ea, Ka Na'i Aupuni, and Kaiwakiloumoku is the most famous Hawaiian in history. This course will look at the rise to power of Kamehameha I, as he consolidated all of the islands under his control establishing the Hawaiian Kingdom. We will examine his genealogy and chiefly family relations including, his most famous exploits and battles, the olelo no'eau (wise sayings) related to his life, and the cultural and political legacies he has left Hawai'i.

Credits 3

Lecture Hours 3

Designation

DH

Recommended Preparation

HWST 107 and HAW 101

Course Outcomes

- Identify important events and characters associated with the life and events of Kamehameha's time.
- Compare and contrast different ideas and values we see in the stories about Kamehameha.
- Relate the life and events of Kamehameha's time to contemporary events and issues.

HWST 255 : Introduction to the Hawaiian Kingdom

This course focuses on the Hawaiian Kingdom era covering two major historical periods: the first from 1810 until 1893; the second from 1893 to the present. This course focuses primarily on the first historical period, allowing the legal, political, and economic conclusions from that era to inform and provide for us a continuity into the second historical period. Major topics addressed in this course are: unification; the Hawaiian Constitutions; recognition and nationhood in 1843; feudal and allodial land systems; the Hawaiian economy; the Hawaiian monarchs; the occupation of the Hawaiian Islands; issues and methods of de-occupation; historical, political, legal, and economic global contexts.

Credits 3

Lecture Hours 3

Designation

DS

Prerequisites

A grade of "C" or better in HWST 107, HIST 284 or HIST 224.

Course Outcomes

- Explain the political, economic, and social development of the Hawaiian Kingdom from a pre-unification feudal society to an internationally recognized nation-state.
- Compare and contrast applicable domestic and international law terminology as applied to the Hawaiian historical context.
- Analyze past events in Hawai'i by using methodological reasoning on the various models of social, political or economic systems.
- Assess the various lawful and unlawful Hawaiian Constitutions their creation, implementation and legal authority.
- Analyze the cause and effects of the Great Mahele as a unique land tenure system on Hawaiian society.
- Analyze the problems facing each of the Ali'i Nui, their solutions to those problems and the historical significance of each Ali'i Nui from Kamehameha I to Queen Lili'uokalani

HWST 263 : Hawaiian and Indigenous Film & Literature

This course is a study of film & literature created by Native Hawaiians and other Indigenous peoples; especially to focus on the situational and cultural impetus from which these texts were created.

Credits 3

Lecture Hours 3

Designation

DL

Prerequisite Courses

HWST 107

PACS 108

Prerequisites

Grade of C or better in HWST 107 or PACS 108, or instructor consent.

Course Outcomes

- Illustrate major themes seen across different film & literary works.
- Describe the diversity of film & literary opinions, conflict, and commonality in texts in course..
- Discuss stories and storytellers from a range of ethnic and cultural indigenous groups.

HWST 270 : Hawaiian Mythology

Survey of gods, ʻaumakua, kupua, mythical heroes, heroines, and their kinolau as the basis of traditional Hawaiian Metaphor. This course will investigate and analyze oral and written Hawaiian literary sources.

Credits 3

Lecture Hours 3

Designation

DH

Prerequisites

Credit for HWST 107 or HAW 102.

Course Outcomes

- Analyze written and oral sources of Hawaiian moʻolelo.
- Describe akua (deities), kupua (deities), ʻaumakua (ancestral family deities), and kanaka (humans) and their various forms from Hawaiian moʻolelo.
- Analyze the relationship between Hawaiian moʻolelo (mythologies) and Hawaiian worldview, including Hawaiian cultural values and traditions.
- Employ the terminology of literary and/or cultural analysis in the study of Hawaiian moʻolelo.

HWST 273 : Tattoo Traditions of Polynesia

An overview of the traditional tattoo practices of the various Polynesian islands within the context of the great Pacific.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Compare and contrast the migrations and the peopling of the Pacific focusing on ancestral connections and continuities in the tattoo practices of the Pacific peoples.
- Identify primary and secondary source material and incorporate original documents in their analysis whenever possible.
- Identify the cultural contexts and differences (both traditional and modern) among the tattoo styles of the primary Polynesian groups.

HWST 275 : Wahi Pana: Mythology of the Hawaiian Landscape

Wahi Pana: Mythology of the Landscape, is designed to illuminate Hawaiian intelligence regarding the geographic features of these islands. Students will undertake a basic study of the natural sciences from a Western/modern perspective. They will then look at various Hawaiian chants and epic tales to explore the connections with indigenous knowledge forms found in a Hawaiian worldview. Cross-cultural comparisons are made with the goal of bringing forth specific, physical information about important Hawaiian places. Students will gain cultural awareness of their surroundings through the bridging of geography and the mythology studied, thus creating a more Hawaiian sense-of-place in our community.

Credits 3

Lecture Hours 3

Designation

DH

Recommended Preparation

REL 205.

Prerequisites

Grade of "C" or better in HWST 107, or HWST 270.

Course Outcomes

- Students will compare and contrast landscape descriptions, mythology, and human behavior from different cultural perspectives.
- Students will analyze Hawaiian mythology as it applies to Hawaiian place names, Native Hawaiian social history, and Native Hawaiian relationship to the natural environment.
- The student will explain the importance of place in the island ecosystem and the values of environmental sustainability.

HWST 275L : Wahi Pana: Mythology of the Hawaiian Landscape Field Lab

This field lab supports HWST 275. Together, they illuminate Hawaiian intelligence regarding the geographic features of these islands. The course highlights the Koʻolau districts (Waimānalo to Waimea) or Oʻahu as a living classroom resource where the Wahi Pana (sacred places) and mythology of the landscape can be seen and appreciated. Students will explore connections between the social and natural sciences, and indigenous knowledge forms found in a Hawaiian worldview from observing their physical surroundings. Cross-cultural comparisons are made with the goal of bringing forth specific, physical information about important Hawaiian places.

Credits 1

Designation

DH

Prerequisites

Enrollment or credit in HWST 275 lecture component.

Course Outcomes

- Students will examine the physical properties of the geographic landscape to identify their place in Hawaiian myths.
- Students will observe the physical properties of the physical landscape and describe them from a Hawaiian worldview.

HWST 285 : Lā'au Lapa'au I: Hawaiian Medicinal Herbs

In this class students will learn the basic philosophy and traditions surrounding Hawaiian healing herbs. Students will also learn how to identify, grow, harvest, prepare, store and use these herbs for various human ailments.

Credits 4

Lecture Hours 3

Designation

DH

Prerequisites

Credit for HWST 107 or BOT 105.

Course Outcomes

- Learn Hawaiian and introduced medicinal herbs and be able to identify them by name, color, smell, taste, and sight.
- Learn the beliefs and practices of Hawaiian herbal healing.
- Learn planting, growing and harvesting techniques used to raise traditional Hawaiian herbal healing plants.
- Prepare, use and store Hawaiian herbal remedies.

HWST 296 : Special Topics in Hawaiian Studies

Students will investigate important topics in Hawaiian Studies such as specific people, events, or periods. May be repeated up to 9 credits with different topics.

Credits 3

Lecture Hours 3

Prerequisites

"C" or better in HWST 107.

Course Outcomes

- Identify the important concepts and facts particular to the selected course topic.
- Analyze and interpret the nature and significance of the selected course topic.
- Investigate connections between the selected course topic and contemporary events and issues.

Health

HLTH 123 : Introduction to Clinical Skills and Patient Care

HLTH 123 provides an opportunity for students to discover their suitability for a career in direct client care and clinical medicine. Personal and cultural values and practices, professional conduct, and team-based care will be explored. In depth study will focus on medical terminology, common illnesses, interviewing patients, clinical cases, health care service models, workforce, and provider organizations. Safety/OSHA/HIPPA, CPR/AED certification, payor systems, and health ethics. Concepts and skills learned will be supplemented with site visits to healthcare facilities and guest lectures from selected healthcare professionals.

Credits 3

Lecture Hours 3

Course Outcomes

- Explain the relationship, interplay and trust between patients and providers;
- Distinguish different levels of healthcare, types of care, healthcare workforce and provider organizations;
- Perform skill sets pertaining to patient-centered care;
- Communicate effectively in written and verbal forms.

HLTH 123C : Introduction to Clinical Skills and Patient Care

HLTH 123C will be taught by a registered nurse and satisfies the requirements for the State of Hawaii Certified Nurses Aide Licensure. This course provides an opportunity for students to discover their suitability for a career in direct client care and clinical medicine. Personal and cultural values and practices, professional conduct, and team-based care will be explored. In depth study will focus on medical terminology, common illnesses, interviewing patients, clinical cases, health care service models, workforce, and provider organizations. Safety/OSHA/HIPPA, CPR/AED certification, payor systems and health ethics. Concepts and skills learned will be supplemented with site visits to healthcare facilities and guest lectures from selected healthcare professionals.

Credits 3

Lecture Hours 3

Course Outcomes

- Explain the relationship, interplay, and trust between patients and providers;
- Distinguish different levels of healthcare, types of care, healthcare workforce and provider organizations;
- Perform skill sets pertaining to patient-centered care;
- Communicate effectively in written and verbal forms.

HLTH 124 : Introduction to Hawaiian and Indigenous Health and Healing: Kupuna Care for Nurse Aides

Intro to Hawaiian and Indigenous Health and Healing combines traditional and Western healing knowledge and care giving skills. Training in the Native Hawaiian traditional healing practices focuses on mālama kupuna (elder care), mālama ʻaina (agricultural practices), ʻai pono (healthy nutrition), hoʻoponopno (mutual reciprocation), lomilomi (massage), and lāʻau lapaʻau (plant medicine). The Western elements of the course focuses on human anatomy, medical terminology, basic nursing care, basic home care, nutrition, basic personal care, patient interaction and communication, dressing, bathing and feeding patients, helping patients get out of bed or move about, taking patients' temperature, blood pressure and pulse, and reporting to nurses.

Credits 3

Lecture Hours 3

Prerequisites

Grade of C or better in HLTH 123 or instructor consent.

Course Outcomes

- Explain appropriate pre and post procedures used when providing care;
- Successfully perform 14 of the State of Hawaii CNA mandatory skills;
- Describe the healthcare standards of care.

HLTH 124C : Introduction to Hawaiian and Indigenous Health and Healing: Kupuna Care for Nurse Aides

Intro to Hawaiian and Indigenous Health and Healing combines traditional and Western healing knowledge and caregiving skills. HLTH 124C will be taught by a registered nurse and satisfies the requirements for the State of Hawaii Certified Nurses Aid licensure. Intro to Hawaiian and Indigenous Health and Healing combines traditional and Western healing knowledge and care giving skills. Training in the Native Hawaiian traditional healing practices focuses on mālama kūpuna (elder care), mālama ʻaina (agricultural practices), ʻai pono (healthy nutrition), hoʻoponopno (mutual reciprocation), lomilomi (massage), and lāʻau lapaʻau (plant medicine). The Western elements of the course focuses on human anatomy, medical terminology, basic nursing care, basic home care, nutrition, basic personal care, patient interaction and communication, dressing, bathing and feeding patients, helping patients get out of bed or move about, taking patients' temperature, blood pressure and pulse, and reporting to nurses.

Credits 3

Lecture Hours 3

Prerequisites

Grade of C or better in HLTH 123C or instructor consent.

Course Outcomes

- Explain appropriate pre- and post-procedures used when providing care
- Successfully perform 14 of the State of Hawaii CNA mandatory skills; (even with the non-CNA track, they will be performing the same skills)
- Describe the healthcare standards of care.

HLTH 125 : Survey of Medical Terminology

HLTH 125 familiarizes the student with medical terminology used in both human and animal medicine through analysis of prefixes, suffixes, and word roots. This course covers the pronunciation, spelling, and definitions of selected medical words dealing with mammalian body systems. Commonly used medical abbreviations and pharmacological terms are also discussed.

Credits 1

Lecture Hours 1

Prerequisites

Grade of "C" or better in ENG 21 or ENG 23, or placement in ENG 100X

Corequisites

ENG 100.

Course Outcomes

- Correctly define, spell and pronounce selected medical terms dealing with anatomical planes and regions, anatomy of major body systems and associated diseases and disorders.
- Correctly use plural endings for medical terms.
- Apply knowledge of root words, prefixes and suffixes to identify meaning of novel medical terms.
- Define and give examples of terminology used to describe common surgical and diagnostic procedures.
- Recognize and define common medical and pharmacological abbreviations.

HLTH 134 : Practicum to Hawaiian and Indigenous Health and Healing: Kupuna care for Nurse Aides

This course is a practicum companion to HLTH 124 and prepares students to work in non-long-term care settings. However, it does not qualify students to sit for the State of Hawai‘i Nurse Aide exam to become a Certified Nurse Aide (CNA). Intro to Hawaiian and Indigenous Health and Healing combines traditional Western healing knowledge and care giving skills. Training in the Native Hawaiian traditional healing practices focuses on mälama kapuna (elder care), mälama ʻaina (agricultural practices), kaʻaʻike waha (communication), ʻai Pono (healthy nutrition), hoʻoponopono (mutual restitution), lomilomi (massage), and lāʻau lapaʻau (plant medicine). Western knowledge focuses on human anatomy, medical terminology, basic nursing care, basic home care, emergency care, nutrition, dressing, bathing and feeding patients, taking patients' temperature, blood pressure and pulse, and reporting too nurses. (3 hours Clinical Instruction)

Credits 1

Recommended Preparation

Grade of C or better in ENG 23, OR placement into ENG 100W or higher. Grade of C or better in MATH 75x, OR placement into MATH 82.

Prerequisites

Grade of C or better or registration in HLTH 124.

Course Outcomes

- Explain appropriate pre and post procedures used when providing various types of care;
- Successfully perform 14 of the State of Hawaii CNA mandatory skills.

HLTH 134C : Practicum to Hawaiian and Indigenous Health and Healing: Kupuna care for Nurse Aides

This course is a practicum companion to HLTH 124 and is required for students planning to qualify to sit for the State of Hawaii Nurse Aide exam to become a Certified Nurse Aide (CNA). Intro to Hawaiian and Indigenous Health and Healing combines traditional Western healing knowledge and care giving skills. Training in the Native Hawaiian traditional healing practices focuses on mālama kūpuna (elder care), mālama ʻaina (agricultural practices), kaʻaʻike waha (communication), ʻai Pono (healthy nutrition), hoʻoponopono (mutual restitution), lomilomi (massage), and lāʻau lapaʻau (plant medicine). Western knowledge focuses on human anatomy, medical terminology, basic nursing care, basic home care, emergency care, nutrition, dressing, bathing and feeding patients, taking patients' temperature, blood pressure and pulse, and reporting too nurses. (3 hours clinical instruction)

Credits 1

Recommended Preparation

Grade of C or better in ENG 23, OR placement into ENG 100W or higher. Grade of C or better in MATH 75X, OR placement into MATH 82.

Prerequisites

Grade of C or better or registration in HLTH 124C.

Course Outcomes

- Explain appropriate pre and post procedures used when providing various types of care;
- Successfully perform 14 of the Hawaii CNA mandatory skills.

History

HIST 151 : World History to 1500

A global and historical survey focusing on human societies and cross-cultural interactions to 1500 C.E.

Credits 3

Lecture Hours 3

Designation

FGA

Course Outcomes

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

HIST 152 : World History Since 1500

A global and historical survey focusing on human societies and cross-cultural interactions since 1500 C.E.

Credits 3

Lecture Hours 3

Designation

FGB

Course Outcomes

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

HIST 230 : Pre-Modern European Civilization

A survey of Pre-Modern Europe to 1500 CE. Focus is given to the political evolution and the major economic, social, and cultural development of European states.

Credits 3

Lecture Hours 3

Designation

DH

Recommended Preparation

HIST 151.

Course Outcomes

- Analyze the individuals' roles, events, ideas, and processes (i.e., human migrations, ecological forces, cross-cultural encounters, spread of world religions) that gave rise to a distinct European civilization.
- Synthesize primary sources in order to evidence an argument dealing with a significant issue in Pre-Modern European history.
- Evaluate contemporary issues and events in terms of Pre- Modern European events (i.e., historical roots).

HIST 241 : Civilizations of Asia I

A survey course covering the development of the major civilizations of East Asia, South and Southeast Asia, and historical personages and events from the earliest periods to the 1500's.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

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

HIST 242 : Civilizations of Asia II

A survey course focusing on the changes/development of the major civilizations of East Asia, South and Southeast Asia from the Sixteenth Century to the present. Particular emphasis placed on an analysis of representative Asian societies, the Asian response to the West, and Asian nationalism.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

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

HIST 260 : Twentieth Century World History

This course covers the major individuals and political, economic, social, and culture events of the world during the twentieth century. Emphasis will be placed on global relationships, conflict, and changing patterns of interaction among cultures and peoples in an era of near-constant change.

Credits 3

Lecture Hours 3

Designation

DH

Recommended Preparation

Credit for HIST 152.

Prerequisites

Grade of C or better in ENG 100, or consent of instructor.

Course Outcomes

- Identify important individuals, events, organizations, conflicts, and concepts in twentieth century world history.
- Describe and analyze global processes of the twentieth century (e.g. imperialism, colonialism, economic trends, ecological forces, conflict/war, advancements in technology, etc.)
- Explain cause and effect relationships in twentieth century world history.
- Relate historical events to contemporary issues and events.

HIST 270 : History, Cartoons, and Comic Books: Examining Historical Discourse through Popular Art

This course surveys the history of newspaper strips, comic books, pulp fiction, graphic novels, and other media from the 19th century to the present. Students will analyze different themes in world history--including imperialism, colonialism, war, civil unrest, and revolution--through the medium of the "comic" as it evolved throughout the 19th and 20th centuries. Focused topics include the deconstruction of late 19th/early 20th century political cartoons, the creation of the modern comic book, the birth of the super hero, and historical events such as WWI, The Great Depression, WWII, and the Cold War.

Credits 3

Lecture Hours 3

Designation

DH

Prerequisite Courses

ENG 100

Prerequisites

Grade of C or better in ENG 100, or consent of instructor.

Course Outcomes

- Identify historical, cultural, political, economic,and social themes presented in 19th and 20th century popular forms of cartoons and comic art.
- Compare and contrast different forms of comic and cartoon art of the 19th and 20th centuries.
- Analyze the impact of comic and cartoon discourse throughout 19th and 20th century global history.
- Create an original argument based on the themes and topics of the course and compose a research paper that analyzes a particular piece (or pieces) of comic/cartoon art and its impact on historical discourse.

HIST 281 : Introduction to American History I

An introduction to American history covering significant events in U.S. history from the colonial to Civil War period.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

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

HIST 282 : Introduction to American History II

Continuation of HIST 281 focusing on significant events in American history from Reconstruction (1865) to the present.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Describe, analyze and interpret the major themes in American history from Reconstruction through the 20th century to the present.
- Identify important individuals and events in American history from Reconstruction to the present.
- Critically analyze primary sources.
- Make connections between contemporary events and American history.

HIST 284 : History of Hawai'i

A general study of the social, political and economic development of Hawai'i from the ancient Hawaiians to the present.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Describe, analyze and interpret the major themes in history of Hawai'i from the pre-contact period to the present.
- Critically analyze primary sources.
- Identify important individuals and events in the history of Hawai'i.
- Make connections between contemporary events and Hawai'i's history.

HIST 285 : Environmental History of Hawai'i

This course investigates human interactions with the natural world in the Hawaiian Islands. It is interdisciplinary, drawing on insights from history, geography, anthropology and the natural sciences. Topics covered will include island biogeography and evolution; the natural and human histories of Hawai'i; Hawaiian and American attitudes toward the environment; the impact of introduced diseases, plants and animals in Hawai'i.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Describe cause and effect relationships in the interaction between humans and their environment throughout history.
- Analyze global processes as humans, plants, animals and diseases move around the world.
- Investigate traditional Hawaiian attitudes toward nature.
- Explain the evolution of American attitudes toward nature.
- Apply outcomes 1 through 4 to events specific to Hawai'i and the Windward side of O'ahu in order to evaluate current environmental problems from a historical perspective.

Human Development and Family Studies

HDFS 230 : Human Development and Family Studies

This course provides students with theories of biological, cognitive, and psycho-social development from infancy to adulthood and with similarities and differences among individuals and their cultures.

Credits 3

Lecture Hours 3

Designation

DS

Recommended Preparation

PSY 100.

Course Outcomes

- Compare and contrast the various theories of human development and behavior.
- Describe biological, cognitive, and psychosocial development for each life-span period.
- Investigate the existence of similarities, differences, and uniqueness in human development among individuals and their culture.
- Apply human development theories and concepts to personal, social, educational, and occupational experiences.

HDFS 231 : Infancy and Early Childhood

Growth and development from the prenatal period to age 5. Historical and current issues and research based on ecological, cross-cultural perspectives. Focus on optimal development.

Credits 3

Lecture Hours 3

Prerequisite Courses

HDFS 230

Prerequisites

Grade of C or better in HDFS 230.

Course Outcomes

- Discuss the major milestones of children from conception through age 5 in the main domains of physical, cognitive, and socio-emotional development.
- Discuss the major theories of child development.
- Discuss the interplay between the children and their environmental system (physical settings, family, peers, childcare, neighborhood, economics, social policy, and culture).
- Plan a study to demonstrate basic research skills.

HDFS 232 : Childhood

Intensive investigation into developmental aspects of 6–12 year old children. Historical and current issues, research, and examination of the role of schools and other community resources. Focus on optimal development.

