# Course Descriptions

## Accounting

**Learning Outcomes** 

- Demonstrate satisfactory proficiency in the basic fundamental principles of financial and managerial accounting following generally accepted accounting principles with special emphasis on the elements of the accounting cycle; the rules of debit and credit, journalizing and posting, trial balances, adjustments, worksheets, financial statements, and the closing process.
- 2. Demonstrate satisfactory proficiency in the basic principles procedures, terminology, and application of income and payroll tax laws.
- 3. Demonstrate satisfactory proficiency in hands-on accounting skills for maintaining accounting records using commercial accounting software, and the use of spreadsheets to solve accounting problems.

## ACC 124 : Principles of Accounting

Introduces basic accounting principles and practices for service and/or merchandising types of businesses. Areas include: accounting as an information system, the accounting cycle, financial statements, and internal control, current and/or long-term assets, current liabilities and payroll. Special emphasis will be placed upon the practical application of accounting principles.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 19 with grade C or better or placement at least ENG 22, and MATH 75X with grade C or better or placement at least MATH 82, or consent.

## ACC 125 : Principles of Accounting II

Continues the study of financial accounting procedures. Areas include: long-term assets, long-term liabilities, accounting for corporations and/or partnerships.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ACC 124 with grade C or better, or consent.

## ACC 132 : Payroll & Hawai'i General Excise Tax

Introduces principles, manual and computerized procedures, and terminology for business applications of payroll accounting. Includes preparation and filing of federal and Hawai'i state forms for payroll taxes and Hawai'i General Excise and Use Tax.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites ACC 124 or ACC 201 (or concurrent), or consent.

Prerequisite or Corequisite ACC 124 or ACC 201 (or concurrent), or consent.

## ACC 134 : Individual Income Tax Preparation

Introduces the preparation of federal and State of Hawai'i individual income tax returns with an emphasis on tax laws and regulations and their application to the tax returns. This course is intended for an individual preparing basic tax returns under the supervision of an accounting professional.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## ACC 137 : Business Income Tax Preparation

Introduces Federal and Hawai'i tax laws and regulations and basic return preparation for business entities. This course is intended for an individual preparing basic tax returns under the supervision of an accounting professional. The student will learn to conduct basic tax research using online databases and resources. The student will also learn to prepare tax returns both manually and using commercial tax software.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ACC 134 with grade C or better, or consent.

#### **ACC 193v**

Applies skills to the workplace in an occupation within the student's area of interest. See <u>Special</u> <u>Curricula - Cooperative Education</u> for more information.

## ACC 201: Introduction to Financial Accounting

Introduces accounting principles and practices used to record and communicate financial information. Analyzes methods for valuating assets, liabilities, and equity of an organization. (Letter and Audit grades only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ACC 124 with grade C or better; or both ENG 22 with grade C or better (or placement at ENG 100) and MATH 75X with grade C or better (or placement at least MATH 82); or consent.

## ACC 202 : Introduction to Managerial Accounting

Introduces methods for evaluating financial performance, including cost accounting, budget, breakeven analysis, ratio analysis, and sources and uses of funds. (Letter and Audit grades only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ACC 125 or ACC 201, or consent.

## ACC 252 : Using QuickBooks® in Accounting

Provides "hands-on" approach to computerized accounting using QuickBooks®. Applies previously acquired accounting skills and knowledge in a computerized environment to set up and maintain accounting records. Emphasis will be placed on the application of QuickBooks® to the accounting cycle.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

Prereq or coreq: ACC 125/201, and BUSN 150 or ICS 101, both with C or better or consent.

Prerequisite or Corequisite
ACC 125/201, and BUSN 150 or ICS
101, both with C or better, or
consent.

## ACC 255 : Using Excel in Accounting

Provides "hands-on" training in the use of spreadsheets on computers to solve accounting problems. Applies previously acquired accounting skills and knowledge. Emphasizes financial and managerial accounting.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ACC 202 (or concurrent) and either BUSN 150 or ICS 101, both with grade C or better, or consent.

#### **ACC 295 : Accounting Capstone**

Provides an opportunity to demonstrate the knowledge and understanding gained during the Accounting program. Includes projects on financial, managerial, payroll accounting, and income tax preparation with use of computers. Emphasizes the use of ethics in business decisions.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ACC 132, 134, and 202, all with grade C or better, and ACC 255 (or concurrent), or consent.

## ACC 300 : Intermediate Financial Accounting I

Emphasizes the application of generally accepted accounting principles to the preparation and use of financial statements in decision-making. Special emphasis placed on recognition and measurement of revenues, cash, receivables, inventories, property, plant and equipment, depreciation and depletion, and intangibles. Includes use of spreadsheets.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites ACC 202, or consent.

## Administration of Justice

#### Learning Outcomes

- Define and describe how to keep self and others safe in the specific context of a professional work assignment.
- 2. Write clear and accurate reports.
- 3. Assess and respond appropriately to potential conflict situations.
- Demonstrate the maintenance of physical and mental fitness, utilize stress management techniques and maintain a drug-free lifestyle.
- Use critical observation skills and preserve a chain of evidence.
- 6. Communicate with a diverse population in a culturally sensitive manner, both verbal and non-verbal.
- Perform independently and inter-dependently to accomplish shared professional outcomes.
- Design career plans/options in the Administration of Justice profession and develop strategies (pathways) to progress in professional development.
- Apply within the legal/ethnical parameters of the justice profession knowledge of laws, rules of evidence, confidentiality.
- Demonstrate ability to interact with the public and coworkers in ways that effectively support "justice for all."

## AJ 101: Introduction to Administration of Justice

Examines history and philosophy of the administration of justice in United States with overview of major sub-systems within the criminal justice system: law enforcement, courts, and corrections. Examines expectations and interrelationships of officials, theories of crime, punishment, and rehabilitation. Surveys career opportunities.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

#### AJ 103: Criminal Investigation

Introduces initial investigatory steps relating to crime scenes. Acquaints student with specific offenses and methods of obtaining information.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites AJ 101, or consent.

#### AJ 104: Criminalistics

Emphasizes identification and reproduction of physical evidence. Studies specialized scientific methods and their relationship to court procedures.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Prerequisites
AJ 103. or consent.

#### **AJ 150: The Correctional Process**

Introduces the field of corrections. Includes the history and philosophy of punishment and methods used to protect society and rehabilitate the offender.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

## AJ 170 : Introduction to Private Security

Surveys concepts and issues in the administration of security. Defines public vs. private security roles for retail business, industry, and governmental agencies. Provides an overview of the functions of various security activities.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

## AJ 200 : Principles of the Hawai'i Justice System

Reviews criminal justice systems in the United States, with special emphasis on Hawai'i. Analyzes law enforcement and the judicial and corrections procedures from time of arrest until final disposition of the case. Studies federal and state laws and constitutional principles through legal research.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### AJ 210: Juvenile Justice

Studies principles and procedures of arrest, detention, petition, summons, records and adjudication of juvenile offenders. Introduces organization and function of the police juvenile unit, community diversion practices, and organization of the Family Court. Reviews Hawai'i statutes and United States Supreme Court decisions affecting juvenile rights of due process. Considers societal context of juvenile problems, delinquency prevention, and treatment. (Crosslisted as SOC 231.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

AJ 101, and ENG 22 with grade C or better or placement at ENG 100, or consent.

#### AJ 221: Criminal Law

Studies history and philosophy of criminal law. Examines United States Constitution, especially the Bill of Rights. Considers nature of law, legal institutions, criminal court procedures, offenses against persons and property. Includes case briefs.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## AJ 223 : Laws of Arrest, Search, Seizure

Analyzes statutes and cases pertaining to the problems and procedures in effecting valid arrests, searches, and seizures. Considers Hawai'i Supreme Court decisions and controlling opinions of the United States Supreme Court.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### AJ 224: Rules of Evidence

Considers origin, development, philosophy, kinds and degrees of evidence. Surveys pertinent federal constitutional amendments, landmark Supreme Court decisions affecting the admissibility of evidence, and changes in Federal and Hawai'i case law. Case briefs.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

#### AJ 226: Economic Crimes

Provides information about major economic crimes such as embezzlement, computer crime, and others. Discusses investigative techniques relating to each of the major economic crimes.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## AJ 230 : Principles of Police Supervision

Analyzes supervisor's function and principles of organization and personnel management. Stresses communication, training, disciplines, psychology of supervision, essentials of leadership, promotion methods, and selection of supervisors.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### AJ 231: Stress in Policing

Surveys major sources of stress in police work and effects of stress on the officer. Considers stress management programs.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

#### AJ 232: Officer Survival

Emphasizes positive tactics police officers can employ to effectively use their own firearms to defeat those of assailants. Teaches techniques that work for survival in real-life situations.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

## AJ 234 : Police-Community Relations

Examines philosophies and styles of policing. Encourages effort of the police and community to share in the common goal of understanding mutual problems.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## AJ 240 : Hawaiian Cultural & Natural Resources Management

Provides a background for onsite management of Native Hawaiian cultural and natural resources. Relates traditional Native Hawaiian resource conservation practices to current governmental policies, rules, and regulations. Introduces duties and responsibilities of conservation and resource enforcement officers.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep

AJ 101, and one of COM 145, COM130/BUS 130, or SP 151.

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## AJ 250 : Community Based Corrections

Explores juvenile and adult probation, after-care parole, halfway houses, work and educational release-furlough. Examines dilemma of custody-control vs. supervision-treatment. Investigates citizen-agency relationships, along with potentials for utilizing citizen volunteers in corrections.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## AJ 270 : Principles of Loss Prevention

Considers various theories of managing security countermeasures. Acquaints students with loss prevention measures for retail businesses, government agencies, hotels and motels, hospitals, schools, and other organizations.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### AJ 293v : Administration of Justice Internship

Offers flexible, customized, supervised school-to-work experiences in all aspects of the administration of justice field. Integrates and applies classroom theory to work situations via field experiences. (Note: 3 credits required for AAS degree; student may take up to 6 additional credits.) (Student must complete minimum 75hr/cr per semester)

Credits 3 Lecture Hours 75 Prerequisites

AJ 101 with grade C or better, or consent.

## Agriculture

#### AG 92U: Open Topic

Meets local interests in agriculture. Varies specific content for each topic to match job site or geographical needs and conditions. Credit in AG 92U is not applicable toward a degree in Agriculture. AG 92U may be repeated without limit for credit.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00

#### AG 101: Home Gardening

Introduces ornamental and vegetable gardening for the home gardener. Includes landscape installation and maintenance. Intended for non-majors.

Credits 3 Lecture Hours 30 Lecture/Lab Credits 30 Teaching Equivalent 3.33

## AG 103 : Sustainable Agriculture Systems

Explores sustainable agriculture systems in Hawai'i and the world. Compares various sustainable models. Examines various sectors of production agriculture and related agribusinesses in Hawai'i. Field trips to farms, processors, and wholesalers.

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50

#### AG 104 : Food Safety & Post Harvest Handling

Examines Food Safety Certification requirements for farms. Explores and evaluates post harvest handling of farm products including vegetables, fruits, meats, and flowers. Identifies and evaluates standard wholesale and retail packaging for various farm products. Reviews worker protection standards.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00

#### **AG 113: Organic Certification**

Outlines the requirements for certified organic farms. Examines process of transitioning to organic farming. Examines and evaluates record keeping requirements and accepted products and practices.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00

#### AG 122: Soil Technology

Studies identification, preparation, and fertilization of soils; amendments, sterilization, mulching, and composting methods. Includes soil testing, microbiology, and soil moisture. Emphasizes sustainable management systems.

Credits 3 Lab Hours 45 Lecture Hours 30 Teaching Equivalent 4.17 Designation

DB DY

#### **Recommended Prep**

Placement at least ENG 22, and MATH 75X with grade C or better or placement at least MATH 82, or consent.

## AG 162 : Introduction to Beekeeping

Introduces the biology and behavior of honeybees and best management practices for hive management. Develops hands-on skills for hive inspection, maintenance, and management techniques to control honeybee diseases and pests. Investigates alternative pollinators.

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Recommended Prep AG 174.

#### AG 163: Advanced Beekeeping

Provides the student with additional hands on training in all aspects of beekeeping. Honeybee hive inspection, maintenance, and best management practices carried out under limited supervision of instructor. Examines honeybee diseases and pests and the management techniques for these problems. Primary topics include and not limited to: Swarm Trapping, Swarm Management, Hive Splits, Queen Rearing and Value Added Products.

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Prerequisites

AG 162 with grade B or better, or consent.

#### AG 174: Insects & Their Control

Introduces basic morphology and classification of insects. Studies destructive and beneficial insects. Covers principles of cultural, mechanical, legislative, biological, and chemical control. Investigates sustainability of control methods.

Credits 3 Lecture Hours 30 Lecture/Lab Credits 30 Teaching Equivalent 3.33 Designation

DB DY

#### **Recommended Prep**

Placement at least ENG 22, and MATH 75X with grade C or better or placement at least MATH 82, or consent.

#### **AG 193v**

Applies skills to the workplace in an occupation within the student's area of interest. See <u>Special</u> <u>Curricula - Cooperative Education</u> for more information.

Credits 1

AG 194v Credits 1-3

#### AG 200: Principles of Horticulture

Introduces plant botany and physiology. Discusses plant nutrients, moisture, and environmental requirements and plant propagation. Studies culture and production techniques for selected ornamental crops.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DB

**Prerequisites** 

ENG 22 with grade C or better, or placement at ENG 100, or consent. **Corequisites** 

AG 200L.

#### AG 200L : Principles of Horticulture Lab

Lab to accompany AG 200. Examine internal and external plant anatomy, plant growth, and physiology. Propagate plants by sexual and asexual methods. Produce a commercial horticulture crop.

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Designation

DY

**Prerequisites** 

ENG 22 with grade C or better, or placement at ENG 100, or consent.

Corequisites AG 200

## AG 201: Introduction to Plant Disease

Introduces classification, morphology, and biology of fungi, bacteria, viruses, and nematodes that attack economic crops. Covers diagnosis and control of plant diseases. Investigates sustainability of control methods.

Credits 3 Lecture Hours 30 Lecture/Lab Credits 30 Teaching Equivalent 3.33 Recommended Prep

Placement at least ENG 22, and MATH 75X with grade C or better or placement at least MATH 82, or consent.

#### AG 230 : Agricultural Business Management

Introduces farm and landscape management practices including decision making, record keeping, cash flow, financial statements, ratio analysis, use of computers as a management tool, and marketing of agricultural products and services.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep

Placement at least ENG 22, and MATH 75X with grade C or better or placement at least MATH 82, or consent.

## AG 232 : Farm Tractor & Equipment Operation

Teaches operation of a rototiller and wheel type tractor with allied implements on the College farm. Includes safety, maintenance, three point hitch hookups, hydraulics, and field adjustments.

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Prerequisites Consent.

AG 233 Credits 2

## AG 235 : Irrigation Principles & Design

Examines types of irrigation systems including materials, equipment, and installation. Discusses evapotranspiration and soil moisture relations. Calculates hydraulic and operational parameters of irrigation systems. Designs an irrigation system to scale.

Credits 3 Lecture Hours 30 Lecture/Lab Credits 30 Teaching Equivalent 3.33 Prerequisites

MATH 75X with grade C or better or placement at least MATH 82, or consent.

## AG 251: Sustainable Crop Production

Introduces production methods for selected crops including propagation planting, fertilization, irrigation, pest control, harvesting, and marketing. Evaluates conventional and alternative methods of production and analyzes effects of these practices. Examines economic and social impacts. Field trips to production areas.

Credits 4 Lab Hours 90 Lecture Hours 30 Teaching Equivalent 6.67 Recommended Prep

ENG 19 with grade C or better or placement at least ENG 22, and MATH 75X with grade C or better or placement at least MATH 82, or consent.

**Prerequisite or Corequisite** AG 103 and AG 104, or consent.

## AG 252 : Sustainable Crop Production II

Reinforces production practices for sustainable agriculture. Develops skills in designing, planning, and executing a sustainable production system for wholesale and retail sales. Determines cost of production and integrates multiple marketing practices. Evaluates products, cultural practices, and marketing methods. Practices farm record keeping.

Credits 2 Lab Hours 90 Teaching Equivalent 5.00 Recommended Prep AG 200.

**Prerequisites** 

AG 251 with grade C or better, or consent.

#### AG 253: Hawaiian Food Plants: Traditional and Contemporary Production

Explores commercial production of traditional food crops of Hawai'i. Compares traditional geographical centers of production to contemporary production areas. Compares and contrasts traditional and contemporary cultural production practices. Explores modern markets for traditional crops. Teaches production techniques including propagation, planting, fertility, harvest, and post harvest methods. Identifies common varieties of traditional crops.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

HI DB

#### **Prerequisites**

AG 200 or BOT 105/HWST 211, either with grade C or better, or consent.

#### AG 253L: Hawaiian Food Plants: Traditional and Contemporary Production Lab

Lab to accompany AG 253.

Credits 1

Lab Hours 45

Teaching Equivalent 2.50

Designation

ΗΙ

DY

#### **Prerequisites**

AG 200 or BOT 105/HWST 211, either with grade C or better, or consent.

#### **Corequisites**

AG 253.

**AG 254** 

Credits 4

#### AG 260: Tropical Landscape

Introduces the student to the elements of landscape design, planning and plan implementation. The areas covered include design principles, functional aesthetics, reading and development, landscape plants, and cost estimates. (Formerly AG 250.)

Credits 4 Lab Hours 45 Lecture Hours 45 Teaching Equivalent 5.00 Prerequisites

Either AG 265 and 265L, or AG 269, or consent.

#### AG 261: Turfgrass Management

Studies identification, planting, and maintenance of turfgrasses for home, park, and golf areas. Discusses watering and fertilizing. Treats insect, disease, and weed control. (Formerly AG 260.)

Credits 3

consent.

Lecture Hours 30

Lecture/Lab Credits 30

**Teaching Equivalent** 3.33 **Recommended Prep** 

Placement at ENG 100, and MATH 75X with grade C or better or placement at least MATH 82, or

#### AG 264: Plant Propagation

Introduces theoretical and applied aspects of sexual and asexual reproduction of plants. Discusses propagation of selected plants by seed, cuttings, grafting, budding, layering, and division.

Credits 3

Lecture Hours 30 Lecture/Lab Credits 30 Teaching Equivalent 3.33 Prerequisites

AG 200, or consent.

## AG 265 : Horticulture of Hawaiian Plants

Explores the biology, ecology, and adaptations of plants focusing on endemic and indigenous Hawaiian and Polynesian introduced.

Teaches techniques of horticulture including propagation, cultivation, and management. Introduces uses of plants in landscaping and native habitat restoration projects.

Credits 3

**Lecture Hours** 45

**Teaching Equivalent** 3.00 **Designation** 

Н

DB

#### **Prerequisites**

AG 200 or BOT 105/HWST 211, either with grade C or better, or consent.

Corequisites

AG 265L.

## AG 265L : Horticulture of Hawaiian Plants Lab

Lab to accompany AG 265.

Credits 1

Lab Hours 45

Teaching Equivalent 2.50

Designation

DY

#### **Prerequisites**

AG 200 or BOT 105/HWST 211, either with grade C or better, or consent.

Corequisites

AG 265.

## AG 266 : Greenhouse & Nursery Management

Introduces management practices for production and operation of nurseries and greenhouses in Hawai'i. Includes environmental factors, structures, materials, sanitation, pests, and diseases.

Credits 3

Lecture Hours 30 Lecture/Lab Credits 30 Teaching Equivalent 3.33 Recommended Prep

Placement at least ENG 22, and MATH 75X with grade C or better or placement at least MATH 82, or consent.

## AG 269 : Ornamental Plant Materials

Presents identification, use, propagation, and cultural requirements of trees, shrubs, vines, and ground covers used in Hawaiian landscapes.

Credits 3 Lecture Hours 30 Lecture/Lab Credits 30 Teaching Equivalent 3.33

#### AG 281: Weed Science

Teaches weed classification, identification, ecology, and principles of weed control. Emphasizes properties, uses, action, and safety of herbicides and pesticides.

Credits 3 Lecture Hours 30 Lecture/Lab Credits 30 Teaching Equivalent 3.33 Recommended Prep

Placement at least ENG 22, and MATH 75X with grade C or better or placement at least MATH 82, or consent.

## Anthropology

#### **ANTH 150: Human Adaptation**

Studies human evolution. Examines prehistoric and recent developments of culture, and common features and principle variations in cultural behavior.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DS

# ANTH 151: Emerging Humanity: Introduction to human biological evolution and the archaeology of culture in the world prior to AD 1500.

Introduces human biological evolution, concepts and practices of archaeology and anthropology. Topics include the fossil record of human biological evolution, archaeology of culture of the world prior to AD 1500, the development of technology, the origins of plant and animal domestication, the genesis of cities and urbanism, and the political and ecological consequences of human impact on the natural environment.

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Designation FGA

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### **ANTH 152: Culture and Humanity**

Provides an introduction to Cultural Anthropology. Students examine the interaction between the natural environment, human cultures, using a multi-cultural perspective through which they interpret the post-1500 world.

Credits 3

Lecture Hours 45
Teaching Equivalent 3.00
Designation

**FGB** 

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## ANTH 165 : Heritage Sites in Archaeology

Introduces the concepts and practices of archeology, historical research, historic site preservation, and heritage management.

Combines lecture, laboratory, and fieldwork.

Credits 3

Lecture Hours 45
Teaching Equivalent 3.00
Designation

HI DS

#### **Prerequisites**

ENG 100 with grade C or better, or consent.

#### **ANTH 200 : Cultural Anthropology**

Studies the concept of culture and basic tools for analyzing cultural behavior. Topics include patterning and integration, dynamics of culture, culture and the individual, cultural change, and anthropology and the future.

Credits 3

Lecture Hours 45
Teaching Equivalent 3.00
Designation

DS

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### ANTH 210 : Archaeology

Introduces prehistoric archaeology. Surveys cultural growth in prehistoric times. Explains methods and techniques of excavation and laboratory analysis.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DS

Recommended Prep ANTH 150, 200, or 215.

## ANTH 210L : Archaeology Laboratory

Teaches methods and techniques of archaeological excavation. Uses laboratory techniques to analyze data.

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Designation DY

**Prerequisites** 

ANTH 210 with grade C or better (or concurrent), or consent.

#### **ANTH 215: Physical Anthropology**

Introduces students to the study of human biological make-up, origins of that make-up, and the pre-history of human biological and cultural development.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DB

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### **ANTH 225: Medical Anthropology**

Surveys human health and disease, and how they relate to cultural practices, belief systems, and environmental factors. Seeks to bridge the health sciences and anthropology by focusing on how social and environmental factors affect health. Explores alternative ways of understanding and treating disease. Includes ethno-medicine, the traditional healing and health practices of a selection of cultures, paleopathology, epidemiology, and human adaptation.

Lecture Hours 45
Teaching Equivalent 3.00
Designation
DS
Recommended Prep
ANTH 200 or 215 (or concurrent).
Prerequisites
ENG 22 with grade C or better, or

placement at ENG 100, or consent.

#### **ANTH 235: Peoples of the Pacific**

Surveys the cultural areas of the Pacific from pre-contact to present day. Covers prehistoric migration patterns, historical movements, and present day distributions, including western colonization and current problems. (Crosslisted as HIST 288.)

Credits 3

Lecture Hours 45
Teaching Equivalent 3.00
Designation

DH

**Recommended Prep** HIST 152 or ANTH 200.

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## ANTH 281: Archaeological Field Techniques

Applies archaeological techniques including survey, excavation, mapping, and photography. Taught entirely in the field at an archaeological site.

Credits 4 Lecture/Lab Credits 120 Teaching Equivalent 6.67 Designation

DS

#### **Prerequisites**

ANTH 210 with grade C or better (or concurrent), or consent.

### Aquaculture

#### **AQUA 466: Fisheries Science**

Examines general characteristics of fisheries, harvesting methods, principles and techniques to derive data and analyze fished populations.

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00 Designation

DB

**Recommended Prep**MATH 115 and AQUA 362.

**Prerequisites** 

OCN 201, 201L, ZOOL 200, and ZOOL 200L, all with grade C or better, or consent.

Corequisites AQUA 466L.

## AQUA 466L : Fisheries Science Lab

Laboratory to accompany AQUA 466.

Credits 1
Lab Hours 45
Teaching Equivalent 2.50
Designation

Recommended Prep MATH 115 and AQUA 362.

**Prerequisites** 

OCN 201, 201L, ZOOL 200, and ZOOL 200L, all with grade C or better, or consent.

**Corequisites** AQUA 466.

Credits 3

# Architectural Engineering & CAD Tech

#### **AEC 110: Basic AutoCAD**

Introduces the foundation of AutoCAD. Covers basic commands and operations from 2D drawing and editing to creating solid models and rendering. Teaches 2D drawing, text, dimensions, blocks, hatching, reference files, sharing data, 3D drawing, and plotting. Prepares students for Autodesk certification.

Credits 4 Lecture Hours 4 Teaching Equivalent 4.00 Recommended Prep

ICS 101 or BUSN 150, and placement at ENG 100.

#### **Prerequisites**

BLPR 101 or equivalent training/ experience with consent.

### Art

#### **ART 101: Intro to Visual Arts**

Introduces the basic elements of visual arts and their expressions in various forms. Meets the UH Mānoa Arts & Science core requirement.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA

#### **ART 104: Intro to Printmaking**

Introduces basic technical information and hands on experience in the multiple facets of printmaking media.

Credits 3 Lecture/Lab Credits 90 Teaching Equivalent 4.29 Designation DA

Recommended Prep ART 113.

#### **ART 105: Intro to Ceramics**

Studies ceramic form. Emphasizes hand building, glazing techniques, and surface treatment. Involves lectures and projects. Meets the UH Mānoa Arts & Science core requirement.

Credits 3 Lecture/Lab Credits 90 Teaching Equivalent 4.29 Designation DA

## ART 107 : Introduction to Photography

Introduces the history of film and non-silver photography from its 19th century invention to its current practice as an art form. Students will learn the basics of film photography, including the proper use of a 35mm manual camera and the darkroom techniques of black and white photography.

Credits 3 Lecture/Lab Credits 90 Teaching Equivalent 4.29 Designation DA

## ART 107D : Introduction to Digital Photography

Introduces the fundamental, technical, and aesthetic practices of digital photography. Students will learn camera operation, computer editing techniques, basic lighting concepts, composition and print production.

Credits 3 Lecture/Lab Credits 90 Teaching Equivalent 4.29 Designation DA

**Prerequisites** 

Access to digital camera (manual settings preferable).

#### **ART 113: Introduction to Drawing**

Emphasizes two-dimensional visualization and rendering of forms, spaces, and ideas through a variety of approaches and media. Meets the UH Mānoa Arts & Science core requirement.

Credits 3 Lecture/Lab Credits 90 Teaching Equivalent 4.29 Designation DA

## ART 115 : Introduction to 2D Design

Introduces the theory and practice of composing and arranging two-dimensional forms in black, white, and color through manipulation of the basic elements and their interrelationships. Meets the UH Mānoa Arts & Science core requirements.

Credits 3 Lecture/Lab Credits 90 Teaching Equivalent 4.29 Designation DA Recommended Prep

ART 101.

## ART 123B : Introduction to Water Color Painting

Introduces the theory and practice of watercolor painting. Includes basic materials and technical procedures.

Credits 1 Lecture/Lab Credits 30 Teaching Equivalent 1.43 Designation DA

## ART 123C : Introduction to Oil Painting

Introduces the theory and practice of oil painting. Includes basic materials and technical procedures.

Credits 1 Lecture/Lab Credits 30 Teaching Equivalent 1.43 Designation DA

## ART 123D : Introduction to Acrylic Painting

Introduces the theory and practice of acrylic painting. Includes basic materials and technical procedures.

Credits 1 Lecture/Lab Credits 30 Teaching Equivalent 1.43 Designation DA

#### **ART 223: Intermediate Painting**

Practices the development of painting skills following the chronological progression of Western Modernism. Explores painting work by studying the foundations of major developments in the late 19th century and early 20th century painting styles. Examines and compares the two parallel tendencies of Structuralism and Expressionism. Teaches control and management of pictorial space and paint application. Develops personal sources of imagery, and explores the effects of scale and color interaction in personal work.

Credits 3 Lecture/Lab Credits 90 Teaching Equivalent 4.29 Designation DA

**Prerequisites** 

ART 113 and 123BCD, or consent.

## ART 243 : Intermediate Ceramics: Hand Building

Develops vessel and sculptural concepts using hand-building techniques. Introduces the elements of art through the making of ceramic form. Progresses beyond basic hand building techniques to advanced skills: various forming and embellishing techniques, work with plaster and molds, colored slip, colored clay, glaze work, and the firing of kilns. Students work towards development of individual creative expression.

Credits 3 Lecture/Lab Credits 90 Teaching Equivalent 4.29 Designation

DA

**Prerequisites** ART 105, or consent.

## **ART 244: Intermediate Ceramics:** Wheel Throwing

Develops vessel and sculptural concepts using wheel-throwing techniques. Introduces the elements of art through the making of ceramic form. Progresses beyond basic throwing techniques to intermediate throwing skills, various forming and embellishing techniques both on the wheel and subsequent to throwing, colored slip work, glaze work, and the firing of kilns. Students work towards development of individual creative expression.

Credits 3 Lecture/Lab Credits 90 Teaching Equivalent 4.29 Designation DA

**Prerequisites** 

ART 105, or consent.

## ART 263 : Advanced Ceramics: Sculpture

Explores sculptural concepts and techniques specifically related to the medium of clay; advanced hand-building, throwing, glazing, and firing techniques.

Credits 3

Lecture/Lab Credits 90 Teaching Equivalent 4.29 Designation

DA

#### **Prerequisites**

ART 243 or ART 244, either with grade C or better, or consent.

## ART 264 : Advanced Ceramics: Vessels

Explores the ceramic vessel as function, metaphor, and expression. Advanced hand-building, throwing, glazing, and firing techniques.

Credits 3

Lecture/Lab Credits 90 Teaching Equivalent 4.29 Designation

DA

#### **Prerequisites**

ART 243 or ART 244, either with grade C or better, or consent.

#### **ART 270: History of Western Art**

Surveys Western Art from prehistoric to modern times. Emphasizes the historical aspects of art including an overview of each historical period.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DH

## **Astronomy**

#### **ASTR 110: Survey of Astronomy**

Introduces the history and methods of astronomy, with descriptive treatments of planets, the solar system, stars, galaxies, and cosmology. Discusses the concepts of size, distance, and time in the observable universe.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DP

#### **Recommended Prep**

High school science

#### **Prerequisites**

ENG 22 with grade C or better or placement at ENG 100, and MATH 75X with grade C or better or placement at least MATH 82, or consent.

#### ASTR 110L : Introduction to Astronomy Laboratory

Introduces instrumentation and methods used in astronomical observations and research. Demonstrates astronomical principles through laboratory observations and analysis of astronomical data, and provides experience using instrumentation and software for observations, data collection and analysis, and image processing.

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Designation

**Recommended Prep** 

ICS 101 or equivalent.

#### **Prerequisites**

ASTR 110 with grade C or better (or concurrent), and MATH 82 with grade C or better or placement at least MATH 100.

## Auto Body Repair & Painting

#### **ABRP 120G: Auto Sheet Metal**

Explains the theory and principle of the basic skills required for automotive sheet metal panel repair. Introduces picking and filing, shrinking of damaged sheet metal, and corrosion repair. (Formerly ABRP 20G)

Credits 3

Lecture/Lab Credits 90 Teaching Equivalent 3.75 Prerequisites

AMT 100 with grade C or better(or concurrent), or consent. Student must maintain a valid driver's license throughout duration of the Auto Body course of studies.

## ABRP 120H : Body & Fender Repair

Introduces basic auto body skills and procedures. Covers the proper and safe handling of hand and power tools and materials used in the auto body industry. (Formerly ABRP 20H)

Credits 3

Lecture/Lab Credits 90 Teaching Equivalent 3.75 Prerequisites

ABRP 120G with grade C or better, or consent. Student must maintain a valid driver's license throughout duration of the auto body course of studies.

## ABRP 122E : Basic Auto Refinishing

Presents the basics of automotive refinishing. Emphasizes shop and personal safety in using hand tools, power tools, supplies, and materials for vehicle preparation for painting.

Credits 4

Lecture/Lab Credits 120 Teaching Equivalent 5.00 Recommended Prep

**ABRP 120H.** 

#### **Prerequisites**

AMT 100 with grade C or better, or consent. Student must maintain a valid driver's license throughout duration of the Auto Body course of studies.

#### ABRP 122G : Complete and Touch Up Refinishing Techniques

Explains the complete painting process. Covers preparation and application of sealers to surface, to the final detailing of the vehicle.

Credits 6

Lecture/Lab Credits 180 Teaching Equivalent 7.50 Prerequisites

ABRP 122E with grade C or better, or consent. Student must maintain a valid driver's license throughout duration of the Auto Body course of studies.

#### **ABRP 141G: Plastic Panel Repair**

Introduces the repairing of damaged plastic and fiberglass panels and components. (Formerly ABRP 41G)

Credits 3

Lecture/Lab Credits 90
Teaching Equivalent 3.75
Prerequisites

ABRP 120H with grade C or better(or concurrent), or consent. Student must maintain a valid driver's license throughout duration of the auto body course of studies.

## ABRP 141H : Management & Estimating

Introduces the student to the fundamentals of writing and understanding repair estimates and repair orders. Discusses management, business procedures, and industrial relations. (Formerly ABRP 41H)

#### Credits 2 Lecture/Lab Credits 60 Teaching Equivalent 2.50 Prerequisites

ABRP 122G with grade C or better(or concurrent), or consent. Student must maintain a valid driver's license throughout duration of the Auto Body course of studies.

## Automotive Technology

**Learning Outcomes** 

- 1. Diagnose, service, and repair the electrical system.
- 2. Diagnose, service, and repair the fuel system.
- 3. Diagnose, service, and repair the emission system.
- 4. Diagnose, service, and repair the ignition system.
- 5. Diagnose, service and repair the heating and air conditioning system.
- Diagnose, service, and repair the steering and suspension system.
- 7. To be able to write customer repair orders and estimates.
- 8. To be able to orally communicate, to customer, management, parts person and other technicians.
- 9. To be able to use computer to retrieve information for repairs and estimates.
- To be able to write resumes and be able to use job interview techniques.

#### AMT 80 : Small Engine Repair

Explores the theory and practice in the operation, repair, and maintenance of small displacement internal combustion engines including two-cycle and four-cycle types found on single cylinder lawn mowers, power plants, garden tillers, and chain saws.

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00

## AMT 100 : Introduction to Automotive Technology

Introduces principles for the operation of automotive systems. Explains the selection and use of basic automotive tools, equipment, and procedures for the preventive maintenance and minor repair service. Includes lectures, demonstrations, and lab work on shop training units and "live" service vehicles. (Formerly AMT 20)

Credits 2 Lecture/Lab Credits 60 Teaching Equivalent 2.50 Recommended Prep

Placement at ENG 21 or higher.

#### **Prerequisites**

Student must maintain a valid Driver's license throughout duration of the automotive course of studies, or consent.

#### AMT 129: Engines Repair

Covers shop safety, tools, and all components found in the modern internal combustion engine. Designed to provide students with an understanding of the fundamental operation and construction of internal combustion engines. Instruction includes theory and laboratory(shop) activities in which students learn how to inspect, service, maintain, diagnose, and repair automobile engine malfunctions. This course includes live work. Students are required to have a valid driver's license. (Formerly AMT 30)

Credits 7 Lecture/Lab Credits 210 Teaching Equivalent 8.75 Recommended Prep

At least 10th grade reading skill.

#### **Prerequisites**

AMT 100 and AMT 141, both with grade C or better; and ENG 19 with grade C or better, or placement at least ENG 22, or consent. Student must maintain a valid Driver's license throughout duration of the automotive course of studies.

#### AMT 141 : Electrical/Electronics Systems I

Examines principles of operation, diagnosis, service and repair of the electrical/ electronic system.

Covers the electron theory, circuits and schematics, batteries, starting and charging system. Explains use of automotive tools and testing equipment. (Formerly AMT 40C)

Credits 5 Lecture/Lab Credits 150 Teaching Equivalent 6.25 Prerequisites

AMT 100 with grade C or better(or concurrent), and ENG 19 with grade C or better, or placement at least ENG 22, or consent. Student must maintain a valid Driver's license throughout duration of the automotive course of studies.

## AMT 144: Heating and Air Conditioning

This course provides an understanding of the theory, diagnosis, service, safety handling of refrigerant and repair of automotive heating, ventilation, and air conditioning (HVAC) systems. The course presents the operation and function of vacuum, electrical, refrigeration circuits, and computer controls. Training is provided on the use of tools and equipment while performing diagnostics, repairs, and service on HVAC systems.

(Formerly AMT 43)

#### Credits 4

#### Lecture/Lab Credits 120 Teaching Equivalent 5.00 Prerequisites

AMT 100 with grade C or better, and ENG 19 with grade C or better, or placement at least ENG 22, or consent. Student must maintain a valid Driver's license throughout duration of the automotive course of studies.

## AMT 145 : Manual Drive Trains and Axles

Examines principles of operation, diagnosis, and repair of standard transmissions and transaxles, clutches, drive shafts, and drive axles. Explains use of automotive tools and testing equipment. (Formerly AMT 46)

Credits 4

Lecture/Lab Credits 120 Teaching Equivalent 5.00 Recommended Prep

At least 10th grade reading skill, or consent.

#### **Prerequisites**

AMT 100 with grade C or better(or concurrent), and ENG 19 with grade C or better, or placement at least ENG 22, or consent. Student must maintain a valid Driver's license throughout duration of the automotive course of studies.

## AMT 149 : Automatic Transmissions and Transaxles

Examines principles of operation, diagnosis, and repair of automatic transmissions and transaxles. Explains use of automotive tools and testing equipment. (Formerly AMT 50)

#### Credits 4

Lecture/Lab Credits 120 Teaching Equivalent 5.00 Recommended Prep

At least 10th grade reading skill, or consent.

#### **Prerequisites**

AMT 241 with grade C or better(or concurrent), and ENG 19 with grade C or better, or placement at least ENG 22, or consent. Student must maintain a valid Driver's license throughout duration of the automotive course of studies.

#### AMT 152: Brake Systems

Examines principles of operation, diagnosis, service, and repair of drum, disc, and power brake systems. Explains use of automotive tools and testing equipment. (Formerly AMT 53)

#### Credits 4

Lecture/Lab Credits 120 Teaching Equivalent 5.00 Recommended Prep

At least 10th grade reading skill, or consent.

#### **Prerequisites**

AMT 100 with grade C or better(or concurrent), and ENG 19 with grade C or better, or placement at least ENG 22, or consent. Student must maintain a valid Driver's license throughout duration of the automotive course of studies.

#### AMT 154 : Suspension and Steering Systems

Examines principles of operation, theory, design, and repair of standard and power steering systems, front and rear suspension, tires, wheels, alignment, and balancing. Explains use of automotive tools and testing equipment. (Formerly AMT 55)

#### Credits 4

Lecture/Lab Credits 120 Teaching Equivalent 5.00 Recommended Prep

At least 10th grade reading skill, or consent.

#### **Prerequisites**

AMT 100 with grade C or better(or concurrent), and ENG 19 with grade C or better, or placement at least ENG 22, or consent. Student must maintain a valid Driver's license throughout duration of the automotive course of studies.

## AMT 240 : Fuel & Emission Systems

Examines principles of operation, diagnosis, and repair of fuel systems and emission systems. Explains fuel injection, direct injection supercharging, turbocharging, fuel pumps, electronic control systems, and emission controls. Explains use of automotive tools and testing equipment. (Formerly AMT 40B)

#### Credits 4

Lecture/Lab Credits 120 Teaching Equivalent 5.00 Recommended Prep

ENG 21; and QM 107C or MATH 100 or higher.

#### **Prerequisites**

AMT 241 with grade C or better, or consent.

## AMT 241 : Electrical/Electronics Systems II

This course covers essential theories and practical skills in diagnosing and repairing automotive accessory circuits such as power windows, power door locks, power antennas, power mirrors, audio systems, anti-theft systems, power seats, horns, blower fan, and wiper/washer. Also covered are conventional instrumentation, digital instrumentation, and supplemental inflatable restraint (SRS). (Formerly AMT 41C)

#### Credits 4

Lecture/Lab Credits 120 Teaching Equivalent 5.00 Recommended Prep

At least 10th grade reading skill, or consent.

#### **Prerequisites**

AMT 141 with grade C or better, and ENG 19 with grade C or better, or placement at least ENG 22, or consent. Student must maintain a valid Driver's license throughout duration of the automotive course of studies.

#### AMT 246: Ignition Systems

Examines principles of operation, diagnosis, service, and repair of the ignition and computer systems. Explains the use of automotive tools and equipment. (Formerly AMT 40G)

#### Credits 4

Lecture/Lab Credits 120 Teaching Equivalent 5.00 Recommended Prep

At least 10th grade reading skill; or consent.

#### **Prerequisites**

AMT 241 with grade C or better, and ENG 19 with grade C or better, or placement at least ENG 22, or consent. Student must maintain a valid Driver's license throughout duration of the automotive course of studies.

#### **AMT 250: Engine Performance**

Provide students with an introduction to the Automotive Service Excellence (ASE) Engine Performance Test (A6). This course is designed to provide the student with the ability to retrieve and record diagnostic trouble codes, diagnose drivability concerns and make the necessary repairs. Course content includes diagnostic and repair strategies in Electrical and Electronic Systems, Engine Performance and Emissions systems. This course is also intended for the student as a test preparation course for the Automotive Service Excellence (ASE) A6 and A8 certification exams. The simulator training will be based on the "Composite Vehicle" by the use of simulator boards and computer-based training methods prior to live vehicle work. This is an introductory study of computerized engine controls and diagnosis as it pertains to the function and control of the engine, fuel, ignition, and emission control systems. Emphasis will be placed on system components and their operational characteristics. Basic troubleshooting techniques of the engine, fuel, ignition, and emission control systems will be demonstrated. (Previously AMT 240 and AMT 246.)

#### Credits 6

Lecture/Lab Credits 210 Teaching Equivalent 8.75 Recommended Prep

At least 10th grade reading skill.

#### **Prerequisites**

AMT 100, AMT 129 (or concurrent), and AMT 141 (or concurrent), all with grade C or better; and ENG 19 with grade C or better, or placement at least ENG 22, or consent. Student must maintain a valid Driver's license throughout the duration of the automotive course of studies.

## AMT 262 : Advanced Diagnostic and Repair

Applies diagnostic skills and techniques in advanced automotive mechanics technology with emphasis on realism in lab and shop operations. Includes students being prepared to take the ASE certification exam in the following areas: suspension and steering, electrical/electronics, engine performance, automatic transmission/ transaxle, manual drive train and axles, brakes, heating and air conditioning, and engine repair. (Formerly AMT 60)

#### Credits 8

Lecture/Lab Credits 240 Teaching Equivalent 10.00 Prerequisites

AMT 100, 129, 141, 144(or concurrent), 145, 149, 152, 154, 240, 241, and 246, all with grade C or better; and ENG 19 with grade C or better or placement at least ENG 22, or consent. Student must maintain a valid Driver's license throughout duration of the automotive course of studies.

## **Biochemistry**

## **BIOC 141 : Fundamentals of Biochemistry**

Introduces biological chemistry stressing integration of the fundamental concepts of general chemistry, inorganic chemistry, and organic chemistry with broad application of these principles to the study of living systems. (Formerly BIOC 241)

#### Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Designation

DΡ

#### **Recommended Prep**

High school science.

#### **Prerequisites**

MATH 82 with grade C or better, or placement at least MATH 100, or consent.

#### **BIOC 142: Elements of Biochemistry**

Introduces chemical principles and concepts of living systems. Emphasizes the composition, function, and transformation of biological substances in animals, plants, and microorganisms. Provides sufficient organic chemistry to supplement a thorough understanding of the general concepts of biochemistry. (Formerly BIOC 244)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DP **Prerequisites** 

BIOC 141, CHEM 151, or CHEM 161, any with grade C or better; or consent.

## **Biology**

#### **BIOL 100: Human Biology**

Surveys human anatomy and physiology. Introduces students to the structure and function of cells, tissues, organs, and systems of the human body. Includes disease processes and recent scientific advances.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

**Prerequisites** 

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### **BIOL 101: Biology and Society**

Introduces characteristics of science, historical development of scientific concepts, and interactions of society with science, illustrated by topics from biological sciences. (Crosslisted as SCI 121.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DB

**Prerequisites** 

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### **BIOL 101L: Biology and Society** Lab

Laboratory to accompany BIOL 101. (Crosslisted as SCI 121L).

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Designation DY

**Prerequisites** 

ENG 22 with grade C or better, or placement at ENG 100, or consent. Corequisites

**BIOL 101.** 

#### **BIOL 102: General Botany**

Studies growth, function, and evolution of plants. Analyzes human interactions with plants and plant interactions with their environment. (Crosslisted as BOT 101.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### **BIOL 102L: General Botany Lab**

Lab to accompany BIOL 102. (Crosslisted as BOT 101L.)

Credits 1

Lab Hours 45

Teaching Equivalent 2.50

Designation

DY

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

Corequisites

BIOL 102.

#### **BIOL 103: Principles of Zoology**

Surveys major animal groups with emphasis on structure, physiology, development, reproduction, evolution, ecology, behavior, and interactions with humans. (Crosslisted as ZOOL 101.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DB

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### **BIOL 103L: Principles of Zoology** Lab

Lab to accompany BIOL 103. (Crosslisted as ZOOL 101L.)

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Designation DY

**Prerequisites** 

ENG 22 with grade C or better, or placement at ENG 100, or consent.

**Corequisites** 

BIOL 103.

#### **BIOL 105: Hawaiian Field Biology**

Surveys, in the classroom and on location, ecosystems from near-shore ocean waters to mountain top. Considers geological history, physical geography, and natural history. Discuss pre- Polynesian establishment of organisms, origins of endemic species, and the influences of human populations on island ecosystems.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

ΗІ

DΒ

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## BIOL 105L : Hawaiian Field Biology Lab

Lab to accompany BIOL 105.

Credits 1

Lab Hours 45

Teaching Equivalent 2.50

Designation

ΗΙ

DY

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### Corequisites

BIOL 105.

## BIOL 124 : Environment and Ecology

Examines the biological and physical principles affecting human interactions with the environment. Explores the impacts of science, technology, values, and perceptions on global ecology. Discusses problems of pollution, overpopulation, and resource depletion with an emphasis on island ecosystems. Evaluates alternatives to current actions and public policies stressing responsibility of the individual.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

DB

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## BIOL 124L : Environment and Ecology Lab

Laboratory to accompany BIOL 124.

Credits 1

Lab Hours 45

Teaching Equivalent 2.50

Designation

DY

#### **Prerequisites**

BIOL 124 with grade C or better (or concurrent), or consent.

#### **BIOL 151: Introduction to Genetics**

Introduces basic concepts in genetics and explores how they are used in research. Investigates human gene structure and function, including the genetic basis of development, causes of birth defects, mental retardation, genetic diseases, sexual determination, and behavior. Surveys current topics in genetic research.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

DR

**Recommended Prep** 

BIOL 100 or 101.

**Prerequisites** 

ENG 100, or consent.

## BIOL 152L : Introduction to Biotechnology Lab

Provides and overview of the impact of biotechnology in the achievement of contemporary objectives in the fields of medicine, ecology, food science, and forensics. Introduces the concepts of bioethics, patenting, and regulatory issues in biotechnology. Focus on laboratory section with hands-on applications in DNA and protein technologies. Course serves as a complimentary lab for BIOL 151.

Credits 2

Lab Hours 90

**Teaching Equivalent** 5.00

Designation

DY

#### **Recommended Prep**

High school or college level chemistry

#### **Prerequisites**

BIOL 100 or 151, and ENG 100, both with grade B or better, and at least MATH 82 with grade B or better or placement at least MATH 103, or consent.

#### **BIOL 171: General Biology I**

Introduces cell structure and chemistry, growth, reproduction, genetics, evolution, viruses, bacteria, and simple eukaryotes. Required for life science majors.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

DB

#### **Prerequisites**

CHEM 151 or 161(or concurrent), or consent.

#### Corequisites

BIOL 171L.

#### **BIOL 171L: General Biology I Lab**

Laboratory to accompany BIOL 171.

Credits 1

Lab Hours 45

Teaching Equivalent 2.50

Designation

DY

#### **Prerequisites**

CHEM 151 or 161(or concurrent), or consent.

#### Corequisites

BIOL 171, or consent.

#### **BIOL 172: General Biology II**

Continues BIOL 171. Includes anatomy, physiology, and systematics of plants and animals. Studies behavior, ecosystems, populations, and communities.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DB

#### **Prerequisites**

BIOL 171, or consent.

#### **BIOL 172L: General Biology II Lab**

Laboratory to accompany BIOL 172.

Credits 1

Lab Hours 45

Teaching Equivalent 2.50

Designation

DY

#### **Prerequisites**

BIOL 171, 171L, and 172 (or concurrent), or consent.

#### **BIOL 200: Coral Reefs**

Introduces the biology, ecology, and geology of stony corals and the reef structures they build. Identifies the roles of other members of the coral reef community including algae, other invertebrates, and fishes. Explores the use of corals as resources and the impacts of human activities on coral reefs.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

ΗΙ

DB

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### **BIOL 200L: Coral Reefs Lab**

Laboratory to accompany BIOL 200.

Credits 1

Lab Hours 45

Teaching Equivalent 2.50

Designation

DY

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

Corequisites

BIOL 200.

#### **BIOL 282: Global Change**

Introduces principal components of global change and explores the impacts on the environment. Focuses on the interdisciplinary nature of global change and Interrelationships to biological, physical, anthropological, economic, and political concepts.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DB

#### **Recommended Prep**

College science course.

#### **Prerequisites**

ENG 100 with grade C or better, or consent

## BIOL 331: Marine Mammal Biology

Provides an overview of marine mammal science, significance and roles of marine mammals in their ecosystems, and marine conservation issues. Covers current research topics in marine mammal science.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

DB

#### **Prerequisites**

Either BIOL 171 or ZOOL 200, and MATH 115, both with grade C or better, or consent.

## BIOL 331L : Marine Mammal Biology Lab

Introduces current field and laboratory techniques and equipment used to collect and analyze data on marine mammal population structure and dynamics.

Credits 1

Lab Hours 45

**Teaching Equivalent** 2.50 **Designation** 

DY

#### **Prerequisites**

BIOL 331 (or concurrent).

## **BIOL 424 : Protected Species** Management

Examines policy and management issues related to protected species. Explores methods for monitoring and estimating population sizes. Provides opportunities for students to assist agencies with monitoring and assessment activities.

Credits 2

Lecture Hours 30

Teaching Equivalent 2.00

Designation

DB

#### **Recommended Prep**

ENG 225, and MATH 115.

#### **Prerequisites**

BIOL 171 and ZOOL 200/L, all with grade C or better, or consent.

## **BIOL 424L : Protected Species Management Lab**

Laboratory to accompany BIOL 424.

Credits 1

Lab Hours 45

**Teaching Equivalent** 2.50 **Designation** 

Desig

#### **Recommended Prep**

ENG 225, and MATH 115.

#### **Prerequisites**

BIOL 171 and ZOOL 200/L, all with grade C or better, or consent.

#### **Corequisite Courses**

BIOL 424: Protected Species Management

## Blueprint

## **BLPR 101 : Blueprint & Drafting Foundations**

Introduces the fundamental principles of pictorial and architectural drawing and blueprint reading. Focuses on the use of mechanical drawing instruments and freehand sketching to make shop drawings and develop interpretation and visualization techniques as they refer to detailed artistic renderings and construction drawings, and concepts essential to related fields of carpentry, architecture, engineering, and graphic arts.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, and MATH 75X with grade C or better or placement at least MATH 82, or consent

## Botany

#### **BOT 101: General Botany**

Studies growth, function, and evolution of plants. Analyzes human interactions with plants and plant interactions with their environment. (Crosslisted as BIOL 102.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DB

#### **BOT 101L: General Botany Lab**

Laboratory to accompany BOT 101. (Crosslisted as BIOL 102L.)