Credits 3

Lecture Hours 3

Prerequisite Courses

HDFS 230

Prerequisites

Grade of C or better in HDFS 230.

Course Outcomes

- Discuss the major milestones of children from conception through ages 6-12 in the main domains of physical, cognitive, and socio-emotional development.
- Discuss the major theories of child development.
- Discuss the interplay between children and their various physical, social, and economic environments.
- Access credible information sources on childhood development.
- Discuss current issues in the field of Human Development and Family Studies.

HDFS 241 : Parenting

Parenting theories, methods, skills, issues, and resources; parent-child relations in various cultural contexts.

Credits 3

Lecture Hours 3

Prerequisite Courses

HDFS 230

Prerequisites

Grade of C or better in HDFS 230.

Course Outcomes

- Discuss different concepts of democratic parenting.
- Demonstrate democratic parenting skills.
- Discuss multiple parenting styles and the Adlerian Philosophy.
- Plan an activity or event to support based on the Five Family Protective Factors to support effective and harmonious families.

Information and Computer Sciences

ICS 100 : Computing Literacy and Applications

Fundamental information technology concepts and computing terminology, productivity software for problem solving, computer technology trends and impact on individuals and society. Emphasizes the utilization of operating systems and the production of professional documents, spreadsheets, presentations, databases, and web pages.

Credits 3

Lecture Hours 3

Recommended Preparation

Credit in both ENG 22 or ENG 23 and MATH 22, 24, 25, 26, 28, 29, 75X or higher.

Course Outcomes

- Utilize the basic features of computer applications to communicate effectively (major content area).
- Utilize operating system interfaces to manage computing resources effectively and securely.
- Utilize online resources for research and communication.
- Define, explain, and demonstrate proper computing terminology usage in areas such as hardware, software, and communications.
- Describe ethical and security issues involved in the use of computing technology.

ICS 101 : Digital Tools for the Information World

Fundamental information technology concepts and computing terminology, productivity software for problem solving, computer technology trends and impact on individuals and society. Emphasizes the utilization of operating systems and the production of professional documents, spreadsheets, presentations, databases, and web pages.

Credits 3

Lecture Hours 3

Course Outcomes

- Utilize the appropriate computing applications to produce professional documents, spreadsheets, presentations, databases, and webpages for effective communication (major content area).
- Utilize operating system interfaces to manage computing resources effectively and securely.
- Extract and synthesize information from available Internet resources using intelligent search and discrimination.
- Define, explain, and demonstrate proper computing terminology usage in areas such as hardware, software, and communications to effectively interact with other computer users and to prepare for higher-level computer courses.
- Describe ethical issues involved in the use of computer technology.

ICS 105 : Introduction to Computing Skills

In this introductory computing course, students will learn basic file management, digital communication, word processing, and presentation software. Students will explore various computing systems and terminology. This course is recommended for students inexperienced in computing.

Credits 3

Lecture Hours 3

Course Outcomes

- Use appropriate computing tools to communicate effectively.
- Demonstrate basic file management tasks.
- Identify computing terminology, systems, and issues.

ICS 107 : Web Site Development

An introduction to the concepts and skills for developing websites from planning through publishing. Design, usability, accessibility, markup and styling language, and integrating media will be emphasized. Web development software utilized.

Credits 3

Lecture Hours 3

Recommended Preparation

Intermediate computing skills including file management and common computing skills: cut, copy, paste, open/save files, web search.

Course Outcomes

- Demonstrate the website development cycle.
- Use appropriate web development software to create an effective website that communicates a message, incorporates appropriate media, and adheres to usability and accessibility standards.
- Describe ethical issues involved in the development and use of websites.

ICS 111 : Introduction to Computer Science I

Intended for computer science majors and all others interested in a first course in programming. An overview of the fundamentals of computer science emphasizing problem solving, algorithm development, implementation, and debugging/testing using an object-oriented programming language.

Credits 3

Lecture Hours 3

Prerequisites

MATH 103 with a grade of "C" or better, placement into MATH 135, or consent of instructor.

Course Outcomes

- Use an appropriate programming environment to design, code, compile, run, and debug computer programs.
- Demonstrate basic problem solving skills: analyzing problems, modeling a problem as a system of objects, creating algorithms, and implementing models and algorithms in an object-oriented computing language.
- Illustrate basic programming concepts such as program flow and syntax of a high-level general purpose language and basic security practices.
- Demonstrate working with primitive data types, strings, and arrays.

ICS 119 : Introduction to Social Media

This computing course explores the foundations of building a presence on the Web, developing an entity's brand and creating a social channel to share ideas, expertise and business philosophies. Topics covered: choosing a domain name, securing a content hosting service, initiating content creation, and constructing a social web channel.

Credits 3

Lecture Hours 3

Recommended Preparation

Write well-formed sentences and organized paragraphs using proper grammar and correct spelling. Have computing skills including file management, uploading/ downloading files and Internet search skills.

Course Outcomes

- Use the appropriate social media tools to create an online identity.
- Create content that uniquely represents an entity's image.
- Plan and implement a social media campaign and analyze its effectiveness.
- Analyze the ethical roles and responsibilities of a content creator.

ICS 121 : Computing Topics

This course covers current computing topics. The course is designed to have variable credits to coincide with the rigor of the topic. Maybe repeated up to 6 credits with different topics. A course description will be on record to designate the various topics for a student's transcript.

Credits 1-4

Lecture Hours 1

Prerequisites

TBA based on course topic.

Course Outcomes

- Produce a final project to demonstrate knowledge of the computer topic.

ICS 123 : Introduction to Digital Audio and Video Production

This is an introductory course covering concepts and skills of working with digital audio and video including recording, editing and publishing online.

Credits 3

Lecture Hours 3

Designation

DA

Recommended Preparation

Intermediate computing skills including file management and common computing skill including cut, copy, paste, open/save files, web search and ability to independently access technical support through online forums.

Course Outcomes

- Record, edit and produce digital audio.
- Produce a digital video project to communicate an effective message.
- Define audio and video terminology and ethical practices as they apply to the use of digital media.

ICS 129 : Introduction to Databases

This course covers the fundamental concepts in database technology, including storage structures, access methods, recovery, concurrency, and integrity. The relational model and its implementation will be covered in depth together with an overview of SQL and its role in application development. The course will also present an overview of database administration, including modeling and design activities. A substantial part of the course involves the development of an understanding of database concepts.

Credits 3

Lecture Hours 3

Course Outcomes

- Define common database terminology.
- Create Entity Relationship Diagrams (ERD).
- Design and create a relational database using the normalization process.
- Use Structured Query Language (SQL) to manipulate data.
- Follow best practices in secure database design.

ICS 141 : Discrete Mathematics for Computer Science I

This course covers logic, sets, functions, matrices, algorithmic concepts, mathematical reasoning, recursion, counting techniques, and probability theory.

Credits 3

Lecture Hours 3

Designation

FQ

Prerequisites

Grade of "C" or better in MATH 103 or placement into MATH 135 or higher, or consent of instructor.

Course Outcomes

- Analyze issues and apply mathematical problem solving skills to plan courses of action in decision-making situations.
- Solve problems by using basic mathematical formal logic, proofs, recursion, analysis of algorithms, sets, combinatorics, relations, functions, matrices and probability.

ICS 171 : Introduction to Computer Security

Examines the essentials of computer security, including risk management, the use of encryption, activity monitoring, intrusion detection; and the creation and implementation of security policies and procedures to aid in security administration.

Credits 3

Lecture Hours 3

Prerequisites

ICS 184 with a C or better, or concurrent enrollment, or consent of the instructor.

Course Outcomes

- List the first principles of security and describe why each principle is important to security and its relationship to the development of security mechanisms and security policies.
- Describe why good human machine interfaces are important to system use, the interaction between security and system usability and the importance for minimizing the effects of security mechanisms.
- Analyze common security failures and identify specific design principles that have been violated, and the needed design principle, when given a specific scenario.
- List the fundamental concepts of the Information Assurance/ Cyber Defense discipline and describe how they can be used to provide system security.
- Identify the elements of a cryptographic system and describe the differences between symmetric and asymmetric algorithms, which cryptographic protocols, tools and techniques are appropriate for a given situation, and implementation issues.

ICS 184 : Introduction to Networking

This course provides the student with the knowledge and skills to manage, maintain, troubleshoot, install, operate and configure basic network infrastructure, as well as to describe networking technologies, basic design principles, and adhere to wiring standards and use testing tools. The course also introduces the student to network security concepts.

Credits 3

Lecture Hours 3

Course Outcomes

- Manage networking projects as part of a team.
- Discuss information security technologies such as cryptography, digital signatures, key management, and authentication as they relate to computer networks.
- Describe the fundamental concepts, technologies, components, terminology, protocols, standards organizations, and business, legal, ethical, and security issues related to communications and data networks.
- Describe a basic secure network architecture in accordance with current best practices given a specific need and set of hosts/clients.
- Use current network tools to monitor, map and troubleshoot a network and to track and identify packets.

ICS 193V : Cooperative Education/Internship/Practicum

Cooperative program between the student, an employer, and the College that integrates classroom learning with supervised practical experience. Reflects the student's major interest area and availability of job assignments. Offers the opportunity to develop workplace employability skills dependent on job assignments and course of study.

Credits 1-3

Lecture Hours 1

Prerequisites

Various as determined by the particular course of study and placement of the cooperative education/internship practicum in the sequence of courses.

Course Outcomes

- Complete computer assignments in a job that is cooperatively supervised by the employer and College.
- Demonstrate the skills in the above assignments to both the College and the employer.

ICS 203 : Digital Image Editing

Introduction to the terminology, tools, features and techniques of digital image editing.

Credits 3

Lecture Hours 3

Designation

DA

Recommended Preparation

Intermediate Computing Skills which include the following: File management File Compression Upload/ download files Internet search skills Troubleshooting skills

Course Outcomes

- Use photographic practices and concepts to demonstrate the merits of digital photography.
- Implement skills for digital image capture and manipulation with a variety output formats and input devices.
- Apply the visual elements of line, shape, value, color, texture, space, time and motion as well as the design principles of balance, rhythm, emphasis, contrast, variation and unity in the creation of digital art works.
- Complete the creative process from concept development through revisions to final output using problem-solving strategies.

ICS 207 : Building Web Applications

Web Applications introduces programming for the web. Topics include: problem solving; web interactivity for websites; building applications with web authoring languages for markup, styling and scripting; presenting applications for mobile devices.

Credits 3

Lecture Hours 3

Recommended Preparation

Students must have HTML and CSS experience.

Course Outcomes

- Programming with javascript
- Utilizing javascript with HTML and CSS to create a web application.
- Using events to trigger an action
- Drawing on the web canvas
- Using video and audio files on a web page
- Going beyond standard fonts
- Detecting the screen size of a device and optimize the application for the different sizes
- Using local storage to remember data across web sessions.

ICS 211 : Introduction to Computer Science II

Reinforce and strengthen problem-solving skills using abstract data types and introduce software development practices. Emphasize the use of searching and sorting algorithms and their complexity, recursion, object-oriented programming, and data structures.

Credits 3

Lecture Hours 3

Prerequisites

A grade of "C" or better in ICS 111 or consent of instructor.

Course Outcomes

- Use and implement abstract data types such as lists, stacks, queues, and trees.
- Select the appropriate searching or sorting algorithm based on the algorithm's behavior.
- Develop recursive algorithms and programs.
- Use standard libraries or packages as well as advanced object-oriented programming techniques (polymorphism, inheritance, and encapsulation).
- Produce robust and secure programs using exception handling and extensive program testing.

ICS 212 : Program Structure

Program organization paradigms, programming environments, implementation of a module from specifications, the C and C++ programming languages.

Credits 3

Lecture Hours 3

Prerequisites

Grade of "C" or better in ICS 211 or consent of instructor.

Course Outcomes

- Use an editor, make file, and compiler in the UNIX environment.
- Use recursion, arrays, pointers, character variables, bitwise operators, structures, and linked data structures in C.
- Use classes (constructors, destructor, and overloading assignment), operator overloading, inheritance, and polymorphism in C++.
- Use linked data structures and recursion in C++.
- Use standard C++ strings and C++ STL library data structures, such as STL lists.

ICS 215 : Introduction to Scripting

Introduction to scripting languages for the integration of applications and systems. Scripting in operating systems, web pages, server-side application integration, regular expressions, event handling, input validation, selection, repetition, and parameter passing for languages such as Perl, JavaScript, PHP, Python, and/ or shell scripting.

Credits 3

Lecture Hours 3

Prerequisites

Grade of "C" or better in ICS 211 or consent of instructor.

Course Outcomes

- Use regular expressions to solve different problems.
- Produce robust client and server side scripts in a variety of scripting languages using software engineering techniques such as review and extensive program testing.
- Handle user and system generated events using various scripting languages.
- Validate user input using various scripting languages for security purposes.

ICS 240 : Operating Systems

This course introduces students to various aspects of Operating Systems. This course examines and explores the structure, basic functionality, administration, troubleshooting, and installation of operating systems and related applications. Advanced topics include scripting, operating system security, maintenance and services.

Credits 3

Lecture Hours 3

Prerequisite Courses

ICS 111

Prerequisites

Grade of C or better in ICS 111.

Course Outcomes

- Install and maintain an operating system and essential system services.
- Describe the core components within operating system.
- Demonstrate proper use of common operating system commands.
- Write simple shell scripts to perform different tasks.

ICS 241 : Discrete Mathematics for Computer Science II

Includes program correctness, recurrence relations and their solutions, divide and conquer relations, graph theory, trees and their applications, Boolean algebra, introduction to formal languages and automata theory.

Credits 3

Lecture Hours 3

Prerequisites

Grade of "C" or better in ICS 141 or consent of instructor.

Course Outcomes

- Analyze issues and apply more complex mathematical problem solving skills to plan courses of actions in high-level decision-making situations.
- Utilize such tools as graphs, trees, boolean algebra, and recurrence relations.
- Explain discrete math concepts such as formal languages, finite-state machines, and program correctness.

ICS 281 : Ethical Hacking

This course covers basic ethical hacking techniques also known as white hat hacking. It stresses the moral and legal issues about hacking and how these techniques can be used to defend against attacks as well as to perform authorized system security evaluation testing.

Credits 3

Lecture Hours 3

Prerequisites

Grade of C or better in ICS 171, or consent of instructor.

Course Outcomes

- Demonstrate how to apply current cyber-attack, countermeasures and best practices using current cyber defense tools, methods and components.
- Implement a defense incident response and recovery strategies.
- Evaluate the moral and legal obligations of an ethical hacker.
- Apply the knowledge gained in hardening systems to prevent or minimize attacks.

ICS 282 : Computer Forensics

This course covers basic computer forensics including operating system diagnostics, the use of forensic toolkits to examine and validate computer activity and techniques for the proper collection, examination and preservation of forensic evidence.

Credits 3

Lecture Hours 3

Prerequisites

Grade of C or better in ICS 171, or consent of instructor.

Course Outcomes

- Discuss the rules, laws, policies, and procedures that affect digital forensics.
- Demonstrate the proper use of one or more common digital forensics tools.
- Describe the steps in performing digital forensics from the initial recognition of an incident through the steps of evidence gathering, preservation and analysis, through the completion of legal proceedings.

Interdisciplinary Studies

IS 103 : Introduction to College

This course offers strategies for success in college and life-long learning. It emphasizes understanding yourself, setting and attaining goals, critical thinking, effective communication, relationship building, study habits and skills, time management, college resources, and setting your foundation to succeed. Students will participate in and lead classroom learning through discussions, readings, writing assignments, group activities, and hands-on experiences.

Credits 3

Lecture Hours 3

Course Outcomes

- Identify personal characteristics (e.g., learning styles, strengths and weaknesses, habits of mind) and analyze how these impact decision-making and success.
- Consider those factors which impact student relationships with others and articulate strategies and skills to encourage strong relationship building.
- Identify college policies and resources related to students.
- Practice learning strategies (e.g., note-taking, time management, test-taking) to increase success in college coursework.

IS 105B : Career Decision Making

An introductory course designed to prepare students to make more focused career/life decisions through self analysis and world of work examinations.

Credits 2

Lecture Hours 2

Recommended Preparation

Placement in ENG 22 or ENG 23 or higher.

Course Outcomes

- Describe the career development process, current labor market trends, and issues related to economic self-sufficiency.
- Identify personal, family, cultural, and financial influences that relate to their career and educational decisions.
- Apply career knowledge by exploring their interests, skills, values, personality traits.
- Illustrate how their career search relates to job shadowing and service learning activities choices.
- Evaluate the effectiveness of the career decision making process by keep a journal and responding to evaluations of the instructor.

IS 105C : Professional Employment Preparation

Facilitates employment search by emphasizing professional techniques and standards in the preparation of application forms, resumes, cover letters, and employment interviews.

Credits 1

Lecture Hours 1

Recommended Preparation

Credit for ENG 22, ENG 23, or higher, keyboarding skills, and knowledge of word processing.

Course Outcomes

- Integrate job interview preparation techniques into a live interview.
- Utilize resources needed to find a job.
- Assemble a career portfolio for ongoing career development.

IS 130 : CSI Hawaii: An Introduction to the Scientific Process Using Forensic Science

This is an interdisciplinary science course that uses forensic science to teach students about the scientific process. It draws chiefly upon biology but also incorporates elements of chemistry, mathematics, and physics. Topics covered include the biology of mammals (including humans), anatomy and physiology of select body systems, types of forensic evidence, latent fingerprints, blood typing, and blood spatter analysis, osteology, hair and fiber analysis, fluorescence of bodily fluids, and ballistics. This is a non-majors class intended for students who have an interest in forensic science and wish to satisfy DB and DY requirements for the AA degree. It is not intended for forensic science majors.

Credits 3

Lab Hours 3

Lecture Hours 2

Designation

DB

DY

Recommended Preparation

Credit for ENG 100 and MATH 100 or higher

Course Outcomes

- Explain the anatomy and function of select body systems (e.g., integumentary, skeletal, and cardiovascular)
- Describe the various types of physical and biological evidence used in forensic science and discuss their uses and limitations.
- Use the scientific method to analyze and interpret forensic data, identify a suspect, and describe the modus operandi.

IS 201 : The Ahupua'a

Study of the traditional Hawaiian approaches to natural resource development, utilization, exploitation, and management. The ahupua'a, as the traditional Hawaiian unit of land and sea subdivision, beginning in the upland forests, stretching across lower elevations, past the shoreline to the edge of the reef, will be evaluated as a microcosm of an integrated ecosystem and as a model for natural resource management and sustainability.

Credits 3

Lab Hours 3

Lecture Hours 2

Designation

DB

DY

Recommended Preparation

BIOL 101 or BIOL 124 or similar preparation.

Course Outcomes

- Describe how Hawai'i's unique geological formation affects its sustainable natural resources.
- Describe how the ancient migration begins to affect the management of its natural resources and the socio-political fabric of the "new land."
- Describe the agri-spiritual relationship between plant and mahi'ai; and the fish and the lawai'a.
- Discuss the ancient and present management value of water.
- Describe and assist in the reconstruction of lo'i kaloandlokoi'a.
- Describe and discuss the current resources management practices, which augment or negate ancient practices.
- Research and replicate an artifact of his or her choice.

IS 204 : Themes in Popular Culture

An interdisciplinary study of a specific event, person, idea, or process in popular culture which will bring together various methodologies and conceptual tools to create a complex analysis. Topics covered will include: the concept of popular culture, how elements of popular culture are created and circulated, how elements of popular culture connect to historical, political, social, symbolic and intellectual history, how different groups in society are related to the elements of popular culture, and how popular culture plays a role in the lives of individuals.

Credits 3

Lecture Hours 3

Course Outcomes

- Identify the connection between the theme in popular culture with larger political, social, and intellectual patterns in society.
- Analyze the connection between the theme in popular culture and other themes, either contemporary or historical.
- Participate effectively in group discussions, given evidence of thoughtfulness and an engagement with other people's positions.
- Connect local elements of popular culture to global economic and political systems.
- Explain and justify an evaluation of the role of popular culture in the student's life.

IS 207 : Research in Sustainability

IS 207 offers a research experience in sustainability, drawing upon the natural sciences, social science, humanities, Hawaiian studies, language arts, mathematics, or other disciplines. This is a research-based course emphasizing the application of scholarly methods to a specific project. Repeatable for up to 6 credits.

Credits 3

Lecture Hours 3

Course Outcomes

- Execute research appropriate to the discipline.
- Access information from multiple scholarly sources.
- Report research in ways appropriate to discipline.
- Examine and apply concepts of sustainability to local, regional and/or global challenges.

IS 231 : The Zombie Apocalypse & Other Doomsday Beliefs in Popular Culture

An interdisciplinary study of the zombie apocalypse and other doomsday beliefs in popular culture which will bring together various methodologies and conceptual tools to create a complex analysis. Topics covered will include: the concept of apocalyptic beliefs in popular culture; how apocalyptic beliefs are created and circulated in popular culture; how elements of apocalyptic beliefs in popular culture connect to historical and contemporary philosophical, religious, political, and psychological issues; how different groups and individuals in history and contemporary society relate to apocalyptic beliefs.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Identify significant themes in representations of doomsday beliefs in popular culture (e.g., social contract, communitarianism, tribalism, realism, liberalism, neo-conservatism, fascism, barbarism, morality).
- Analyze doomsday beliefs in popular culture using historical, religious, political, philosophical, psychological, social, &/or intellectual frameworks.
- Evaluate how doomsday beliefs in popular culture serve as metaphor to current issues and events, and provides social commentary on the historical context it was produced in.