Credits 1
Lab Hours 45
Teaching Equivalent 2.50
Designation
DY
Corequisites
BOT 101.

#### BOT 105/HWST 211: Ethnobotany

Identifies endemic, indigenous, and Polynesian introduced flora of Hawai'i. Examines the many uses of Hawai'i's flora by the indigenous people. Reveals the relationship of gods/plants/man, and connects belief and practices with the intentional migration of specific plants. Meets Social Science requirement, not Natural Science requirement.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

HI DS

#### **BOT 105L: Ethnobotany Lab**

Studies the interactions between the Hawaiian culture and plants/plant environments. Considers different levels and types of interactions and patterns of interactions between people and plants. Places emphasis on the importance of cultural upbringing. Includes field trips in lieu of lab. (Crosslisted as HWST 211L.)

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Designation DY

**Prerequisites** 

BOT 105 or HWST 211, either with a C or better (or concurrent).

#### **Business**

#### BUS/COM 130/SP: Communication - Speech

Develops competence in oral communication within business and organizational context. Provides the theory and practical skills to be a confident and effective communicator in a variety of business and organizational settings.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### **BUS 120: Principles of Business**

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

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep

ENG 22 with grade C or better, or placement at ENG 100.

#### **Prerequisites**

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

#### **BUS 125: Starting a Business**

Surveys the business environment, establishing a business entity, decision-making processes, marketing assessments, financing, operations considerations, and government regulations as they relate to the development of a formal business plan. It is designed for those who wish to start or are currently operating their own business.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep

ENG 22 with grade C or better, or placement at ENG 100.

#### **Prerequisites**

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

#### **BUS 150: Personal Finance**

Introduces financial planning, money management and tax planning. Includes financing real and personal property, purchasing insurance and managing investments. (Crosslisted as ECON 150.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 19 with grade C or better or placement at least ENG 22, and MATH 75X with grade C or better or placement at least MATH 82, or consent.

#### **BUS 193V**

Applies skills to the workplace in an occupation within the student's area of interest. See <u>Special</u> <u>Curricula - Cooperative Education</u> for more information.

Credits 3

## **BUS 310 : Statistical Analysis for Business Decisions**

Emphasizes problem recognition, formulation, and stress on cross-disciplinary complex problem solving and communication. Covers descriptive statistics, probability, and hypothesis testing with emphasis on quality, productivity, and regression analysis. (Computer intensive.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

MATH 115 with grade C or better, or consent.

#### **BUS 318: Principles of Finance**

Introduces the theory and practice of financial management: analysis and decision making for asset management, capital budgeting, capital structure, and dividend policy.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Prerequisites

ACC 300 with grade C or better, or consent.

## BUS 320 : Entrepreneurship – Opportunity Recognition and Evaluation

Develops skills necessary to recognize an opportunity, and evaluate the viability of an idea, prior to the investment of significant time and money. Uses student teams to develop, present, and critique entrepreneurial startups. (Letter grade only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

MGT 310 and MKT 300, both with grade C or better; or consent.

## **BUS 322 : New Venture** Leadership

Focuses on organizational leadership. Emphasizes the human dimension within organizations. Provides a foundation for understanding the process and stages of organization dynamics. Includes the management of change and innovation.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep PSY 100 or SOC 100. Prerequisites

MGT 310, or consent.

## **BUS 393V : ABIT Cooperative Education**

Applies skills to the workplace in an occupation within the student's area of interest. See <a href="Special">Special</a> <a href="Curricula - Cooperative Education">Curricula - Cooperative Education</a> for more information.

Credits 1-3

#### **BUS 420 : Global Business Strategies**

Focuses on understanding the global environment and the interconnections of cultural, political, legal, economic, and ethical systems. Identifies forms of business ownership and international opportunities. Explores basic concepts underlying international finance, management, marketing, and trade relations.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites MKT 300 and MGT 310, or consent.

#### BUS 495: ABIT Capstone I

Provides the skills necessary to utilize and demonstrate the topics and content learned during the ABIT program. Includes creation of a business value proposition for one or more customer segments. Covers formation of customer relationships using one or more channels, utilization of business partners, resources and activities to start a new business. Involves the creation of a revenue model and pricing model, and a cost estimate to the start of the business. A Minimum Viable Product(MVP) is the culmination of this course that demonstrates the value proposition to any new customer or partner. (Letter grade only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

BUS 320 with grade C or better, or consent.

#### **BUS 496: ABIT Capstone II**

Provides the skills necessary to transform a business startup from a Minimum Viable Product (MVP) or a basic prototype to a full startup that is ready for launch. Extension of the Capstone I project that creates the MVP, to a business model, plan and prototype that is ready for launch. Provides students the ability to explore options to sustain business after graduation. (Letter grade only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

BUS 495 with grade C or better, or consent.

#### **Business Law**

## **BLAW 200 : Legal Environment of Business**

Introduces legal environment in which businesses operate with particular attention to principles of law relating to contracts, agency, commercial paper, partnerships, corporations, and government regulations.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## **BLAW 324 : Business Law for Entrepreneurs**

Explores the legal challenges the entrepreneur faces throughout the course of a project or business venture. Identifies and develops skills and tools used to increase or realize value and grow the business while mitigating risks.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 100 with grade C or better, or consent.

## **BLAW 360 : International Business Law**

Examines international and national laws as the apply to international trade. Readings and case studies focus on the legal environment of selected areas in the Asia Pacific region and strategies for doing business overseas.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 100 with grade C or better, or consent.

## Business Technology

## **BUSN 50 : Basic Computing Skills** for College Success

Introduces the basics of how computers are used by college students. Covers the parts and operations of personal computers, the graphical user interface and file management techniques. Provides instruction and practice with E-Mail, Internet and the Laulima course management system. Provides instruction and practice with word processing and presentation programs.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

## **BUSN 110 : Office Computer Troubleshooting and Maintenance**

Introduces basic troubleshooting and maintenance procedures for personal computers used in typical office environments. Develops basic understanding of computer hardware modules and operating system software. Covers system assembly, disassembly, configuration, booting up, preparing disk drives, loading operating system software, diagnosing problems, and upgrading.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

BUSN 150 or ICS 101, either with grade C or better, or consent.

## **BUSN 121: Introduction to Word Processing**

Introduces the parts of a personal computer and how the computer keyboard and mouse are used. Develops the ability to key alphabetic, punctuation, number, symbol keys, and the ten-key pad by touch. Further develops speed, accuracy, and technique keying. Introduces document formatting.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

## **BUSN 123 : Word Processing for Business**

Uses advanced features from a word processing program to create business documents emphasizing production and proofreading. Integrates knowledge of the Internet and computer. Includes timed computer keyboarding skills for creating and editing business documents and sending electronic attachments.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep

35 gross words a minute (gwam) or BUSN 121 with grade C or better.

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## **BUSN 150 : Introduction to Business Computing**

Introduces the role of computers in the evolution of an information-based society. Reviews history and need for information processing, the basic information processing cycle and functions, processing capabilities of computers, system development, and program development. Provides students with experience in an operating system and business applications, such as word processing, database management, spreadsheets, and presentation software.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep BUSN 50 or 121.

## **BUSN 151: Intermediate Business Computing**

Expands the concepts of business computing introduced in BUSN 150. Develops greater proficiency in creating, modifying, and printing documents, spreadsheets, database queries, reports, and forms. Broadens knowledge of spreadsheet, database, and presentation software. Provides experience with typical business applications that utilize Intranet and Internet technologies.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

BUSN 150 or ICS 101, either with grade C or better, or consent.

## **BUSN 157 : Desktop Publishing for Business**

Introduces desktop publishing on the personal computer. Develops proficiency in creating and modifying layout for brochures, business cards, fliers, and newsletters. Covers basic principles of graphics designs, formatting techniques, importing text files from word processing programs, preparing and importing various types of graphics, and creating special effects with graphics and text.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

BUSN 150 or ICS 101, either with grade C or better, or consent.

## BUSN 158 : Social Media and Cloud-Based Collaboration for Business

Introduces students to social media and collaboration tools as they relate to business. Students create, maintain, and update blogs, social media sites, and internal/ external collaboration and communication tools. Organizational management of cloud storage is included.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep

Basic computer, Internet, and keyboarding skills.

**Prerequisites** 

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## BUSN 159 : Creating and Managing the Virtual Office

Explores concepts and issues involved in establishing a virtual assistant business. Students apply integrated software applications to complete assignments, create projects, conduct research, and prepare a basic business and marketing plan.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep

Basic computer, Internet, and keyboarding skills.

#### **Prerequisites**

BUSN 121 or 123, and BUSN 150/ ICS 101, and BUSN 164, all with grade C or better, and ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### **BUSN 161: Customer Service**

Builds and maintains the critical skills and understanding necessary to be a dynamic and successful member of today's rapidly growing service economy. Individuals who work with customers gain insight into customer behavior and attitudes and develop strategies to create positive customer relationships encountered in various situations on the job.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 or placement at ENG 100, or consent.

#### **BUSN 164: Career Success**

Presents concepts and theories relating to workplace behavior and managing one's attitude and relationships for workplace effectiveness.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep

Computer experience using word processing.

#### **Prerequisites**

ENG 22 with grade C or better (or concurrent), or placement at ENG 100, or consent.

## **BUSN 166 : Professional Employment Preparation**

Facilitates employment search by emphasizing professional techniques and standards in the preparation of application forms, resumes, cover letters, and employment interviews. (Crosslisted as IS 105C.)

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00

## BUSN 170 : Records and Information Management

Studies principles and procedures for organizing and operating Records and Information Management (RIM) programs. Topics include: selection of filing systems, equipment, and supplies, procedures for storage, retrieval, transfer, retention, and disposal of record; records inventory and analysis; records protection and disposition; and study and application of ARMA (Association of Records Managers and Administrators) rules for alphabetic, alphanumeric, geographic, numeric, and subject methods. Helps a business or organization meet its fiscal, legal, governmental, requirements by managing its information systems.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Prerequisite or Corequisite
ENG 100, or consent.

## **BUSN 185 : Processing Physician's Orders**

Introduces skills for transcribing physician orders. Includes transcribing medication, intravenous, admission, preoperative, post-operative, and referral orders. Includes computer transcription.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Prerequisites
NURS 50 and BUSN 123, both with grade C or better, or consent.

#### **BUSN 189: Business Mathematics**

Introduces various quantitative computational procedures used in accounting and finance such as present and future value concepts, payroll, inventory, and international currency exchange rates. Utilization of the electronic 10-key pad as a tool for calculating is stressed.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

MATH 75X with grade C or better or placement at least MATH 82, or consent.

## BUSN 193v : Business Technology Cooperative Education

Provides practical career-related work experience through a program used nationally in colleges and universities to apply classroom knowledge and to develop job competencies. Full-time or part-time work in private and public sectors of the business, government and industrial communities is utilized for this program. (Letter grade only.)

Credits 3 Lecture Hours 1 Prerequisites

BUSN 123, BUSN 151, and BUSN 170, all with grade C or better; or BUSN 159 (or concurrent) and BUSN 158, both with grade C or better; or consent.

## **BUSN 232 : Business Computer** Spreadsheets

Covers business spreadsheets with special attention to advanced techniques required by experts. Develops critical thinking skills for applying software tools to business problems. Covers financial and logical functions, custom formatting, charts and graphs, multisheet and shared workbooks, formula auditing, data importing, Web features, one-variable and two-variable data tables, and application development tools.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

BUSN 151 and BUSN 189, both with grade C or better, or consent.

## **BUSN 237 : Business Computer** Databases

Covers business databases with special attention to advanced techniques required by experts. Develops critical thinking for applying software tools to business problems. Covers databases and table creation and modification, queries, forms, reports, defining data relationships, importing and exporting data, multi-user databases, operations on the Web, and creating database applications.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

BUSN 151 and BUSN 189, both with grade C or better, or consent.

#### BUSN 261: Web Page Construction Fundamentals and Marketing

Introduces web page construction including HTML code, Internet service providers, and web page construction software. Examines World Wide Web marketing strategies.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

BUSN 150 or ICS 101, either with grade C or better, or consent.

## **BUSN 292 : Integrated Office Procedures**

Designed to bring together, within a portfolio, all elements of learning from the Business Technology program. Includes advanced word processing, spreadsheet, database, integration of applications, and creation of a web site. Utilizes Microsoft applications. Applies electronic presentations for projects. Prepares for Microsoft Office Specialist (MOS) Core certification. (Letter grade only.)

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

BUSN 123, 151, and 193v, all with grade C or better, or consent.

## Carpentry

#### **CARP 120: Basic Carpentry Skills**

Introduces proper use and maintenance of carpentry hand and power tools. Practices selecting and using construction materials and fastening systems. (Formerly CARP 20)

Credits 3 Lecture Hours 15 Lecture/Lab Credits 60 Teaching Equivalent 3.13

**Prerequisites** 

ENG 19 with grade C or better or placement at least ENG 22, and at least MATH 75X with grade C or better (or concurrent) or placement at least MATH 82, or consent.

## **CARP 121 : Framing and Exterior** Finish

Introduces theoretical and job related skills necessary to lay out and construct foundations, wall and ceiling framing, roofing systems, and apply exterior finish components for residential and light commercial construction. (Formerly CARP 40)

Credits 3 Lecture Hours 15 Lecture/Lab Credits 60 Teaching Equivalent 3.13 Prerequisites

CARP 120, or consent.

#### **CARP 122: Interior Finish**

Introduces interior finish of floors, walls, ceiling, trim and special feature applications in residential and light commercial construction. (Formerly CARP 43)

Credits 3
Lecture Hours 15
Lecture/Lab Credits 60
Teaching Equivalent 3.13
Prerequisites
CARP 120, or consent.

## Chemistry

#### **CHEM 100: Chemistry and Society**

Provides an introduction to chemistry for non-science majors. Reviews basic chemistry concepts and their application to everyday life. Provides a survey of concepts and applications of chemistry with emphasis on the role of chemistry in the real world.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Designation
DP

#### **Prerequisites**

ENG 22 with grade C or better or placement at least ENG 100, and MATH 75X with grade C or better or placement at least MATH 115, or consent.

## CHEM 100L : Chemistry and Society Lab

Laboratory to accompany CHEM 100. Lab introduces fundamental applications of chemistry, with special emphasis on relevant topics and how chemistry relates to the real world. (Intended for students preparing for careers in non-science fields.)

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Designation DY

#### **Prerequisites**

CHEM 100 (or concurrent) with grade C or better; and ENG 22 with grade C or better or placement at ENG 100, and MATH 75X with grade C or better or placement at least MATH 115; or consent.

#### CHEM 131 : Preparation for General Chemistry

Provides background in algebra and elementary concepts of chemistry in preparation for entering the General Chemistry sequence.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better or placement at ENG 100, and MATH 82 with grade C or better or placement at least MATH 103; or consent.

## CHEM 151: Elementary Survey of Chemistry

Provides the beginning student with background in the fundamentals of chemistry. Intended for students needing a one-semester science course. Presents films, demonstrations, and experiments of introductory laboratory techniques illustrating chemical principles.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DP

**Prerequisites** 

ENG 22 with grade C or better or placement at ENG 100, and MATH 82 with grade C or better or placement at least MATH 103; or consent.

## CHEM 151L : Elementary Survey of Chemistry Lab

Laboratory to accompany CHEM 151

Credits 1

Lab Hours 45

**Teaching Equivalent** 2.50 **Designation** 

DY

#### **Prerequisites**

ENG 22 with grade C or better or placement at ENG 100, and MATH 82 with grade C or better or placement at least MATH 103; or consent.

Corequisites CHEM 151

#### CHEM 161: General Chemistry I

Covers basic principles of chemistry including introduction to units, equations, atomic structure, chemical bonding, gases, crystals, and solutions.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DP

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, and MATH 103 with grade C or better (or concurrent) or placement at least MATH 135, or consent.

Corequisites CHEM 161L.

#### CHEM 161L : General Chemistry I Lab

Presents laboratory experiments illustrating fundamental principles of chemistry.

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Designation

DY

Corequisites

CHEM 161, or consent.

#### **CHEM 162: General Chemistry II**

Covers reaction thermodynamics, chemical kinetics, chemical equilibrium, acids and bases, solubility, complex ions, oxidation-reduction, and the various groups of elements including their differences, production, uses, and reactions.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DP

**Prerequisites** 

CHEM 161 and at least MATH 135, or consent.

Corequisites CHEM 162L.

## CHEM 162L : General Chemistry II Lab

Presents laboratory experiments illustrating fundamental principles of chemistry.

Credits 1 Lab Hours 45

Teaching Equivalent 2.50

Designation

DY

Corequisites

CHEM 162, or consent.

#### CHEM 272: Organic Chemistry I

Introduces the first semester of a comprehensive organic chemistry course including molecular structure, nomenclature, stereochemistry, spectroscopy, reactions and reaction mechanisms, synthesis, and applications to biology. Intended for science majors.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DP

**Prerequisites** 

CHEM 162 with grade C or better, or consent.

#### Corequisites

CHEM 272L.

## CHEM 272L : Organic Chemistry I Lab

Introduces standard laboratory principles of organic chemistry including proficient use of laboratory equipment, manipulation of organic materials, laboratory safety, molecular structure, nomenclature, stereochemistry, spectroscopy, reactions and reaction mechanisms, synthesis, and applications to biology. Intended for science majors.

Credits 2

Lab Hours 60

Teaching Equivalent 3.33

Designation

DY

**Prerequisites** 

CHEM 162L with grade C or better, or consent.

Corequisites

CHEM 272.

#### **CHEM 273: Organic Chemistry II**

Covers the second semester of a comprehensive organic chemistry course including molecular structure, nomenclature, stereochemistry, spectroscopy, reactions and reaction mechanisms, synthesis, and applications to biology.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DP

**Prerequisites** 

CHEM 272 with grade C or better, or consent.

Corequisites

CHEM 273L.

## CHEM 273L : Organic Chemistry II Lab

Covers the second semester of standard laboratory principles of organic chemistry including proficient use of laboratory equipment, manipulation of organic materials, laboratory safety, molecular structure, nomenclature, stereochemistry, spectroscopy, reactions and reaction mechanisms, synthesis, and applications to biology.

Credits 2

Lab Hours 60

Teaching Equivalent 3.33

**Designation** 

DY

**Prerequisites** 

CHEM 272L with grade C or better, or consent.

Corequisites

CHEM 273.

#### Communication

## **BUS/COM 130/SP:**Communication - Speech

Develops competence in oral communication within business and organizational context. Provides the theory and practical skills to be a confident and effective communicator in a variety of business and organizational settings.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

DA

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### COM/PSY 215 : Conflict Resolution & Mediation

Explores the reason 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

**Teaching Equivalent** 3.00 **Designation** 

DS

#### **Recommended Prep**

ENG 100 with grade C or better.

**Prerequisites** 

COM 145, BUS/COM 130, or PSY 100, any with grade C or better, or consent.

## COM 145 : Interpersonal Communication I

Provides the theory and practical skills to be a competent communicator in a one-to-one setting.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DS

## COM 210 : Intercultural Communication I

Explores problems and opportunities of communicating in a variety of intercultural contexts. Focuses on theory and practice in managing intercultural communication effectiveness.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DS

**Prerequisites** 

ENG 100, or consent.

## COM 353 : Conflict Management & Resolution

Examines communication and behavior in interpersonal conflict through analysis of professional and personal relationships.

Assesses political, social, and cultural influences on conflict, and applies Western and Polynesian models of dispute resolution processes in relational conflict. (Crosslisted as PSY 353.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DS

**Recommended Prep** PSY 253/COM 215.

#### **Prerequisites**

ENG 100, PSY 100, or SOC 100, any with grade C or better; and BUS/COM 130, COM 145, or COM 210, any with grade C or better; or consent.

## COM 459 : Intercultural Communication II

Surveys the major factors affecting interpersonal communication between/among members of different cultures. Expands breadth and depth of knowledge of cultural, social, and political influences on intercultural communication. Focuses on theory, research, and managing intercultural effectiveness globally.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DS

**Prerequisites** 

ENG 200 or ENG 209 or ENG 225, any with grade C or better; or consent.

#### PSY/COM 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. (Crosslisted as COM 215.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

## Community Health Worker

#### CHW 135 : Health Promotion/ 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 45 Teaching Equivalent 3.00 Prerequisites HSER 101 with grade C or better, or consent.

# Cooperative Arts & Sciences Education

#### CASE 193v: Work-Based Learning

Cooperative Education is an academic course awarding college credits to students who participate in a field experience that is related to their major or career goals. See Special Curricula section for details.

#### CASE 293v: Work-Based Learning

Cooperative Education is an academic course awarding college credits to students who participate in a field experience that is related to their major or career goals. See Special Curricula section for details.

#### CASE 393v: Work-Based Learning

Cooperative Education is an academic course awarding college credits to students who participate in a field experience that is related to their major or career goals. See Special Curricula section for details.

#### **Prerequisites**

Students must be upper division program majors, or consent.

#### CASE 493v: Work-Based Learning

Cooperative Education is an academic course awarding college credits to students who participate in a field experience that is related to their major or career goals. See Special Curricula section for details.

#### **Prerequisites**

Students must be upper division program majors, or consent.

# Cooperative Vocational Education

#### CVE 93v: Work-Based Learning

See Special Curricula section for details.

#### CVE 193v: Work-Based Learning

See Special Curricula section for details.

#### CVE 293v: Work-Based Learning

See Special Curricula section for details.

### Creative Media

**Learning Outcomes** 

- Apply effective communication and critique skills with peers and clients.
- Demonstrate skills in professional use of creative media applications and equipment.
- 3. Describe ethical and legal aspects regarding the creation and use of creative media.

4. Produce creative media project using critical thinking and basic design concepts.

## CM 105 : Storytelling: Find Your Voice in Creative Media

Introduces students to core
Storytelling principles in
commercial art and life, and
inspires passion, focus, and
commitment to craft. Students
explore the nature of storytelling
and storytellers in film, television,
literature, music, spoken word,and
more, and features artists and
media professionals as guest
speakers. Students apply what they
learn by presenting stories in any
of a number of forms which reflect
their own unique voice.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA

#### **CM 118: Principles of Animation**

Introduces traditional styles and methods of hand-drawn 2D animation and fundamental mechanics of motion including paths of action, forces, timing, patterns, anticipation, action and counteraction, balance, weight, squash and stretch, primary and secondary action, and overlap. Students employ animation drawing tablets and "pencil test" software to create frame-by-frame animated motion to learn how to visualize and then represent the action of forms and shapes in motion, and create the illusion of such actions as acceleration, deceleration, collision, anticipation, balance, momentum, and intent.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

#### **Recommended Prep**

DA

CM 123. Students should be familiar and comfortable with the use of computers. Digital drawing tables are essential tools in this course (and provided for students in the computer lab).

#### **Prerequisites**

ART 113 with grade C or better, or consent.

#### CM 119 : Movies from Script to Screen

Introduces the complex interconnected processes of screenwriting, producing, directing, and editing, and also how sound design and score elevate emotional storytelling. Through this unique exploration of the mindset required of above-the-line creatives in the motion picture and animation industry, Students discover the big picture and better understand primary considerations for both Filmmakers and Animators when planning and executing their own digital media projects. (Formerly CM 115)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA

## CM 120 : Introduction to Digital Video

Develops foundational skills in preproduction and production for both broadcast TV studio and fieldbased video projects. The course emphasizes vital technical aspects of digital cinematography and sound recording as well as conceptual development, planning, writing, storyboarding, editing, and project management for Filmmakers and Animators. In addition, students are introduced to basic rules of visual composition, lighting, sequencing, and collaborative visual storytelling.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Designation
DA
Recommended Prep
CM 152

#### CM 123: Photoshop and Illustrator

Introduces the basic tools and features of raster image editing, photo retouching, and color correction of images. Focuses on the fundamental drawing techniques of vector illustration graphics, including pen tool paths, objects, and type with specific attention to practical applications in Creative Media.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA Recommended Prep

ICS 101

## CM 125 : Introduction to Graphic Design

Plan, develop and produce visual communications for print and electronic formats. Elevate skills and prepare for a career in graphic design with hands-on experience while utilizing industry-standard software to explore your creativity in a design-centric and project-focused environment.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA

#### Prerequisites

CM 123 with grade C or better, or consent.

#### CM 139 : Media Analysis: Comedy

Explores the rise of comedy in media including groundbreaking cinema, stand-up comics, and iconic TV situation and sketch comedies. Through examination of the masters of the form, students discover the science of comedy and learn to utilize proven techniques to inject humor into their writing, performance, commercial art, and inter-personal relationships.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DH

## CM 144 : Media Analysis: Graphic Novel

Examines the history, evolving art forms and cinematic interpretations of comic books. Topics include the process of artistic adaptation, contrasting approaches to creating narrative and visual structures, historical and social responses to the material and how the creation of graphic novel artistry in film and animation can accelerate or condescend the intent of the original author.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DH

## CM 145 : Media Analysis: Film Criticism

Provides an overview on the history of cinema (from gimmick to art form to industry) and the development and professional practice of film criticism. Students become familiar with varying means of writing constructive film reviews, the writers who established the need for film criticism and the films and artists whose work demands a written response. This course empowers students to express their voice through written works, with an intent to inspire them to strengthen their writing abilities, apply their voice to their writing and, perhaps, pursue writing as a profession.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Designation

DΗ

## CM 146 : Media Analysis: Horror Cinema

Explores the subtext, artistic influences and social relevance within the history of horror films. Covers the varying definitions of the genre, the social and political means in which the subject is examined and focuses on the need for the genre to address and confront troubling societal norms. Students develop constructive criticism abilities and become familiar with tropes and possibilities within the genre affectionately known as the cinema of fear.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DH

#### CM 147: Mass Media and Culture

Examines the historical beginnings of electronic media and its global impact by delving into the advent and rise of radio, cinema, television, home computers, the internet, social-media, and emerging technologies. Students develop critical-thinking skills as they further understand the potential of shaping understanding, creating art, commerce, and sharing of ideas on an international scale. Everevolving trends in mass media distribution and consumption in concert with real-time global events provide students a rich and dynamic experience.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DS

## CM 148 : Media Analysis: World Cinema

Introduces students to indigenous, Hawaii, and world cinema history, and encourages creative writing and critical-thinking. Subjects cover the origin and growth of international cinema, lingering stereotypes and issues of representation which plague the industry and society at large, and how motion pictures shape perceptions of culture. Students will work on research projects, delve into histories of international and/or island-based cultures, broaden understanding and perspectives on creative arts, explore established norms within narrative and documentary media, and explore the possibilities for future careers in digital media, production, writing and social causes.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DH

## CM 152 : Principles of Video Editing

Develops technical and creative skills essential for video editing. Students learn to manipulate existing footage into thoughtful and creative video edits by using professional software, and discover the technical and creative elements essential for success in Creative Media. (Formerly CM 149)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA

#### **Recommended Prep**

Students must be proficient with the use of a computer, and CM 123 Photoshop and Illustrator is strongly recommended so that a student is already familiar with the Adobe CC environment.

## CM 175 : Motion Graphics and 2D Animation

Introduces two-dimensional digital illustration, animation principles, and techniques for storytellers. Topics include drawing and manipulating objects, scaling and rotating, creating symbols, tweens, frame by frame animations, nested animations, and animating along a path. Additionally, lessons will include audio integration, synching and basic interactive elements. Projects will utilize the use of vector and raster images, typology and effects to create integrated visual effects and motion graphics for use in presentations, advertising, motion pictures, and animation.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA Recommended Prep

CM 152

**Prerequisites** 

CM 123 with grade C or better, or consent.

## CM 178 : Introduction to 3D Animation

Explores the use of industry standard tools for the creation of 3D digital animation and the production process. Students learn the terminology and basics of modeling, character rigging, animation, shading, lighting, rendering and tracking.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA

**Prerequisites** 

CM 123 with grade C or better, or consent.

## CM 180 : Introduction to Website Technology

Studies and practices creative strategies for the build and maintenance of professional websites using powerful industrystandard tools and advanced methodologies. Explores social media, search-engine optimization, business and advertising paradigms, and emphasizes effective client and project management skills. Students are not required to have prior webcoding experience, but would benefit greatly if they do. This is a hands-on, intensive course for graphic artists to prepare them for entry level work in the field.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DA

**Prerequisites** 

CM 123 with grade C or better, or consent.

## CM 220 : Intermediate Digital Video

Develops advanced skills in video pre-production and production. The course emphasizes technical and creative aspects of digital cinematography and sound recording as well as essential skills for field and TV studio production in terms of conceptual development, planning, collaboration, writing, storyboarding, editing, and project management. Students must produce, deliver, and exhibit a polished narrative or documentary short film to complete this course.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DA

#### **Prerequisites**

CM 120 with grade C or better, or consent.

## CM 225 : Intermediate Graphic Design

Explores higher-levels of communication design with indepth refinement of the creative process and emphasis on typography, composition, and layout. Assigned projects demand effective branding and marketing solutions, compelling logo design, and professional multiple-page interactive document design and layout for print and the web. Working with industry-leading software including Adobe Illustrator, Photoshop, and InDesign, this course prepares students to manage complex projects, and the expectations of their clients.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Designation

**Prerequisites** 

CM 125 with grade C or better, or consent

## CM 252 : Intermediate Video and Audio Editing

Emphasizes next-level editing considerations, and professional editorial techniques while also providing support in the completion of Graduate projects for Filmmaking and Animation majors. Editing is communication; students in this course develop strategies within a grand scale of intent, meaning, and impact, while elevating their capabilities with sound effects, dialog preparation, score, and fundamental sound design principles.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA

Prerequisites

CM 152 with grade C or better, or consent.

## CM 285 : Creative Media Capstone

Evaluates the scope of understanding accumulated during the student's years in the program, with required delivery of an ambitious final project encompassing their overall knowledge, familiarity and process in their chosen subject area. For Photographers or Graphic Designers that might be an online portfolio, or a professional reel or short for Filmmakers and Animators. Through job market research and development of employment strategies, we also aim to prepare students as entrepreneurs, for the workforce, or continuation to a four-year college such as Academy for Creative Media (ACM) Manoa or West Oahu.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DA

#### **Recommended Prep**

Completion of the majority of Creative Media requirements for an A.S. degree.

#### **Prerequisites**

CM 175 with grade C or better, or consent.

## cm 278 : Intermediate 3D Animation

Emphasizes disciplined production processes to create the illusion of life through the principles of animation. Students create animated scenes from initial design to final character animation, and learn character modeling, advanced character rigging, character animation techniques, facial animation, and soundtrack synchronization, with an emphasis on acting and personality in animated characters.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DA

#### **Prerequisites**

CM 178 with grade C or better, or consent.

## Culinary Arts

**Learning Outcomes** 

- Identify and practice the basic principles of culinary service, organization and structure, sanitation and safety in a food service operation to maintain the optimum health and satisfaction of the consumer.
- Explain, examine and demonstrate principles and concepts of quality food procurement and identification, food and baking preparation and cost controls, service, and proper use of tools and equipment to produce and serve a variety of professional food items.
- 3. Demonstrate skills in various areas of the culinary hierarchy: human relations, teamwork, leadership, personnel management, and ethical decision making.
- 4. Discuss the standards of restaurant regulations involving liquor protocol and health and safety regulations

 Practice standards in behavior, ethics, grooming and dress appropriate to culinary industry professionals.

## CULN 100 : Math for the Culinary Arts

Introduces the quantitative methods, reasoning, and operations necessary to perform tasks and solve problems needed by culinary professionals. The quantitative methods covered include computation measurement, ratio, proportion, and percent; conversions, recipe scaling, yield percent, and recipe costing; baker's percent and kitchen ratios; purchasing, and proportioning. Applications include interpretation and analysis of quantitative information needed in culinary situations. The course is designed for Culinary Arts degrees and certificates but does not satisfy the Foundation Symbolic Reasoning (FS) and Foundation Quantitative Reasoning (QR) core requirement of an Associate in Arts degree. (Letter grade only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

MATH 75X with grade C or better or placement at least MATH 82, or consent.

## **CULN 111: Introduction to the Culinary Industry**

Provides an overview of the culinary industry within the aspects of the entire hospitality industry. It provides students with an introduction to the historical, social, and cultural forces that have affected and shaped the industry of today. Students identify job qualifications and opportunities, professional standards, communication skills, and attitudes essential for successful workers in the industry (Letter grade only.).

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00

#### **CULN 112: Sanitation and Safety**

Provides the study and application of the principles and procedures of sanitation and safety in the hospitality industry. Includes the study of food-borne illnesses, biological, chemical, and physical hazards, and cross-contamination as they may occur during the flow of food. An introduction to HACCP (Hazard Analysis Critical Control Point) and other sanitation and safety programs will also be presented. Safety issues, ServSafe certification or equivalent, and OSHA (Occupational Safety and Health Administration) guidelines and standards will be covered as they apply to the hospitality industry. (Letter grade only.)

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00

#### **CULN 115: Menu Merchandising**

Studies the factors involved in planning effective menus for a variety of food service operations. Includes the design, format, selection, costing, pricing, and balance of menu items based on an understanding of the needs of various target markets. (Letter grade only.)

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00

## **CULN 120 : Fundamentals of Cookery**

Introduces the fundamental concepts, skills, and techniques of food preparation. Includes the use of standardized recipes, basic cooking methods for meats, stocks, soups, sauces, seafood, vegetables, and starches. Students will learn to identify, use, and maintain all equipment, tools, and utensils in a safe and sanitary manner. (Letter grade only.)

Credits 5 Lecture/Lab Credits 180 Teaching Equivalent 7.50 Prerequisites

CULN 112 with grade C or better(or concurrent), or consent.

#### **CULN 130: Intermediate Cookery**

Focuses on the application of basic concepts, skills, and techniques in fundamentals of cookery to short order cookery, including breakfast cookery, as found in coffee shops, snack bars, and other quick service outlets, with emphasis in American Regional Cuisine; to quantity food production with emphasis on menu development, recipe standardization and conversion, and quality control. Includes experience in both quantity food production and short-order cookery. (Letter grade only.)

Credits 5 Lecture/Lab Credits 180 Teaching Equivalent 7.50 Prerequisites

CULN 112 and CULN 120, both with grade C or better, or consent.

#### **CULN 132: Batch Cookery**

Focuses on fundamental concepts, skills, and techniques of cookery. Includes the use of standardized recipes. Covers basic cooking methods for meats, poultry, seafood, vegetables, and starches. Teaches identification, use and maintenance of equipment, tools, and utensils in a safe and sanitary manner. Special focus on batch cookery, and larger production cooking, and just-in-time preparation as needed throughout the serving period in order to preserve food quality and prevent waste. (Letter grade only.)

Credits 5 Lecture/Lab Credits 180 Teaching Equivalent 7.50 Prerequisites

CULN 112 and CULN 120, both with grade C or better, or consent.

## CULN 150 : Fundamentals of Baking

Introduces the fundamental concepts, skills, and techniques of basic baking. Special emphasis is placed on the study of ingredient functions, product identification, weights, measures, and proper use and maintenance of bakeshop tools and equipment. Students identify the basic baking concepts and techniques in preparing items such as quick breads, yeast breads, pies, cakes, cookies, dessert sauces, custards, and creams. (Letter grade only.)

Credits 5 Lecture/Lab Credits 180 Teaching Equivalent 7.50 Prerequisites

CULN 112 with grade C or better (or concurrent), or consent.

#### **CULN 155: Intermediate Baking**

Studies international culinary terms, ingredient identification, and safety and sanitation practices. Examines science of lean and rich yeast dough products, flat breads, breakfast goods, and a wide variety of yeast breads, along with application in the production of laminated dough products such as classical French puff pastry dough, croissants, and Danish pastries. Introduces the theory of chocolate and emphasizes skills involved in chocolate tempering, bonbons, and decor. Provides instruction and demonstrations in beginning petit fours and confections. (Letter grade only.)

Credits 5 Lecture/Lab Credits 180 Teaching Equivalent 7.50 Prerequisites

CULN 150 with grade C or better, or consent.

## **CULN 160 : Dining Room Operations**

Studies and applies a variety of service styles and techniques practiced by industry with special emphasis on the importance of the relationship coordination between the front and the back of the house. Includes the study of the principles, practices, responsibilities and liabilities associated with alcohol service. (Letter grade only.)

Credits 5 Lecture/Lab Credits 180 Teaching Equivalent 7.50

**Prerequisites** 

CULN 112 with grade C or better (or concurrent), or consent.

#### CULN 191 : Catering Field Experience

Provides broad-based exposure to principles and practice of the fundamentals of catering within the food service industry. Utilizes practical hands-on experiences to teach the facets of sales, planning, preparation, and service of catered on and off-premise affairs covering: theme, receptions, buffets, and banquets. Also provides a means for experiencing a diversity of onsite food service through field trips. (Letter grade only.)

Credits 1 Lecture Hours 75 Prerequisites

CULN 112 with grade C or better (or concurrent), or consent.

#### **CULN 220 : Advanced Cookery**

Provides practice and theory in ala carte and banquet food production as found in quality hotels and specialty restaurants and integrates previous culinary training and academic studies using fundamental cooking techniques. Student teams will create menus with instructor input, organize production and service, define and staff kitchen stations and develop systems for efficient operation. (Letter grade only.)

Credits 5

Lecture/Lab Credits 180 Teaching Equivalent 7.50 Prerequisites

CULN 130 and 132, both with grade C or better, or consent.

#### **CULN 240 : Garde Manger**

Develops skills in the preparation of pates, terrines, galantines, canapés, hot and cold hors d'oeuvres, appetizers, mousses and gelatins. Also covered are the techniques of cold food decoration, cold platter design and presentation and the design and planning of buffets. (Letter grade only.)

Credits 4 Lecture/Lab Credits 165 Teaching Equivalent 6.88 Prerequisites

CULN 130 with grade C or better, or consent.

#### **CULN 250: Advanced Baking I**

Develops skills used in the production of more advanced baked pastry and confectionery products: especially chocolates, candies and decorated specialties which include, specialty cakes, wedding cakes, pastillage, gum paste, royal icing, and chocolate decor. Students will define, describe, and prepare various types of meringues and filling, and develop advanced decorating and finishing techniques for cakes. (Letter grade only.)

Credits 5 Lecture/Lab Credits 180 Teaching Equivalent 7.50 Prerequisites

CULN 155 and ENG 100, both with grade C or better, or consent.

#### **CULN 251: Advanced Baking II**

Develops skills used in the production of more advanced baked pastry and confectionery products. Emphasizes the techniques required to produce items such as souffles, parfaits, ice creams, and sorbets, plated desserts, marzipan, decorated specialties, sugar and isomalt decoration, and pastillage. (Letter grade only.)

Credits 5

Lecture/Lab Credits 180 Teaching Equivalent 7.50 Prerequisites

CULN 250 with grade C or better, or consent.

## CULN 271: Purchasing and Cost Control

Analyzes purchasing and food control systems in commercial food service operations. Practices cost and sales analysis, comparative buying, and inventory control. (Letter grade only.)

Credits 4 Lecture/Lab Credits 165 Teaching Equivalent 6.88 Prerequisites

CULN 120 and CULN 130, both with grade C or better, or consent.

## CULN 291: Culinary Field Experience

Offers flexible, customized, and supervised school to work experiences in all aspects of the culinary arts industry. Integrates and applies classroom theory to work situations via numerous field experiences. Infuses the "Culinarian's Code" into field experiences. (Letter grade only.)

Credits 2 Lecture Hours 150 Prerequisites

CULN 130 and CULN 132, both with grade C or better (or concurrent), or consent.

## Dental Hygiene

**Learning Outcomes** 

- Facilitate the development of entry-level care providers who demonstrate an understanding of dental hygiene roles, including the legal, professional, and ethical responsibilities within the community.
- Demonstrate basic theoretical knowledge and skills in biological science, dental radiology, chair side dental hygiene, and business office procedures to support dental hygiene practice and build the foundation for an associate degree in the dental hygiene program.
- 3. Demonstrate a commitment to lifelong learning and advancing competency over a lifetime of practice.

## DH 150 : Oral Histology & Embryology

Describes general and oral histology including an overview of oral embryology, a study of the fundamentals of cytology, and the normal microscopic anatomy of oral tissues. (Letter grade only.)

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00 Prerequisites

Admission to Dental Hygiene program.

## **DH 153 : Assessment Procedures** in Dental Hygiene

Provides an orientation to dental hygiene practice. Focuses on the assessment techniques of the dental hygiene process of care model. Introduces infectious diseases important to dentistry, hazardous materials management, waste management, and rules of regulatory agencies (DCCA, OSHA, CDC and ADA). Teaches disinfection, instrument decontamination, sterilization procedures, tray set-up preparation and protocols, and emergency procedures for hazardous and biohazardous waste and materials. Focuses on dental hygiene assessment procedures including: review of health/dental history, vital signs, extra/intraoral examination, assessment of the dentition, and comprehensive periodontal examination. Discusses rationale for collection of assessment data and associated clinical procedures. (Letter grade only.)

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00 Prerequisites

Admission to Dental Hygiene program.

#### **DH 155: Dental Emergencies**

Provides an overview of medical and dental emergencies including prevention of and preparedness for management of emergencies, client observation, and vital signs.

Discusses basic principles of pharmacology related to emergencies including drug actions and interactions, toxicity and allergy, dental drugs in common use, and drugs used in the treatment of medical problems.

Describes legal and ethical aspects of emergency procedures in dentistry. (Letter grade only.)

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Prerequisites Admission to Dental Hygiene

program.

## DH 156 : Pre-clinical Dental Hygiene

Introduces clinical procedures and techniques of dental hygiene including prevention of disease transmission, health/ dental history, extra/intraoral examination, gingival evaluation and description, comprehensive periodontal examination, suspicious caries examination, and classification of occlusion. Demonstrates operation of the dental unit, basic instrumentation techniques, and ergonomic practice. (Letter grade only.)

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Prerequisites

Admission to Dental Hygiene program.

**Corequisites** DH 156C

## DH 156C : Pre-Clinical Dental Hygiene Clinic

Develops clinical procedures and techniques of dental hygiene including prevention of disease transmission, health/dental history, extra/intraoral examination, gingival evaluation and description, comprehensive periodontal examination, suspicious caries examination, and classification of occlusion. Demonstrates operation of the dental unit, basic instrumentation techniques, and ergonomic practice. (Letter grade only.)

Credits 2 Teaching Equivalent 3.75 Clinical Hours 90 Prerequisites

Admission to Dental Hygiene program.

Corequisites DH 156

#### **DH 158: Anatomical Sciences**

Examines dental anatomy focusing on the development, morphology and functions of the teeth, head and neck including mastication. (Letter grade only.)

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00 Prerequisites

Admission to Dental Hygiene program.

#### **DH 252: Dental Materials**

Examines the study of materials utilized in the practice of dentistry and dental hygiene. Reviews properties of dental materials and presents ADA requirements. (Letter grade only.)

Credits 1
Lecture Hours 15
Teaching Equivalent 1.00
Prerequisites
DH 158 with grade C or better.
Corequisites
DH 252L.

#### **DH 252L: Dental Materials Lab**

Develops laboratory experience providing students with techniques in preparation and utilization of dental materials. (Letter grade only.)

Credits 1

Lab Hours 45

Teaching Equivalent 1.88 Prerequisites

DH 158 with grade C or better.

Corequisites

DH 252.

#### DH 254 : Pathology in Dental Hygiene and Special Patient Populations

Introduces general pathology and specific pathologic processes, repair, healing, and regressive changes. Discusses social significance of pathology. Correlates pathology and diseases related to the dental hygiene client, including the indications and contraindications for care, modifications to treatment, and appointment planning for special patient/client populations. Uses client case studies. (Letter grade only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

**Prerequisites**Admission to Dental Hygiene

program.

## DH 255 : Oral Pathology in Dental Hygiene

Examines pathology of the head, neck, and oral structures. Differentiates developmental conditions, caries, diseases of bacterial, viral, and fungal origin. Describes neoplasms of the oral cavity. (Letter grade only.)

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00 Prerequisites

DH 254 with grade C or better, or consent.

## DH 256 : Applied Pharmacology in Dentistry

Examines drugs by groups with special emphasis on those used in dentistry including their physical and chemical properties, dosage, and therapeutic effects. Describes implications for client dental hygiene care using case studies. (Letter grade only.)

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00 Prerequisites

PHRM 203 with grade C or better, or licensed dentist or dental hygienist.

## DH 257 : Periodontics 1 and Advanced Clinical Techniques

Focuses on fundamental principles of periodontology including normal periodontium, etiology, and classification of periodontal disease and relationship of dental deposits to periodontal diseases. Correlates basic sciences with the clinical aspects of periodontal diseases. Describes etiology and pathogenesis of periodontal diseases. Identifies development of periodontal pocket, abscess, and process of bone loss. Demonstrates advanced instrumentation techniques, ultrasonic devices, root planning, curettage, subgingival irrigation, and hypersensitivity. (Letter grade only.)

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Prerequisites

DH 156 and DH 156C, both with grade C or better.

Corequisites

DH 257C

## DH 257C: Periodontics 1 & Advanced Clinical Techniques Clinic

Develops clinical experience that focuses on fundamental principles of periodontology including normal periodontium, etiology and classification of periodontal disease, and relationship of dental deposits to periodontal diseases. Correlation of basic sciences with the clinical aspects of periodontal diseases. Describes etiology and pathogenesis of periodontal diseases. Identifies development of periodontal pocket, abscess, process of bone loss. Demonstrates advanced instrumentation techniques, ultrasonic devices, root planning, curettage, subgingival irrigation, and hypersensitivity. (Letter grade only.)

Credits 1
Teaching Equivalent 1.88
Clinical Hours 45
Prerequisites

DH 156 and DH 156C, both with grade C or better.

Corequisites DH 257

### DH 258 : Periodontics 2 and Advanced Clinical Techniques

Focuses on diagnosis, treatment planning, and therapeutic procedures. Explains preventive and therapeutic measures within scope and responsibility of the dental hygienist. Utilizes advanced instrumentation in periodontal treatment. Compares types of periodontal surgery and therapies. Describes rationale and criteria for periodontal referral. (Letter grade only.)

Credits 1
Lecture Hours 15
Teaching Equivalent 1.00
Prerequisites
DH 257 and DH 257C, both with

grade C or better. **Corequisites** 

DH 258C

#### DH 258C : Periodontics 2 and Advanced Clinical Techniques in Dental Hygiene Clinic

Develops clinical skills on diagnosis, treatment planning, and therapeutic procedures. Explains preventive and therapeutic measures within scope and responsibility of the dental hygienist. Utilizes advanced instrumentation in periodontal treatment. Compares types of periodontal surgery and therapies. Describes rationale and criteria for periodontal referral. (Letter grade only.)

Credits 1
Teaching Equivalent 1.88
Clinical Hours 45
Prerequisites

DH 257 and DH 257C, both with grade C or better.

Corequisites DH 258

#### DH 260: Clinical Dental Hygiene 1

Focuses on assessing, planning, implementing, and evaluating dental hygiene care on clinic clients. Develops clinical competency, skills, and performance with each successive academic semester. (Letter grade only.)

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Prerequisites

DH 156 and DH 156C, both with grade C or better.

**Corequisites** DH 260C

### DH 260C : Clinical Dental Hygiene 1 Clinic

Develops clinical experience on assessing, planning, implementing and evaluating dental hygiene care on the clinic clients. Develops clinical competency, skills, and performance with each successive academic semester. (Letter grade only.)

Credits 3

Teaching Equivalent 5.63 Clinical Hours 135 Prerequisites

DH 156 and DH 156C, both with grade C or better.

Corequisites DH 260

#### DH 261: Clinical Dental Hygiene 2

Focuses on assessing, planning, implementing, and evaluating dental hygiene care on clinic clients. Develops clinical competency, skills, and performance with each successive academic semester. (Letter grade only.)

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Prerequisites

DH 260 and DH 260C, both with grade C or better.

Corequisites DH 261C

### DH 261C : Clinical Dental Hygiene 2 Clinic

Develops clinical experience on assessing, planning, implementing, and evaluating dental hygiene care on clinic clients. Develops clinical competency, skills, and performance with each successive academic semester. (Letter grade only.)

Credits 1 Teaching Equivalent 1.88 Clinical Hours 45 Prerequisites

DH 260 and DH 260C, both with grade C or better.

Corequisites DH 261

### DH 262 : Clinical Dental Hygiene 3

Focuses on assessing, planning, implementing, and evaluating dental hygiene care on clinic clients. Develops clinical competency, skill, and performance. (Letter grade only.)

Credits 1

Lecture Hours 15

Teaching Equivalent 1.00

**Prerequisites** 

DH 261 and DH 261C, both with grade C or better

Corequisites

**DH 262C** 

### DH 262C : Clinical Dental Hygiene 3 Clinic

Develops clinical experience on assessing, planning, implementing, and evaluating dental hygiene care on clinic clients. Develops clinical competency, skill, and performance. (Letter grade only.)

Credits 4

**Teaching Equivalent** 7.50 **Clinical Hours** 180

Prerequisites

DH 261 and DH 261C, both with grade C or better.

Corequisites

DH 262

### DH 263 : Clinical Dental Hygiene 4

Focuses on assessing, planning, implementing, and evaluating dental hygiene care on clinic clients. Develops clinical competency and skills. (Letter grade only.)

Credits 1

Lecture Hours 15

Teaching Equivalent 1.00

**Prerequisites** 

DH 262 and DH 262C, both with grade C or better.

Corequisites

**DH 263C** 

#### DH 263C: Clinical DH 4

Develops clinical skills on assessing, planning, implementing, and evaluating dental hygiene care on clinic clients. Develops clinical competency and skills. (Letter grade only.)

Credits 4

**Teaching Equivalent** 7.50

**Clinical Hours** 180

**Prerequisites** 

DH 262 and DH 262C, both with grade C or better.

Corequisites

DH 263

### DH 264 : Community Dental Health

Examines community dental health problems, school dental health programs, and epidemiology of dental disease, as well as assessment, development, implementation, and evaluation of a community dental health program. (Letter grade only.)

Credits 2

Lecture Hours 30

Teaching Equivalent 2.00

**Prerequisites** 

Admission to Dental Hygiene Program.

### DH 265 : Law and Ethics in Dental Hygiene

Describes ethics, jurisprudence, and practice aspects of dental hygiene practice. Discovers employment opportunities. Discusses resumes, interviewing, and office policies. (Letter grade only.)

Credits 1

Lecture Hours 15

Teaching Equivalent 1.00

**Prerequisites** 

Admission to Dental Hygiene program.

### DH 266 : Local Anesthesia and Pain Control

Reviews pharmacology, anatomy, physiology, and emergency procedures associated with local anesthesia and nitrous oxide/ oxygen analgesia. Demonstrates preparation for and administration of conduction and infiltration anesthesia in dental procedures. (Letter grade only.)

Credits 1

**Lecture Hours** 15

Teaching Equivalent 1.00 Prerequisites

DH 155 and DH 256, both with grade C or better.

Corequisites

DH 266C

### DH 266C : Local Anesthesia and Pain Control Clinic

Develops clinical experience with; pharmacology, anatomy, physiology, and emergency procedures associated with local anesthesia and nitrous oxide/ oxygen analgesia. Demonstrates preparation for and administration of conduction and infiltration anesthesia in dental procedures. Provides laboratory and clinical experience in administration of local anesthesia and nitrous oxide/ oxygen analgesia. (Letter grade only.)

Credits 1

Teaching Equivalent 1.88 Clinical Hours 45

Prerequisites

DH 155 and DH 256, both with grade C or better.

**Corequisites** 

DH 266

### DH 267 : Dental Radiology and Interpretation

Reviews the production, characteristics, and biological effects of radiation, functions. components, and operation of the x-ray unit. Includes radiation protection and monitoring, chemistry, and techniques associated with x-ray film and developing solutions. Reviews anatomic landmarks, intraoral, short-cone radiographic techniques in bitewing, periapical, full mouth, and occlusal surveys. Introduces and expands experience of radiographic identification, interpretation of radiographic caries, periodontal disease, endodontics, edentulous, trauma, and dental anomalies utilizing dental x-ray films, panoramic, cephalometric, and other extraoral radiographs. Explains forensic and legal considerations of dental radiology. Reviews traditional methods of x-ray exposure including digital technique. Includes clinical lab experience of exposing and interpreting radiographs on clients. (Letter grade only.)