IS 295A : Hawaiian Knowledge Innovation Capstone

This is a capstone project course for the Academic Subject Certificate in Hawaiian Knowledge Innovation. Students enrolled in this ASC program will apply knowledge they have learned from both their Information and Computer Science and Hawaiian Studies Classes to develop and finish an independent technology based project using a Hawaiian theme and Hawaiian cultural content. Students will work with two faculty members, one from the Hawaiian Studies/Hawaiian Language disciplines, and one from the Information and Computer Sciences discipline to develop their project. Students can work both individually and in small groups depending on capstone enrollment and faculty approval on a case-by-case basis. Students will be required to meet with faculty mentors regularly throughout the semester. Students will be required to track weekly hours spent on research and project development. (3 hours cooperative education)

Credits 3

Prerequisites

Instructor Consent

Course Outcomes

- Document the technical and cultural knowledge and sources needed to carry out project idea.
- Translate project ideas into a realistic work plan that draws on both technical and cultural sources.
- Produce and professionally present the project plan and results.

Japanese Language

JPN 101 : Elementary Japanese I

An introductory course focusing on grammar and vocabulary sufficient to maintain conversation at the elementary level and on the three writing systems: hiragana, katakana, and kanji.

Credits 4

Lecture Hours 4

Course Outcomes

On completing the course, students will be able to:

- Express themselves orally using learned phrases and sentences for introductory-level students in various social and academic contexts.
- Read learned materials written in hiragana, katakana and approximately 75 kanji.
- Write short sentences and passages using the three writing systems: hiragana, katakana and kanji.

JPN 102 : Elementary Japanese II

A continuation of JPN 101 focusing on additional grammar topics and increased vocabulary to maintain conversation at the elementary level and on the three writing systems: hiragana, katakana, and kanji.

Credits 4

Lecture Hours 4

Prerequisites

Credit for JPN 101 or consent of instructor.

Course Outcomes

On completing the course, students will be able to:

- Express themselves orally using sentences combining learned and new vocabulary and grammatical structures in various social and academic contexts.
- Read materials in hiragana, katakana and learned kanji, such as menus, memos, and passages
- Develop a functional command of 161 kanji.

JPN 108 : Basic Japanese Conversation

Elementary-level conversational Japanese to develop speaking and understanding of Japanese culture. This is a course recommended for people who deal with or are interested in things concerning Japan.

Credits 3

Lecture Hours 3

Course Outcomes

- Use basic Japanese to communicate appropriately in formal and informal situations.

JPN 201 : Intermediate Japanese I

A continuation of JPN 102 focusing on additional grammar topics and increased vocabulary to maintain conversation at the intermediate level and on the three writing systems: hiragana, katakana, and kanji.

Credits 4

Lecture Hours 4

Prerequisites

Credit for JPN 102 or consent of instructor.

Course Outcomes

On completing the course, students will be able to:

- Express themselves orally using complex sentences in a variety of everyday situations, reinforcing what students have already learned in JPNS 101/102.
- Read several paragraphs utilizing skimming, scanning, and intensive reading techniques.
- Write various kinds of texts, such as letters, suggestions, and descriptions, reinforcing what students have already learned in JPNS 101/102.
- Learn 75 new kanji.

JPN 202 : Intermediate Japanese II

A continuation of JPN 201 focusing on additional grammar topics and increased vocabulary to maintain conversation with greater proficiency at the intermediate level and on the three writing systems: hiragana, katakana, and kanji.

Credits 4

Lecture Hours 4

Prerequisites

Credit for JPN 201 or consent of instructor.

Course Outcomes

On completing the course, students will be able to:

- Express themselves orally using complex sentences in a variety of everyday situations, reinforcing what students have already learned in JPN 101/102/201.
- Read several paragraphs utilizing skimming, scanning, and intensive reading techniques.
- Write various kinds of texts, such as letters and stories, reinforcing what students have already learned in JPN 101/102/201.
- Learn 118 new kanji. 5. Develop communication skills by comparing Japanese culture/society/history with their own to broaden their understanding of the world.

Journalism

JOUR 150 : Media and Society

The role of the media in contemporary society, including development, influence, rights, responsibilities, issues and trends - with emphasis on the social, political and economic effects.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Compare and evaluate various forms of mass media and their effect on society.
- Use critical reasoning skills to distinguish fact from opinion and judge the credibility of various information sources.
- Describe and apply basic mass media principles as well as social science methods (e.g. interviews, observation and surveys) to analyze examples from the media.
- Illustrate and explain why an understanding of news and media literacy is important in the 21st century.

JOUR 200 : Introduction to Multimedia Journalism

Fundamentals of multimedia journalism including reporting stories that include photography, audio, graphics and video that can be combined into the ideal online package.

Credits 3

Lecture Hours 3

Course Outcomes

- Apply basic journalistic concepts and principles to produce multimedia stories that can be published online.
- Generate story ideas and determine the best way to convey those stories through text, audio, photography, video and/ or infographics.
- Gather essential information for a story, including conducting interviews, following through on assignments and meeting deadlines.
- Take pictures using a digital camera applying concepts of photocomposition and then edit them using editing software.

JOUR 250 : Media Writing

An introductory course in reporting and writing news stories for delivery to different media, including print, online media and video.

Credits 3

Lecture Hours 3

Prerequisites

"C" or better in ENG 100.

Course Outcomes

- Analyze the quality of coverage in stories produced by the mass media to become a more informed consumer of news.
- Describe the basic journalistic issues related to news values and communication law and ethics.
- Produce various multimedia writing (print, online media, and video) using journalistic concepts and principles.
- Write, edit and proofread stories for readability, clarity, accuracy, news value, conciseness and mechanics.

JOUR 270 : Introduction to Multimedia Storytelling

Fundamentals of multimedia storytelling using video, audio and photography to report and produce news and documentary stories for the web and other distribution platforms.

Credits 3

Lecture Hours 3

Designation

DA

Prerequisites

Credit for or registration in JOUR 150 or JOUR 250 or consent of instructor

Course Outcomes

- Produce various news videos and short documentaries independently or in groups that meet professional journalistic standards and ethics
- Generate story ideas; research, gather and organize information; follow through on assignments; and meet deadlines
- Apply basic knowledge and skills of digital video production including cinematography, sound and editing
- Critically analyze news videos and documentaries produced by the mass media

JOUR 286 : Multimedia News Production

Students will develop intermediate skills in video journalism and produce video and multimedia news stories about campus and community events and issues for publication on the Ka 'Ohana website and other distribution platforms. Repeatable for up to 6 credits. (Crosslisted as CM 286.)

Credits 3

Lecture Hours 2

Designation

DA

Prerequisites

Credit for CM 120 or JOUR 120; or consent of instructor.

Course Outcomes

- Produce various news videos independently or in groups that meet professional journalistic standards and can be published on the Ka 'Ohana website.
- Generate story ideas; research, gather and organize information; work collaboratively with editors and reporters; follow through on assignments; and meet deadlines.
- Develop basic knowledge and skills of digital video production including cinematography, sound and editing.
- Critically analyze news videos produced by the mass media.

JOUR 287V : Newspaper Production

Complete production of the student newspaper Ka'Ohana, including reporting, writing, layout, editing, photography, web and social media. Repeatable for up to 6 credits.

Credits 1-3

Lecture Hours 1

Prerequisites

Grade of C or better in ENG 100 and credit for or registration in JOUR 205 or 250; or consent of instructor. NOTE: credits are variable 1 to 3 credits.

Course Outcomes

- Apply basic journalistic concepts and principles to produce a range of articles that meet standards for publication, including readability, accuracy, news style and mechanics.
- Demonstrate a working knowledge of page design principles and software to produce pages for a tabloid publication.
- Apply knowledge of photography to take pictures using a digital camera and to edit them for publications.
- As part of a team, produce a monthly publication that meets journalistic standards for news value, readability, accuracy, objectivity, clarity, balance and fairness.
- Demonstrate an ability to generate story ideas, meet deadlines, gather and organize information, and follow through on assignments.

Learning Skills

LSK 110 : College Study Skills

This course assists students to deal more effectively with the rigors of the academic expectations of college. Students will carefully assess their work habits, attitudes, and learning styles and will learn specific strategies to achieve academic success.

Credits 3

Lecture Hours 3

Prerequisites

Placement in ENG 21 or ENG 23 or higher or consent of instructor.

Course Outcomes

- Analyze and evaluate one's own academic strengths and weaknesses in processing information, preparing for learning, textbook and lecture note taking techniques and strategies, and test taking skills.
- Apply various study skills strategies and techniques.
- Complete the required library research units in order to write a short research paper involving strategies that include finding, evaluating, and documenting information from various sources.

Linguistics

LING 102 : Introduction to Language

An investigation of the nature and function of language, its sounds, structures and semantics, oral and written expression, acquisition and change. General linguistic principles applicable to all languages will be covered. We will learn ways of talking about language that will enable us to discuss language and understand what linguists do and say.

Credits 3

Lecture Hours 3

Designation

DH

Prerequisites

Credit for ENG 22 or ENG 23 or higher or consent of instructor.

Course Outcomes

- Examine and appreciate humanity's supreme achievement— human language—and its repercussions.
- Articulate an appreciation of human languages and how they work.
- Articulate the diversity of communication systems in daily lives.
- Examine and assess one's own language beliefs, capabilities, and learning.

Management

MGT 120 : Principles of Management

This course is a practical introduction to and study of management principles and practices. The student will learn the elements needed to manage effectively as well as better understand the decision making process in business.

Credits 3

Lecture Hours 3

Course Outcomes

- Describe the basic functions of management including planning, organizing, staffing, leading and controlling.
- Apply management skills in areas such as technical, human relations, administration, communication and problem solving.
- Discuss ethical dilemmas faced by managers and the social responsibilities of business.
- Develop strategies to reduce resistance to change

Math

MATH 75X : Introduction to Mathematical Reasoning

This course prepares students for MATH 100, MATH 101, MATH 111, and MATH 115. Course topics include ratio and percent, unit conversion, graphs, data interpretation, basic algebra, solving linear equations, and working with formulas with special emphasis on pattern recognition and problem solving. Additional topics may include set theory, inequalities, and quadratics.

Credits 4

Lecture Hours 4

Course Outcomes

- Solve applied mathematical problems, judge reasonableness of results, and communicate conclusions using appropriate terminology and symbols
- Recognize and express mathematical patterns in various forms and contexts
- Perform operations on real numbers
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form

MATH 78 : College Math Companion

This course provides students concurrently enrolled in MATH 100, MATH 101, MATH 111, or MATH 115 with Just-In-Time support with special emphasis on pattern recognition and problem solving. Course topics are tailored to the concurrent course and may include ratio and percent, unit conversion, graphs, data interpretation, basic algebra, solving linear equations, and working with formulas. (Grading is CR/NC)

Credits 1

Lecture Hours 1

Prerequisites

Satisfactory Placement Score

Course Outcomes

- Demonstrate college-level mathematical reasoning skills.

MATH 82 : Algebraic Foundations

This course covers elementary algebra topics. Topics include linear equations and inequalities, graphing, linear systems, properties of exponents, operations on polynomials, factoring, rational and radical expressions and equations, quadratic equations, and applications.

Credits 4

Lecture Hours 4

Prerequisites

Satisfactory Placement, or a Grade of "C" or better in Math 21, Math 21B, Math 24, Math 28, or Math 75X.

Course Outcomes

- Use algebraic techniques to analyze and solve applied problems
- Graph linear and quadratic equations
- Solve equations, inequalities, and systems
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form

MATH 88 : College Algebra Companion

Math 88 provides students with supplemental algebra instruction that directly supports the topics covered in Math 103. (Grading is CR/NC)

Credits 2

Lecture Hours 2

Prerequisites

Satisfactory Placement Score

Corequisites

MATH 103

Course Outcomes

- Demonstrate algebra skills needed to be successful in Math 103

MATH 100 : Survey of Mathematics

An introduction to quantitative and logical reasoning for the nonscience/nonmathematics major. The question, "What is mathematics?" is explored, while focusing on mathematical systems or models, cultivating an appreciation for mathematics as an aesthetic art, and developing skills in problem-solving and analysis.

Credits 3

Lecture Hours 3

Designation

FQ

Prerequisites

"C" or better in MATH 25, 26, 28, 29, 75X or higher or equivalent

Corequisites

enrollment in MATH 78, satisfactory math placement test score, or consent of instructor.

Course Outcomes

- Utilize basic properties and/or operations related to the topics covered in the course.
- Employ symbolic/mathematical techniques to solve applied problems.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 101 : Mathematics for Veterinary Assistants & Technicians

An introduction to clinical calculations used in veterinary medicine. Topics include the application of mathematical skills to solve applied problems in veterinary nursing and pharmaceutical dispensing with emphasis on dosage, concentration, dilution and drip rates. Also included is mathematical and laboratory terminology. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields.

Credits 3

Lecture Hours 3

Designation

FQ

Prerequisites

Grade of C or better in MATH 25, 26, 28, 29, 75X or higher or equivalent, satisfactory math placement test score.

Course Outcomes

- Identify information needed for dosage calculations and perform dosage calculations.
- Utilize appropriate techniques to solve applied problems in the veterinary profession.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.
- Demonstrate proficiency in calculating infusion rates for fluid therapy.

MATH 103 : College Algebra

Linear equations, inequalities, systems of equations, polynomials, functions, fractional expressions and equations, exponents, powers, roots, quadratic equations and functions; rational, exponential and logarithmic functions.

Credits 4

Lecture Hours 4

Designation

FQ

Prerequisites

"C" or better in MATH 25, 26, 29, 82 or equivalent

Corequisites

enrollment in MATH 88, satisfactory math placement test score, or consent of instructor.

Course Outcomes

- Graph or interpret algebraic relations that are relevant to the topics in this course.
- Employ algebraic techniques to find the solutions to equations or inequalities, or systems of equations or inequalities appropriate to the level of this course.
- Use algebraic techniques to analyze and solve applied problems.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 111 : Mathematics for Elementary Teachers I

Math 111 is the first of a two-course sequence designed to give prospective elementary education majors the depth of understanding necessary to teach mathematics in the elementary classroom. Topics include number (natural numbers, integers, fractions, and real numbers) and operations, sets, patterns, functions and algebra. Emphasis will be on communication, connections and problem solving, representations, and reasoning and proof.

Credits 3

Lecture Hours 3

Prerequisites

"C" or better in Math 25, 26, 28, 29, 75X, or higher or equivalent, satisfactory math placement test, and grade of C or better in ENG 22 or ENG 23 or placement in ENG 100.

Course Outcomes

- Explain the meaning of numerical operations and how they relate to each other.
- Utilize symbolic forms to represent, model, and analyze mathematical situations to solve problems.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 112 : Mathematics for Elementary Teachers II

Math 112 is the second of a two-course sequence designed to give prospective elementary education majors the depth of understanding necessary to teach mathematics in the elementary classroom. Topics include the representation of and operations on the natural numbers and properties of those operations. Emphasis will be on communication, connections and problem solving, representation and reasoning.

Credits 3

Lecture Hours 3

Designation

FQ

Prerequisites

Grade of "C" or better in MATH 111.

Course Outcomes

- Use mathematical concepts to demonstrate critical thinking.
- Employ appropriate techniques to solve problems related to elementary math education.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 115 : Introduction to Statistics and Probability

Utilizes basic statistical topics including measures of central tendency and dispersion, classification of variables, sampling techniques, elementary probability, normal and binomial probability distributions, tests of hypothesis, linear regression and correlation in order to solve problems.

Credits 3

Lecture Hours 3

Designation

FQ

Prerequisites

Grade of C or better in Math 25, 26, 28, 29, 75X or higher or equivalent, satisfactory math placement test score, or consent of instructor.

Course Outcomes

- Calculate and interpret statistical information.
- Calculate and interpret probabilities for binomial or normal distributions, including the use of the Central Limit Theorem.
- Demonstrate the use of inferential statistics.
- Utilize appropriate statistical terminology and mathematical symbols to effectively communicate mathematics in written and/or oral form.

MATH 135 : Precalculus: Elementary Functions

Investigates linear, quadratic, polynomial, rational, exponential, logarithmic functions, and related topics. This course is the first part of the precalculus sequence

Credits 3

Lecture Hours 3

Designation

FQ

Prerequisites

Grade of "C" or better in MATH 103 or equivalent, satisfactory math placement test score, or consent of instructor.

Course Outcomes

- Use appropriate symbolic techniques to analyze and solve applications problems.
- Utilize elementary function concepts.
- Graph elementary functions utilizing behavior information and/or transformations.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 140 : Precalculus: Trigonometry and Analytic Geometry

Studies trigonometric functions, analytic geometry, polar coordinates, vectors, and related topics. This course is the second part of the precalculus sequence.

Credits 3

Lecture Hours 3

Designation

FQ

Prerequisites

Grade of "C" or better in MATH 135 or equivalent, satisfactory math placement test score, or consent of instructor.

Course Outcomes

- Employ algebraic and geometric representations of trigonometric functions and other relations.
- Use appropriate techniques to analyze and solve application problems requiring the use of trigonometry or analytical geometry.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 203 : Calculus for Business and the Social Sciences

Basic mathematical concepts, topics in differentiation and introductory integration of algebraic, exponential and logarithmic functions. Related applications to management, finance, economics and social science will be considered.

Credits 3

Lecture Hours 3

Designation

FQ

Prerequisites

Grade of "B" or better in MATH 103, "C" or better in MATH 135 or equivalent, satisfactory math placement test score or consent of instructor.

Course Outcomes

- Demonstrate proficiency in determining limits, derivatives, and integrals.
- Use calculus techniques to analyze and solve applied problems.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 241 : Calculus I

Basic mathematical concepts, topics in differentiation, and introductory integration of algebraic and trigonometric functions. Applications of differentiation and integration will be demonstrated. Formerly MATH 205.

Credits 4

Lecture Hours 4

Designation

FQ

Prerequisites

Grade of "C" or better in MATH 140 or equivalent, satisfactory math placement test score, or consent of instructor.

Course Outcomes

- Demonstrate proficiency in determining limits, derivatives, and integrals.
- Use calculus techniques to analyze and solve applied problems.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 242 : Calculus II

Differentiation and integration concepts of trigonometric, exponential, logarithmic and hyperbolic functions. Integration implements, infinite series, and applications of derivatives and integrals are also featured. Formerly MATH 206.

Credits 4

Lecture Hours 4

Prerequisites

Grade of "C" or better in MATH 205 or MATH 241 or equivalent or consent of instructor.

Course Outcomes

- Demonstrate proficiency in determining limits, derivatives, and integrals associated with the topics in the course.
- Use concepts from the course to solve applied problems.
- Demonstrate proficiency in working with sequences or series.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 243 : Calculus III

Vector algebra, vector-valued functions, differentiation in several variables, and optimization. Formerly MATH 231.

Credits 3

Lecture Hours 3

Prerequisites

Grade of "C" or better in MATH 206 or MATH 242 or equivalent.

Course Outcomes

- Apply concepts and techniques in vector calculus.
- Apply principles and concepts from calculus to multivariable functions.
- Use strategies from this course to solve applied problems.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

MATH 244 : Calculus IV

Math 244 is the fourth course in the calculus sequence. Topics include multiple integrals, line integrals, Green's Theorem, surface integrals, Stokes' Theorem, Gauss' Theorem and differential equations. Formerly MATH 232.

Credits 3

Lecture Hours 3

Prerequisites

Grade of C or better in Math 231 or MATH 243 or equivalent or consent of instructor.

Course Outcomes

- Compute multiple integrals in various coordinate systems.
- Use multiple integrals or vector calculus techniques to solve applied problems.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

Microbiology

MICR 130 : General Microbiology

Fundamentals of microbiology, growth, development, and classification of bacteria, viruses, protozoa, fungi and algae; roles of microorganisms in the environment and human affairs: medical microbiology, immunology, and applied microbiology for food sanitation and public health.

Credits 3

Lecture Hours 3

Designation

DB

Course Outcomes

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

MICR 140L : General Microbiology Lab

Laboratory course illustrating fundamental techniques and concepts of microbiology, such as microscopic observations, aseptic transfer, microorganism classification and identification, environmental factors influencing microorganisms, biochemistry of microorganisms, ecological microbiology, and medical microbiology. This course is designed to complement MICR 130. Primarily for students in Agripharmatech, nursing, dental hygiene and nutrition. Science laboratory course.

Credits 2

Lab Hours 4

Designation

DY

Prerequisites

Credit for or registration in MICR 130; placement into Math 24, 25, 26, 28, 29, 82 or higher.

Course Outcomes

- Operate equipment used in microbiology laboratory.
- Prepare growth media.
- Perform aseptic transfer.
- Identify microorganisms using morphological and physiological tests.
- Follow biosafety procedures.
- Produce lab reports using the standard scientific format.

Music

MUS 106 : Intro to Music Literature

Elements, styles, and forms of music, from the listener's standpoint. Focus on classical music literature. Concert attendance and written critique required for two live performances during semester.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

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

MUS 107 : Music in World Cultures

Music as organized sound and as a cultural object. Role of music in various societies: ancient and modern, sophisticated and non-sophisticated, child and adult, Western and non-Western. Representative styles and regional characteristics viewed in terms of musical characteristics and related cultural factors; a conceptual introduction to music and culture. Attendance at one ethnic performance is required.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Describe the role of music in different cultures.
- Describe the distinctive aural features and music aesthetics of a music culture.
- Describe the historical, religious, social, and political aspects of a society that contribute to the development of a music culture.
- Affirm the validity of other music traditions.
- Contrast/compare one's own music within the broader context of other music traditions.