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00 Prerequisites

Admission to Dental Hygiene Program.

#### **Corequisite Courses**

DH 158: Anatomical Sciences DH 267L: Dental Radiology & Interpretation Lab

### DH 267L : Dental Radiology & Interpretation Lab

Develops laboratory experience providing students with the following techniques in preparation and utilization of: the production, characteristics, and biological effects of radiation, functions, components, and operation of the x-ray unit. Includes radiation protection and monitoring, chemistry and techniques associated with x-ray film and developing solutions. Identifies anatomic landmarks, intraoral, short-cone radiographic techniques in bitewing, periapical, full mouth and occlusal surveys. Introduces and expands experience of radiographic identification, interpretation of radiographic caries, periodontal disease, endodontics, edentulous, trauma, and dental anomalies utilizing dental x-ray films, panoramic, cephalometric and other extraoral radiographs. Explains forensic and legal considerations of dental radiology. Demonstrates traditional methods of x-ray exposure including digital technique. Includes clinical lab experience of exposing and interpreting radiographs on clients. (Letter grade only.)

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Prerequisites

Admission to Dental Hygiene Program.

#### **Corequisite Courses**

DH 158: Anatomical Sciences DH 267: Dental Radiology and Interpretation

### Digital Media

### DMED 193v : Digital Media Internship I

Reflects student interest and the availability of job stations. Offers opportunity to upgrade workplace employability. Student, instructor, and employment supervisor jointly develop learning outcomes; instructor and employment supervisor jointly evaluate student.

Credits 1-3

Lecture Hours 1 Recommended Prep

ICS 102 and ENG 100.

**Prerequisites** 

ICS 161, and consent of instructor and Co-op coordinator.

### DMED 293v : Digital Media Internship II

Reflects student interest area and the availability of job stations.

Offers the opportunity to upgrade employment and problem-solving skills. Student, instructor, and employment supervisor jointly develop learning outcomes; instructor and employment supervisor jointly evaluate student.

Credits 1-3 Lecture Hours 1 Recommended Prep

MATH 100 or MATH 107, and BUS/COM 130.

**Prerequisites** 

DMED 193v, ENG 100, and consent.

## Early Childhood Education

**Learning Outcomes** 

- Use knowledge of child development and of individual children to create healthy, challenging learning environments and experiences
- 2. Build respectful partnerships with children, families, and their communities.

- 3. Observe, document and assess children's development and learning in partnership with families.
- 4. Build positive relationships and guide children through supportive interactions.
- Plan, implement, and assess learning experiences using appropriate content, concepts, and methods.
- 6. Base decisions and actions on ethical and other professional standards.
- Advocate for children and their families within the program.

### ECED 105 : Introduction to Early Childhood Education

Introduces and explores the nature of the field of early childhood education and care.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at least ENG 100, or consent.

### ECED 110 : Developmentally Appropriate Practices

Introduces concepts of developmentally appropriate practice and the importance of play. Provides an overview of and experience with the knowledge and skills necessary for working with children birth through age eight, including children with special needs.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

### ECED 115: Health, Safety, and Nutrition for the Young Child

Introduces theories and practices for creating and maintaining a safe, healthy learning environment for young children and adults in group settings. Introduces guidelines and practices for providing for the nutritional needs of young children and adults in group settings.

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### ECED 131 : Early Childhood Development: Theory into Practice

Introduces principles of human development from conception through age eight and how this informs practice. Focuses on the relationships between physical, cognitive, emotional and social aspects of the individual during this period.

Credits 3

Lecture Hours 45
Teaching Equivalent 3.00
Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

### **ECED 140 : Guiding Young Children in Group Settings**

Addresses positive ways to support children's social-emotional development. Focuses on adult-child and child-child interactions and relationships. (No longer crosslisted as FAMR 140, effective Spring 2020.)

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00

**Recommended Prep** 

ECED 131.

#### **Prerequisites**

ENG 22 with grade C or better or placement in ENG 100 or consent.

### ECED 170 : Introduction to Working with Infants and Toddlers

Provides an overview of the basic skills needed for working with infants and toddlers and their families in group care settings. Focuses on interactive aspects of child development. Introduces infant-toddler caregiving routines and environments, and caregiver roles.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at least ENG 100, or consent.

### ECED 175B : Introduction to Home Visiting

Explores child growth and development from birth to five with emphasis on establishing a partnership with families to encourage their involvement in enhancement of the child's self-esteem; self-discipline; intellectual development; and physical, social, and emotional competence. Introduces principles of adult learning and effective communication skills.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Prerequisites

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

### ECED 175C : Home Visiting: Assessment & Recordkeeping

Introduces and explores assessment, record keeping, and case-management skills required for home visitor programs. Examines action plans based on identification of the child and adult needs and progress.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Prerequisites

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

### **ECED 175D : Home Visiting: Professionalism**

Explores community resources, professional ethics, personal boundaries, confidentiality, and professional development for the home visitor to meet the needs of community agencies that employ home visitors.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Prerequisites

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

### ECED 193 : Early Childhood Field Experience IA

Provides a supervised work experience in an early childhood education and care setting.
Supports students in integrating content knowledge with practice.
Designed for those who have little or no experience in early childhood programs. Students take ECED 193 or ECED 194 as their first field experience course. Students should consult with program coordinator to determine which course to take. (Cannot be audited.) (Formerly ECED 190)

Credits 4
Lecture Hours 8
Teaching Equivalent 4.00
Designation

**Recommended Prep** ECED 105.

#### **Prerequisites**

Permission of instructor; and ECED 110 and ECED 131, both with grade C or better, and ENG 22 or placement at ENG 100. Note: Students may be required to obtain a physical or doctor's note and to be fingerprinted, all at the student's expense.

### ECED 194 : Early Childhood Field Experience IB

Provides a supervised work experience in an early childhood education and care setting.
Supports students in integrating content knowledge with practice.
Designed for those already working in an early childhood program.
Students take 193 or 194 as their first field experience course.
Students should consult with program coordinator to determine which course to take. (Cannot be audited.)

Credits 4 Lecture Hours 15 Recommended Prep ECED 105.

#### **Prerequisites**

Permission of instructor; and ECED 110 and ECED 131, both with grade C or better; and ENG 22 with grade C or better or placement at ENG 100. Note: Students may be required to obtain a physical or doctor's note and to be fingerprinted all at the student's expense.

### ECED 245 : Child, Family, and Community

Develops communication skills and other strategies for building effective relationships with diverse families and relevant community members. Introduces students to the local resources available for family referral. (No longer Crosslisted as FAMR 235, effective Spring 2020.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep ECED 105.

#### **Prerequisites**

ENG 100 with grade C or better, or consent.

### ECED 263 : Language and Creative Expression Curriculum

Addresses creative and language disciplines, stages of development for each, and how these relate to appropriate early childhood curriculum. Includes designing curriculum for language, literacy, literature, and creative expression (art, music, & creative movement/dance) based on observation of children. Students must have contact with preschool children in a formal setting for observation and implementation of course assignments.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ECED 110, ECED 131, and ENG 100, all with grade C or better, or consent.

### ECED 264 : Inquiry and Physical Curriculum

Addresses physical development and inquiry disciplines, stages of development for each, and how these relate to appropriate early childhood curriculum. Includes designing curriculum for physical development, and inquiry (math, science, and social studies) based on observation of children. Introduces integrated curriculum based on science and social studies topics. Students must have contact with preschool children in a formal setting for observation and implementation of course assignments.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ECED 110, ECED 131, and ENG 100, all with grade C or better, or consent.

### ECED 275 : Inclusion of Children with Special Needs

Introduces legal, historical, and research information about serving young children with special needs in inclusive environments. Introduces issues and practices associated with establishing partnerships with families and understanding collaborative relationships that contribute to meeting diverse needs of young children in inclusive settings. Facilitates development of skills to adapt and modify the learning environment in line with developmentally appropriate practice. Introduces traditional and alternative assessment and identifies skills necessary to facilitate successful transitions.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Prerequisites
ECED 131 and ENG 100, both wi

ECED 131 and ENG 100, both with grade C or better, or consent.

### ECED 281: Early Childhood Program Administration 1

Examines and analyzes early childhood curriculum and environments; staff development including hiring, grievance, and hiring policies; and various ways an administrator can be an advocate for children and families by understanding and utilizing the decision making processes at the county, state and federal levels. (Formerly ECED 281BCD)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

### ECED 282 : Early Childhood Program Administration 2

Provides an overview of the role and responsibilities of an early childhood administrator. Examines licensing and it's role; organizations; principles of profit and non-profit management; and budgeting and financial planning. Analyzes operating policies, record keeping, and staff and child evaluations. (Formerly ECED 282BCD)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better or placement at ENG 100, or consent.

### ECED 295 : Early Childhood Field Experience II

Provides a culminating supervised work experience in an early childhood education and care setting. Supports students in integrating content knowledge with practice. (Cannot be audited.)

Credits 4 Lecture Hours 15 Recommended Prep ECED 115.

#### **Prerequisites**

Permission of instructor; and ECED 105, ECED 140, ECED193 or 194, ECED 245, ECED 263 or 264 (or concurrent) and ENG 100, all with grade C or better. Note: Students may be required to obtain a physical or doctor's note and to be fingerprinted, all at student's expense.

#### **Economics**

### **ECON 120 : Introduction to Economics**

Introduces the way economic systems operate. Contrasts the American economy with other systems. Studies the operation of business. Analyzes national policies in solving the economic problems of inflation, unemployment, and foreign trade. One semester course for non-majors in economics. \*Note: ECON 120, 130, or 131 may be used to meet Social Science core requirements. UH Mānoa students cannot receive more than 6 credits for ECON 120, 130, and 131.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DS

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

### **ECON 130 : Principles of Economics: Microeconomics\***

Analyzes the market mechanism, prices, competition, and the efficient allocation of scarce resources. Formulates possible solutions to contemporary economic and social issues such as world food problems, poverty and distribution of income, market power of business including multinationals, role of labor unions, energy crises, environmental pollution, consumerism, and welfare. \*Note: ECON 130 and 131 are both required for Economics majors and for admission to UH Mānoa College of Business Administration. ECON 120, 130, or 131 may be used to meet Social Science core requirements. UH Mānoa students cannot receive more than 6 credits for ECON 120, 130, and 131.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DS

#### **Prerequisites**

ENG 22 with grade C or better or placement at ENG 100, and MATH 82 with grade C or better or placement at least MATH 103, or consent.

### ECON 131: Principles of Economics: Macroeconomics\*

Analyzes the forces determining national and international economic performance in such areas as employment, inflation, production, money supply, and trade. Presents, in historical context, the modern economic situation. Describes the relative roles of major economic institutions such as businesses, labor unions, government agencies, international organizations, and the banks. \*Note: ECON 130 and 131 are both required for Economics majors and for admission to UH Manoa College of Business Administration. ECON 120, 130, or 131 may be used to meet Social Science core requirements. UH Mānoa students cannot receive more than 6 credits for ECON 120, 130, and 131.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

Designation

DS

#### **Prerequisites**

ENG 22 with grade C or better or placement at ENG 100, and MATH 82 with grade C or better or placement at least MATH 103, or consent.

#### **ECON 150: Personal Finance**

Introduces financial planning, money management and tax planning. Includes financing real and personal property, purchasing insurance and managing investments. (Crosslisted as BUS 150.)

Credits 3

Lecture Hours 45

**Teaching Equivalent** 3.00 **Designation** 

DS

#### **Prerequisites**

ENG 19 with grade C or better or placement at least ENG 22, and MATH 75X with grade C or better or placement at least MATH 82, or consent.

### Electrical Engineering

### **EE 160 : Programming for Engineers**

Introduces 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. (Letter grade only.)

Credits 4 Lab Hours 45 Lecture Hours 45 Teaching Equivalent 5.00 Designation

**Prerequisites** 

MATH 241 with grade C or better (or concurrent), or consent.

#### EE 211: Basic Circuit Analysis I

Covers the study of linear circuits, time domain analysis, transient and steady state response; phasors impedance, and admittance; network of system functions, frequency responses, and filtering; and resonance. (Letter grade only.)

Credits 4
Lab Hours 45
Lecture Hours 45
Teaching Equivalent 5.00
Designation
DP

#### **Prerequisites**

MATH 243 and PHYS 272, both with grade C or better (or concurrent), or consent.

### Electricity

### ELEC 100 : Survey of Electrical Math and Physics

Studies current, voltage, resistance, and Ohm's Law. Discusses magnetism, electrical safety and measurements, AC and DC circuits, induction, and capacitance as applicable to residential, commercial, appliance, and industrial wiring systems. (Formerly ELEC 20)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 19 with grade C or better or placement at least ENG 22, and MATH 75X with grade C or better or placement at least MATH 82, or consent.

### **ELEC 110 : Residential and Light Commercial Wiring**

Introduces electrical principles and National Electric Code (NEC) requirements for residential and light commercial building structures, equipment and appliances. Develops skills in practical applications. (Formerly ELEC 23)

Credits 2 Lecture/Lab Credits 60 Teaching Equivalent 2.50 Prerequisites ELEC 100, or consent.

#### **Electronics**

#### ETRO 105: Circuit Analysis I

Develops step-by-step problem solving methods and hands-on laboratory applications. Utilizes electronics measurement instrumentation and software for data analysis. Studies fundamental topics including resistance, networks with DC voltage sources, and circuit analysis. Demonstrates Ohm's law, Kirchoff's laws, Thevenin's theorem, and maximum power theorems.

Credits 4 Lecture/Lab Credits 120 Teaching Equivalent 6.67 Prerequisites

ENG 22 with grade C or better or placement at ENG 100, and MATH 82 with grade C or better or placement at MATH 103 or higher, or consent.

#### ETRO 106: Circuit Analysis II

Studies Ohm's law, Kirchoff's laws, Thevenin's theorem, and maximum power theorems as applied to AC circuits and waveforms. Reinforces troubleshooting and circuit analysis skills. Introduces magnitude and phase, rectangular and polar forms for sinusoids, impedance, and power vectors. Studies time domain and frequency domain solutions for capacitive and inductive circuits. Demonstrates high pass, low pass, band pass, and band stop filter circuits.

Credits 4 Lecture/Lab Credits 120 Teaching Equivalent 6.67 Prerequisites

ETRO 105 with grade C or better, or consent.

### ETRO 140 : Fundamentals of Computer Networking

Introduces the OSI and TCP/IP models for network communication, discusses industry standards, commonly used network topologies, IPv4 and IPv6 addressing, routing and switching concepts, ACLs, DHCP, NAT; queuing models, network architecture design and troubleshooting. Introduces wireless networking and Virtual-LANs. Prepares students for the Cisco Certified Entry Networking Technician (CCENT) exam.

Credits 4 Lecture/Lab Credits 120 Teaching Equivalent 6.67 Recommended Prep

ICS 111 and MATH 115.

#### **Prerequisites**

ETRO 105 and MATH 103(or higher), both with grade C or better, or consent.

### ETRO 161 : Intro Optics & Photonics

Introduces the physics of light, geometric optics, lenses, and mirrors. Studies interference, diffraction, and polarization phenomena. Applies theory to laser physics, optical imaging, and biophotonics. Provides lab experiments and projects to reinforce the theory.

Credits 3 Lecture/Lab Credits 90 Teaching Equivalent 5.00 Prerequisites

ENG 22 with grade C or better or placement at ENG 100, and MATH 103 with grade C or better or placement at least MATH 119/135, or consent.

#### ETRO 193v: Internship

Introduces the student to the workplace, the student's major interest area, and the availability of job stations. Upgrades opportunities for specific skills dependent upon the job station. Requires a work-related project during which the student will demonstrate competency in acquired employability skills. Note: Student, instructor, and employment supervisor jointly develop learning outcomes. Instructor and employment supervisor jointly evaluate student. (May be repeated for a maximum of 3 credits.)

#### Credits 1

#### Lecture Hours 75 Prerequisites

ETRO 105 with grade C or better, or consent.

### ETRO 201: Digital Computer Technology I

Introduces digital computer technology. Studies binary and hex number systems and codes, Boolean algebra, logic circuits, and data circuits including flip-flops. Designs, analyzes, builds, models, and troubleshoots digital circuits. Characterizes counter circuit input and output waveforms. Utilizes LED display circuits, phototransistors, transistors, and operational amplifiers.

#### Credits 4 Lecture/Lab Credits 120 Teaching Equivalent 6.67

**Prerequisites**ETRO 105 with grade C or better, or consent.

### ETRO 205 : Digital Computer Technology II

Introduces microprocessor technology. Studies microprocessor architecture and programming. Investigates addressing modes, stack operations, subroutines, input and output operations, microcomputer subsystems and interfacing. Designs, builds, analyzes, and troubleshoots oscillators, counter circuits, decoders, display drivers, digital to analog and analog to digital convertors. Programs INTEL microprocessors using emulators and embedded systems. Calibrates and characterizes digital systems and specifications.

#### Credits 4 Lecture/Lab Credits 120 Teaching Equivalent 6.67 Prerequisites

ETRO 201 and MATH 103 (or higher), both with grade C or better; or consent.

### ETRO 210 : Electronic Technology

Investigates amplifiers including audio, radio, and infrared sensing applications. Introduces topics including basic theory and operations of solid-state devices. Applies to diodes, bipolar transistors, field effect transistors, and Zener diodes. Studies electronic circuits performing rectifying and amplification.

#### Credits 3

Lecture/Lab Credits 90 Teaching Equivalent 5.00 Prerequisites

ETRO 105 and MATH 103 (or higher), both with grade C or better; or consent.

### ETRO 212 : Electronic Technology

Presents concepts of electronic devices and circuits including modeling of semiconductor devices, analysis and design of transistor biasing circuits and linear amplifiers. Applies to the design of amplifiers, cascade amplifiers, power amps, operational amplifiers, IC oscillators, and timing circuits. Offers an introduction to Printing Circuit Board Design tools using LPKF.

#### Credits 3

Lecture/Lab Credits 90 Teaching Equivalent 5.00 Prerequisites

ETRO 210 with grade C or better, or consent.

### ETRO 240 : Computer Networking II

Develops intermediate level computer networking skills. Introduces Ethernet switching and intermediate routing skills including variable length subnet masking, routing protocols, and WAN technologies topics. Designs, builds, and troubleshoots local area networks. Prepares students for the Cisco Certified Networking Associate (CCNA) certificate examination.

#### Credits 4 Lecture/Lab Credits 120 Teaching Equivalent 6.67 Prerequisites

ETRO 140 with grade C or better, or consent.

#### ETRO 296: Capstone Project I

Develops special topics in electronic and digital computer technology. Creates, designs, and builds an electronics and computer engineering technology capstone student project. Investigates required schematics, components, and devices for the project. Includes programming, testing, troubleshooting, and characterization. Demonstrates, explains, and presents project goals, milestones, and results.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ETRO 106, and either ICS111 or EE 160, and MATH 103 (or higher), all with grade C or better; or consent.

#### ETRO 297: Capstone Project II

Continues Capstone Project I, leading to completion of the project. Includes review of project definition and refining project plans. Continues development, testing, and evaluation. Requires a written formal report and oral presentation of the project.

Lecture Hours 45
Teaching Equivalent 3.00
Prerequisites
ETRO 296 with grade C or better, or consent.

Credits 3

### Energy

#### ENRG 101: Introduction to Sustainable Technology

Introduces alternative methods for meeting long term energy needs, identifies and explores local resources including demand-side management of conventional gas and electric power and sustainable energy resources such as solar, wind, biomass, small hydroelectricity, geothermal, ocean thermal energy conversion, and alternative transportation fuel options.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep ICS 101 or BUSN 150, and

placement at ENG 100.

#### **Prerequisites**

ENG 19 with grade C or better or placement at least ENG 22, and MATH 75X or placement at least MATH 82, or consent.

### **ENRG 103 : Energy Production** Systems

Introduces theoretical concepts and practical applications of sustainable energy systems. Develops knowledge of photovoltaic, thermal, wind, hydro, ocean thermal, fossil, ocean wave, and absorption systems, with emphasis on solutions for residential and commercial applications in Hawai'i.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Recommended Prep
ENG 100.
Prerequisites
ENRG 101 (or concurrent), or consent.

#### ENRG 193v : Internship in Sustainable Technology

Introduces student to the workplace on a job within the student's area of interest and preparation. Student and instructor jointly develop learning outcomes, and the instructor and the employment supervisor jointly perform evaluation. (May be repeated for a maximum of 8 credits.)

Credits 1-4 Lecture Hours 75 Recommended Prep ENG 100, and ICS 101 or BUSN 150. Prerequisite or Corequisite ENRG 101, 102, 103, 104, or 105, and consent.

### **English**

### ENG 10 : Reading & Writing Fundamentals

Develops fundamental writing, reading, and study skills. (A-F, N, W grades only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

Placement for English language fundamentals, or consent.

#### **ENG 19: Writing Essentials**

Develops essential writing skills for college and the workplace. Students engage in writing as a process, applying basic rhetorical strategies to produce focused, wellsupported paragraphs and other short compositions that meet the needs of specific audiences and purposes. Students study the grammar and mechanics of Standard English, applying knowledge to recognize and correct errors in their writing. Students also practice effective reading strategies, developing skill in summarizing ideas from courses. (A-F, N, W grades only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 10, or placement at ENG 19, or consent.

#### **ENG 21: Intro to College Reading**

Develops college-level reading skills, improving reading speed, comprehension, and retention of information in written texts. Students build college-level vocabulary and learn to distinguish between main ideas and supporting details and examples. Students practice drawing inferences through critical analysis of written materials and demonstrate understanding of reading material through writing accurate summaries and paraphrases. (A-F, N, W grades only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 19 with grade C or better, or placement at ENG 21, or consent.

#### **ENG 22: Intro to Composition**

Develops college-level writing skills, Students engage in a writing process that includes generating ideas, organizing ideas, drafting, revising, and editing for sentencelevel errors. Students employ varied rhetorical strategies to produce short compositions that effectively develop a main point while appealing to an appropriate audience and purpose. Students also learn and practice basic academic conventions for incorporating information from sources into their writing. (A-F, N, W grades only.)

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 19 with grade C or better, or placement at ENG 22, or consent.

#### ENG 98 : Composition I Supplement

Provides supplemental instruction in the writing process, rhetorical principles, critical reading, and research to support achievement of ENG 100 learning outcomes. (A-F, N, W grades only.)

Credits 1

Lecture Hours 15 Teaching Equivalent 1.00 Recommended Prep

ENG 19 with grade A, or completion of high school English composition course with grade C or better.

#### **Prerequisites**

ENG 19 with grade C or better, or placement at ENG 22, or consent.

Corequisites

ENG 100.

#### **ENG 100: Composition I**

Discovers and applies the concepts of purpose, audience, and tone in writing. Emphasizes evaluating written texts and writing various types of essays, including writing from sources. Focuses on critical thinking.

Credits 3

**Lecture Hours** 45

**Teaching Equivalent** 3.00 **Designation** 

FW

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### ENG 102: College Reading Skills

Studies and practices strategies to improve college-level reading and study skills. Intended for students who are reading at or above their grade level and who wish to improve skills of comprehension and critical thinking.

Credits 3

**Lecture Hours** 45

**Teaching Equivalent** 3.00 **Prerequisites** 

ENG 21 with grade C or better, or placement at ENG 100 or 102, or consent.

### **ENG 104 : Introduction to Creative Writing**

Explores the principles and practice of creative writing through readings and composition in several major genres.

Credits 3

**Lecture Hours** 45

**Teaching Equivalent** 3.00 **Designation** 

DA

#### **Prerequisites**

ENG 100 with grade C or better, or consent.

#### **ENG 106: Report Writing**

Practices organization of factual material and objective writing for the purpose of writing reports and technical articles. Develops ability to write clearly, accurately, and concisely. Reviews basic grammar. Improves technical vocabulary usage.

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### **ENG 200: Composition II**

Expands and deepens composition skills from ENG 100 (Composition I). Prepares students for upperdivision study and research in a variety of academic fields. Studies and practices advanced skill in academic writing, reading, and research with emphasis on research strategies, critical analysis of texts, and self-assessment of the rhetorical impact of one's writing. Students produce at least one substantial research project in the course. (Formerly ENG 210.)

Credits 3

Lecture Hours 45
Teaching Equivalent 3.00
Prerequisites

ENG 100 with grade C or better, or consent.

#### **ENG 204A: Fiction Writing**

Studies and practices creative strategies to produce and revise works of fiction.

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Designation

DA

#### **Prerequisites**

ENG 104 with grade of C or better, or consent.

#### **ENG 204B: Poetry Writing**

Studies and practices creative strategies to produce and revise works of poetry.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DA

#### **Prerequisites**

ENG 104 with grade of C or better, or consent.

### **ENG 204C : Introduction to Screenwriting**

Introduces the basics of writing short narrative screenplays for film or animation. Students learn the fundamentals and format of screenwriting as well as basic elements of story and character development.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

DA

**Recommended Prep** 

ENG 104 or CM 119

#### **Prerequisites**

ENG 100 with grade C or better, or consent.

### ENG 209 : Business & Managerial Writing

Focuses on the skills needed for effective business and managerial written communication. Studies and practices strategies for effective business writing, including a formal report requiring research documentation.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

**Prerequisites** 

ENG 100 with grade C or better, or consent.

### **ENG 225 : Writing for Science and Technology**

Develops and applies skills in scientific writing to produce reports on experimentation and research. Analyzes various forms of writing required in scientific and technical careers.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00 Recommended Prep

Successful completion of a science laboratory course.

#### **Prerequisites**

ENG 100 with grade C or better, or consent.

#### **ENG 250: American Literature**

Studies major works of American fiction, non-fiction, drama, and poetry.

Credits 3

**Lecture Hours** 45

**Teaching Equivalent** 3.00 **Designation** 

DL

#### **Prerequisites**

ENG 100 with grade C or better, or consent.

### ENG 251: Major Works of British Literature to 1800

Studies major works of British fiction, non-fiction, poetry, and drama from the Middle Ages to 1800. Note: The courses ENG 251-256 and ENG 257EFR satisfy the 6-credit requirement for sophomore literature at the University of Hawaiʻ i, a prerequisite for upper division English courses.