MUS 108 : Music Fundamentals

A basic music theory course. Emphasis on learning basic concepts involved in reading and writing music. Notation and reading of simple and compound rhythm, pitch, intervals and triads. Application to performance.

Credits 3

Lecture Hours 3

Designation

DA

Course Outcomes

- Read and write music (pitch and rhythm) in conventional notation.
- Identify and write major and minor key signatures and scales; intervals, triads.
- Apply knowledge to performance on a primary instrument.
- Apply knowledge of solfege to diatonic melodies in major and minor keys.

MUS 114 : College Chorus

Rehearsal and performance of choral literature. Open to all students. No previous choral experience required. Attendance at class concerts is required. Repeatable for up to 8 credits.

Credits 2

Lecture Hours 1

Designation

DA

Course Outcomes

- Read pitch and rhythmic notation in choral parts.
- Demonstrate musicianship in ensemble singing and professional performance practices.

MUS 121B : Voice 1

Performance class in vocal production and literature for voice. No previous vocal training required. Repeatable for up to 4 credits.

Credits 2

Lecture Hours 1

Designation

DA

Course Outcomes

- Demonstrate basic vocal techniques of physical alignment, breath support, breath control, and tone production inperformances of several songs.
- Apply basic concepts of rhythm and pitch accuracy in performances.
- Employ basic concepts of sight reading in learning music for performance.
- Learn and demonstrate professional performance practices

MUS 121C : Piano 1

Basic principles of performance. Relevant problems in piano literature at elementary level. MUS 121C, 122C must be taken in sequence. May be repeated up to 6 credits.

Credits 2

Lecture Hours 1

Designation

DA

Course Outcomes

- Identify and write the basic concepts of music notation.
- Demonstrate basic concepts, such as rhythm, notation, dynamics, and expression in accurate performances.
- Analyze history of piano development.
- Learn and demonstrate professional performance practices.

MUS 121D : Guitar 1

Basic principles of classical guitar performance; relevant problems in literature. Repeatable for up to 4 credits.

Credits 2

Lecture Hours 1

Designation

DA

Course Outcomes

- Identify and write the basic concepts of music notation.
- Demonstrate basic concepts, such as rhythm, notation, dynamics, and expression in accurate performances.
- Analyze history of guitar development.
- Learn and demonstrate professional performance practices.

MUS 121F : Slack Key Guitar 1

Basic principles of performance; relevant problems in literature. Student learns to play two slack key tunings. This course is intended for students with little or no background in this style of guitar playing. Ability to read music is not required. May be repeated up to 6 credits.

Credits 2

Lecture Hours 1

Designation

DA

Course Outcomes

- Demonstrate knowledge of the history of slack key guitar development.
- Demonstrate knowledge of basic concepts, such as rhythm, notation, dynamics, and expression in accurate performances.
- Use knowledge of slack key techniques and music concepts (music theory) to complete in-class recitals.
- Learn and demonstrate professional performance practices.

MUS 121G : Hawaiian Steel Guitar 1

Introductory course in Hawaiian Steel guitar. Basic principles of performance; history and development of the steel guitar and playing methods. Focus on principles of performance. The course is intended for students with little or no experience in playing the ukulele. May be repeated for up to 6 credits.

Credits 2

Lab Hours 2

Lecture Hours 1

Designation

DA

Course Outcomes

- Discuss the history and development of the steel guitar.
- Demonstrate basic concepts, such as rhythm, notation, dynamics, and expression in accurate performances.
- Perform chords and vamps in multiple keys.
- Demonstrate professional performance practices.

MUS 121H : Hawaiian Singing

This class is a performance and history course that focuses on different Hawaiian singing styles and qualities of voice. May be repeated up to 6 credits.

Credits 2

Lab Hours 2

Lecture Hours 1

Designation

DA

Course Outcomes

- Demonstrate proper vocal techniques for Hawaiian Singing.
- Demonstrate proper pronunciation of Hawaiian Language music.
- Discuss different styles of Hawaiian vocal production and qualities of voice.
- Demonstrate professional performance practices.

MUS 121Z : ʻUkulele 1

Introductory course in ʻukulele. Basic principles of performance; history and development of ʻukulele playing methods. Focus on principles of performance. Course is intended for students with little or no experience in playing the ukulele. May be repeated for up to 6 credits.

Credits 2

Lecture Hours 1

Designation

DA

Course Outcomes

- Discuss the history of ʻukulele development.
- Demonstrate basic concepts, such as rhythm, notation, dynamics, and expression in accurate performances.
- Strum chords in different keys, applying music theory applications.
- Learn and demonstrate professional performance practices.

MUS 122B : Voice 2

Performance class in vocal production and literature for voice. Class is designed for students with previous vocal experience or training. May be repeated up to 4 credits.

Credits 2

Lecture Hours 1

Designation

DA

Prerequisites

Grade of C or better in MUS 121B or consent of instructor.

Course Outcomes

- Discuss the origin and development of vocal music.
- Demonstrate intermediate level vocal techniques of diction, tone production, and breath control in performance situations.
- Sight read and learn music at an intermediate level.
- Learn and demonstrate professional performance practices.

MUS 122C : Piano 2

Designed for further study of principles and basic skills of piano performance established in first semester piano. Continues the group participation chord approach with greater emphasis on ensemble playing and improvisation. MUS 121C and 122C must be taken in sequence. Repeatable for up to 4 credits.

Credits 2

Lecture Hours 1

Designation

DA

Prerequisites

Grade of C or better in MUS 121C or consent of the instructor.

Course Outcomes

- Incorporate additional theoretical concepts in the performance of piano music.
- Demonstrate musical concepts such as rhythm, notation, dynamics, and expression in accurate performances of the level-two repertoire.
- Sight read music with increasing accuracy and musicianship.
- Learn and demonstrate professional performance practices with level-two repertoire.

MUS 122D : Intermediate Classical Guitar

Continuation of MUS 121D. Increased emphasis on guitar literature. Recommended that students register for MUS 101 concurrently.

Credits 2

Lab Hours 2

Lecture Hours 1

Designation

DA

Prerequisite Courses

MUS 121D

Prerequisites

Credit for MUS 121D or consent of instructor.

Course Outcomes

- Incorporate additional theoretical concepts in the performance of classical guitar music.
- Demonstrate knowledge of intermediate level concept in performances.
- Sight read music with increasing accuracy and musicianship.
- Exhibit greater confidence in performing level-two repertoire.

MUS 122F : Slack Key Guitar 2

Intermediate slack key guitar: level I. Student learns to play solos in C tunings and intermediate solos at level I in tunings learned in the elementary class. May be repeated up to 6 credits.

Credits 2

Lecture Hours 1

Designation

DA

Prerequisites

Credit for MUS 121F or consent of instructor.

Course Outcomes

- Incorporate additional theoretical concepts in the performance of slack key music.
- Demonstrate knowledge of intermediate level concepts on performances.
- Sight read tablature notation with increasing accuracy and musicianship.
- Exhibit greater confidence in performing level-two repertoire.

MUS 122H : Hawaiian Singing 2

This class is a performance and history course that focuses on different Hawaiian singing styles and qualities of voice at an intermediate level. May be repeated up to 6 credits.

Credits 2

Lab Hours 2

Lecture Hours 1

Designation

DA

Prerequisite Courses

MUS 121H

Prerequisites

Grade of C or better in MUS 121H or instructor consent.

Course Outcomes

- Discuss the origins and development of vocal techniques for Hawaiian Singing.
- Demonstrate intermediate level vocal techniques of diction, tone production, and breath control in Hawaiian Language music performance.
- Demonstrate different styles of Hawaiian vocal production and qualities of voice.
- Demonstrate professional performance practices.

MUS 122Z : ʻUkulele 2

Continuation of MUS 121Z. Increased emphasis on ʻukulele literature. Focus on principles of performance. Emphasis on ensemble playing. Repeatable for up to 6 credits.

Credits 2

Lecture Hours 1

Designation

DA

Prerequisites

Grade of "C" or better in MUS 121Z or consent of instructor.

Course Outcomes

- Incorporate additional theoretical concepts in the performance of ʻukulele music.
- Demonstrate intermediate level concepts in performances, e.g., triplets, arpeggios.
- Sight-read tablature with increasing accuracy and musicianship.
- Exhibit greater confidence in performing level-two repertoire.

MUS 130F : Slack Key Guitar Ensemble

Continuation of Music 122F. Increased emphasis on slack key literature, techniques, and tunings. Advanced intermediate techniques of slack key guitar as applied to ensemble playing.

Credits 2

Studio Hours 3

Designation

DA

Prerequisites

Credit for MUS 122F.

Course Outcomes

- Analyze repertoire for articulation, phrasing and fingering difficulties.
- Incorporate intermediate level theoretical and technical concepts in the performance of chosen repertoire.
- Sight read tablature notation with greater accuracy and musicianship.
- Exhibit confidence in performing intermediate-level repertoire.

MUS 140 : Introduction to Audio Production

Introduction to the process of audio engineering for live concerts and performances. Students learn the proper usage of audio production tools in both the analog and digital formats through lecture and hands-on projects. May be repeated for up to 6 credits.

Credits 3

Lecture Hours 3

Course Outcomes

- Describe the fundamental physics of sound.
- Operate various audio equipment components.
- Employ procedures and methods used in live sound engineering.
- Discuss best practices for professional sound engineers.

MUS 166 : Popular Music in America

A survey of Pop Music (including Blues, Jazz, Rock and Folk), in the United States in the twentieth century. Activities will include listening to recordings, writing lyrics and tunes and learning various aspects of the business of music. Fieldtrips and concert attendance required.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Describe the role of music in different communities.
- Describe and compare the distinctive aural features and music aesthetics of the various style of popular music.
- Describe the historical, religious, social and political aspects of a society that contribute to the development of diverse musical styles.
- Compare/contrast different styles of popular music.

MUS 177 : Intro to Hawaiian Music

A survey of Hawaiian music from Polynesian origins and pre- contact traditional forms to acculturated and contemporary forms and expressions including vocal, instrumental and dance music in their social, cultural and religious contexts.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Identify and define the basic concepts, terminology and distinguishing features of Western European and Hawaiian music.
- Identify the distinguishing features of indigenous and post-contact Hawaiian music and musical instruments.
- Discuss the functions of music in pre-contact Hawaiian society and in contemporary Hawai'i.
- Discuss important events and personalities in the evolution of Hawaiian music.

MUS 211 : Intro to Hawaiian Ensemble

Performance of Hawaiian music for groups of various sizes at an introductory level. Exploration of basic principles of history and development of ensemble performance. Students learn to play while singing. Ability to read music is not required. Repeatable up to 6 credits.

Credits 2

Lecture Hours 1

Designation

DA

Prerequisites

Grade of C or better in MUS 121Z, MUS 121F, MUS 121D, OR by instructor consent.

Course Outcomes

- Discuss the history of Hawaiian music.
- Apply basic musical concepts in accurate solo and ensemble performances.
- Demonstrate professional performance practices.

MUS 212 : Polynesian Music

Performance of Polynesian music for groups of various sizes. Exploration of basic principles, histories, and techniques for different Polynesian styles of music. Students learn to play while singing. Ability to read music is not required. Repeatable up to 6 credits. (1 hour lecture, 2 hour lecture/lab)

Credits 2

Lab Hours 2

Lecture Hours 1

Prerequisites

Grade of C or better in MUS 121Z, MUS 121F, MUS 121D, or MUS 211; or by instructor consent.

Course Outcomes

- Discuss the music history and techniques of different Polynesian islands.
- Demonstrate basic concepts, such as rhythm, notation, dynamics, and expression in accurate performances.
- Perform songs from 3 different Polynesian Islands.
- Demonstrate professional performance practices.

MUS 221C : Piano 3

Continuation of MUS 122C. Increased emphasis on piano literature up to the intermediate level. Repeatable for up to 4 credits.

Credits 2

Lecture Hours 1

Designation

DA

Prerequisites

Grade of C or better in MUS 122C or consent of the instructor.

Course Outcomes

- Incorporate additional theoretical concepts in the performance of piano music.
- Demonstrate musical concepts such as rhythm, notation, dynamics, and expression in accurate performances of the level-three repertoire.
- Sight read music with increasing accuracy and musicianship.
- Learn and demonstrate professional performance practices with level-three repertoire.

MUS 221F : Slack Key 3

Continuation of MUS 122F. Increased emphasis on Slack Key literature up to the intermediate level. Repeatable for up to 6 credits.

Credits 2

Lab Hours 2

Lecture Hours 1

Designation

DA

Prerequisite Courses

MUS 122F

MUS 211

Prerequisites

A grade of C or better in MUS 122F or MUS 211.

Course Outcomes

- Demonstrate additional techniques in the performance of slack key music.
- Demonstrate musical concepts such as rhythm, dynamics, and expression in accurate performances of the level-three repertoire.
- Perform in two slack key tunings.
- Demonstrate professional performance practices.

MUS 221Z : ʻUkulele 3

Continuation of MUS 122Z. Increased emphasis on ʻUkulele literature up to the intermediate level. Repeatable for up to 6 credits.

Credits 2

Lab Hours 2

Lecture Hours 1

Designation

DA

Prerequisite Courses

MUS 122Z

MUS 211

Prerequisites

A grade of C or better in MUS 122Z or MUS 211.

Course Outcomes

- Demonstrate additional techniques in the performance of ʻukulele music.
- Demonstrate musical concepts such as rhythm, dynamics, and expression in accurate performances of the level-three repertoire.
- Discuss improvisation techniques.
- Demonstrate professional performance practices.

MUS 222C : Piano 4

Continuation of MUS 221C. Increased emphasis on piano technique and literature up to the intermediate level. Introduction to accompanying. Repeatable for up to 4 credits.

Credits 2

Lecture Hours 1

Designation

DA

Prerequisites

Grade of C or better in MUS 221C or consent of the instructor.

Course Outcomes

- Apply, analyze, and discuss the form, articulation, rhythm, and phrasing of performance repertoire.
- Provide logical fingering for repertoire pieces.
- Learn and demonstrate professional performance practices with level-four repertoire.

MUS 222F : Slack Key 4

Continuation of MUS 221F. Increased emphasis on Slack Key literature up to the advanced level. Repeatable for up to 6 credits.

Credits 2

Lab Hours 2

Lecture Hours 1

Designation

DA

Prerequisite Courses

MUS 221F

Prerequisites

A grade of C or better in MUS 221F.

Course Outcomes

- Demonstrate additional techniques in the performance of slack key music.
- Demonstrate musical concepts such as rhythm, dynamics, and expression in accurate performances of the level-four repertoire.
- Perform in three slack key tunings.
- Demonstrate professional performance practices.

MUS 222Z : ʻUkulele 4

Continuation of MUS 221Z. Increased emphasis on ʻukulele literature up to the advanced level. Repeatable for up to 6 credits.

Credits 2

Lab Hours 2

Lecture Hours 1

Designation

DA

Prerequisite Courses

MUS 221Z

Prerequisites

A grade of C or better in MUS 221Z.

Course Outcomes

- Demonstrate additional techniques in the performance of ʻukulele music.
- Demonstrate musical concepts such as rhythm, dynamics, and expression in accurate performances of the level-four repertoire.
- Create an instrumental solo
- Demonstrate professional performance practices.

MUS 231B : Applied Music, Western (Voice)

This course provides individual instruction in vocal performance. The course covers intermediate vocal technique paced to an appropriate level for each student's experience. Applied Voice is a performance class. The emphasis will be toward developing vocal technique that focuses on breath technique, expression, movement, clarity, dynamics, diction and musicianship. May be repeated up to 4 credits. (1 hour individual instruction)

Credits 1-6

Designation

DA

Recommended Preparation

MUS 121B

Course Outcomes

- Demonstrate basic vocal techniques of physical alignment, breath support, breath control, and tone production
- Apply basic concepts of rhythm and pitch accuracy in performances.
- Employ basic concepts of sight reading in learning music for performance.
- Demonstrate professional performance practices

MUS 231C : Applied Music, Western (Piano)

This course provides individual instruction in piano performance, covering intermediate and advanced piano technique paced to an appropriate level for each student's experience. Applied piano instruction is a performance class. The emphasis will be toward developing piano technique that has clarity, flexibility, dynamic intensity, and sensitivity of phrasing for expressive musicianship through increasingly more confident and skillful performances. Pedaling, theory, sight-reading, and learning/ practicing/ memorization/ performing techniques will also be covered. May be repeated up to 4 credits. (1 hour Individual Instruction)

Credits 1-6

Designation

DA

Recommended Preparation

MUS 121C

Course Outcomes

- Incorporate additional theoretical concepts in the performance of piano music.
- Demonstrate musical concepts such as rhythm, notation, dynamics, and expression in accurate performance of selected repertoire
- Sight read music with increasing accuracy and musicianship.
- Learn and demonstrate professional performance practices

MUS 231F : Applied Music, Western (Slack Key Guitar)

This course provides individual instruction in slack key guitar. The course covers slack key techniques that are appropriate for the student's experience. Applied slack key guitar is a performance class. The emphasis will be toward developing guitar playing technique that focuses on expression, dynamics, rhythmic stability and musicianship. May be repeated up to 4 credits. (1 hour individual instruction)

Credits 1

Designation

DA

Course Outcomes

- Demonstrate musical concepts
- Demonstrate basic slack key techniques
- Sight read tablature
- Demonstrate professional performance practices
- Discuss the history of slack key guitar development

MUS 231Z : Applied Music, Western ('Ukulele)

This course provides individual instruction in 'ukulele. The course covers 'ukulele techniques that are appropriate for the student's level of experience. Applied 'ukulele is a performance class. The emphasis will be toward developing playing techniques for the 'ukulele that focus on expression, dynamics, rhythmic stability and musicianship. May be repeated up to 4 credits. (1 hour individual instruction)

Credits 1

Designation

DA

Course Outcomes

- Demonstrate musical concepts
- Demonstrate right and left hand techniques on the 'ukulele
- Sight read tablature
- Demonstrate professional performance practices
- Discuss the history of the 'ukulele

MUS 240 : Introduction to Digital Music

Introduction to digital music and sound production on the Macintosh platform: MIDI sequencing, audio recording, music arranging, editing, mixing and mastering; preparing audio files for CD, video and web applications; sound synthesis and programming using virtual instruments. (Cross-listed as CM 240.)

Credits 3

Lecture Hours 3

Designation

DA

Recommended Preparation

Basic Keyboard (piano) skills, computer (Mac) skills.

Prerequisites

MUS 108, 121 (alpha) or 253; or consent of instructor.

Course Outcomes

- Use MIDI sequencing and audio recording software, and/or notation software, as tools for music composition, arranging and performance.
- Apply basic skills in MIDI sequencing and editing, and digital audio recording and editing to audio mixing and mastering projects.
- Prepare audio files for CD burning, and video and web applications.
- Apply understanding of sound synthesis to create original sounds for music projects.
- Transfer skills to other MIDI sequencing and digital audio software programs across PC and Mac platforms.

MUS 241 : Digital Music Production II

Continuation of principles and skills introduced in MUS 240. Digital music composition and audio production on the Macintosh platform with emphasis on advanced MIDI and mixing techniques, audio editing, sound synthesis, and programming of virtual instruments and effects.

Credits 3

Lecture Hours 3

Prerequisites

MUS 240 or consent of instructor.

Course Outcomes

- Advanced use of MIDI sequencing and audio recording software, or notation software, as tools for music composition, arranging and performance.
- Apply advanced skills in MIDI sequencing and editing, and digital audio editing to music composition projects.
- Effectively mix, bounce and prepare audio files for appropriate media and applications.
- Create and edit original sounds and effects for music projects.
- Transfer skills to other MIDI sequencing and digital audio software programs across PC and Mac platforms.

MUS 253 : Elementary Music in Action

Deals with musical concepts, philosophy & pedagogy; the use of media, singing, movement, and instruments; and resources for an active elementary classroom. Presents correlation between music and brain development in early childhood. Intended for Education majors. Music is a vital stimulus to the developmental process and contributes to the emergence of positive self-esteem. Elementary education candidates learn to apply appropriate strategies in order to provide music making as part of everyday classroom activities.

Credits 3

Lecture Hours 3

Designation

DA

Course Outcomes

- Identify and write the basic components of Western music notation.
- Apply basic theoretical components of Western music notation to written examples of music.
- Notate and read basic rhythm and melodic patterns, both in simple and compound meters.
- Apply basic knowledge of basic theoretical concepts to performance on various instruments.
- Teach a mini model lesson, demonstrating a grade-appropriate musical concept.
- Harmonize simple melodies.

MUS 277 : Mele, Mo'olelo, and Motion

This is a music class that focuses on Hawaiian songs, the stories that accompany those songs, and how the motions of the hula interact with both the lyrics and the stories. May be repeated up to 6 credits.

Credits 3-6

Lecture Hours 3

Designation

DH

Recommended Preparation

MUS 177

Course Outcomes

- Explain the connection between Hawaiian music lyrics, the stories, and the hula motions.
- Discuss meaning of Hawaiian lyrics and poetry.
- Demonstrate motions and steps that would be appropriate for the chosen mele.
- Demonstrate correct pronunciation of Hawaiian music lyrics.

MUS 280 : Basic Theory and Aural Skills

Basic Theory and Aural Skills develops students' skills in music reading and music perception through notation, sight singing and dictation exercises. Students learn how to notate simple rhythms in simple and compound time; learn to recognize intervals, scales, triads, seventh chords and harmonic functions; and learn how to analyze non-modulating harmonic progressions in root position.