Credits 3

**Lecture Hours** 45

**Teaching Equivalent** 3.00 **Designation** 

DL

#### **Prerequisites**

ENG 100 with grade C or better, or consent.

### ENG 252 : Major Works of British Literature after 1800

Studies major works of British fiction, non-fiction, drama, and poetry from 1800 to the present. Note: The courses ENG 251-256 and ENG 257EFR satisfy the 6-credit requirement for sophomore literature at the University of Hawaii, a prerequisite for upper division English courses.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

DL

#### **Prerequisites**

Designation

ENG 100 with grade C or better, or consent.

### ENG 254 : World Literature (Western)

Studies and analyzes literary works of Western cultures from ancient times to present. Note: The courses ENG 251-256 and ENG 257EFR satisfy the 6-credit requirement for sophomore literature at the University of Hawaiʻ i, a prerequisite for upper division English courses.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

Designation

DL

#### **Prerequisites**

ENG 100 with grade C or better, or consent.

#### **ENG 255: Types of Literature**

Studies, analyzes, and critiques major European and American short stories and novels. Note: The courses ENG 251-256 and ENG 257EFR satisfy the 6-credit requirement for sophomore literature at the University of Hawaii, a prerequisite for upper division English courses.

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00

**Designation** DL

#### **Prerequisites**

ENG 100 with grade C or better, or consent.

### **ENG 257 : Themes in Literature:** Special Topics

Studies and analyzes universal problems in selected literary works of various types, cultures, and periods. Presents topics, which will vary with student interest and availability of faculty. Note: The courses ENG 251-256 and ENG 257EFR satisfy the 6-credit requirement for sophomore literature at the University of Hawai' i, a prerequisite for upper division English courses.

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Designation

DL

#### **Prerequisites**

ENG 100 with grade C or better, or consent.

### **ENG 257E**: Themes in Literature: Literature of Hawai'i

Focuses on selected poems, legends, biographies, short stories, and novels by people of present-day Hawaiian, Polynesian, American, European, and Oriental heritage, drawn from ancient, transitional, and modern Hawaiian literature. Studies and analyzes universal problems in selected literary works. Note: The courses ENG 251-256 and ENG 257EFR satisfy the 6-credit requirement for sophomore literature at the University of Hawai' i, a prerequisite for upper division English courses.

Credits 3 Lecture Hours 45

Teaching Equivalent 3.00 Designation

ΗΙ

DL

#### **Prerequisites**

ENG 100 with grade C or better, or consent.

### ENG 316 : Advanced Research Writing

Provides advanced knowledge in planning, developing, organizing, and editing writing projects with clarity and precision. Emphasizes critical thinking skills; social, ethical, and political argument; and the ability to write a variety of work, including research projects in specific fields of study, using appropriate documentation styles.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DL

**Recommended Prep** 

ENG 200 or 225 preferred.

#### **Prerequisites**

ENG 209 or 200 or 225, any with grade of C or better; or consent.

### Facilities Management

## FMGT 100 : Introduction to Building Maintenance and Construction

Introduces tools, materials, and safety for building maintenance and construction trades. Explores fundamentals of building systems and operations of the maintenance department. (Formerly MAIN 20)

Credits 2 Lecture/Lab Credits 60 Teaching Equivalent 2.50

### FMGT 120 : Introduction to Project Management

Introduces concepts and principles for the planning and management of major facility operations, renovation, and construction projects. Develops project management skills and explores best practices for planning and implementation processes to include: stakeholder engagement, budget and risk assessment and controls, scheduling, resource allocation and acquisition, and project closing.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 100 with grade C or better, and MATH 75X with grade C or better or placement at least MATH 100, or consent.

#### FMGT 200 : Mechanical Systems Design and Construction

Explores commercial building mechanical and environmental systems and their relationship to occupant comfort and satisfaction. Focuses on building systems operation, diagnostics, and optimization of comfort and convenience features to manage and reduce energy consumption.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 100 with grade C or better, and MATH 75X with grade C or better or placement at least MATH 100, or consent.

### FMGT 201: Facilities Operations and Leadership

Examines the key principles of management in the facilities engineering industry. Focuses on leadership skill building and decision-making processes within the managerial levels of a commercial facility. Explores management concepts, strategies, and tools essential for organizational effectiveness.

Credits 2
Lecture Hours 30
Teaching Equivalent 2.00
Prerequisites
FMGT 120, or consent.

### Fashion Technology

**Learning Outcomes** 

- Demonstrate satisfactory
   proficiency in fundamentals of
   constructing a garment
   including terminology, tools
   and supplies; pattern
   identification; taking and
   calculating measurements;
   pattern alteration, layout and
   cutting; sewing construction
   and garment fitting.
- Demonstrate satisfactory understanding of design concepts and proficiency in conveying design ideas onto paper including identifying and sketching design details accurately and in proportion to the figure or object.
- Demonstrate satisfactory proficiency in principles of pattern making, including terminology, use of tools, and process of pattern development.
- Demonstrate satisfactory proficiency in terminology, principles and skill sets relevant to special topic courses.

- Demonstrate satisfactory proficiency in the safe operation of sewing machines and equipment.
- 6. Demonstrate satisfactory understanding of textile characteristics and end use.
- 7. Demonstrate satisfactory understanding of principles of starting a small business.

### FT 90v : Special Topics in Fashion Technology

Provides knowledge and training in new techniques and/or specialized areas in the sewing industry that are not included in the basic fashion technology curriculum. (May be repeated without limit for credit.)

#### FT 90v, 190v, 290v : Topic: Advanced Fashion Illustration

Studies advanced illustration techniques for drawing the fashion figure. Stresses development of each student's individual style of fashion illustration.

Credits 3 Lab Hours 45 Lecture Hours 30 Teaching Equivalent 3.13 Prerequisites FT 216, or consent.

### FT 90v, 190v, 290v : Topic: Sewing Activewear

Provides specialized training in the design and construction techniques used in the development of active sportswear. Stresses ready-to-wear production techniques.

Credits 3 Lab Hours 45 Teaching Equivalent 3.13 Prerequisites FT 113 and FT 115, or consent.

### FT 90v, 190v, 290v : Topic: Home Furnishings

Provides specialized training in design, measurement and construction techniques used in the production of draperies, pillows, table linens, bed linens, slipcovers, and other home furnishings.

Credits 3 Lab Hours 45 Teaching Equivalent 3.13 Prerequisites FT 25, or consent.

#### FT 90v, 190v, 290v : Topic: Draping

Introduces the fundamentals of draping on the standard dress form. Practices interpretation of design details through draping.

Credits 3 Lab Hours 45 Teaching Equivalent 3.13 Prerequisites

FT 215, or consent.

#### FT 113: Clothing Construction I

Introduces sewing tools and equipment. Treats selection and adjustment of basic commercial patterns and construction of clothes from these patterns to fit figures. (Letter grade only.)

Credits 3 Lab Hours 45 Lecture Hours 30 Teaching Equivalent 3.13 Corequisite Courses

FT 115: Clothing Construction II

#### FT 115 : Clothing Construction II

Explores custom sewing techniques using various kinds of fabrics.
Emphasizes accuracy and neatness in pattern alteration and garment construction. (Letter grade only.)

Credits 3 Lab Hours 45 Lecture Hours 30 Teaching Equivalent 3.13 Corequisite Courses

FT 113: Clothing Construction I

### FT 130 : Ready-To-Wear Clothing Production

Explores efficient and economical techniques in fabric layout, cutting, and sewing. Offers practice in aloha shirt and blouse construction. (Letter grade only.)(Formerly FT 25.)

Credits 3
Lab Hours 45
Lecture Hours 30
Teaching Equivalent 3.13

### FT 190v : Special Topics in Fashion Technology

Provides knowledge and training in new techniques and/or specialized areas in the sewing industry that are not included in the basic fashion technology curriculum. (May be repeated without limit for credit.)

Credits 3

#### FT 215: Flat Pattern Making I

Introduces principles of pattern making for women's apparel through the manipulation of basic slopers. (Letter grade only.)

Credits 3 Lab Hours 45 Lecture Hours 30 Teaching Equivalent 3.13 Prerequisites

FT 113 and FT 115, both with grade C or better; or consent.

Corequisites FT 217.

#### FT 216: Fashion Illustration

Demonstrates principles and techniques of sketching the fashion figure including garment details and fabric drape. Encourages the development of a personal style of illustration. Introduces the use of computers in illustration. (Letter grade only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA

#### FT 217: Flat Pattern Making II

Explores garment development using a personal full size sloper as a foundation for pattern making. Emphasizes application of flat pattern principles and garment construction techniques appropriate to the design. (Letter grade only.)

Credits 3 Lab Hours 45 Lecture Hours 30 Teaching Equivalent 3.13 Prerequisites

FT 113 and FT 115, both with grade C or better; or consent.

#### **Corequisite Courses**

FT 215: Flat Pattern Making I

#### FT 221: Textiles I

Introduces fibers, fabric structure, and finishes related to selection and care. Interrelationship between textile characteristics, properties, and end uses. (Letter grade only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DP

)P

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100; or consent.

#### FT 237 : Pattern Grading

Principles of proportionally increasing or decreasing a master pattern according to a prescribed set of body measurements.

Applications include basic, intermediate an advanced designs. Includes use of the grading machine. (Letter grade only.)

Credits 3 Lab Hours 45 Lecture Hours 30 Teaching Equivalent 3.13 Prerequisites

FT 215 with grade C or better, or consent.

#### FT 240: Sewing Knit Fabrics

Explores working with a variety of knit textiles. Analyzes tools, equipment, supplies and methods of garment construction specific to knits with varying degrees of stretch. (Letter grade only.)

Credits 3 Lab Hours 45 Lecture Hours 30 Teaching Equivalent 3.13 Prerequisites

FT 113 and FT 115, both with grade C or better; or consent. A portable sewing machine with straight and zigzag feature in working condition.

### FT 290v : Special Topics in Fashion Technology

Provides knowledge and training in new techniques and/or specialized areas in the sewing industry that are not included in the basic fashion technology curriculum. (May be repeated without limit for credit.)

### **Filipino**

#### FIL 101: Beginning Filipino I

Introduces speaking, listening, reading, and writing skills of basic Tagalog. Includes basic structures of Tagalog, language commonly used in daily situations, and different aspects of Philippine cultures.

Credits 4 Lecture Hours 60 Teaching Equivalent 4.00 Designation HSL

#### FIL 102: Beginning Filipino II

Continues FIL 101. Includes speaking, listening, reading, and writing skills of basic Tagalog.

Credits 4
Lecture Hours 60
Teaching Equivalent 4.00
Designation
HSL

FIL 101, or consent.

**Prerequisites** 

#### FIL 261: Philippine Literature

Surveys Philippine/Filipino literature from the early period to contemporary times. It will introduce canonical works and authors as well as major literary forms of the period. Selected literary pieces in English and in English translation are studied.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DL

#### **Prerequisites**

ENG 100 with grade C or better, or consent.

#### **Finance**

#### FIN 311: Investments

Introduces various investment media and capital markets. Topics include the analysis of security returns using techniques such as beta, filter rules, and portfolio theory.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

BUS 310 and 318 both with grade C or better, or consent.

## Food Science & Human Nutrition

### FSHN 185 : Food Science and Human Nutrition

Integrates natural science concepts basic to the study of human nutrition. Emphasizes nutrient requirements of healthy individuals, nutrient categories and characteristics, physiological functions, and food sources. Includes review and adaptation of dietary practices to reflect current nutritional issues.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DB

**Prerequisites** 

ENG 22 with grade C or better, or placement at ENG 100, or consent.

### FSHN 285 : The Science of Human Nutrition

Provides an overview of the principles of nutritional science. Includes descriptions and functions of nutrients, digestion and absorption, effects of deficiencies and toxicities, requirements throughout the life cycle, food sources, nutrient interactions, dietary assessment, cultural sensitivity, sports nutrition, eating disorders, global health issues, drug interactions, and nutrition as it pertains to dental health. Required for UHMC Dental Hygiene program.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DB

#### **Prerequisites**

ENG 22 with grade C or better or placement at ENG 100, and MATH 75X with grade C or better or placement at least MATH 82, or consent.

### Geographic Information Systems

#### GIS/ICS 150 : Introduction to GIS/ GPS

Introduces applications of geographic information systems (GIS) with a special emphasis on using ArcView GIS. Includes database construction and techniques for spatial data manipulation, analysis, and display. Teaches use of global positioning system (GPS). Explores crossdisciplinary applications in the natural and social sciences.

Credits 4 Lecture Hours 60 Teaching Equivalent 4.00 Recommended Prep

Familiarity with computer databases.

#### **Prerequisites**

ICS 101 or BUSN 150, either with grade C or better, or consent.

#### GIS 180 : GIS in Ecosystem Management

Uses global positioning system (GPS) technologies and advanced geographic information system (GIS) principles for data collection and analysis. Applies GIS techniques to develop geodatabases and computergenerated map layers for specific sites. Evaluates resource management decisions for natural ecosystem conservation and habitat restoration projects.

Credits 4
Lecture Hours 60
Teaching Equivalent 4.00
Prerequisites
GIS/ICS 150 with grade C or better, or consent.

### Geography

### **GEO 101 : The Natural Environment**

Surveys the natural environment: weather, climate, soil, vegetation, and landforms, with emphasis on Hawai'i. Lab optional.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DP

### **GEO 101L : The Natural Environment Laboratory**

Introduces the geographer's tools: globes, atlases, maps, and aerial photographs. Uses laboratory investigation techniques to understand concepts of physical geography. Special emphasis on Hawai'i and on human modification of the environment.

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Designation DY

**Prerequisites**GEO 101 (or concurrent), or consent.

### GEO 102 : World Regional Geography

Surveys the world's major cultural regions. Explores economic, environmental, social, and political conditions from a geographical perspective.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation FGB

**Prerequisites** 

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## Geology & Geophysics

#### **GG 101: Introduction to Geology**

Presents principles of physical geology including the composition and structure of the earth, its evolution over geologic time, and processes shaping the earth's crust including continental drift, volcanism, earthquakes, and erosion.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DP

**Prerequisites** 

ENG 22 with grade C or better or placement at ENG 100, and MATH 75X with grade C or better or placement at least MATH 82, or consent.

### GG 101L : Introduction to Geology Lab

Laboratory to accompany GG101 or GG103.

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Designation DY

#### **Prerequisites**

GG 101 or GG 103 (or concurrent); ENG 22 with grade C or better or placement at ENG 100, and at least MATH 75X with grade C or better or placement at least MATH 82, or consent.

### GG 103 : Geology of Hawaiian Islands

Surveys Hawaiian geology and geologic processes. Includes origin of the Hawaiian Islands, volcanism, rocks and minerals, landforms, stream and coastal processes, landslides, earthquakes and tsunamis, groundwater, and geologic and environmental hazards.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

HI DP

#### Hawaiian

## HAW 100 : Language in Hawai<sup>1</sup>i: A Microcosm of Global Language Issues

Introduces students to essential linguistic features of Hawaiian and language related issues enhancing communicative experience in

Hawai'i. Analyzes social, cultural, political, and linguistic cross-cultural interaction locally and globally.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

FGB HI

#### HAW 101: Elementary Hawaiian I

Introduces speaking, reading, and writing elementary Hawaiian. Treats structural points inductively. Devotes four out of five hours to drill and practice. Daily lab work determined by individual need.

Credits 4 Lecture Hours 45 Lecture/Lab Credits 30 Teaching Equivalent 4.17 Designation

#### **HAW 102 : Elementary Hawaiian II**

Continues HAW 101 instruction to write, speak, and read Hawaiian. Devotes four out of five hours to drill and practice. Daily lab work determined by individual need.

Credits 4 Lecture Hours 45 Lecture/Lab Credits 30 Teaching Equivalent 4.17 Designation

ΗΙ

**Prerequisites** 

HAW 101, or consent.

#### HAW 104 : Hawai'i: Language Through Hula

Introduces conversational Hawaiian language through the medium of dance (hula) and song. Requires study, memorization, and close examination of Hawaiian vocabulary and simple sentence structure.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

HI DA

### HAW 201 : Intermediate Hawaiian

Continues HAW 102. Uses advanced Hawaiian grammatical structure with emphasis placed on speaking Hawaiian. Practices translation of materials from classical Hawaiian literature. Devotes two out of five hours to drill and practice. Daily lab work determined by individual need.

Credits 4
Lecture Hours 45
Lecture/Lab Credits 30
Teaching Equivalent 4.17
Designation

ΗІ

**Prerequisites** 

HAW 102, or consent.

### HAW 202 : Intermediate Hawaiian

Introduces further advanced Hawaiian grammatical structures with emphasis placed on speaking Hawaiian. Drills translating materials from classical Hawaiian literature. Devotes two of five hours to drill and practice. Daily lab work determined by individual needs.

Credits 4 Lecture Hours 45 Lecture/Lab Credits 30 Teaching Equivalent 4.17 Designation

HI

**Prerequisites** 

HAW 201, or consent.

#### **HAW 221: Hawaiian Conversation**

Practices systematic control of spoken Hawaiian. Further develops vocabulary for accurate, mature expression.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Designation

ΗΙ

**Prerequisites** 

HAW 202, or consent.

### HAW 261: Hawaiian Literature in Translation

Surveys Hawaiian literature, including prose narration and poetry with reference to Polynesian and world themes and forms from pre-contact to discovery. Introduces a full range of Hawaiian stories, chants, poems, songs, and sayings which have been translated into English.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Designation

HI

DL

**Prerequisites** 

ENG 100 with grade C or better, or consent.

#### Hawaiian Studies

**Learning Outcomes** 

ΗΙ

- Professional actions are based on core nursing values, professional standards of practice, and the law
- 2. Develops insight through reflective practice, self-analysis, and self care.
- Engages in ongoing selfdirected learning and provides care based on evidence supported by research.
- 4. Demonstrates leadership in nursing and health care.
- 5. Collaborates as part of a health care team.
- 6. Practices within, utilizes, and contributes to the broader health care system.
- 7. Practices patient-centered care.
- 8. Communicates effectively
- Demonstrates clinical judgment/critical thinking in the delivery of care of patients while maintaining safety.

#### BOT 105/HWST 211: Ethnobotany

Identifies endemic, indigenous, and Polynesian introduced flora of Hawai'i. Examines the many uses of Hawai'i's flora by the indigenous people. Reveals the relationship of gods/plants/man, and connects belief and practices with the intentional migration of specific plants. Meets Social Science requirement, not Natural Science requirement.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

HI DS

### HWST/MUS 176 : History and Development of Hawaiian Music

Focuses on the history and development of traditional and acculturated vocal and instrumental Hawaiian music. Discusses Hawaiian dance genres related to the music. Examines Hawaiian music and dance as an organization of sound and movement and as a product of culture and people. Uses sound recordings, video presentations, and live performances of the various music genres discussed.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

HI

DH

#### Prerequisites

HAW 101 and HWST 107, both with a grade C or better, or consent.

## HWST 100B : Intro to Hawaiian Culture: Communication-Basic Language and Phrases

Develops correct pronunciation and usage of basic Hawaiian language and phrases.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Designation

HI DH

#### HWST 100C : Intro to Hawaiian Culture: Worldwide-Values, Folklore, and Cultural Practices

Provides an orientation to traditional and contemporary Hawaiian practices and values.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Designation

HI DH

#### HWST 100D: Intro to Hawaiian Culture: Landscape-Historical Events, Physical Features, and Unique Flora & Fauna of Maui and Hawai'i

Explains important historical events of Maui and Hawai'i and identifies their unique flora and fauna, physical features, and scenes.

Credits 1
Lecture Hours 15
Teaching Equivalent 1.00
Designation

HI DH

### HWST 107 : Hawai'i: Center of the Pacific

Introduces the unique aspects of Hawai'i and Hawaiian culture in relation to the larger Pacific, including geography, origins, language, religion, land, art, and history.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

HI DH

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### **HWST 111: The Hawaiian 'Ohana**

Examines culture of Hawaiian people as expressed in home and family. Provides understanding of the family as the basis of larger Hawaiian society. Compares and contrasts both ancient and modern aspects of the Hawaiian family. Uses Hawaiian terminology.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

HI DH

#### **Prerequisites**

HWST 107 with grade C or better, or consent.

### HWST 132 : Hula 'O Iapa (Foundational Hawaiian Dance)

Studies foundational hula and chant from pre-contact, post-contact, Monarchy era and contemporary Hawai'i. Students will be introduced to hula instruments, costuming and adornments, the kuahu hula and beginning choreography.

Credits 2

Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50

Designation

HI DH

#### **Prerequisites**

HAW104 with grade C or better, or instructor consent.

#### HWST 133 : Hula 'Auana (Contemporary Hawaiian Dance)

Studies contemporary Hawaiian dance from post-contact, Monarchy era and contemporary Hawai'i. Students will be introduced to hula instruments, costume and adornments appropriate to hula 'auana and beginning choreography.

Credits 2

Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Designation

DH HI

#### **Prerequisites**

HAW 104 with grade C or better, or consent.

#### HWST 205 : Hawaiian Music in Action A Mele 'Āina E Mele Pili Kanaka I Other

Teaches Hawaiian songs as a means of strengthening knowledge of language, poetry, and culture. Conducted primarily in Hawaiian. (May be repeated for credit if subletters are different.)

Credits 2

Lecture Hours 15

Lecture/Lab Credits 30 Teaching Equivalent 2.50

**Designation** HI

DA

#### **Prerequisites**

HAW 102, or consent.

### HWST 207 : Mālama Ahupua'a: Resource Management

Examines the ahupua'a system: its mythologies, place names, history, poetry, and early documents of the Hawaiian nation as it was conceptualized by the ancient Hawaiians. Explores the relevance of the ahupua'a system in modern society.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DH HI

#### **Prerequisites**

HWST 107 with grade C or better, or consent.

### HWST 211L : Hawaiian Ethnobotany Lab

Studies the interactions between the Hawaiian culture and plants/ plant environments. Considers different levels and types of interactions and patterns of interactions between people and plants. Places emphasis on the importance of cultural upbringing. Includes field trips in lieu of lab. (Crosslisted as BOT 105L.)

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Designation

DY

#### **Prerequisites**

HWST 211 or BOT 105, either with a C or better (or concurrent).

### HWST 213 : Hawaiian Ethnozoology

Surveys and identifies Hawaiian fishes, birds, and other creatures, and their place in Hawaiian culture. Explores traditional methods of capture, practical uses, and conservation techniques. Uses Hawaiian terminology.

Credits 3

Lecture Hours 45

**Teaching Equivalent** 3.00 **Designation** 

HI

DH

#### **Prerequisites**

HAW 101, or consent.

### HWST 222 : Ma'awe: Hawaiian Fiber Arts

Examines Hawaiian cultural fiber arts. Develops advanced fiber arts projects of Hawaiian cultural significance or ceremonial use. Practices proper protocols used in the procurement of materials needed to complete various fiber arts projects. Explores related protocol and methods for gathering, Native Hawaiian gathering rights, and the type of environments in which specific materials grow and can be gathered. (May be repeated for unlimited credit.)

Credits 3

Lecture Hours 45

**Teaching Equivalent** 3.00 **Designation** 

ΗΙ

DA

#### **Prerequisites**

HWST 211 or BOT 105, either with grade B or better, or consent.

### HWST 231: Native Perspectives on Hawaiian Culture

Explores Native Hawaiian culture from traditional times to present. Examines values, social relationships, religion, traditional practices and arts.

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Designation

ΗΙ

DH

#### **Prerequisites**

HWST 101, or HWST 100BCD, or HWST 107, any with grade C or better, or consent.

#### HWST 241 : He Mooalii No Ihikapalaumaewa: Maui Genealogies

Identifies and analyzes Maui chiefly genealogies, related histories, and wahi pana or significant places.

Credits 3

**Lecture Hours** 45

**Teaching Equivalent** 3.00 **Designation** 

DH

ΗΙ

#### **Prerequisites**

HWST 107 with grade C or better, or consent.

### HWST 262 : Pana Maui: Maui's Sacred Hawaiian Places

Examines the sacred Hawaiian places of Maui, including accounts of mythical heroes, heiau, fishponds, wind and rain names, and their metaphoric value to ancient and modern Hawaiian culture. Uses Hawaiian terminology.

Credits 3

**Lecture Hours** 45

**Teaching Equivalent** 3.00 **Designation** 

HI

DΗ

#### **Prerequisites**

HWST 107 or 111 or 270; and HAW 102; or consent.

#### **HWST 270 : Hawaiian Mythology**

Surveys the gods, 'aumākua, kūpua, mythical heroes, heroines, and their kinolau as the basis of traditional Hawaiian metaphor.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

Н

DH

#### **Prerequisites**

HWST 107 or HAW 102, or consent.

#### HWST 286 : Kahoʻolawe: Aloha 'Āina

Develops and expands students' consciousness towards Kahoʻolawe and the practice of Aloha ʻĀina. Employs a native Hawaiian worldview in studying the cultural history of Kahoʻolawe. Provides hands-on opportunities to practice Aloha 'Āina. Empowers students to become stewards and participate in the protection, restoration, and revitalization of Hawaiʻi Nei. Requires access and volunteer work on Kahoʻolawe.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

HI

DH

#### **Prerequisites**

HWST 107 or 231, either with grade C or better, or consent

### HWST 289 : He Mele Kumulipo: Hawai'i's Song of Creation

Analyzes the Kumulipo, a Hawaiian creation song that encompasses the creation of the universe, earth, plants, animals, and humans. Identifies and analyzes Hawaiian histories, concepts, philosophies, and genealogies.

Credits 3

Lecture Hours 45

**Teaching Equivalent** 3.00 **Designation** 

DH

ΗΙ

#### **Prerequisites**

HWST 107 with grade C or better, or consent.

### HWST 291 : Modern Issues in Hawai'i

Introduces contemporary, domestic and international Hawaiian issues within historical, social, cultural and political contexts. Engages students in research, question, critique, and development of their own critical analysis and commentary on diverse issues.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

HI DH

#### **Prerequisites**

HWST 107 and ENG 100, both with grade C or better, or consent.

#### Health

#### HLTH 122 : Introduction to Physical Therapy Support Skills

Provides theoretical understanding of working with adults and children with disabilities or neuropathologies in home and community settings; supports families, parents and caregivers. Students learn to perform scenarios of therapeutic interventions and to work with therapists and allied health professionals who provide assessment, planning, and delivery of appropriate related services. Values promoted include familycentered care, cultural sensitivity, age-appropriate activities, functional skills, and collaborative teamwork. Prepares Therapeutic Activity Aides to work under supervision of a registered Physical Therapist. (Letter grade only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

Certificate of Competence for Therapeutic Activity Aide I, or consent.

### HLTH 125 : Survey of Medical Terminology

Surveys medical terminology including: prefixes, suffixes, and word roots; pronunciation, spelling and definition of selected medical words dealing with all human body systems; commonly used abbreviations; and use of the medical dictionary.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Prerequisites

ENG 19 with grade C or better or placement at least ENG 22, or consent.

### **HLTH 129 : Terminology for Health Careers**

Develops knowledge of medical terminology, abbreviations, diagnostic tests and procedures commonly used in medical settings. Material will address all systems of the body in depth with an emphasis on increasing professional vocabulary and proficiency in spelling medical terms.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Prerequisite or Corequisite
BIOL 100 and NURS 100, both with
grade C or better, or consent.

### HLTH 150 : Introduction to the Study of Disease

Introduces basic concepts and characteristics of the disease processes. Discusses diseases related to specific body systems.

Credits 1
Lecture Hours 15
Teaching Equivalent 1.00
Prerequisites

ENG 19 with grade C or better or placement at least ENG 22, or consent.

### History

#### HIST 151: World History to 1500

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

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation FGA

Prerequisites

ENG 22 with grade C or better, or placement at ENG 100; or consent.

### HIST 152 : World History Since 1500

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

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

**FGB** 

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100; or consent.

#### HIST 241: Civilizations of Asia I

Interprets and compares the development and interaction of the political, economic, and cultural elements in the major civilizations of Asia from earliest times to contact with the West.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DH

**Prerequisites** 

ENG 100 (or concurrent), or consent.

#### HIST 242: Civilizations of Asia II

Surveys the impact of Western civilization upon major civilizations of Asia and the Asian response to this impact.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DH

**Prerequisites** 

ENG 100 (or concurrent), or consent.

### HIST 253 : Contemporary World History

Examines the political, cultural, economic, and technological history of the world from the end of WWII to the present.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DH

**Recommended Prep** 

HIST 152.

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### HIST 281: Introduction to American History

Develops understanding of the progress of American culture up to the Civil War, an insight into America's heritage, and a sensitivity to its ideals and realities.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DH

#### **Prerequisites**

ENG 100 (or concurrent), or consent.

#### HIST 282 : Introduction to American History

Develops understanding of the progress of American culture since the Civil War, an insight into America's heritage, and sensitivity to its ideals and realities.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

DH

**Prerequisites** 

ENG 100 (or concurrent), or consent.

#### HIST 283: U.S. Women's History

Examines the broad factors that have shaped women's lives in the United States from the pre-colonial period to the present.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DH

**Recommended Prep** 

ENG 100 with grade C or better.

#### **Prerequisites**

<u>HIST 151</u> or <u>HIST 152</u>, either with a grade C or better, or consent.

### HIST 284 : History of the Hawaiian Islands

Surveys the history of the Hawaiian Islands from Polynesian chiefdoms to Hawaiian Kingdom to American territory and state.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

ΗΙ

DH

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100; or consent.

### HIST 288 : History of the Pacific Islands

Surveys the cultural areas of the Pacific from pre-contact to present day. Covers prehistoric migration patterns, historical movements, and present day distributions, including western colonization and current problems. (Crosslisted as ANTH 235.)

Credits 3

Lecture Hours 45

**Teaching Equivalent** 3.00 **Designation** 

Design

**Recommended Prep** 

HIST 152 or ANTH 200.

Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## Hospitality & Tourism

**Learning Outcomes** 

- Demonstrate essential hospitality operations and management skills, including accounting, marketing, and information technology.
- Communicate effectively with guests and co-workers through writing, speech, listening and non-verbal expression appropriate for the hospitality workplace.
- Assess personal work performance through various lenses, including Hawaiian cultural values, multicultural "global" perspectives, ethical reasoning, legal principles, and sustainability.
- 4. Demonstrate essential workplace skills in food and beverage, front office, and housekeeping operations
- 5. Communicate effectively in a customer service environment

#### **HOST 100 : Career and Customer Service Skills**

Focuses on the strategies and skills related to career success and customer satisfaction in the Hospitality & Tourism industry.

Credits 3

Lecture/Lab Credits 60
Teaching Equivalent 3.33
Recommended Prep

Placement at ENG 100.

### **HOST 101: Introduction to Hospitality and Tourism**

Provides an overview of the travel industry and related major business components. Analysis of links between hotel, food, transportation, recreation, and other tourism-related industries will be addressed.

Credits 3

Lecture Hours 45
Teaching Equivalent 3.00

### **HOST 150 : Housekeeping Operations**

Studies the professional management of housekeeping operations including practical applications and management skills required to ensure quality, service and effective performance.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Recommended Prep
HOST 101 with grade C or better.

### **HOST 152 : Front Office Operations**

Studies the philosophy, theory, equipment, and current operating procedures of a hotel front office. Concentrates on the human relation skills necessary for effective guests and employee relations and the technical skills necessary to operate a manual, mechanical or computerized front office operation.

Credits 3 Lecture Hours 45

**Teaching Equivalent** 3.00 **Recommended Prep** 

HOST 101 with grade C or better.

### **HOST 154 : Food & Beverage Operations**

Introduces the basic principles of marketing, menu planning, service styles, nutrition, sanitation and safety, purchasing, and control systems as they apply to food and beverage management in an operational setting. Provides practical applications for effectively managing resources for food and beverage industry operations.

Credits 3

Lecture Hours 45

**Teaching Equivalent** 3.00 **Recommended Prep** 

HOST 101 with grade C or better.

#### **HOST 258: Hospitality Marketing**

Provides students with essential knowledge and practical experience to develop strategic and operating marketing plans for hospitality properties. Emphasizes the marketing orientation as a management philosophy that guides the design and delivery of guest services. Examines the dynamic relationship between hospitality marketing and daily operations.

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

HOST 101 with grade C or better, and ENG 22 with grade C or better or placement at ENG 100, or consent.

#### **HOST 260: Hospitality Law**

Focuses on legal aspects of the hospitality industry with emphasis on compliance and prevention of liabilities. Examines possible consequences of failure to satisfy legal obligations and provides specific perspectives on managing risk.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

**Prerequisites** 

HOST 101 with grade C or better, and ENG 22 with grade C or better or placement at ENG 100, or consent.

#### **HOST 261: Events Management**

Prepares students to plan and administer successful functions, special events, meetings and conventions. Students explore topics such as exhibitions, convention programming, festivals, venue selection, social events, catering needs, sustainability, technology, careers and staffing, event marketing, design and decor, and current trends.

Credits 3

Lecture Hours 45

**Teaching Equivalent** 3.00 **Recommended Prep** 

Placement at ENG 100.

#### **Prerequisites**

HOST 101 with grade C or better, or consent

#### HOST 280 : Hospitality Management

Examines the key principles of management in the hospitality industry. Focuses on leadership skill building and decision-making processes within the various management levels of a hospitality organization. Explores management concepts, strategies, and tools essential for organizational effectiveness. (Formerly HOST 270)

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

HOST 101 with grade C or better, and ENG 22 with grade C or better or placement at ENG 100, or consent.

### **HOST 293 : Hospitality & Tourism Internship**

Provides a supervised field experience that is related to the student's major or career goals. The experience will enable the student to apply knowledge and skills learned in coursework to the work environment. (Letter grade only). (Formerly HOST 200)

Credits 3

Lecture Hours 225
Prerequisites

HOST major; HOST 100 with grade C or better, or consent.

### HOST 294: Hospitality and Tourism Internship Abroad

Provides a supervised field experience abroad that is related to the student's major or career goals. The experience will enable the student to apply knowledge and skills learned in coursework to the work environment. (Cannot be audited.)

Credits 3

Lecture Hours 225 Prerequisites

HOST major; HOST 100 with grade C or better; or consent.

#### HOST 394v: Hospitality and Tourism International Internship

Provides an international work practicum experience in the hospitality industry. Requires students to demonstrate proficiency in job performance in a hospitality-related organization abroad. Students complete a comprehensive work-based project and outline professional goals, assess workplace issues, and prepare recommendations to solve issues. Synthesizes management theories learned in class with actual practices in the hospitality industry and formulation of a comprehensive report. (Credit/No Credit only. May be repeated for a maximum of 6 credits.)

Credits 1-3 Lecture Hours 200 Prerequisites Consent.

# Human Development & Family Studies

#### **HDFS 230 : Human Development**

Studies concepts, issues, and theories of human growth and development from conception to death. Explores systems approaches to inquiry into factors affecting growth and development. (Formerly FAMR230)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DS

**Prerequisites** 

ENG 22 or higher, or consent.

#### **Human Services**

**Learning Outcomes** 

- Demonstrate the interpersonal and communication skills needed to build appropriate, collaborative, and respectful relationships with clients and colleagues.
- 2. Apply key human services attitudes, skills, and knowledge to meet the needs of diverse populations in various practice settings.
- Identify vulnerable populations and the social conditions that contribute to their vulnerability, and describe advocacy strategies to help alleviate those conditions.
- Demonstrate awareness of personal values, professional strengths and challenges, and professional ethical guidelines.

### HSER 101 : Community Health Worker Fundamentals

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

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

### **HSER 110 : Introduction to Human** Services

Provides an overview of the Human Services field, including history of and perspectives on intervention and prevention. Emphasizes self-awareness and examines the attitudes, values, knowledge, and skills necessary for a career in Human Services. Includes a focus on local community resources and practice settings as well state and federal programs.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

#### **HSER 111: Community Action**

Develops a concept of human needs and examines how social institutions and communities provide for such needs. Views selected social problems in community settings and how communities, agencies, and organizational structures function to deal with them. Introduces social-cultural considerations and community action strategies. Participants will identify a community problem/need and develop and implement a proposal for action.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

### HSER 130 : Introduction to Youth Practitioner

Introduces the core skills needed by youth practitioners. Focuses on basic communication skills, growth and development of adolescents, family and cultures and their roles in development, and youth with special needs. Develops teamwork and basic workforce skills.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

#### **HSER 140: Individual Counseling**

Provides an introduction to counseling skills and theory.
Learners will practice interviewing and micro-skills through role-plays and be exposed to theories of counseling, assessment, and intervention, as well as ethical guidelines for work in the field of human services and the helping professions.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Recommended Prep
HSER 101 or HSER 110.

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

### **HSER 145**: Working with Older Adults

Introduces students to the experience of aging and the issues affecting the elderly. Examines aging from developmental and person-in-environment perspectives. Identifies the social service needs of the elderly, local and federal programs, and implications for the "soon-to-be-elderly".

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Recommended Prep
HSER 101 or 110.

#### **Prerequisites**

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

#### HSER 194 : Seminar & Fieldwork I

Provides field experience through an internship at a local human services agency. Includes weekly seminar to provide student with the opportunity to discuss fieldwork experiences.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

Permission of instructor; HSER 140 with grade C or better, and ENG 22 with grade C or better or placement at ENG 100, or consent.

### HSER 240: Introduction to Motivational Interviewing

Introduces the theoretical and practical skills of Motivational Interviewing including the identification and development of skills and strategies across diverse practice contexts and populations.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DS

#### **Prerequisites**

HSER 140 with grade C or better, or consent.

#### **HSER 245: Group Counseling**

Includes theoretical and experiential training in facilitating groups. Designed to encourage understanding and skill development in selecting group members, establishing group norms and goals, and attending to ethical codes of conduct. Skill development includes setting group climate, developing group activities, promoting group and individual growth, and making appropriate group interventions with attention to special populations. Learners will be members of an in-class group and will be co-facilitating a group.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep HSER 140; HSER 101 or 110.

#### **Prerequisites**

ENG 22 with a grade C or better, or placement at ENG 100, or consent.

#### **HSER 248: Case Management**

Provides a systems-based orientation to the development of knowledge and skills needed to become a case manager in health and human services. Incorporates an ethical, culturally appropriate, strength-based, and client-centered approach. Skill development includes intake, assessment, service planning, care coordination, discharge planning, referral, advocacy, and documentation.

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

HSER 140 with grade C or better, or consent.

### HSER 256 : Dynamics of Family Violence & Sexual Assault

Promotes knowledge, skills, sensitivity, and self-care practices for engaging individuals and families affected by interpersonal violence. Examines historical, societal, and legal responses and resources. Content focuses on physical, emotional, and sexual victimization of vulnerable populations such as children. elders, and LGBTQ+. Addresses dating violence, human trafficking, and intimate partner violence. Examines current research on social, economic, cultural, family, and individual risk factors, perpetrator dynamics, effects of violence on victims and survivors, and effective intervention and prevention strategies. Learners have an opportunity to explore their own values and feelings in relation to a difficult subject matter.

Credits 3

Lecture Hours 45

**Teaching Equivalent** 3.00 **Recommended Prep** 

HSER 110.

**Prerequisites** 

ENG 100 with grade C or better, or consent.

### **HSER 268 : Survey of Substance Use Disorders**

Focuses on the continuum of substance use. Analyzes historical, societal, and cultural perceptions, and examines the impact of substance use and behavioral disorders on the individual, the family and the community. Reviews current trends, legal responses, and the effectiveness of various approaches utilized in the field.

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00

**Prerequisites** 

ENG 22 with grade C or better, or placement at ENG 100, or consent.

### **HSER 270 : Substance Use Disorder Counseling**

Provides theoretical and experiential training in the prevention, intervention, treatment, and aftercare approaches applicable to a diverse substance use disorder population. Identifies ethical and legal issues encountered in the field. Covers aspects of the counseling process, specifically the 12 Core Functions utilized by the substance use disorder counselor.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00 Prerequisites

HSER 140 with grade C or better, or consent.

#### **HSER 294: Seminar & Fieldwork II**

Provides advanced, field experience through an internship at a local human services human services agency. Includes weekly seminar to provide students with the opportunity to discuss fieldwork experiences.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

**Prerequisites** 

Permission of instructor; and HSER 194 with grade C or better, and consent.

#### **Humanities**

#### **HUM 100: Themes in Humanities**

Gives the student a start toward viewing the arts as an expression of the meaning of life. Interweaves interpretations of history and a variety of works of poetry, drama, novel, painting, sculpture, music, and philosophy to illustrate mankind's changing awareness.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

HUM 400 : Changes & Choices

DH

Explores ways in which the humanities can contribute to personal and work lives, especially as individuals face change and make decisions. Analyzes how individuals world-wide examine circumstances including the changing landscape of living among people of various beliefs and cultures, making decisions, and dealing with consequences of such decisions. Examines the onset of other choices presented to us as a result of the original decisions made, or alternatively, made for us by our choosing not to engage in the process.

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Designation

DH

**Prerequisites** 

ENG 316, or consent.

#### llokano

#### ILO 101: Beginning Ilokano I

Introduces speaking, listening, reading, and writing skills of basic llokano. Includes basic structures of llokano, language commonly used in daily situations, and different aspects of Philippine cultures.

Credits 4 Lecture Hours 60 Teaching Equivalent 4.00

#### ILO 102: Beginning Ilokano II

Continues ILO 101. Includes speaking, listening, reading, and writing skills of basic llokano.

Credits 4 Lecture Hours 60 Teaching Equivalent 4.00 **Prerequisites** ILO 101, or consent.

### Information and Computer Science

#### GIS/ICS 150: Introduction to GIS/ **GPS**

Introduces applications of geographic information systems (GIS) with a special emphasis on using ArcView GIS. Includes database construction and techniques for spatial data manipulation, analysis, and display. Teaches use of global positioning system (GPS). Explores crossdisciplinary applications in the natural and social sciences.

Credits 4 **Lecture Hours** 60 Teaching Equivalent 4.00 **Recommended Prep** 

Familiarity with computer databases.

#### **Prerequisites**

ICS 101 or BUSN 150, either with grade C or better, or consent.

#### ICS 101: Digital Tools for the Information World

Emphasizes production of professional level documents, spreadsheets, presentations, databases, and web pages for problem solving. Includes concepts, terminology, and a contemporary operating system. Meets requirements for UH Manoa and UH Hilo College of Business and UH Mānoa Biology program and Botany Department.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

#### **ICS 110: Introduction to Computer Programming**

Provides an introduction to coding for anyone. Uses design strategies to create programs. Promotes an understanding of basic programming constructs, including control structure and objectoriented programming. The alpha suffix indicates technology such as: P - Python, C - C/C++, D -Animation/Java, M - Mobile, R -Robotics, G - Games, S - C#.

Credits 3 **Lecture Hours** 45 Teaching Equivalent 3.00 **Recommended Prep** Strongly recommend ICS 101.

### **ICS 111: Intro to Computer Science**

Introduces problem solving using computers. Provides a background for students entering computer science, engineering, or other fields that require a background in computer programming. Teaches the basics of the computer hardware/software interfaces. Includes programs, applications, and compliers. Introduces programming concepts, algorithms, and problem solving techniques using high-level object-oriented programming languages. Meets ACM CS 1 course standards.

Credits 4 **Lecture Hours** 60 Teaching Equivalent 4.00 **Prerequisites** 

ICS 110 with grade C or better; and MATH 82 with grade C or better or placement at least MATH 103; and ENG 19 with grade C or better or placement at least ENG 22; or consent.

#### ICS 141: Discrete Mathematics for **Computer Science I**

Provides instruction for logic, sets, functions, matrices, algorithmic concepts, mathematical reasoning, recursion, counting techniques, and probability theory.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 **Prerequisites** 

MATH 103 with grade C or better; or consent.

#### ICS 169: Introduction to Information Security

Provides the basic foundation to information security, including identifying threats, planning for business continuity, and preparing for various security attacks. Focus will be given to threats to financial security such as attacks on banking and other related financial information. Special emphasis on ethics and legal issues that covers hacking and other cybersecurity techniques and tactics.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 **Prerequisites** 

ICS 101 with grade C or better, or

#### ICS 171: Introduction to Computer **Security**

Examines the essentials of computer security, including risk management, 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 45 Teaching Equivalent 3.00 **Prerequisites** 

ICS 184 or ETRO 140, either with grade C or better(or concurrent), and ICS 169 with grade C or better, or consent.

### ICS 173 : Introduction to Data Science

Introduces the fundamentals of data science, using Python, R or similar programming languages, for the analysis of real-world datasets. Topics include writing scripts and programs in Python or similar languages, and using tools for cleaning, manipulating, and visualizing data. Introduction to intelligent analysis techniques. Properties of domain-specific datasets. No prior programming experience required but basic statistical knowledge is required.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

MATH 115 with grade C or better, or consent.

### ICS 184 : Introduction to Networking

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.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ICS 101 with grade C or better, or consent.

### ICS 193v : Computer Science Internship I

Reflects student interest area and availability of job stations. Offers opportunity to upgrade workplace employability. Student, instructor, and employment supervisor jointly develop learning outcomes; instructor and employment supervisor jointly evaluate student. (May be repeated for a maximum of 3 credits.)

Credits 1-3 Lecture Hours 75 Recommended Prep ETRO 105, and ENG 100.

#### **Prerequisites**

ICS 111, and consent of both instructor and Co-op coordinator.

#### **Corequisites**

Enrollment in ECET program and one or more ECET or ETRO courses.

#### ICS 200: Web Technology

Introduces web page authoring. Creates client-side web pages using web authoring language and style sheets. Uses graphical design elements, validation, browser capability, and accessibility. Uses scripting language to add dynamic elements to web pages, client-side scripting, regular expressions, event handling, input validation, selection, repetition, and parameter passing.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ICS 110 with grade C or better, or consent.

### ICS 211: Introduction to Computer Science II

Reinforces and strengthens problem-solving skills using more advanced features of programming languages and algorithms, such as recursion, pointers, and memory management. Emphasizes use of data structures, such as arrays, lists, stacks, and queues. Meets ACM CS2 course standards.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep MATH 135.

#### **Prerequisites**

ICS 111 with grade C or better, or consent.

#### **ICS 212 : Program Structure**

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

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ICS 211 with grade C or better, or consent.

### ICS 225 : Introduction to Blockchain Technology

Provides an introduction to cryptocurrencies, blockchain technology, smart contracts and distributed applications (DApps). Topics include the origins of the Bitcoin cryptocurrency and its evolution over the past decade, the rise of the Ethereum Virtual Machine (EVM) and Blockchain, the proliferation of Smart Contracts using Solidity, and the emergence of DApps that use Blockchain for a variety of applications. Basic understanding of any computer programming language is required.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Prerequisites
ICS 110 or ICS 111, either with grade
C or better, or consent.

### ICS 241: Discrete Mathematics for Computer Science II

Provides instruction for 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 45 Teaching Equivalent 3.00 Prerequisites

ICS 141 with grade C or better, or consent.

#### ICS 251: Introduction to Unix/ Linux

Introduces the Unix/Linux operating system with emphasis on the Red Hat Linux release. Covers the history and structure of Unix/Linux, basic functions, and fundamental commands. Explores advanced topics unique to Unix/Linux system administration. Stresses the ethics and responsibilities incumbent with Super User privileges.

Credits 4 Lecture Hours 60 Teaching Equivalent 4.00 Prerequisites

ICS 101 with grade C or better, or consent.

### ICS 252 : Unix/Linux System Administration

Continues exploration of the Unix/ Linux operating system with an examination of the tasks and responsibilities of system administration. Examines and explores the Unix group and user hierarchy, system security, networking fundamentals, network administration, system logs, troubleshooting, application installation, and system installation and maintenance. Emphasizes the ethics and responsibilities of Unix System Administration and root user privileges.

Credits 4
Lecture Hours 60
Teaching Equivalent 4.00
Prerequisites
ICS 251 with grade C or better, or consent.

### ICS 272 : Digital Imaging & Animation

Develops 2D computer graphics as elements for 3D projects. Compiles digital imaging and illustration using natural media tools, filters, compositing, templates for 3D project scenes, texture-mapping, and source files. Outlines 3D modeling and animation concepts, tools, and techniques for project development.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites ICS 261 or ART 218, or consent.

#### ICS 281: Ethical Hacking

Studies the 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 45 Teaching Equivalent 3.00 Prerequisites

Either ICS 184 or ETRO 140, and ICS 169, both with grade C or better, or consent.

#### **ICS 282 : Computer Forensics**

Studies the 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 45 Teaching Equivalent 3.00 Prerequisites

Either ICS 184 or ETRO 140, and ICS 169, both with grade C or better, or consent.

### ICS 283 : Advanced Computer Graphics Design

Reviews history, development, technology, and creative approaches of digital tools. Summarizes design theory. Employs graphics software to achieve concepts, content, and distinctive project solutions. Originates and manages the preproduction, production, postproduction of projects in print, web, digital imaging, illustration, and animation. Assembles projects into traditional, content, and digital portfolios. Analyzes professional issues for careers in digital media: resume, portfolio, exhibiting, personal web site, employment, and professional organization.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites ICS 261 or ART 218, or consent.

#### ICS 285: Digital Media Capstone

Provides an opportunity to integrate and employ tools and knowledge developed during the Digital Media program. Evaluates design and technical skills in digital media publishing projects.

Assesses internship experiences and job market research for employment strategies. A comprehensive professional digital media publishing portfolio is required as a capstone project.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ICS 283 and approval of DM faculty.

### ICS 293v : Computer Science Internship II

Reflects student interest area and the availability of job stations.

Offers the opportunity to upgrade employment and problem-solving skills. Student, instructor, and employment supervisor develop learning outcomes; instructor and employment supervisor jointly evaluate student. (May be repeated for a maximum of 6 credits.)

Credits 1-3
Lecture Hours 75
Prerequisites

ICS 193v, or consent.

## ICS 320 : Introduction to Information Systems & E-Commerce

Introduces general concepts of information systems and e-commerce. Includes key business applications, e-commerce, and the Internet, system development, outsourcing, networking, and data communications, data and databases, and security. Includes relevant projects. (Letter grade only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ICS 110 or ICS 111, either with grade C or better; or consent.

### ICS 360 : Database Design & Development

Provides detailed knowledge of database design and development. Explains data models, both relational and object oriented. Examines relational database management systems. Demonstrates database design and development using SQL. Explains client/server systems and web access to databases.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ICS 320 with grade C or better, or consent.

### ICS 385 : Web Development and Administration

Provides detailed knowledge of web page authoring. Demonstrates scripting in operating systems, web pages, server-side application integration, regular expressions, event handling, input validation, selection, repetition, parameter passing. Develops an e-commerce web site that uses a standard browser to accept user input, processes the user input with business logic, and connects to a back-end SQL database. Discusses topics in web site administration. Covers site management (operating system, web server and database installation and administration); security (cryptography, authentication, digital certificates); and content (site design, ethical and business considerations).

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Prerequisites
ICS 320 with grade C or better, or consent.

### ICS 418 : Systems Analysis & Designs

Provides detailed knowledge of system specification, modeling and analysis, prototyping, hierarchical design, program design methods, cost estimation, project management, computer-aided software design. Emphasizes planning, analysis, and design phases of the Software Development Life Cycle with one model of the SDLC covered. Demonstrates learning tools and techniques for sound requirement assessment and, working as a team, produces a verified design of a web-based software product.

Credits 3

Lecture Hours 45
Teaching Equivalent 3.00
Prerequisites

ICS 360 and ICS 385, both with grade C or better, or consent.

### Interdisciplinary Studies

#### IS 103S : Building College Strengths through Culture

Teaches, infuses, and uses culture to help students successfully transition into post-secondary education by developing an understanding of personal strengths for student success.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00

#### IS 104B: Transitions: Personal

Introduces students to college level work, strategic reasoning, communicating, and academic strategies. Helps students to develop an understanding of personal learning strengths, needs, time and resource management, and the use of relevant resources. Develops skills necessary to monitor progress and resolve problems. Introduces the creation of an individual learning portfolio and plan to support the successful transition to college.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00

#### IS 104C: Transitions: Community

Focuses on developing the understanding that it is essential for human beings to work together.