Credits 3

Lecture Hours 3

Designation

DA

Prerequisites

Credit for MUS 108

Course Outcomes

- Explain and use musical terminology at a beginning level.
- Identify and use basic elements of music (pitch, scales, intervals, rhythm, meter) to create music at a beginning level.
- Analyze music for its melodic, harmonic, rhythmic and formal qualities at a beginning level.

MUS 296 : Special Topics in Music

Students will investigate important topics in music, such as specific people, genres, or periods. Classes may include a performance component. Specific course information will be made available in the schedule of classes. May be repeated up to 9 credits with different topics.

Credits 3

Lecture Hours 3

Recommended Preparation

Introductory MUS class.

Course Outcomes

- Identify the important concepts and facts particular to the selected course topic.
- Analyze and interpret the nature and significance of the selected course topic.
- Investigate connections between the selected course topic and contemporary events and issues.

Natural Sciences

HWST 155 : Nā Limu Hawai‘i: Hawaiian Seaweeds and their Uses

An introduction to Hawaiian Limu biology, ecology, and diversity. Students will learn about the historical, current, and potential uses of Limu and choose a species to research. An introduction to Limu groups (red, green and brown) and sustainable cultivation. Students will learn about the cultural significance and history of Limu in Hawai'i.

Credits 3

Lecture Hours 3

Designation

DB

Course Outcomes

- Identify and describe the diversity of Hawaiian limu
- Describe the biology and ecology of Hawaiian limu
- Describe the historical and current uses of Hawaiian limu
- Apply knowledge to potential limu cultivation and conservation practices

HWST 155L : Nā Limu Hawai‘i: Hawaiian Seaweeds and their Uses Lab

Students will study the various morphologies of local limu species and learn basic limu hatchery and farming techniques such as tumble culture or attached cultivation methods. Hands-on experience in the cultivation, and instruction in the equipment necessary to monitor and manage the cultivation system will take place in the hands-on laboratory. Students are introduced to media preparation, sterile technique, various Limu cultivation methods, and stereomicroscopy. Students will learn seeding techniques for re-planting Limu in critical habitats. Additionally, some lab skills such as DNA extraction/sequencing, and lipid extractions will be covered.

Credits 1

Lab Hours 3

Designation

DY

DB

Prerequisites

Completed or concurrently enrolled in HWST 155.

Course Outcomes

- Identify Hawaiian Limu through keying out species based on morphology
- Demonstrate the use of basic lab equipment to analyze culture systems such as stereomicroscopy and biomass measurements
- Use DNA sequencing to definitively identify Limu
- Apply knowledge to potential limu cultivation and conservation practices in hands on experiential learning.

Oceanography

OCN 101 : Introduction to the Marine Option Program

This course provides an overview of statewide issues and organizations involved with ocean and freshwater activities, including management, education, research and business. It also provides an orientation to the Marine Option Program (MOP) and reviews the requirements of the MOP certificate. The course explores opportunities for internships, projects and careers related to water environments. The course will present guidelines on proposal writing, project implementation, data collection and interpretation, and final report preparation and presentation. This course is taught via HITS interactive television with participation of students and faculty throughout the UH system.

Credits 1

Lecture Hours 1

Recommended Preparation

"C" or better in MATH 24, 25, 26, 28, 29, 75X or higher.

Course Outcomes

- Develop a curriculum/program to facilitate the completion of a Marine Option Program (MOP) Certificate at Windward CC and other MOP campuses.
- Describe the ocean and freshwater related activities that are being undertaken statewide and on other UH campuses.
- Find information about statewide/nationwide/international projects, organizations, and career opportunities relating to marine and freshwater systems.
- Find information about internship and scholarship opportunities relating to water environments.
- Identify an appropriate MOP project topic.
- Identify appropriate mentors and experts in the project area.
- Complete a written MOP project proposal.
- Prepare and deliver an oral presentation.

OCN 102 : Introduction to the Environment and Sustainability

This course will introduce students to the basic principles of environmental science and sustainability as they apply to analysis of environmental systems on a global scale. The integrated natures of ocean, terrestrial and atmospheric systems will be introduced by first introducing the Earth's major ecosystems and then discussing their coupled integration. The concepts of sustainability will be infused into the course with an emphasis on the importance of sustaining resources and mitigating pollution to ecosystems. This issue of sustainability will be approached from the perspective of the impact that 9 billion or more people will impose upon the planets resources and ecosystems. Similarly, this course will include the concepts of sustainability with Native Hawaiian culture and indigenous knowledge.

Credits 3

Lecture Hours 3

Designation

DB

Course Outcomes

- Define the Earth's major ecosystems and the major flows of matter and energy through them.
- List the identity, source and action of the major pollutants that disrupt these ecosystems.
- Relate the carrying capacities of each major ecosystem relative to these pollutant loads, as well as the consequences to the environment if they fail.
- Define the fundamentals of sustainability metrics in terms of major impact categories (into which pollutants and activities are grouped) and their units.
- State how the cultural practices and indigenous knowledge of the Native Hawaiians relate to sustainability.

OCN 120 : Global Environmental Challenges

Scientific approach to evaluating human-caused environmental challenges and their potential solutions.

Credits 3

Lecture Hours 3

Designation

DP

Recommended Preparation

Basic pre-college level math, chemistry, physics.

Course Outcomes

- Apply scientific principles and methods to describe natural Earth system interactions and human impacts on the environment.
- Solve very basic problems involving chemistry and physics, and read and create graphs of data.
- Apply scientific principles and methods to compare causes of environmental problems and impacts of potential solutions to environmental challenges.
- Apply scientific principles and reasoning to critically evaluate proposed explanations for global environmental challenges.

OCN 201 : Science of the Sea

An introductory course to oceanography covering the dimensions of the science of oceanography, the physical and chemical properties of sea water, waves, tides, currents, life in the ocean, and the geologic structure of the ocean floor, environmental concerns, and human use of the oceans.

Credits 3

Lecture Hours 3

Designation

DP

Course Outcomes

- Understand how the scientific method works, how it has been applied in Earth science, and how it differs from other ways of acquiring knowledge.
- Articulate how the Earth is in integrative system across many scientific disciplines.
- Understand the internal structure of the Earth and the dynamic processes of plate tectonics that shape its surface, including seafloor spreading, subduction, and continental drift.
- Understand the causes of rising sea level and its impacts on coastal areas, including erosion and beach loss.
- Identify the major pathways of chemicals to the oceans and the effect that biological processes have on redistributing and removing chemicals from the oceans.
- Describe the major processes that cause the deep and shallow circulation of water in the oceans.
- Identify the major marine habitats, the types of organisms that live in those habitats, and give examples of how organisms are adapted to their habitat.
- Describe the types of interactions that occur among organisms in the marine food web and between organisms and their environment.

OCN 201L : Science of the Sea Lab

Experiments, computer exercises and field trips demonstrating the geological, physical, chemical and biological principles, and equipment, of earth and ocean sciences.

Credits 1

Lab Hours 3

Designation

DY

Recommended Preparation

High school algebra and chemistry; ability to use a computer.

Prerequisites

Credit for or registration in OCN 201 or equivalent preparation or consent of instructor.

Course Outcomes

- Develop a practical understanding of the principals of oceanography.
- Use the methodology of marine biology and oceanography to define and solve problems independently and collaboratively.
- Use a wide variety of laboratory and field techniques with accuracy, precision and safety.
- Accurately interpret biological and oceanographic information.
- Demonstrate proficient library, mathematical and computer skills in data gathering and analysis.
- Apply scientific concepts to environmental and societal issues.
- Apply their learning in an off-campus professional setting.

OCN 260 : Pacific Surf Science and Technology

Pacific Surf Science and Technology is a lecture-based course that showcases scientific and industry aspects of the surfing world for surfers and non-surfers. The course takes a scientific approach to understanding the natural processes that create and influence Waves and surf conditions, while also introducing many ocean safety concepts relating to the environment and the popularity of ocean recreation. A weather and surf journal along with weekly campus field excursions dedicated to studying weather phenomena adds an essential experiential component to the course.

Credits 3

Lecture Hours 3

Recommended Preparation

Ability to access information from the Internet.

Course Outcomes

- Discuss the basic principles of meteorology, oceanography, and geology as they apply to the creation and shaping of waves and surf.
- Predict surf conditions using Internet web sites and local weather station reports.
- Compare and contrast past and present surfboard technology and production.
- Apply the principles of design, production, and retail marketing within surfing related industries.
- Assess the various multimedia applications related to surfing.
- Demonstrate water safety issues related to surfing.
- Apply the basic techniques of surfing.
- Maintain logs of weather and surf observations to use in future forecasts.

OCN 260L : O‘ahu Surf Science and Technology Lab

OCN 260L is a field lab designed to run concurrently with OCN 260, Pacific Surf Science and Technology. The course presents the surfing world through laboratory and field activities, including surfing demonstrations and instruction, learning water safety techniques, studying board design at surfboard manufacturing shops, and speaking with local industry professionals. Meteorology and surf forecasting techniques are covered through on site weather observation activities, and physical processes involved in shaping waves as they approach a shoreline will be examined through several coastal studies.

Credits 1

Lab Hours 3

Prerequisites

Credit for or registration in OCN 260.

Course Outcomes

- Distinguish between pre-historic, traditionally built papa he‘e nalu, historic-era, and modern surfboards.
- Outline the procedures involved in surfboard production.
- Operate safely a surfboard using the basic techniques of surfing.
- Access information on and identify local weather phenomena and ocean/surf conditions around O‘ahu.
- Describe at least five ocean and surf industries.
- Identify wave-generating facilities.
- Maintain a journal of surfing experiences.

Pacific Islands Studies

PACS 108 : Pacific Worlds: an Introduction to Pacific Islands Studies

This course situates Hawai‘i in the larger context of Oceania and exposes students to issues, themes, values, and practices across the region. It also introduces students to the geography, societies, histories, cultures, and arts of Oceania, including Hawai‘i. This course combines lecture and discussion that emphasize Pacific Islander perspectives and experiences.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Locate and name the island groups, geographic regions, and political entities of Oceania.
- Describe social and cultural similarities and differences among Pacific Island societies.
- Identify themes in the works of Pacific Island artists and writers.
- Discuss contemporary social, political, economic, cultural, and environmental issues in the Pacific Islands.
- Explain significant themes in indigenous, colonial, and postcolonial histories of the Pacific Islands.

Pharmacology

PHRM 203 : General Pharmacology

Covers a wide range of drugs with emphasis on sites and mechanism of action, toxicity, fate and uses of major therapeutic agents. This course is intended for students in nursing and allied health fields.

Credits 3

Lecture Hours 3

Designation

DB

Recommended Preparation

College level chemistry.

Prerequisites

Grade of "C" or better in ZOOL 141 and ZOOL 142.

Course Outcomes

- Describe the basic mechanisms of drug action.
- Demonstrate knowledge of the terminology and special concepts useful in the study of pharmacology.
- Describe how differences between individuals govern their response to drugs.
- Define how drugs are processed and bio transformed by the body.
- Identify frequent complications and side effects associated with the major drug classes.
- Describe significant interactions between drugs.
- Use information from the pharmacokinetics of a specific drug to determine dosing schedules and best route of drug administration.
- State the therapeutic uses for each major drug group.

Philosophy

PHIL 100 : Introduction to Philosophy: Survey of Problems

Great philosophical issues, theories, and controversies. Course will focus on issues such as the problem of determinism, the problem of induction, the problem of distributive justice, the problem of the highest good, and the problem of the function of government.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Analyze contemporary issues and events using philosophical concepts and theories.
- Defend a position on a philosophical problem in philosophy.
- Identify important individuals, events, theories, and concepts in Western philosophy.
- Apply critical thinking skills (i.e. clarify concepts, raise normative questions, evaluate ideas presented in the text and handouts, and identify philosophical issues and concerns.

PHIL 101 : Introduction to Philosophy: Morals and Society

Social and individual values, obligations, rights, and responsibilities. Course will cover normative theories and their applications to business, medicine, ethics and sexual relations.

Credits 3

Lecture Hours 3

Designation

DH

Recommended Preparation

College level reading ability.

Course Outcomes

- Recognize the major views that have defined the Western debate on ethical matters to include: virtue ethics, teleological theory, and deontological theory.
- Use logical reasoning and ethical concepts to analyze contemporary ethical problems.
- Defend a position on a fundamental problem in ethics.
- Compare, contrast, and evaluate virtue ethics, teleological theory, and deontological ethics in terms of their respective views of (a) human nature, (b) the nature of goodness, (c) the good life.

PHIL 102 : Introduction to Asian Philosophy: Asian Traditions

Introductory course in selected schools of Asian thought. Universal issues/problems examined from Asian perspective. Focus will be on Indian, Chinese, and Japanese traditions.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Compare, contrast, and evaluate Indian, Chinese, Japanese, and European thought in terms of their respective views of (a) human nature, (b) the nature of goodness, (c) the good life.
- Identify and discuss contributions of schools of Asian philosophy and the influence of each on the other through a historical perspective.
- Discuss terms and concepts like "satori", "anatta", "jen" and evaluate their relevance (significance) for the West.
- Analyze Indian, Chinese, and Japanese thought in terms of (a) methodology, metaphysics, and ethics in order to better understand Asian concerns.

PHIL 110 : Introduction to Logic

A study of the foundations and development of rational thought and communication and their applications. Includes analysis of deductive reasoning, formal and informal fallacies, and the use of symbolic systems.

Credits 3

Lecture Hours 3

Course Outcomes

- Recognize fallacies of relevance, presumption, and ambiguity.
- Employ rules of logic in deductive analysis.
- Construct truth tables for deductive analysis.
- Use symbolic systems for deductive analysis.

PHIL 111 : Introduction to Inductive Logic

Introduction to the theory of arguments based on probabilities and to the theory of decision-making in the context of uncertainty.

Credits 3

Lecture Hours 3

Designation

FQ

Recommended Preparation

Credit in PHIL 110

Course Outcomes

- Correctly classify data and variables.
- Create and interpret various graphs.
- Calculate and interpret descriptive statistics, including the mean, median, and mode.
- Construct and interpret point and interval estimates.

PHIL 211 : Ancient Philosophy

The philosophical traditions of Greece and Rome between the 5th century BCE and the 5th century CE. Important works by four representative figures (two from Classical Greece and two from the Roman tradition).

Credits 3

Lecture Hours 3

Designation

DH

Recommended Preparation

Completion of ENG 100 or equivalent.

Course Outcomes

- Discuss terms and concepts like the "doctrine of homo mensura" and the "doctrine of ideas or forms" and evaluate their relevance (significance) for modern times.
- Identify and discuss contributions of selected philosophers and the influence of each on the other through a historical perspective.
- Trace some of the roots of present day thought through the application of concepts and points of view forwarded in this class.
- Discuss the major tenets of the "classical mind" as well as those that made up the "medieval mind" in order to characterize these periods of time in an orderly and meaningful pattern.

PHIL 213 : Modern Philosophy

Introduction to the history of philosophy based on texts or translations of "modern" works, that is works originally written in a modern European language.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Describe the nature and significance of major controversies in epistemology, ethics, metaphysics, aesthetics, and method that define the period of modernity.
- Clearly explain, synthesize, and compare the arguments put forward by the modern philosophers studied in the course.
- Carefully evaluate the positions of the philosophers studied by employing the methods of philosophical inquiry such as critical thinking, critical reading, and critical writing.
- Clearly, concisely, and convincingly articulate reasons that support personal judgments about major controversies in epistemology, metaphysics, ethics, aesthetics, and method.

Physics

PHYS 122 : Introduction to Science: Physical

Characteristics of science, historical development of scientific concepts, and interactions with society illustrated by topics from physical sciences, with emphasis in physics and chemistry. Designed for non-science majors.

Credits 3

Lecture Hours 3

Designation

DP

Prerequisites

Credit in Math 25, 26, 28, 29, 75X or higher or equivalent.

Corequisites

PHYS 122L.

Course Outcomes

- Recognize the fundamental principles and philosophy upon which the scientific method is based.
- Apply the basic concepts of physics and chemistry.
- Apply the concept of conservation laws in problem solving.
- Apply basic mathematics to problems in physics and chemistry.
- Define the common terms used in the physical sciences.
- Assess the limitations of the scientific method and apply error analysis.
- Recognize the physical science principles as applied to everyday situations.

PHYS 122L : Introduction to Physical Science Lab

Lab experiments illustrating topics and methods in the Physical Sciences with emphasis in Physics and Chemistry. Designed for nonscience majors.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in PHYS 122 or consent of instructor.

Course Outcomes

- Apply the scientific method to a selected group of topics in physics and chemistry.
- Collect, report and analyze data obtained in a laboratory setting in a manner exhibiting organization, proper documentation and critical thinking.
- Manipulate data and apply quantitative techniques, such as graphing and statistical analysis.
- Demonstrate a basic understanding of the standard instruments used in physics and chemistry.
- Identify environmental factors, which affect the outcome of an experiment or observation and apply basic error analyses techniques.

PHYS 151 : College Physics I

A noncalculus one semester course for preprofessionaI or nonengineering majors. Study of the basic concepts of physics, including the fundamental principles and theories in mechanics, energy, and waves.

Credits 3

Lecture Hours 3

Designation

DP

Prerequisites

Credit for or registration in MATH 140 or higher, or consent of instructor

Corequisites

PHYS 151L.

Course Outcomes

- Demonstrate a general understanding of the underlying philosophy of the physics, including the scientific method.
- Apply the basic concepts of physics, including mechanics, energy, simple oscillatory systems, gas laws and fluid dynamics.
- Apply the concept of conservation laws in problem solving.
- Apply basic algebraic and graphical analysis techniques to physics problems.
- Compare and contrast macroscopic and microscopic systems in physics.
- Define quantitatively and qualitatively the common terms used in physics.
- Assess the limitations of the scientific method and apply error analysis.
- Determine when to apply physics principles to everyday situations.

PHYS 151L : College Physics I Lab

Experiments in statics, mechanics, energy, waves, and friction.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in PHYS 151.

Course Outcomes

- Apply the scientific method to physical science systems involving mechanics, energy, simple oscillatory systems, gas laws and fluid dynamics.
- Collect, report and analyze data obtained in a laboratory setting in a manner exhibiting organization, proper documentation and critical thinking.
- Manipulate data and apply quantitative techniques, such as graphing and statistical analysis.
- Demonstrate a basic understanding of the standard instruments used in physics.
- Identify environmental factors, which affect the outcome of an experiment or observation and apply basic error analyses techniques.

PHYS 152 : College Physics II

A noncalculus, one-semester course for pre-professional or nonengineering majors. Study of the basic concepts of physics, including the fundamental principles and theories in electricity, magnetism, optics, and modern physics.

Credits 3

Lecture Hours 3

Designation

DP

Prerequisites

Credit for PHYS 151 or equivalent, or consent of instructor.

Corequisites

PHYS 152L.

Course Outcomes

- Demonstrate a general understanding of the underlying philosophy of the physics, including the scientific method.
- Apply the basic concepts of physics, including thermodynamics, static and dynamic laws of electricity and magnetism, circuit analysis, electromagnetic radiation, optical systems, and the fundamentals of atomic and nuclear physics.
- Apply the concept of conservation laws in problem solving.
- Apply basic algebraic and graphical analysis techniques to physics problems.
- Compare and contrast macroscopic and microscopic systems in physics.
- Define quantitatively and qualitatively the common terms used in physics.
- Assess the limitations of the scientific method and apply error analysis.
- Recognize the physical science principles as applied to everyday situations.

PHYS 152L : College Physics II Lab

Experiments in electricity, magnetism, optics, and modern physics.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in PHYS 152.

Course Outcomes

- Apply the scientific method to physical science systems involving thermodynamics, static and dynamic laws of electricity and magnetism, electrical and electronic circuit analysis, electromagnetic radiation, optical systems, and the fundamentals of atomic and nuclear physics.
- Collect, report and analyze data obtained in a laboratory setting in a manner exhibiting organization, proper documentation and critical thinking.
- Manipulate data and apply quantitative techniques, such as graphing and statistical analysis.
- Demonstrate a basic understanding of the standard instruments used in physics.
- Identify environmental factors, which affect the outcome of an experiment or observation and apply basic error analyses techniques.

PHYS 170 : General Physics I

This is the first of a rigorous, calculus-based course in physics for the professional or engineering majors. The study of the concepts of physics including the fundamental principles and theories of mechanics, energy, waves and thermodynamics.

Credits 4

Lecture Hours 4

Designation

DP

Prerequisites

Credit for MATH 241 (formerly MATH 205) or higher or equivalent or consent of instructor

Corequisites

PHYS 170L and credit for or registration in MATH 242 (formerly MATH 206) or equivalent, or consent of instructor.

Course Outcomes

- Demonstrate a solid conceptual understanding of kinematics, dynamics, wave phenomena, and thermodynamics.
- Solve applicable problems using differential calculus and vector analysis.
- Apply the laws of physics to computational problems in kinematics, dynamics, wave phenomena, and thermodynamics.

PHYS 170L : General Physics I Lab

This laboratory course is a rigorous, calculus-based study for professional or engineering majors. Laboratory exercises are designed to reinforce the fundamental concepts of kinematics, mechanics, energy, waves and thermodynamics. (3hourslaboratory)

Credits 1

Lab Hours 3

Designation

DY

Corequisites

Credit for or registration in PHYS 170.

Course Outcomes

- Demonstrate an experimental understanding of some basic physical concepts and theories.
- Demonstrate familiarity with various instruments and their use in making reliable and precise measurements.
- Calculate a result with the appropriate number of significant figures.
- Analyze data using calculation and graphical methods.
- Organize an accurate and complete laboratory notebook.

PHYS 272 : General Physics II

This is the second in a rigorous, calculus-based physics course for the professional or engineering major. The study of the concepts of physics including the fundamental principles and theories of electricity, magnetism, light, and optical theory.

Credits 3

Lecture Hours 3

Designation

DP

Prerequisites

Credit for MATH 242 (formerly MATH 206) or higher or equivalent and a grade of "C" or better in PHYS 170 or consent of instructor

Corequisites

PHYS 272L.

Course Outcomes

- Demonstrate a solid conceptual understanding of electricity, magnetism, light, and optical theory.
- Solve applicable problems using calculus and vector analysis.
- Apply the laws of physics to computational problems in electricity, magnetism, and wave phenomena.

PHYS 272L : General Physics II Lab

This laboratory course is a rigorous, calculus-based study for professional or engineering majors. Laboratory exercises are designed to reinforce the fundamental concepts of electricity, magnetism, light and optical theory.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in PHYS 272.

Course Outcomes

- Demonstrate experimental understanding of some basic physical concepts and theories.
- Demonstrate familiarity with various instruments and learn to make reliable measurements.
- Calculate a result with the appropriate number of significant figures.
- Analyze data using calculation and graphical methods.
- Organize an accurate and complete laboratory notebook.

PHYS 274 : General Physics III

This course focuses on the study of physical optics, special relativity, quantum mechanics, solid state physics, atomic and nuclear physics, and elementary particle physics.

Credits 3

Lecture Hours 3

Designation

DP

Prerequisites

Credit for PHYS 272 and PHYS 272L, and credit for or registration in MATH 243 (formerly MATH 231), or consent of instructor.

Course Outcomes

- Describe the theory of special relativity and its effects: time dilation and space contraction.
- Describe the particle like properties of electromagnetic radiation as demonstrated in the photoelectric effect and Compton scattering.
- Analyze the wavelike properties of matter known as quantum theory.
- Identify and Describe knowledge of the different properties of solids such as crystal structure, thermal and magnetic properties, and superconductivity.
- Describe nuclear structure, radioactive decay, nuclear interactions, and their applications.
- Identify the different elementary particles and describe their role in the forces that hold matter together.

Physiology

PHYL 141 : Human Anatomy and Physiology I

PHYL 141 is the first semester of a comprehensive two-semester course which provides a thorough introduction to the structure and function of the human body. PHYL 141 covers the gross anatomy, histology, and physiology of the integumentary, skeletal, muscular, and nervous systems. Students will be expected to learn details of anatomy and physiology as well as applying those details in the broader context of whole body function and homeostasis. The covered topics include body orientation, chemical level, cellular level, tissue level, integumentary system, bone tissue, skeletal system, joints, muscular tissue, muscular system, nervous tissue, spinal cord and spinal nerves, brain and cranial nerves, autonomic nervous system, and special senses. Formerly ZOOL 141.

Credits 3

Lecture Hours 3

Designation

DB

Recommended Preparation

CHEM 151, CHEM 161 or BIOC 141 with a grade of C or better or 1 year of high school college prep chemistry with a B or better within the last 5 years. Concurrent enrollment in PHYL 141L.

Course Outcomes

- Identify required anatomical structures of the covered systems.
- Identify required physiological functions of the covered systems.
- Describe metabolic processes of covered systems and relate them to everyday activities such as eating, sleeping, and exercise.
- Explain the concepts of positive/negative feedback and homeostasis and relate them to physiological processes covered in the course.

PHYL 141L : Human Anatomy and Physiology I Lab

PHYL 141L is the laboratory course of Human Anatomy and Physiology I and it provides a thorough introduction to the structure and function of the human body. PHYL 141L covers the gross anatomy, histology, and physiology of the integumentary, skeletal, muscular, and nervous systems. Students will be expected to learn details of anatomy and physiology through models, dissections, and physiological experimentations. Students will also apply those details in the broader context of whole body function and homeostasis. The covered topics include body orientation, chemical level, cellular level, tissue level, integumentary system, bone tissue, skeletal system, joints, muscular tissue, muscular system, nervous tissue, spinal cord and spinal nerves, brain and cranial nerves, autonomic nervous system, and special senses. Formerly ZOOL 141L.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in PHYL 141.

Course Outcomes

- Identify anatomical structures at the level of the cell, tissue, organ, and organ system through the use of models, computer images, observation, and dissections.
- Apply the scientific method to study, measure, analyze, and understand the physiological systems of the human body.

PHYL 142 : Human Anatomy and Physiology II

PHYL 142 is the second semester of a comprehensive two-semester course which provides a thorough introduction to the structure and function of the human body. PHYL 142 covers the gross anatomy, histology, and physiology of the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, reproduction systems as well as basic concepts of inheritance and development. Students will be expected to learn details of anatomy and physiology as well as applying those details in the broader context of whole body function and homeostasis. Formerly ZOOL 142.

Credits 3

Lecture Hours 3

Designation

DB

Recommended Preparation

Registration in PHYL 142L.

Prerequisites

A grade of C or better in PHYL 141.

Course Outcomes

- Identify required anatomical structures of the covered systems.
- Identify required physiological functions of the covered systems.
- Describe metabolic processes of covered systems and relate them to everyday activities such as eating, sleeping, and exercise.
- Explain the concepts of positive/negative feedback and homeostasis and relate them to physiological processes covered in the course.

PHYL 142L : Human Anatomy and Physiology II Lab

PHYL 142L is the laboratory course of PHYL 142 (Human Anatomy and Physiology II) and it provides a thorough introduction to the structure and function of the human body. PHYL 142L covers the gross anatomy, histology, and physiology of the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, reproductive systems as well as basic concepts of inheritance and development. Students will be expected to learn details of anatomy and physiology through models, dissections, and physiological experimentations. Students will also apply those details in the broader context of whole body function and homeostasis. Formerly ZOOL 142L.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in PHYL 142.

Course Outcomes

- Identify anatomical structures at the level of the cell, tissue, organ, and system through the use of models, computer images, observation, and dissections.
- Apply the scientific method to study, measure, analyze, and understand the physiological systems.

Political Science

POLS 110 : Introduction to Political Science

Introduction to politics as a human activity. Discusses theories, ideologies, systems, and processes of politics.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Identify and describe the structure of political issues and political relationships.
- Clearly explain and evaluate complex political thought and the positions of several thinkers in political theory.
- Examine and interpret contemporary political issues through the application of political theory.
- Relate media, technology, and language to the formation and maintenance of the political order.
- Carefully justify one's own political position.

POLS 120 : Introduction to World Politics

Power economics and world politics from cross-national perspectives. Discussion of U.S. foreign policy since 1945.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Explain basic terms, concepts, and principles of international relations.
- Analyze political processes, institutions, and issues in the foreign policy environment.
- Apply basic terms, concepts, and principles to everyday life.
- Assess his or her personal effectiveness in the political process.

POLS 130 : Introduction to American Government

Focus on American politics and government on the basis of tradition and continuity. Covers: overview of constitutional development, institutions, processes, and participants of the American political system and alternative interpretations.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Explain basic terms, concepts, and principles of politics.
- Analyze political processes, institutions, and issues.
- Apply basic terms, concepts, and principles to everyday life.
- Assess his or her personal effectiveness in the American political process.

POLS 180 : Introduction to Hawaiian Politics

Introduction to the study of political institutions, processes, and issues in Hawai'i.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Explain basic terms, concepts, and principles of politics.
- Analyze political processes, institutions, and issues in Hawai'i.
- Apply basic terms, concepts, and principles to everyday life.
- Assess his or her personal effectiveness in the political process.

POLS 243 : Introduction to Politics and Film

The course introduces students to the analysis of the relationship between politics and film. Topics covered in the course will include the impact of films and the film industry on politics, the impact of politics on film, and methods for understanding the representational practices of film.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Identify and describe the narrative and compositional structure of film.
- Clearly explain and evaluate the political thoughts, assumptions and implications of several key films.
- Examine and interpret contemporary political issues in film through the application of political thought.
- Relate media, technology, and language to the formation and maintenance of the political order.
- Carefully justify one's own political position.

Psychology

PSY 100 : Survey of Psychology

An introductory course with emphasis on principles of human behavior. Topics covered include motivation, learning, perception, emotion, development, personality, states of consciousness, group processes, problem solving and thinking, and methods of inquiry.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Recognize the study of psychology as a science.
- Discuss the biological and environmental basis of human behavior.
- Integrate the basic perspectives, concepts, principles, and general information comprising the field of psychology.

PSY 170 : Psychology of Adjustment

Focus is on understanding, evaluating and improving adjustment. Includes study of theories, concepts and techniques concerning personal growth and behavior change.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Identify and evaluate important issues in her or his own past and present.
- Integrate the basic perspectives, concepts, principles, and general information comprising the field psychology.
- Utilize the various psychology adjustment models and concepts in understanding his or her life.

PSY 202 : Psychology of Gender

Survey of topics in psychology relevant to gender and its impact on the lives of women and men: socialization of gender, mental health, racial identity, majority-minority status, sexual orientation, life-span issues, and violence. (Cross-listed as WGSS 202)

Credits 3

Lecture Hours 3

Designation

DS

Prerequisites

A grade of "C" or better in WGSS 151 or PSY 100 or consent of instructor.

Course Outcomes

- Describe the central concepts, theoretical perspectives, and research methods used in the psychology of gender.
- Use theoretical perspectives to explain gender behavior.
- Describe the biological influences on sex.
- Describe the cultural influences on gender.

PSY 212 : Survey of Research Methods

Provides an overview of research design strategies used in psychological research. Topic covered include the scientific method; reviewing literature for hypothesis development; ethical issues in research; the operational definition of variables; observational, self-report and experimental methods; data analysis; inferential hypothesis testing; and the American Psychological Association writing style. The course furnishes students with the fundamentals of research that all psychology majors should be aware of, regardless of whether they plan to pursue a research career. Emphasis is placed on the critical evaluation of psychological research as it is reported in the popular media and research periodicals.

Credits 3

Lecture Hours 3

Designation

DS

Prerequisites

Grade of C or better in PSY 100

Course Outcomes

- Describe basic research methods for psychology.
- Craft a solid research question
- Identify appropriate variables for a given research question.
- Choose the appropriate methodology to answer a research question.
- Critically analyze the research methodology in scholarly publications and in various other sources.

PSY 224 : Abnormal Psychology

Concepts and principles used in clinical practice: dynamics, diagnosis, and treatment of abnormal behavior. Compares and contrasts the different patterns of abnormal behavior. Examines the differences in theoretical models for understanding maladaptive behavior.

Credits 3

Lecture Hours 3

Designation

DS

Prerequisite Courses

PSY 100

Prerequisites

Grade of C or better in PSY 100

Course Outcomes

- Compare and contrast historical and current theories of abnormal behavior.
- Identify and describe different types of abnormal behavior and the "best practice" therapies associated with each type.
- Apply the principles of psychology to their own thoughts and feelings.
- Illustrate understanding of the role of culture, ethnicity, and socio-economic factors in defining abnormal behavior.

PSY 225 : Statistical Techniques

This course covers statistical methods related to behavioral sciences including frequency distributions, graphic methods, central tendency, variability, correlation, reliability, and tests of significance.

Credits 3

Lecture Hours 3

Prerequisites

Credit in a 100-level (or above) Social Science course, placement into English 100, and placement into Math 103 or higher; or consent of instructor.

Course Outcomes

- Use descriptive and inferential statistics to summarize and analyze raw data.
- Present statistical data in graphs and tables.
- Use statistics to investigate the relationships among variables.
- Use t-tests, regression, and ANOVA to test hypotheses and statistical significance.

PSY 240 : Developmental Psychology

This course examines the emotional, mental, physical, and social development of individuals from infancy to adulthood with special attention to interests abilities and critical issues at successive developmental stages.

Credits 3

Lecture Hours 3

Designation

DS

Prerequisite Courses

PSY 100

Prerequisites

Grade of C or better in PSY 100 or consent of instructor.

Course Outcomes

- Discuss the biological and environmental basis of human behavior.
- Integrate the basic perspectives, concepts, principles, and general information comprising the field of developmental psychology.
- Utilize the various developmental psychology models and concepts in explaining human behaviors.
- Recognize the study of psychology as a science.

PSY 241 : Applied Developmental Psychology

Examines the emotional, mental, physical, and social development of individuals from infancy to adulthood with special attention to the impact of racism at each developmental stage.

Credits 3

Lecture Hours 3

Designation

DS

Prerequisite Courses

PSY 100

Prerequisites

Grade of C or better in PSY 100

Course Outcomes

- Discuss the biological and environmental basis of human behavior.
- Integrate the basic perspectives, concepts, and principles of developmental psychology.
- Utilize the various developmental psychology models and concepts in explaining human behaviors.
- Recognize the study of psychology as a science.
- Explain how racism impacts development at various stages of the lifespan.

PSY 250 : Social Psychology

This course will provide students with an understanding of the relationship of social roles on human behaviors and how interpersonal relationships, attribution theories, attitudes, group behaviors, and stereotypes affect human behaviors.

Credits 3

Lecture Hours 3

Designation

DS

Prerequisites

Grade of "C" or better in PSY 100.

Course Outcomes

- Recognize the study of social psychology as a science.
- Integrate the basic perspectives, concepts, principles, and general information comprising the field of social psychology.
- Utilize the various social psychology models and concepts in explaining human behaviors.

PSY 251 : Human Sexuality

Examines topic areas in the field of human sexuality including anatomy/physiology, sexual response, and sexual themes in society. Emphasizes understanding of one's sexuality through decision-making and communication skills.

Credits 3

Lecture Hours 3

Designation

DS

Prerequisite Courses

PSY 100

Prerequisites

Grade of C or better in PSY 100

Course Outcomes

- Recognize the study of human sexuality as a science.
- Describe the role of biology, culture, and socio-economic factors in the understanding and expression of human sexuality.
- Discuss the basic perspectives, concepts, principles, and general information comprising the field of human sexuality.

PSY 253 : Conflict Resolution & Mediation

Explores the reasons for conflict and the different approaches for seeking resolution for conflict. Studies personal and societal value systems, the psychology of how people respond to conflict, the impact of culture on conflict styles, communication skills useful in dealing with conflict, and alternative resolution strategies. Practices mediation skills as a third party intervention method.

Credits 3

Lecture Hours 3

Designation

DS

Recommended Preparation

Grade of C or better in ENG 100.

Prerequisite Courses

PSY 100

Prerequisites

Pre-Requisite: Grade of C or better in PSY 100

Course Outcomes

- List and discuss the basic issues of conflict, conflict management, and resolution.
- Apply the basic theories of conflict resolution.
- Integrate critical thinking of conflict resolution into communication and interaction patterns.
- Integrate constructs presented with personal knowledge and experience with conflict situations.

PSY 255 : Applied Social Psychology

This course explores how social psychological concepts are utilized in media, including literature, film, and television. The course emphasizes how social psychological theories are illustrated through fictional characters and situations along with investigating how accurately these characters and situations reflect real life research on said theories.

Credits 3

Lecture Hours 3

Designation

DS

Prerequisite Courses

PSY 100

Prerequisites

A grade of C or better in PSY 100.

Course Outcomes

- Recognize the study of psychology as a science.
- Apply the principles of social psychology to media.
- Utilize social psychology concepts in explaining media depictions human behavior.

PSY 260 : Psychology of Personality

An introduction to the basic theoretical approaches to personality, how they are developed, changed and analyzed.

Credits 3

Lecture Hours 3

Designation

DS

Prerequisite Courses

PSY 100

Prerequisites

Grade of C or better in PSY 100

Course Outcomes

- Recognize the study of personality psychology as a science.
- Discuss the basic perspectives, concepts, principles, and general information comprising the field of personality psychology.
- Utilize the various personality psychology models and concepts in explaining human behaviors.

PSY 270 : Introduction to Clinical Psychology

History, theories, nature of psychological problems, methods of assessment, forms of intervention, current developments.

Credits 3

Lecture Hours 3

Designation

DS

Prerequisites

Grade of "C" or better in PSY 100.

Course Outcomes

- Critique the foundation of knowledge, skills, professional attitudes and values associated with clinical psychology.
- Integrate the basic perspectives, concepts, principles, practices and general information comprising the field of clinical psychology.
- Utilize the various clinical psychology models and concepts in explaining human behaviors.

PSY 271 : Introduction to Trauma

This course provides an overview of trauma, covering the types of traumas experienced, the nature of trauma such as sexual abuse, combat, and natural disasters, how trauma affects individuals, grief reactions, and traumatic stress. It explores the professional's response to trauma, vicarious traumatization, the use of trauma-informed care as a crisis intervention, comorbid disorders and general treatment issues.

Credits 3

Lecture Hours 3

Designation

DS

Recommended Preparation

Grade of C or better in ENG 100.

Prerequisite Courses

PSY 100

Prerequisites

Grade of C or better in PSY 100 or consent of instructor.

Course Outcomes

- Define traumatic stress and trauma.
- Identify the common responses of individuals, families, groups, and communities affected by trauma
- Describe the connection between traumatic experiences and physical and mental health consequences
- Identify cultural considerations that impact understanding of trauma.
- Describe the elements of trauma informed intervention at the individual, family, organizational and community level.

PSY 294 : Special Topics: Psychology

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

Credits 3

Religion

REL 150 : Introduction to World's Major Religions

Introduction to the world's major religions: Primitive, Hinduism, Buddhism, Shinto, Confucianism, Taoism, Judaism, Christianity, and Islam. Fieldtrips maybe required outside class time.

Credits 3

Lecture Hours 3

Designation

FGC

Course Outcomes

- Identify the following elements or dimensions: origin, doctrines, ethics, sacred literature, important figures/founders, rituals, worship, and institutions for each of the world's major religious traditions.
- Identify the similarities and differences between two or more religions on the basis of the aforementioned dimensions.
- Examine the relationship between religion and culture/society.
- Question and think critically.

REL 151 : Religion and the Meaning of Existence

Introduction to basic issues of the question of the meaning of human existence. Emphasis is placed upon the student analyzing his/her own beliefs and exploring alternative answers.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Identify the various understandings of experience, existence, and/or the Ultimate/Absolute Reality in the world's religious traditions.
- Compare and contrast the similarities and differences between these meanings of existence in two or more religions.
- Identify the rituals, myths, and symbols/art that shape these worldviews.
- Analyze their belief systems.

REL 201 : Understanding the New Testament

Analysis of the origin and development of the early Christian message as set forth in the New Testament. Special attention will be given to the message of Jesus and Paul and its relevance to the modern world.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Demonstrate awareness of the historical and literary context of the New Testament.
- Show knowledge of modern Biblical interpretation and criticism.
- Show an understanding of the major parts and types of literature contained in the New Testament.
- Demonstrate recognition of how New Testament teachings have shaped modern society and human understanding of self.

REL 202 : Understanding Indian Religions

Historical survey of the teachings and practices of the major religious traditions of India.

Credits 3

Lecture Hours 3

Designation

DH

Recommended Preparation

REL 150 or 151.

Prerequisites

Placement in ENG 100, or consent of instructor.

Course Outcomes

- Identify the myths, histories, doctrines, and practices of Hinduism, Jainism, Buddhism, and Sikhism.
- Identify each religion's understanding of the human condition, ethics, knowledge, death, the afterlife, and conceptions of the divine.
- Identify common themes within the religions studied.
- Interpret primary sources (such as epics, devotional poetry, mystical instruction, myths, and hymns).
- Examine the relationship between religion and culture/society.
- Question and think critically.

REL 205 : Understanding Hawaiian Religion

Major Hawaiian religious teachings and practices from ancient times to the present. Investigation of cultural influence of Hawaiian religious beliefs; analysis of religious texts and relation to other traditions. This course may be applied to the BA language/culture core requirements at UH Mānoa.

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Identify and access major sources on Hawaiian religion.
- Express thoughts on Hawaiian religion in oral and written form.
- Compare and contrast elements of the Hawaiian religious experience with others or with their own.
- Identify ways in which Hawaiian religious thought and practice continues in the present.
- Interpret some symbolism of Hawaiian religious ritual and poetry.

REL 206 : Understanding Confucianism

Exploration of Confucianism in its philosophical, cultural, and historical context in China.

Credits 3

Lecture Hours 3

Designation

DH

Recommended Preparation

Credit for REL 150 Introduction to Major World Religions.

Course Outcomes

- Analyze the primary and secondary texts.
- Explore the relevance of these texts to contemporary issues today, both in China and elsewhere.
- Describe the origins and major historical periods in Confucian belief and practice.
- Examine the relationship between religion and culture/society.

REL 207 : Understanding Buddhism

Survey of major forms and practices of Buddhism.

Credits 3

Lecture Hours 3

Designation

DH

Recommended Preparation

ENG 100 and either REL 150 or REL 151.

Course Outcomes

- Identify the myths, histories, doctrines, and practices of the major schools of Buddhism.
- Identify each school's understanding of the human condition, ethics, knowledge, death, the afterlife, and conceptions of the divine.
- Interpret primary sources.
- Examine the relationship between religion and culture/society.
- Question and think critically.

REL 212 : Science Fiction and Religion

This course explores and reflects on the presence of religions and religious themes in science fiction films and television shows. Students will also discuss the ethics of robots and other forms of artificial intelligence (AI). This course explores the presence of religious themes such as the messianic hero, immortality, free will and determinism, prophecy, evil, mysticism, and apocalypse in films and tv shows including Star Trek, Star Wars, the Matrix, I Robot, Avatar, Superman, and more.

Credits 3

Lecture Hours 3

Designation

DH

Recommended Preparation

REL 150

Course Outcomes

- Identify the presence of the major religious motifs in science fiction films and television shows.
- Analyze the hero archetype, the monomyth, in religious literature and science fiction media.
- Investigate the ways in which science fiction constitutes contemporary religious myth-making.
- Examine the influence and impact that artificial intelligence will have on society.

REL 217 : Understanding Polynesian Religions

This course provides an introduction to the study of Polynesian religions through an exploration of the oral traditions of Hawai'i, Aotearoa (New Zealand), French Polynesia (Tahiti et al.), and Samoa among others. In this class, students will gain a foundational understanding of important religious themes that permeate Polynesia. Main themes include but are not limited to deities' forms & functions, cosmogonies, etiologies, and belief-regulated practices. Additionally, a portion of the semester will focus on belief narratives as vehicles for the transmission of knowledge and the significance of contemporary representation and self-representation of Polynesian religion and culture. This class will use comparative analysis between Hawaiian religion and the religious traditions of Aotearoa, French Polynesia, and Samoa to identify the fundamental concepts needed to understand Polynesian religions and explore how they are interconnected and interwoven into the fabric of our lives today. (Cross-listed as HWST 217)

Credits 3

Lecture Hours 3

Designation

DH

Course Outcomes

- Identify and describe significant source-language terms, major figures, and stories in Hawaiian and other Polynesian religions
- Identify and describe important themes common to Hawaiian and other Polynesian religions
- Analyze, compare, contrast, major themes common to Hawaiian and other Polynesian religions

REL 296 : Special Topics in Religion

Students will investigate important topics in the study of religion such as Sacred Places, Religion and the Media, or Religion and Politics. A specific course description will be printed in the schedule of classes.

Credits 3

Lecture Hours 3

Recommended Preparation

REL 150 or REL 151

Course Outcomes

- Identify the important concepts and facts associated with the topic under examination.
- Explain cause and effect relationships in connection to the topic discussed.
- Compare and contrast various religions' ideas of the topic.
- Relate the topic to contemporary events.

Science

SCI 210 : Polynesian Voyaging: Seamanship and Stewardship

This course focuses on the fundamentals of oceanic voyaging by blending the traditions of Polynesian culture, history and skills with modern science and technology. An interdisciplinary approach is used in treating topics in astronomy, navigation, geology, oceanography, meteorology and archaeology. Students are introduced to the basic skills of seamanship and stewardship, including the techniques in navigational wayfinding and the impact of human activity on the island environments.

Credits 3

Lecture Hours 3

Designation

DP

Recommended Preparation

Credit for or concurrent enrollment in HSWT 110

Course Outcomes

- Describe the basic geography of Polynesia and its settlement as gleaned from archaeological findings.
- Apply the fundamental concepts in modern positional astronomy and techniques of wayfinding (non-instrument navigation).
- Discuss Polynesian mythology and cosmology, especially as related to voyaging.
- Apply the basic concepts in geology and weather forecasting in the Pacific area.

SCI 210L : Polynesian Voyaging: Seamanship and Stewardship Lab

Laboratory/field trip course designed to acquire seamanship skills and apply knowledge of astronomy, geology, oceanography, meteorology, marine biology, ethnobotany and archaeology through sailing and environmental exploring activities. Laboratory/field trip course is also designed to apply knowledge of Polynesian skills and modern science to the impact on the environment due to human settlement, especially in Hawai'i.

Credits 1

Lab Hours 3

Designation

DY

Recommended Preparation

Credit for or concurrent enrollment in SCI 210.

Prerequisites

1. Minimum water skills and survival requirements Student must demonstrate an: -Ability to swim a minimum of 500 yards in the open ocean using any strokes, except backstroke. -Ability to tread water for 30 minutes in the open ocean. (Note: Accredited water skill and survival tests passed within the past year are acceptable upon instructor approval. The swim test must be completed by the date of the first sailing lab.)

2. Health Clearance: from a licensed physician must be provided. (Note: Health clearance submitted within the past year is acceptable upon instructor approval. Health clearance must be submitted by the date of the first sailing lab.)

Course Outcomes

- Apply both traditional Polynesian skills and modern scientific methods when engaged in sailing and environmental exploring activities.
- Apply basic sailing and navigational skills to prepare and carry out a sailing plan.
- Apply water safety skills.
- Conduct basic canoe operations, including rigging, sailing and maintenance.
- Identify Polynesian-introduced plants and native plants that are valuable for voyaging and discuss their value as food source, medicine, building material, and cordage.
- Identify common marine organisms found in Hawaii and know what to do when stung or bitten, and know which marine organisms is suitable as a food source.
- Respond to navigational and environmental problems using knowledge of constellations, wayfinding, geology, oceanography, weather forecasting, and ecology.

SCI 295AL : Introduction to STEM Research in Algae

STEM research class with a student engaged in independent research in topic areas related to Algae Studies. Credits vary from 1 – 4 based on the complexity of the research topic. May be repeated up to 6 credits. (3 hours cooperative education/work experience per week per credit.)

Credits 1-4

Prerequisites

Instructor Consent.

Course Outcomes

- Use research and technology skills to access information from multiple sources
- Design and implement a plan to solve a specific STEM-based research project
- Collect, analyze, and interpret data generated by the selected research project
- Communicate conclusions in written and/or oral form

SCI 295AS : Introduction to STEM Research in Aerospace Science

SCI 295AS Introduction to STEM Research in Aerospace Science (variable 1-3 credits) offers a research experience in aerospace science, which emphasizes the application of the scientific method to a specific aerospace project. Repeatable up to 6 credits. (3 hours cooperative education/work (COOP) experience per week per credit)

Credits 1-3

Recommended Preparation

Completion of an engineering, physics, astronomy or ICS lab as stipulated by the instructor.

Prerequisites

Instructor consent

Course Outcomes

- Use research and technology skills to access information from multiple sources.
- Design and implement a plan to solve a specific STEM-based research project.
- Collect, analyze, and interpret data generated by the selected research project.
- Communicate conclusions in written and/or oral form.

SCI 295EN : Introduction to STEM Research in Engineering

SCI 295EN Introduction to STEM Research in Engineering (variable 1-3 credits) offers a research experience in engineering, which emphasizes the application of the scientific method to a specific engineering project. Repeatable for up to 6 credits. (3 hours cooperative education/work (COOP) experience per week per credit)

Credits 1-3

Recommended Preparation

Completion of an engineering or physics lab course as stipulated by the instructor.

Prerequisites

Instructor consent.

Course Outcomes

- Use research and technology skills to access information from multiple sources.
- Design and implement a plan to solve a specific STEM-based research project
- Collect, analyze and interpret data generated by the selected research project.
- Communicate conclusions in written and/or oral form.

SCI 295EP : Introduction to STEM Research in Ethnobotanical Pharmacognosy

SCI 295EP Introduction to STEM Research in Ethnobotanical Pharmacognosy (1-4 credits) offers a research experience in study of Hawaiian medicinal plants for the health benefits, bioactive constituents, development of value added foods, and possible production of nutraceuticals. A total of four credits are necessary to meet the capstone requirement for the Certificate in Ethnopharmacognosy. May be repeated up to 6 credits. (3 hours cooperative education/work (COOP) experience per week per credit.)

Credits 1-4

Recommended Preparation

Completion of a MICR, BOT or BIOL lab course as stipulated by the instructor.

Prerequisites

Instructor Consent.

Course Outcomes

- Use research and technology skills to access information from multiple sources
- Design and implement a plan to solve a specific STEM-based research project
- Collect, analyze, and interpret data generated by the selected research project
- Communicate conclusions in written and/or oral form

SCI 295PB : Introduction to STEM Research in Plant Biotechnology

SCI 295PB Introduction to STEM Research in Plant Biotechnology (1-4 credits) offers a research experience in application of the principles and techniques of plant biotechnology in agricultural production and plant conservation. A total of four credits are necessary to meet the capstone requirement for the Certificate in Plant Biotechnology. May be repeated up to 6 credits. (3 hours cooperative education/work experience per week per credit.)

Credits 1-4

Recommended Preparation

Completion of a MICR, BOT or BIOL lab course as stipulated by the instructor.

Prerequisites

Instructor Consent.

Course Outcomes

- Use research and technology skills to access information from multiple sources
- Design and implement a plan to solve a specific STEM-based research project
- Collect, analyze, and interpret data generated by the selected research project
- Communicate conclusions in written and/or oral form

SCI 295V : Introduction to STEM Research

SCI 295V offers a research experience in science, technology, engineering, and/or mathematics, emphasizing the application of the scientific method to a specific project. Repeatable for up to 6 credits. (3 hours cooperative education/work experience per week per credit)

Credits 1-3

Recommended Preparation

Completion of a lab science course as stipulated by the instructor.

Prerequisites

Instructor consent.

Course Outcomes

- Use research and technology skills to access information from multiple sources.
- Design and implement a plan to solve a specific STEM-based research project.
- Collect, analyze and interpret data generated by the selected research project.
- Communicate conclusions in written and/or oral form.

Social Sciences

SOCS 225 : Statistical Analysis for Social Sciences

This course covers statistical methods related to behavioral sciences including frequency distributions, graphic methods, central tendency, variability, correlation, reliability, and tests of significance.

Credits 3

Lecture Hours 3

Designation

DS

Prerequisites

Credit in a 100-level (or above) Social Science course, placement into English 100, and placement into Math 103 or higher; or consent of instructor.

Course Outcomes

- Use descriptive and inferential statistics to summarize and analyze raw data.
- Present statistical data in graphs and tables.
- Use statistical formulas to investigate the relationships among variables, including central tendency, correlations, and percentages.
- Use t-test, f-test, and z-test to test hypotheses and statistical significance.

SSCI 193 : Cooperative Arts and Science Education

A work-study course providing opportunities to reinforce skills learned in the Social Science areas and to apply those skills in actual job situations. May be repeated up to 6 credits.

Credits 1-4

Prerequisites

Minimum of 12 credit hours of general curricula.

Course Outcomes

- Integrate the foundations of knowledge, skills, professional attitudes and values associated with a careerfield in the helping and human resource professions.
- Discuss the dynamics and multiple causes of interpersonal, family, and organizational dysfunction.
- Utilize a range of helping strategies and skills appropriate for prevention and early intervention work in a variety of settings.
- Apply the basic knowledge and practice of counseling and problem solving skills.

SSCI 293 : Cooperative Arts and Science Education

A work-study course providing opportunities to upgrade and diversify knowledge and skills learned in the behavioral and social sciences, and to apply these in job situations. (Practicum)

Credits 1-4

Prerequisites

SSCI 193V.

Course Outcomes

- Integrate the foundations of knowledge, skills, professional attitudes and values associated with a careerfield in the helping and human resource professions.
- Discuss the dynamics and multiple causes of interpersonal, family, and organizational dysfunction.
- Utilize a range of helping strategies and skills appropriate for prevention and early intervention work in a variety of settings.
- Apply the basic knowledge and practice of counseling and problem solving skills.

Social Work

SW 200 : The Field of Social Work

Orientation to the profession of social work; the nature and scope of social work, historical development, values and philosophy, methods of practice, scope, and aims.

Credits 3

Lecture Hours 3

Designation

DS

Prerequisites

Credit for ENG 22 or ENG 23 or placement in ENG 100.

Course Outcomes

- Explain social work values and their applications in the field.
- Analyze social problems affecting individuals, families, groups, and communities.
- Explain the theories and skills of social problems and their applications.

Sociology

SOC 100 : Survey of General Sociology

This course is an introduction to the scientific discipline of sociology. It will focus on key concepts, main theoretical perspectives, and research findings used by sociologists to explain the social world and social interaction. The course examines the fundamental components and institutions that makeup the structure of human societies as well as the basic processes and direction of social change.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Summarize and distinguish the three main theoretical perspectives in sociology.
- Analyze and apply specific sociological theories and perspectives to human behavior and social issues.
- Explain and evaluate how society and culture affect our beliefs, values, behavior, and thinking patterns.
- Express and communicate ideas and opinions clearly in writing.

SOC 214 : Introduction to Race and Ethnic Relations

This course focuses on race and ethnic relations from local (Hawaii), national, and international perspectives; patterns of race/ethnic relations; and the social, economic, and political problems associated with racial/ethnic conflict.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Explain why sociologists call race a "social construction".
- Describe examples of racial inequality in the United States.
- Identify examples of racism and microaggressions.
- Apply major sociological perspectives to race/ethnic relations at both the micro and structural level.

SOC 218 : Introduction to Social Problems

This course is a theoretical and substantive survey of the nature and causes of social problems; selected topics may vary from semester to semester.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Identify and utilize sociological perspectives to analyze social problems in society.
- Use critical thinking skills to evaluate the causes of social problems.
- Evaluate proposed solutions to social problems.

SOC 231 : Introduction to Juvenile Delinquency

This course focuses on juvenile delinquency in the U.S. and examines the nature of and trends in juvenile delinquency, explanations for and theories of juvenile delinquency, and institutional responses to and treatment of juvenile delinquency in the U.S. juvenile justice system.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Apply sociological theories of juvenile delinquency to contemporary cases.
- Explain the multiple causes of juvenile delinquency.
- Describe the differences in male and female offenders.
- Describe how social institutions prevent and/or contribute to juvenile delinquency.

SOC 251 : Introduction to Sociology of the Family

SOC 251 is the study of human relationships within courtship, marriage, and the family as influenced by culture and society. It is designed to challenge students to re-examine assumptions regarding behavior, decisions, choices, and motivations in interpersonal relationships. The course places particular emphasis on diverse family forms, and the changing nature of how we define family.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Identify, describe, and analyze major trends in the family from a sociological perspective.
- Describe and analyze the connections between individual family experiences and larger social institutions.
- Analyze contemporary social and political issues and describe how those issues affect the family.

Spanish Language

SPAN 101 : Beginning Spanish I

Introduction to basic structures of the Spanish language emphasizing speaking, writing, listening and reading. Oral communication emphasized to provide students with the right pronunciation vocabulary and the control of basic grammar. Introduction to Hispanic culture.

Credits 4

Lecture Hours 4

Course Outcomes

- Use appropriate pronunciation, structure and vocabulary to communicate orally with speakers of Spanish, answering questions or making simple descriptions.
- Read and understand authentic documents in Spanish for cultural information.
- Write simple texts (shopping lists, descriptions, postcards, forms) using knowledge of vocabulary, culture and basic grammatical structures.
- Analyze oral, written and visual sources (phone messages, menus, advertisements, cartoons) of information about Hispanic culture and compare and contrast with what the students know of their own culture.

SPAN 102 : Beginning Spanish II

Continues SPAN 101 through reading, speaking, writing and listening. Oral communication emphasized. Utilizes videos, stories and songs. Deals with Hispanic culture and the basic knowledge of the history, geography, and the traditions of Spanish speaking countries.

Credits 4

Lecture Hours 4

Prerequisites

Credit for SPAN 101 or consent of instructor.

Course Outcomes

- Use appropriate pronunciation, structure and vocabulary to communicate orally with speakers of Spanish with greater proficiency, using role playing to create dialogues based on real-life situations.
- Read and understand authentic documents in Spanish (simple articles, poems, newspaper articles) for cultural information with greater proficiency.
- Write simple texts (letters, diaries, simple essays) using knowledge of vocabulary, culture and basic grammatical structures with greater proficiency.
- Analyze oral, written and visual sources (dialogues, articles, film clips, Internet sites) of information about Hispanic culture and compare and contrast with what the students know of their own culture.

SPAN 201 : Intermediate Spanish I

Continuation of SPAN 102. Further refinement of basic language skills. Increased control over structures and idioms in written and oral expression. Reading about Hispanic culture, society, history and literature.

Credits 3

Lecture Hours 3

Prerequisites

Credit for SPAN 102 or consent of instructor.

Course Outcomes

- Use appropriate pronunciation, structure and vocabulary to communicate orally with speakers of Spanish.
- Read and understand authentic documents (menus, recipes, itineraries, articles) in Spanish for cultural information.
- Compose dialogues and do research on some aspect of Hispanic culture or history and present it orally.
- Analyze oral, written and visual sources of information about Hispanic culture and compare and contrast with what the students know of their own culture.
- Write descriptions, letters, diaries, showing knowledge of vocabulary, appropriate structures and knowledge of Hispanic culture.
- Use Spanish to communicate personal information and experience and narrate past events and future aspirations.

SPAN 202 : Intermediate Spanish II

Continuation of SPAN 201. Further refinement of basic language skills including vocabulary development beyond the 201 level. Increased control over structures and idioms. Includes reading about literature, culture and society.

Credits 3

Lecture Hours 3

Prerequisites

Credit for SPAN 201 or consent of instructor.

Course Outcomes

- Use accurate pronunciation, structure and vocabulary to communicate orally with speakers of Spanish, creating dialogs based on real-life situations.
- Read and understand authentic documents in Spanish (articles, poems, short stories, film scripts, plays) for cultural information and critical thinking.
- Write texts (poems, essays, diaries, reports) using knowledge of vocabulary, culture and increasingly sophisticated syntax and grammatical structure, with increasing fluency and proficiency.
- Analyze oral, written and visual sources (dialogs, articles, film clips, feature length films, Internet sites) of information about Hispanic culture and compare and contrast with what the students know of their own culture.
- Create short film clips in the u-tube genre, containing both visual and verbal information about Hispanic culture.

Speech

SP 151 : Personal and Public Speech

This course introduces students to the basic principles of human communication. Students will receive practice in improving their competency in the areas of public speaking, specifically in informative and persuasive speaking.

Credits 3

Lecture Hours 3

Designation

DA

OC

Prerequisites

Placement in ENG 21 or ENG 23 or higher.

Course Outcomes

- Describe the principles and processes of human communication.
- Compare and contrast differences between interpersonal, intrapersonal, and public speaking.
- Demonstrate and evaluate effective verbal and nonverbal communication.
- Appropriately adapt communicative messages to the self and to others.
- Demonstrate effective listening skills.

SP 181 : Introduction to Interpersonal Communication

Introduction to basic principles of interaction between two people. Emphasis is on enhancement of skills in a variety of interpersonal contexts.

Credits 3

Lecture Hours 3

Designation

OC

Prerequisites

Placement in ENG 21 or ENG 23 or higher.

Course Outcomes

- Analyze situations in terms of communication models, identifying perspective and perception.
- Demonstrate improvement in listening skills through tests and critical analysis of other students by avoiding listening problems and practicing guidelines for listener feedback.
- Determine the source of individual values and development in understanding and analyzing self-image as the communicator.
- Recognize nonverbal communication identifying body language, gesture, facial expression, and posture.
- Apply effectively specific skills to improve assertiveness.
- Define conflict/stress and identify steps in reaching a mutually acceptable decision.
- Trace the development of relationships, identifying major steps of each level, and analyzing the progression of these levels.

SP 251 : Principles of Effective Public Speaking

This course provides students with the opportunity to build on their public speaking skills through extensive practice in speech preparation and delivery techniques. This course will focus on how to organize a presentation, develop rhetorical skills, and use analytical skills.

Credits 3

Lecture Hours 3

Designation

DA

OC

Prerequisites

Grade of "C" or better in ENG 100 or credit for SP 151.

Course Outcomes

- Demonstrate correct usage of relevant concepts, theories, and principles of effective public communication.
- Analyze the ethical implications of speaking and being an attentive audience member.
- Select appropriate and effective speech topics.
- Conduct quality research and gather supporting material for various types of public speeches.
- Critique and provide constructive feedback to public speakers.

SP 253 : Argumentation and Debate

SP 253 develops writing, reading, critical thinking, and communication skills. Students will learn to develop techniques to researching and presenting arguments in an effective and articulate manner.

Credits 3

Lecture Hours 3

Designation

DA

OC

Recommended Preparation

Recommended course SP 151

Prerequisites

Grade of "C" or better in ENG 100 or credit for SP 151.

Course Outcomes

- Use different speech components to form cohesive argument
- Identify support for claims and be able to refute and explain logical fallacies
- Recognize ethical and unethical arguments through the use of rhetoric
- Differentiate between propositions of fact, value, and policy
- Demonstrate an increased self-awareness of critical thinking and reasoning including identifying self-biases and inferences

SP 261 : Organizational Communication

Introduces theories and strategies for managing communication in organizations. Students will gain an understanding of how communication functions by addressing the self, maintaining interpersonal relationships, problem solving and decision-making, and the use of technology in the workplace.

Credits 3

Lecture Hours 3

Designation

DS

OC

Course Outcomes

- Discuss the characteristics of groups and teams in organizations
- Analyze communication problems in the workplace
- Evaluate the role of interpersonal relationships in organizations
- Apply communication theories to everyday situations using multiple perspectives
- Discuss case studies to reflect on qualitative methods used in organizational communication.

Theatre

THEA 101 : Introduction to Drama and Theatre

An introduction to the art of drama and theatre. Students study selected plays that are representative of important playwrights and historical periods. These plays are studied in their historical context and provide a basis for understanding elements and styles of drama. Theatre production will also be explored by considering the functions of actors, audiences, designers, playwrights and technicians.

Credits 3

Lecture Hours 3

Designation

DA

Course Outcomes

- Discuss the origin and development of the theatre from its beginnings to the present.
- Discuss the theatre's influence and importance in human culture.
- Compare and contrast plays and theatre practices from different time periods and cultures.
- Analyze the artistic choices and techniques used to transform a written dramatic script into a performed work presented to an audience.

THEA 131 : Beginning Unarmed Stage Combat

Introduction to theatrical unarmed stage combat. Maybe repeated up to 9 credits.

Credits 3

Lecture Hours 3

Designation

DA

Course Outcomes

- Correctly define stage combat specialized terminology and concepts.
- Execute theatrical fight techniques
- Choreograph and perform staged fights

THEA 132 : Beginning Sword Stage Combat

Introduction to sword-fighting for the stage. May be repeated up to 9 credits.

Credits 3

Lecture Hours 3

Designation

DA

Prerequisites

Grade of "C" or better in THEA 131 or instructor consent.

Course Outcomes

- Demonstrate correct usage of sword stage combat terminology and core concepts
- Execute sword techniques for the stage
- Perform choreographed theatrical sword fights

THEA 133 : Stage Combat Workshop Level I

Continuing exploration of theatrical stage combat in assorted weapons. May be repeated up to 9 credits.

Credits 3

Studio Hours 6

Designation

DA

Recommended Preparation

Credit for THEA 221 or THEA 131

Course Outcomes

- Define stage combat specialized terminology and concepts.
- Execute theatrical fight techniques.
- Choreograph and perform staged fights.

THEA 177 : Introduction to Theatre of Hawai'i

An exploration of theatrical performances and plays showcasing the people, places and history of Hawai'i.

Credits 3

Lecture Hours 3

Designation

DH

Recommended Preparation

THEA 101

Course Outcomes

- Describe the historical, religious and cultural content of theatre in Hawai'i.
- Analyze the dramatic and cultural content of local, original Hawaiian plays using artifacts from original performances.
- Communicate the themes and body of work of a major local or Hawaiian playwright, director or theatrical company.

THEA 200B : Beginning Theatre Practicum: (Acting)

Beginning workshop experience in the practical application of theatre skills: (B) acting. THEA 200 is repeatable up to four credits in each alpha. Pre: for 200B, audition and performance of role in a THEA 260 production or similar performance deemed appropriate by instructor.

Credits 1

Recommended Preparation

THEA 221

Corequisites

THEA 260

Course Outcomes

- Demonstrate skill in chosen role's duties in a professional theatrical production.
- Communicate effectively with Director and fellow cast and crewmembers in discipline specific language and terminology.
- Execute all duties of chosen role in a live theatrical performance.

THEA 200C : Beginning Theatre Practicum: (Stagecraft)

Beginning workshop experience in the practical application of theatre skills: (C) Stagecraft. THEA 200 is repeatable up to four credits in each alpha.

Credits 1

Recommended Preparation

THEA 101 or THEA 240

Course Outcomes

- Demonstrate skill in chosen role's duties in a professional theatrical production.
- Communicate effectively with Director and fellow cast and crewmembers indiscipline specific language and terminology.
- Execute all duties of chosen role in alive theatrical performance.

THEA 200D : Beginning Theatre Practicum: (Costume)

Beginning workshop experience in the practical application of theatre skills: (D) Costume. THEA 200 is repeatable up to 4 credits in each alpha.

Credits 1

Recommended Preparation

THEA 101 or THEA 240

Course Outcomes

- Demonstrate skill in chosen role's duties in a professional theatrical production.
- Communicate effectively with Director and fellow cast and crewmembers in discipline specific language and terminology.
- Execute all duties of chosen role in alive theatrical performance.

THEA 211 : Mask Making and Performance

A hands-on course exploring several mask-making techniques, and the fundamentals of bringing a mask to life. The history and cultural significance of the mask will be surveyed. Students will make several masks and will perform for each other.

Credits 3

Lecture Hours 3

Designation

DA

Course Outcomes

- Discuss the importance of the mask in human culture.
- Demonstrate two or more mask-making techniques.
- Apply the basic process of bringing a mask to life to improvisations or rehearsed performances.
- Identify, analyze, and critically evaluate the technique in mask-making and mask performances.

THEA 220 : Beginning Voice and Movement

Introduction to vocal and movement techniques to increase self- awareness and potential for self-expression. May be repeated up to 6 credits.

Credits 3

Lecture Hours 3

Designation

DA

Course Outcomes

- Demonstrate awareness of personal habits, tensions and methods for releasing them, and physical and vocal preferences.
- Execute a wide variety of warmup and performance tools
- Perform pieces with self-expression through vocal and physical choices.

THEA 221 : Acting I

Performance course concentrating on voice, relaxation, body awareness, and freedom from self-consciousness through theatre games, improvisation, and exercises. Emphasis on ensemble work. Students must see two plays and write about them or use the Service- Learning option. May be repeated up to 9 credits.

Credits 3

Lecture Hours 3

Designation

DA

Course Outcomes

- Articulate and project the voice well.
- Devise and execute pantomimes and improvisations.
- Explore dramatic one- and two-person scenes.
- Identify, analyze and critically evaluate the technique and believability of dramatic performances.

THEA 222 : Acting II

Performance course concentrating on exploration of character creation; continued work on voice, relaxation, and self-realization. Students must see two plays and write about them or use the Service- Learning option. May be repeated up to 9 credits.

Credits 3

Lecture Hours 3

Designation

DA

OC

Prerequisites

Grade of "C" or better in THEA 221.

Course Outcomes

- Articulate and project the voice well.
- Devise and execute pantomimes and improvisations.
- Perform dramatic one- and two-person scenes.
- Identify, analyze and critically evaluate the technique and believability of dramatic performances.

THEA 223 : Introduction to Acting for Camera

An introduction to acting techniques for film, TV production, and other camera-based media. Repeatable up to 6 credits. (Cross-listed as CM 223)

Credits 3

Lecture Hours 3

Designation

DA

Recommended Preparation

THEA 101, 221, and 222.

Prerequisites

Grade of C or better in THEA 221.

Course Outcomes

- Demonstrate the skill of acting by using the camera lens to convey story.
- Illustrate the complexities of character within a given text.
- Analyze performances for television and film for quality and desired effect on the audience.

THEA 225 : Shakespeare Workshop

A study of William Shakespeare's life, works, contemporary performance practices, and the Royal Shakespeare Company's current training and methods of bringing the Bard's work to life for modern audiences. The curriculum of this course is tailored to the Royal Shakespeare Company's Summer Season, and this course serves as mandatory preparation for the Windward CC Footholds Shakespeare Study Abroad program to London and Stratford-upon-Avon. May be repeated up to 6 credits.

Credits 3

Studio Hours 6

Designation

DA

Recommended Preparation

THEA 101, THEA 221, and THEA 222.

Prerequisites

Grade of C or better in THEA 260 and THEA 200B, or Instructor Permission.

Course Outcomes

- Analyze Shakespeare's use of meter and poetry.
- Replicate Shakespeare's Contemporary Performance Practices.
- Deliver Shakespeare's Poetic Text with skillful use of iambic pentameter.
- Perform Scenes and Monologues from some of Shakespeare's great roles.

THEA 226 : Footholds UK Shakespeare Study Abroad

This course is a two-week intensive study abroad program to England. The first week is spent working with top-tier industry professionals at East 15 Acting School in London, and viewing productions at noted theatres there, as well as meeting professional actors for Q&A sessions. The second week is spent in Stratford-upon-Avon training closely with the Royal Shakespeare Company, attending lectures and seminars at the Shakespeare Birthplace Trust, and viewing two productions at the Royal Shakespeare Theatre. The course culminates in a performance of scenes and monologues in Shakespeare's own gardens for visiting tourists.

Credits 3

Studio Hours 6

Recommended Preparation

THEA 101, 221, 222, 260 and 200B.

Prerequisites

Grade of B or better in THEA 225.

Course Outcomes

- Analyze professional productions in London and Stratford.
- Interface effectively with current industry professionals.
- Demonstrate knowledge of Shakespeare's plays and roles.
- Perform scenes and monologues from Shakespeare's canon in his own gardens.

THEA 231 : Intermediate Unarmed and Staff Stage Combat

Intermediate training in the Unarmed and Quarterstaff disciplines of Stage Combat. Repeatable for up to 9 credits.

Credits 3

Lecture Hours 3

Designation

DA

Prerequisite Courses

THEA 131

Prerequisites

Grade of C or better in THEA 131 or instructor approval.

Course Outcomes

- Demonstrate correct usage of stage combat terminology and core concepts.
- Execute intermediate-level techniques for the stage.
- Perform choreographed theatrical fights.

THEA 232 : Intermediate Rapier and Dagger Stage Combat

Intermediate training in Rapier and Rapier and Dagger weapon disciplines in Stage Combat. Repeatable for up to 9 credits.

Credits 3

Lecture Hours 3

Designation

DA

Recommended Preparation

THEA 131 and THEA 132

Prerequisites

Grade of C or better in THEA 132 or instructor approval.

Course Outcomes

- Demonstrate correct usage of rapier and rapier and dagger stage combat terminology and core concepts.
- Execute rapier and rapier and dagger techniques for the stage.
- Perform choreographed theatrical sword fights.

THEA 233 : Stage Combat Workshop Level II

Level II Training in assorted weapon disciplines. Repeatable for up to 9 credits.

Credits 3

Studio Hours 6

Designation

DA

Prerequisites

Credit for THEA 131 AND 132, OR Credit for THEA 133 OR Instructor approval

Course Outcomes

- Demonstrate correct usage of stage combat terminology and core concepts.
- Execute stage combat techniques for the stage.
- Perform choreographed theatrical sword fights.

THEA 240 : Introduction to Stagecraft

Introduction to the technical process of theatre including scenery, lighting, sound and stage management. Students will focus on the range of skills needed to work in theatrical space. May be repeated up to 6 credits.

Credits 3

Lecture Hours 3

Designation

DA

Course Outcomes

- Demonstrate competence with the use of theatrical equipment.
- Identify key theatrical terms and concepts.
- Critically evaluate a theatrical event.
- Work effectively in a theatrical environment.

THEA 241 : Advanced Stagecraft

Advanced techniques of the technical process of theatre including lighting, sound, and rigging. Students will focus on the range of skills needed to work in convention, theatrical, concert, and dance applications. May be repeated up to 6 credits.

Credits 3

Lecture Hours 3

Designation

DA

Prerequisites

Credit for THEA 240 or consent of instructor.

Course Outcomes

- Demonstrate competence with the use of theatrical equipment to the instructor.
- Identify key theatrical terms and concepts.
- Critically evaluate a theatrical event.
- Work effectively in a theatrical environment.
- Demonstrate knowledge of one particular area of stagecraft through a presentation to the class and/or the instructor.

THEA 251 : Applied Theatre

This course provides individual instruction in theatre, covering intermediate and advanced performance techniques taught to each student's individual level. Applied theatre is a performance course. The emphasis will be toward developing performing skills from a wide range of methods focusing on bringing characters to vivid life, textual analysis, cold reading, voice and movement training, and playing truthful and effective moments on stage or screen for a contemporary audience. The goal is to facilitate student actors in attaining a level of confidence and skill that allows for consistently powerful and playful performances. This course may be repeated for up to 4 credits. (1 hour Individual Instruction)

Credits 1

Designation

DA

Prerequisite Courses

THEA 221

Prerequisites

A grade of C or better in THEA 221.

Course Outcomes

- Incorporate theoretical concepts in theatrical peformance.
- Cold read scripts with commitment, and strong appropriate character-driven choices.
- Demonstrate professional performance practices.

THEA 252 : Professional Preparation

This course provides individual instruction in theatre, covering necessary professional skills and resources to facilitate student performers' transition into the professional performing arts industry. Students will learn audition best practices, procure headshots, build a resume, and cultivate a repertoire of audition pieces. This course may be repeated for up to 4 credits. (1 hour Individual Instruction)

Credits 1

Designation

DA

Prerequisite Courses

THEA 221

Prerequisites

A grade of C or better in THEA 221.

Course Outcomes

- Research and contact casting directors, agents, companies and studios.
- Generate self-promotional materials..
- Prepare slates, monologues and other audition pieces.
- Demonstrate professional performance practices.

THEA 260 : Dramatic Production

Introduction to the process of converting a play in to a performance. Students are required to participate in at least two aspects of an actual production. Maybe repeated up to 9 credits.

Credits 3

Studio Hours 6

Designation

DA

Course Outcomes

- Identify key theatrical terms and concepts.
- Critically evaluate a theatrical event.
- Demonstrate professionalism in one particular area of theatrical production.

THEA 280 : Beginning Playwriting

The course introduces structure, guidelines, and format of the monologue and short play; beginning with the conception of an idea, followed by effective outlining and research techniques, subsequent drafts, and the final product in a polished monologue and short play.

Credits 3

Lecture Hours 3

Designation

DA

Prerequisites

Credit for ENG 100.

Course Outcomes

- Analyze the theme, plot-structure, historical context, political and/or cultural commentary and influence on later works of three to five plays.
- Write monologues and scenes.
- Write a complete short play (one or two acts).

THEA 296 : Special Topics in Theatre

Students will investigate important topics in Theatre Studies such as specific artists/practitioners, genres, or methods of training. May be repeated up to 6 credits with different topics.

Credits 3

Lecture Hours 3

Prerequisites

"C" or better in THEA 101 or "C" or better in THEA 221.

Course Outcomes

- Identify the important concepts and facts associated with the topic under examination.
- Explain cause and effect relationships in connection to the topic discussed.
- Compare and contrast various interpretations of the topic.
- Relate the topic to contemporary events.

Women, Gender & Sexuality Studies

WGSS 151 : Introduction to Women, Gender, and Sexuality Studies

This course is an introduction to feminist interdisciplinary analysis from global and critical perspectives. It explores relationships between women and men from various cultures, with a focus on gender, race, class, and sexual dynamics. The course also explores women\'s negotiations with institutional dynamics.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Explain the difference between sex as a biological category and gender as a social category.
- Describe the various ways that gender categories are socially constructed.
- Describe the historical changes in both gender roles and the status of women in the United States.
- Explain the similarities and differences of women's roles across cultural, racial, social, and economic lines.

WGSS 200 : Culture, Gender, and Appearance

This course explores the social construction of gender within culture and its visual expression through appearance. An analysis of role, identity, conformity, and deviance in human appearance is emphasized.

Credits 3

Lecture Hours 3

Designation

DS

Course Outcomes

- Use concepts and apply theories to describe the role of individual choice in appearance.
- Describe the links between clothing and culture.
- Describe the role appearance plays in gender development.
- Explain the communicative nature of appearance and expressions of identity.

WGSS 202 : Psychology of Gender

Survey of topics in psychology relevant to gender and its impact on the lives of women and men: socialization of gender, mental health, racial identity, majority-minority status, sexual orientation, life-span issues, and violence. (Cross-listed as PSY 202)

Credits 3

Lecture Hours 3

Designation

DS

Prerequisites

A grade of C or better in WGSS 151 or PSY 100, or consent of instructor.

Course Outcomes

- Describe the central concepts, theoretical perspectives, and research methods used in the psychology of gender.
- Use theoretical perspectives to explain gender behavior.
- Describe the biological influences on sex.
- Describe the cultural influences on gender.

Zoology

ZOOL 105 : Hawaiian Use of Fish and Aquatic Invertebrates

A study of fish and aquatic invertebrates used traditionally by Native Hawaiians. This class will examine the role of fish and aquatic invertebrates in Hawaiian culture and resource utilization and management.

Credits 3

Lecture Hours 3

Recommended Preparation

High school biology.

Course Outcomes

- describe the origin of Hawaiian aquatic fauna in relationship to the geologic history of the Islands, human introductions and the environments in which they occur.
- identify (common names, scientific names, and Hawaiian names) the fish and aquatic invertebrates used in old Hawai'i and recent times and the roles these species played in Hawaiian culture and resource utilization.
- describe the various methods whereby aquatic animals were acquired, cultured, and managed.

ZOOL 106 : Hawaiian Marine Invertebrates

Survey of marine invertebrates, their structure, ecology, and evolutionary relationships. Emphasis will be placed on identification and uses of Hawaiian tidal and coral reef animals. Three field trips required.

Credits 3

Lecture Hours 3

Designation

DB

Recommended Preparation

Ability to swim.

Course Outcomes

- Apply the principles of science and the scientific method to the study of marine invertebrates.
- Identify the common species of Hawaiian marine invertebrates by their common, scientific and Hawaiian names.
- Describe the basic biology (anatomy, morphology, adaptation, physiology, higher systematics, phylogeny, nutrition, behavior, ecology and biogeography) of marine invertebrates.
- Describe the importance of marine invertebrates to human society.

ZOOL 107 : Identification of Hawaiian Fishes

Identification of major groups and common species of fishes in Hawai'i with emphasis on shore fishes. Topics include morphology, adaptation, physiology, phylogenetic relationships, feeding relationships, behavior, ecology, fishing methods and Hawaiian use of fishes. Lecture/laboratory/field trip course (two required field tips on Saturdays).

Credits 3

Lab Hours 3

Lecture Hours 2

Designation

DB

DY

Recommended Preparation

Ability to swim.

Course Outcomes

- Know the names and characteristics of the major families of Hawaiian fishes.
- Learn how to identify Hawaiian fishes and know the common names, Hawaiian names, and scientific names of common Hawaiian fish species.
- Have an understanding of the biology of fishes in general, including the following topics: history of science and ichthyology, fish evolution and systematics, functional morphology, locomotion and buoyancy, respiration, circulation, thermal regulation, feeding relationships, osmoregulation and excretion, reproduction, behavior and communication, environmental biology, ecological relationships, and zoogeography.
- Have an understanding of the importance of fish to human society especially including the importance of fish to ancient Hawaiian culture, ancient and modern fishing methods, and commercial fisheries in Hawaii and elsewhere.
- Be able to observe, collect, preserve and describe Hawaiian fisheries in their natural habitats.

ZOOL 154 : Exercise for Wellness

The course will introduce students to the field of exercise, including a discussion of the underlying physiology, clinical responses, and the recommended medically related remediation. Exercise will be analyzed as an open energy system, supported by the major body systems, including cardiovascular, pulmonary, skeletal and neuromuscular systems. Important factors that will be considered include the frequency, intensity, type, and duration/time of exercise as well as the impact of gender, age, purpose, lifestyle and your body composition and metabolic status.

Credits 3

Lecture Hours 3

Designation

DB

Recommended Preparation

BIOL 100 or ZOOL 101 or ZOOL 141 and ZOOL 142.

Course Outcomes

- Define basic terms, concepts and principles of exercise, fitness, and wellness.
- Describe the fundamental classification of exercise biology and its underlying processes.
- Discuss the relationships between exercise and health.
- Explain the specificity of exercise and its multiple modes of application and related responses.
- Describe guidelines for assessing and planning a fitness- wellness program.
- Contrast Western and Eastern approaches to wellness.

ZOOL 200 : Marine Biology

Biological, physical, and chemical characteristics, flora and fauna, and interactions of components of marine ecosystems; survey of marine environments; utilization, exploitation, pollution, and conservation of marine resources; with special emphasis on the Hawaiian marine environment.

Credits 3

Lecture Hours 3

Designation

DB

Recommended Preparation

Registration in ZOOL 200L.

Course Outcomes

- Explain the process and philosophical basis of scientific inquiry.
- Distinguish between living things and inanimate objects.
- Demonstrate an understanding of the physical and chemical characteristics of the marine environment, especially those of the Hawaiian marine environment, and how they impact marine life.
- Communicate knowledge of the diversity of marine organisms, especially Hawaiian species.
- Exhibit an appreciation of the interaction between structure and function of marine life and how marine organisms are taxonomically related.
- Illustrate and provide examples of the ecological role of and relationships between marine organisms.
- Describe the major life zones of the ocean and the adaptations of living things relevant to being a successful species in these zones.
- Recognize and suggest solutions to the negative impacts of human activities on the marine environment.
- Research and write, using the language of the field, about a marine biology topic.

ZOOL 200L : Marine Biology Lab

Companion laboratory to ZOOL 200, Marine Biology. Practical, hands-on experiences in marine biology. Laboratory/fieldtrip class.

Credits 1

Lab Hours 3

Designation

DY

Prerequisites

Credit for or registration in ZOOL 200 or consent of instructor.

Course Outcomes

- Use the scientific method of inquiry to investigate biological phenomena.
- Apply the concepts learned in ZOOL 200 to an experimental and hands-on observational setting.
- Collect, reduce, and interpret biological data.
- Prepare written objective reports describing and interpreting experimental and observational results.
- Demonstrate the use of some of the standard tools of the biological scientist, such as microscopes, scales, spectrophotometers, computers, and other analytical tools.
- Demonstrate the use of specialized tools and methods frequently used in the study of the marine environments and the organisms that live in these environments.

ZOOL 254 : Exercise Therapy

This course introduces selected concepts, principles and practices of physical activity that affect human wellness and fitness throughout all stages of life. In particular, the concepts of exercise specificity, adaptation, and remediation are presented as they affect human growth and development, and the aging process. The clinical concept of hypokinetic disease (under activity) is presented and its counterpart, clinical exercise therapy (Rx dosage) for purposes of preventative health application and remediation. Comparative study of both Western and Eastern exercise regimens are included in the context of their clinical contribution to wellness.

Credits 3

Lecture Hours 3

Designation

DB

Recommended Preparation

BIOL 100 or ZOOL 101 or ZOOL 141 and ZOOL 142.

Course Outcomes

- Define basic terms, concepts and principles of exercise, fitness, and wellness.
- Describe the fundamental classification of exercise biology and its underlying processes.
- Discuss the relationships between exercise and health.
- Explain the specificity of exercise and its multiple modes of application and related responses.
- Describe guidelines for assessing and planning a fitness-wellness program.
- Comprehend the professional literature and correctly interpret and categorize new developments/approaches in the field.
- Apply scientific logic to the selection and application of the many commercial products and procedures inundating the field.
- Contrast Western and Eastern approaches to wellness.