Teaches how to work as a productive member of a successful team. Develops critical thinking and problem solving skills. Teaches and practices taking responsibility in implementing a solution, and recognizing and producing quality performance and quality products.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00

### IS 105 : Career/Life Exploration & Planning

Prepares student for effective career/life exploration, planning and decisions. Emphasizes self-assessment, world of work information, survey of occupational clusters and related academic preparation relevant to self-assessed interests, and values and decision-making. Students cannot take both IS 105 and IS 105B for credit toward a degree.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

#### IS 105B: Personal Assessment

Assists students in evaluating their interests, values, abilities, lifestyles, and other factors relating to career choice. Provides students with an opportunity to develop career decision-making skills. Students cannot take both IS 105 and IS 105B for credit toward a degree.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00

#### 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.

(Crosslisted as BUSN 166.)

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00

#### IS 106: College Orientation I

Develops knowledge, skills, and attitudes associated with personal, academic, and career success. Provides overviews of college policies, procedures, and curricular offerings. Develops communication and teamwork skills. Encourages contacts with students and staff. Strongly recommended for entering students.

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00

#### IS 107: College Orientation II

Integrates, practices, and applies knowledge, skills, and attitudes associated with personal, academic, and career success. Integrates and applies communication and teamwork skills. Encourages contacts with students and staff as well as community and campus service. Strongly recommended for entering students.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Prerequisite or Corequisite IS 106, or consent.

#### Japanese

#### JPN 101: Elementary Japanese I

Introduces speaking, listening, reading, and writing skills of beginning Japanese. Includes basic sentence structures. Daily practice highly recommended.

Credits 4 Lecture Hours 60 Teaching Equivalent 4.00

#### JPN 102 : Elementary Japanese II

Continues JPN 101. Introduces additional basic Japanese speaking, listening, reading, and writing sentence structures. Daily practice highly recommended.

Credits 4
Lecture Hours 60
Teaching Equivalent 4.00
Prerequisites
JPN 101, or consent.

#### JPN 201: Intermediate Japanese I

Second level course in Japanese listening, reading, speaking, and writing. Introduces more advanced grammatical patterns and vocabulary words. Daily practice highly recommended.

Credits 4
Lecture Hours 60
Teaching Equivalent 4.00
Prerequisites
JPN 102, or consent.

### JPN 202 : Intermediate Japanese II

Continues JPN 201. Completes introduction of major grammatical patterns of standard Japanese. Daily practice highly recommended.

Credits 4
Lecture Hours 60
Teaching Equivalent 4.00
Prerequisites
JPN 201, or consent.

#### **Journalism**

#### JOUR 250: Media Writing

Introduces the fundamentals of journalism including media ethics, fact gathering, and interviewing to produce written material for varied media.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 100 with grade C or better, or consent.

### Learning Skills

#### LSK 110 : College Learning Skills

Enhances students' abilities to succeed academically. Investigates communication and organizational skills, methods of inquiry, creative thinking skills, cognitive learning styles, and academic and community resources.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

ENG 22 with grade C or better, or placement at ENG 100, or consent.

### Linguistics

### LING 102 : Introduction to the Study of Language

Investigates the nature and workings of language: its composition (sound system, grammatical structure, and lexicon), representation (oral and written), and divergence (relationships between languages of the world). General linguistic principles applicable to all languages will be covered.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

**Prerequisites** 

DH

ENG 100 or 102, or placement at ENG 100, or consent.

#### Maintenance

#### MAIN 130: Masonry

Introduces materials and explains techniques used in installing and repairing concrete, hollow tile, and related masonry construction. (Formerly MAIN 30)

Credits 2

**Lecture/Lab Credits** 60 **Teaching Equivalent** 2.50

#### MAIN 140: Painting & Decorating

Introduces materials and explains techniques used in applying and maintaining paints, wallpaper, and plaster. (Formerly MAIN 40)

Credits 2 Lecture/Lab Credits 60 Teaching Equivalent 2.50

#### MAIN 150: Plumbing I

Introduces materials and explains techniques used to install and maintain plumbing lines, fixtures, and controls. Emphasizes effective maintenance procedures for commercial structures. (Formerly MAIN 50)

Credits 2

Lecture/Lab Credits 60
Teaching Equivalent 2.50

#### MAIN 155: Plumbing II

Studies the plumbing system of the typical single-family residential dwelling. Examines how local and national codes apply to residential units. (Formerly MAIN 55)

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00 Prerequisites MAIN 150, or consent.

### MAIN 160 : Small Equipment Repair

Introduces the repair and maintenance of small engines, appliances, garden equipment, and power tools. Examines troubleshooting techniques and emphasizes repair fundamentals. (Formerly MAIN 60)

Credits 2 Lecture/Lab Credits 60 Teaching Equivalent 2.50

### MAIN 165 : Air Conditioning and Refrigeration

Studies air conditioning systems of residential and commercial buildings. Explores the servicing of small appliances (Type I), and servicing or disposing of high or very high-pressure appliances (Type II), except motor vehicle ACs. Introduces skills and concepts of planning, testing, troubleshooting, and balancing such systems. (Formerly MAIN 65)

Credits 2 Lecture/Lab Credits 60 Teaching Equivalent 2.00

#### MAIN 166: Heating, Venting, Air Conditioning and Refrigeration (HVACR) Refrigerant Recovery

Covers laws and regulations for the recovery, reclamation, and recycle or refrigerants used in small appliances (Type I), high or very high-pressure appliances (Type II), and low-pressure appliances (Type III), except motor vehicle ACs. Prepares students to take the Environmental Protection Agency (EPA) Section 608 Universal Technician Exam.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00

#### MAIN 167: Heating, Venting, Air Conditioning and Refrigeration (HVACR) System Design and Controls

Explores components, controls, balancing, preventive maintenance procedures, and efficiency measures for commercial HVACR and chilled water systems. Covers low-pressure refrigerant (EPA Section 608 Type III) cooling and heating systems.

Credits 2 Lecture/Lab Credits 60 Teaching Equivalent 2.50 Prerequisites Permission of instructor.

### MAIN 170 : Preventive Maintenance

Explores principles of preventive maintenance: records maintenance, replacement schedules, rust prevention, and equipment maintenance and servicing. (Formerly MAIN 70)

Credits 2 Lecture/Lab Credits 60 Teaching Equivalent 2.50

### Management

#### MGT 120 : Principles of Management

Introduces the principles and concepts of management including managerial functions, motivation, leadership, and decision-making.

Credits 3

Teaching Equivalent 3.00 Prerequisites

ENG 19 with grade C or better, or placement at least ENG 22, or consent

### MGT 122 : Human Relations in Management

Introduces the basic concepts of individual, group, and organizational human behavior as they affect human relations, performance, and productivity within the workplace.

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep

ENG 22 with grade C or better, or placement at ENG 100.

#### **Prerequisites**

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

#### MGT 124 : Human Resources Management

Introduces the principles, organizations and techniques of personnel administration including procurement and placement, improvement of performance, management and labor relations, remuneration and security and other human resource functions.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep

ENG 22 with grade C or better, or placement at ENG 100.

#### **Prerequisites**

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

### MGT 310 : Principles of Management

Introduces activities and skills needed to successfully manage both domestic and international organizations with an emphasis on decision-making. Includes communication, work motivation, group dynamics, leadership and organizational change, conflict, personality, and teamwork. Relates these concepts to performance, job satisfaction, and organizational commitment. (Letter grade only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

BUS 120 or SSM 202, either with grade C or better, or consent.

#### MGT 322 : Organizational Leadership and Management of Change

Prepares managers to influence the human side of developing and implementing changes in organizations. Theory, cases, and exercises help managers to understand the socio-technical aspects of change; to see leadership as motivating organizational members; to understand their own ability to influence others; and to understand the leadership successes of noted leaders from all walks of life.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

PSY 100 or SOC 100, either with grade C or better, or consent.

### Marketing

#### MKT 120: Principles of Marketing

Introduces marketing concepts and the application to the process of marketing products, services, and ideas to provide value and benefits to both for-profit and non-profit organizations. Students will develop an understanding of the marketing process, analyze marketing opportunities, and develop strategies to fulfill the needs of target markets.

Credits 3

Lecture Hours 45
Teaching Equivalent 3.00
Recommended Prep

ENG 22 with grade C or better, or placement at ENG 100.

#### **Prerequisites**

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

### MKT 160 : Advertising & Promotion

Introduces the principles of advertising and promotion, including sales promotion, publicity, public relations, and selling, and their relationship to the marketing system. Stresses strategies of informing, persuading, and integrating information to create a positive image.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep MKT 120.

#### **Prerequisites**

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

### MKT 285 : Internet/Social Media Marketing

Examines the use of internet as an effective marketing tool to enhance customer relationships and strengthen brand awareness. Examines how continually emerging internet technologies and social media are increasing marketing effectiveness and efficiency. Covers development of an internet marketing plan.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep MKT 160.

**Prerequisites** 

BUS 150 or ICS 101, and MKT 120, both with grade C or better, or consent.

#### MKT 300: Principles of Marketing

Applies the fundamental principles of successful marketing including segmentation, targeting, product development, positioning, packaging, placement, pricing, promotion, service and relationship building to development of marketing plans. Explores the impact of marketing of goods and services using the Internet, the World Wide Web, and other technologies as they emerge. (Letter grade only.)

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Prerequisites
BUS 120 with grade C or better, or consent.

### MKT 400 : Marketing for a Digital Age

Examines how startup and small/ medium companies reach the marketplace and sustain their businesses within highly competitive industries. Recognizes the need of management to operate flexibly, making maximum effective use of scarce resources in terms of people, equipment, funds, and the opportunities that exist within new and established market niches.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites MKT 300 with grade C or better, or consent.

#### **Mathematics**

#### MATH 75X : Introduction to Mathematical Reasoning

Prepares students for MATH 100, MATH 111, and MATH 115. Course topics include ratio and percent, unit conversion, graphs, data interpretation, basic algebra, solving linear equations, working with formulas with special emphasis on pattern recognition and problem solving, financial formulas, money management, exponential growth, and geometry, (A-F, N, W grades only.) Mathematics courses numbered below 100 do not count toward UHMC degrees (AA, AS, AAS, ATS, BAS). To progress to more advanced mathematics courses, students should have grade C or better in prerequisite courses. The prerequisite course is most beneficial when completed during the prior 12 months. Math placement testing or alternate placement measures are required of all students who are taking mathematics at UH Maui College. (For more info, see English and Math Placement section, or the Math Routes for Specific Majors chart.)

Credits 4 Lecture Hours 60 Teaching Equivalent 4.00

#### MATH 82: Accelerated Algebra

Covers elementary algebra topics. Topics include operations with real numbers; linear equations and inequalities; graphing; linear systems, properties of exponents; operations and polynomials; factoring; rational expressions and equations; roots and radicals; quadratic equations; and applications. (A-F, N, W grades only.) Mathematics courses numbered below 100 do not count toward UHMC degrees (AA, AS, AAS, ATS, BAS). To progress to more advanced mathematics courses, students should have grade C or better in prerequisite courses. The prerequisite course is most beneficial when completed during the prior 12 months. Math placement testing or alternate placement measures are required of all students who are taking mathematics at UH Maui College. (For more info, see English and Math Placement section, or the Math Routes for Specific Majors chart.)

## Credits 4 Lecture Hours 60 Teaching Equivalent 4.00 Recommended Prep

Reading placement at least ENG 21.

#### **Prerequisites**

MATH 75X with grade C or better, or placement at MATH 82, or consent.

### MATH 100 : Survey of Mathematics

Acquaints the non-specialist with examples of mathematical reasoning. Explores selected topics such as numeration systems, consumer math, linear and exponential growth, inductive patterns, mathematical art, probability, statistics, set theory, and logic.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

FQ

#### **Recommended Prep**

At least 11th grade reading skills.

#### **Prerequisites**

MATH 75X with grade C or better, or placement at MATH 100, and ENG 22 with grade C or better or placement at ENG 100, or consent.

#### MATH 103: College Algebra

Analyzes and interprets the behavior and nature of functions including linear, polynomial, exponential, log, absolute value, and piecewise-defined functions; solves systems of equations; solves application problems. To progress to more advanced mathematics courses, students should have grade C or better in prerequisite courses. The prerequisite course is most beneficial when completed during the prior 12 months. Math placement testing or alternate placement measures are required of all students who are taking mathematics at UH Maui College. (For more info, see English and Math Placement section, or the Math Routes for Specific Majors chart.)

Credits 3

Lecture Hours 45
Teaching Equivalent 3.00
Designation

FQ

#### **Recommended Prep**

At least 11th grade reading skills.

#### **Prerequisites**

MATH 82 with grade C or better or placement at least MATH 103, and ENG 22 with grade C or better or placement at ENG 100, or consent.

#### MATH 103T : College Algebra with Supplement

Analyzes and interprets the behavior and nature of functions including linear, polynomial, exponential, log, absolute value, and piecewise defined functions; solve systems of equations; solves application problems. Reinforces learning through supplemental activities such as peer discussion and problem solving, individualized tutorial assistance and performance tracking.

Credits 5 Lecture Hours 75 Teaching Equivalent 5.00 Designation

FQ

#### **Prerequisites**

MATH 82 with grade C or better or placement at least MATH 103T, and ENG 22 with grade C or better or placement at ENG 100, or consent.

#### MATH 111: Mathematics for Elementary Teachers I

Explores mathematical ideas, problem solving, quantitative and symbolic reasoning. Focuses on operations and their properties, sets, counting, patterns, and algebra. To progress to more advanced mathematics courses, students should have grade C or better in prerequisite courses. The prerequisite course is most beneficial when completed during the prior 12 months. Math placement testing or alternate placement measures are required of all students who are taking mathematics at UH Maui College. (For more info, see English and Math Placement section, or the Math Routes for Specific Majors chart.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

MATH 75X with grade C or better or placement at least MATH 100, and ENG 22 with grade C or better or placement at ENG 100, or consent.

#### MATH 112 : Mathematics for Elementary Teachers II

Demonstrates operations and develops the properties of the natural numbers, integers, rational numbers, and real numbers. Explores the use of mathematical operations to solve problems, including geometry, probability, and physical rates. To progress to more advanced mathematics courses, students should have grade C or better in prerequisite courses. The prerequisite course is most beneficial when completed during the prior 12 months. Math placement testing or alternate placement measures are required of all students who are taking mathematics at UH Maui College. (For more info, see English and Math Placement section, or the Math Routes for Specific Majors chart.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

FQ

#### **Prerequisites**

MATH 111 with grade C or better, or consent.

### 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. To progress to more advanced mathematics courses, students should have grade C or better in prerequisite courses. The prerequisite course is most beneficial when completed during the prior 12 months. Math placement testing or alternate placement measures are required of all students who are taking mathematics at UH Maui College. (For more info, see English and Math Placement section, or the Math Routes for Specific Majors chart.)

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Designation

FQ

#### **Prerequisites**

MATH 75X with grade C or better, or placement at MATH 115, and ENG 22 with grade C or better or placement at ENG 100, or consent.

# MATH 115T: Introduction to Statistics & Probability with Supplement

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 4 Lecture Hours 60 Teaching Equivalent 4.00 Designation

**Prerequisites** 

FQ

Placement at MATH 115T, and ENG 22 with grade C or better or placement at ENG 100, or consent.

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

Investigates linear, quadratic, polynomial, rational, exponential, and logarithmic functions and related topics. This course is the first part of the precalculus sequence. To progress to more advanced mathematics courses, students should have grade C or better in prerequisite courses. The prerequisite course is most beneficial when completed during the prior 12 months. Math placement testing or alternate placement measures are required of all students who are taking mathematics at UH Maui College. (For more info, see English and Math Placement section, or the Math Routes for Specific Majors chart.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation FQ

#### **Prerequisites**

MATH 103 with grade C or better or placement at MATH 135, or consent.

#### MATH 140X : Accelerated Pre-Calculus: Elementary functions, Trigonometry and Analytic Geometry

Studies the trigonometric functions, analytic geometry, polar coordinates, vectors, and related topics. This course is the second part of the precalculus sequence. To progress to more advanced mathematics courses, students should have grade C or better in prerequisite courses. The prerequisite course is most beneficial when completed during the prior 12 months. Math placement testing or alternate placement measures are required of all students who are taking mathematics at UH Maui College. (For more info, see English and Math Placement section, or the Math Routes for Specific Majors chart.)

Credits 4 Lecture Hours 45 Teaching Equivalent 4.00 Designation

FQ

#### **Prerequisites**

MATH 135 with grade C or better or placement at MATH 140, or consent.

#### MATH 140X : Accelerated Precalculus: Elementary Functions, Trigonometry, and Analytic Geometry

Provides an accelerated path to Calculus to students who have a strong background in College Algebra. Topics include the essential pre-calculus skills needed for success in calculus: functions, with special attention to polynomial, rational, exponential, logarithmic, and trigonometric functions; plane and analytic trigonometry; polar coordinates; and conic sections. Credit may not be earned for both MATH 140 and MATH 140X.

Credits 4 Lecture Hours 60 Teaching Equivalent 4.00 Designation FQ

#### **Recommended Prep**

Students who pass College Algebra with a C grade are encouraged to take the two semester precalculus path with MATH 135 and MATH 140.

#### **Prerequisites**

MATH 103 or MATH 103T either with grade C or better, or placement at MATH 135, or consent of instructor.

### MATH 203 : Calculus for Business & Social Sciences

Studies the basic concepts of differentiation and integration and their applications in the areas of finance, management, economics, and social sciences. To progress to more advanced mathematics courses, students should have grade C or better in prerequisite courses. The prerequisite course is most beneficial when completed during the prior 12 months. Math placement testing or alternate placement measures are required of all students who are taking mathematics at UH Maui College. (For more info, see English and Math Placement section, or the Math Routes for Specific Majors chart.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

#### **Prerequisites**

MATH 135 with grade C or better or placement at MATH 140, and ENG 100 with grade C or better (or concurrent), or consent.

#### MATH 241: Calculus I

Explores basic concepts of differential and integral calculus. Reviews functions, focuses on differentiation and its applications. Introduces integration. (Formerly MATH 205.) To progress to more advanced mathematics courses, students should have grade C or better in prerequisite courses. The prerequisite course is most beneficial when completed during the prior 12 months. Math placement testing or alternate placement measures are required of all students who are taking mathematics at UH Maui College. (For more info, see English and Math Placement section, or the Math Routes for Specific Majors chart.)

Credits 4 Lecture Hours 60 Teaching Equivalent 4.00 Designation

#### **Prerequisites**

MATH 119 or 140 either with grade C or better or placement at MATH 241, or consent.

#### MATH 242: Calculus II

Extends and completes the calculus on a single real variable with the differentiation and integration of transcendental functions. techniques of integration, applications, and infinite series. (Formerly MATH 206.) To progress to more advanced mathematics courses, students should have grade C or better in prerequisite courses. The prerequisite course is most beneficial when completed during the prior 12 months. Math placement testing or alternate placement measures are required of all students who are taking mathematics at UH Maui College. (For more info, see English and Math Placement section, or the Math Routes for Specific Majors chart.)

Credits 4 Lecture Hours 60 Teaching Equivalent 4.00 Designation

#### **Prerequisites**

FQ

MATH 241 with grade C or better, or consent.

#### MATH 243: Calculus III

Studies functions of several variables including vectors, vector functions, the calculus on these functions, and 3-dimensional analytic geometry. (Formerly MATH 231.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation FQ

**Prerequisites** 

MATH 242 with grade C or better, or consent.

#### MATH 244: Calculus IV

Extends the study of functions of several variables with multiple integrals and vector analysis. Studies the solutions of elementary differential equations. (Formerly MATH 232.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

FQ

#### **Prerequisites**

MATH 243 with grade C or better, or consent.

### Microbiology

#### MICR 130: General Microbiology

Introduces fundamentals of microbiology. Explains role of microorganisms and how they affect humans. Emphasizes medical and public health aspects, bacterial and viral diseases, and epidemiology. To progress to more advanced mathematics courses, students should have grade C or better in prerequisite courses. The prerequisite course is most beneficial when completed during the prior 12 months. Math placement testing or alternate placement measures are required of all students who are taking mathematics at UH Maui College. (For more info, see English and Math Placement section, or the Math Routes for Specific Majors chart.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DB

#### **Prerequisites**

ENG 100 with grade C or better, and MATH 82 with grade C or better (or concurrent) or placement at least MATH 100, or consent.

### MICR 140 : General Microbiology

Laboratory to accompany MICR 130.

Credits 2

Lecture/Lab Credits 60 Teaching Equivalent 3.33 Designation

DY

Prerequisite or Corequisite MICR 130.

### Music

# HWST/MUS 176 : History and Development of Hawaiian Music

Focuses on the history and development of traditional and acculturated vocal and instrumental Hawaiian music. Discusses Hawaiian dance genres related to the music. Examines Hawaiian music and dance as an organization of sound and movement and as a product of culture and people. Uses sound recordings, video presentations, and live performances of the various music genres discussed.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

HI DH

#### **Prerequisites**

HAW 101 and HWST 107, both with a grade C or better, or consent.

### MUS 106 : Introduction to Music Literature

Treats styles and forms of Western music. Develops skills in listening to and appreciating music. Introduces music styles in their historical and social contexts.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DH

#### **MUS 107: Music in World Cultures**

Analyzes folk, popular, and art music from major regions of the world, with emphasis on Asia and the Pacific. Develops a knowledge of representative styles and regional characteristics in world music.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation FGC

#### **MUS 108: Music Fundamentals**

Introduces basic musical concepts to enable students to express themselves as budding composers, performers, listeners and teachers. Develops skills in listening to and writing down examples, clapping out rhythms, melodies and chords. Designed for the beginner with no previous musical training.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA

**Recommended Prep** MUS 121C.

#### MUS 114: College Chorus

Introduces performance of choral literature from the Renaissance to the present. Includes fundamentals of music and voice training. (May be repeated without limit for credit.)

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Designation

DA

#### **Recommended Prep**

MUS 121B or 122B. No previous choral experience required.

#### MUS 114H: Hawaiian Chorus

Introduces basic vocal group performance. Studies ancient to modern Hawaiian songs.

Credits 2

Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Designation

HI DA

#### **Recommended Prep**

Previous vocal experience may be helpful.

#### MUS 121B: Voice 1

Introduces principles of voice production as related to problems of voice literature, both technical and interpretive, at an elementary level. (Formerly MUS 123)

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Designation

DA

#### **Recommended Prep**

Previous musical training.

#### MUS 121C: Piano 1

Develops basic keyboard skills established during the first semester, including both reading and playing by ear. Repertoire expands to a variety of styles, including classical, pop, jazz, and rock. (Cannot be audited.)

Credits 2 Lecture Hours 15

Lecture/Lab Credits 30 Teaching Equivalent 2.50

Designation

DA

#### **Prerequisites**

Must have access to piano or keyboard.

#### **MUS 121D: Guitar 1**

Introduces classroom instruction in guitar playing. Develops basic guitar technique by covering hand positions, fingering, scales, chords, and arpeggios. Teaches music reading. Applies reading skills to performance. Introduces a variety of guitar literature.

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Designation

DA

#### **Prerequisites**

Guitar in playable condition.

#### MUS 121F: Slack Key Guitar 1

Examines the history, development, and influential performers of Hawaiian slack key guitar, and introduces repertoire, tunings, and performance techniques that students will demonstrate during inclass and outside performances.

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Designation

DA

#### **Recommended Prep**

Prior musical performance experience, preferably with guitar, 'ukulele or a similar stringed instrument.

#### **Prerequisites**

Regular access to a steel or nylon string guitar in adequate condition for class use and practice.

### MUS 121G : Hawaiian Steel Guitar

Examines the history, development, and influential performers of Hawaiian steel guitar, and introduces repertoire, tunings, and performance techniques that students will demonstrate during inclass and outside performances.

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Designation

DA

#### **Recommended Prep**

Prior musical performance experience and an understanding of basic music theory and harmony.

#### **Prerequisites**

Regular access to a steel guitar in adequate condition for class use and practice.

#### MUS 121Z: 'Ukulele 1

Introduces Hawaiian-style ukulele playing. Students learn to play the ukulele through a selection of traditional and contemporary American and Hawaiian songs. An introduction to ukulele history in Hawaii is included. No prior experience necessary.

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Designation

DA

#### **Recommended Prep**

Students must provide their own 'ukulele in good playable condition and have internet access.

#### MUS 122B: Voice 2

Develops principles of voice production as related to problems of voice literature, both technical and interpretive, at an elementary level. (Formerly MUS 124)

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Designation

DA

#### **Recommended Prep**

Previous musical training.

#### **Prerequisites**

MUS 121B with grade C or better, or consent.

#### MUS 122C: Piano 2

Must have access to piano or keyboard. Develops basic keyboard skills established during the first semester, including both reading and playing by ear. Repertoire expands to a variety of styles, including classical, pop, jazz, and rock. (Cannot be audited.)

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Designation

DA

#### **Prerequisites**

MUS 121C with grade C or better, or consent.

#### MUS 122D: Guitar 2

Investigates further guitar techniques, ensemble and solo playing. Introduces sight reading. Develops skill in interpretation.

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Designation

DA

#### **Prerequisites**

MUS 121D, or consent. Requires a guitar in playable condition.

### MUS 122G : Hawaiian Steel Guitar 2

Expands the study of performance in melody and vocal accompaniment playing styles demonstrated during in-class and outside performances. Continues the examination of styles of influential Hawaiian steel guitar performers, repertoire, and technique.

Credits 2

Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Designation

DA

#### **Recommended Prep**

Prior musical performance experience and an understanding of basic music theory and harmony.

#### **Prerequisites**

MUS 121G with grade C or better, or consent. Students must own or have regular access to a steel guitar in adequate condition for class use and practice.

#### MUS 122Z: 'Ukulele 2

Expands 'ukulele performance techniques in ensemble and solo contexts. Further develops skills in interpretation and development of style.

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.14 Designation

DA

#### **Prerequisites**

MUS 121Z with grade C or better, or consent. Students must own or have regular access to an 'ukulele in adequate condition for class use and practice.

### MUS 132 : Hawaiian Music Performance 1

Develops a Hawaiian music repertoire and performance skills. Students will be assigned to a group that will be mentored by faculty and established guest musicians, and will perform both inclass and outside the classroom. (Letter grade only.)

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50

DA

#### **Prerequisites**

Designation

Access to a guitar or 'ukulele in acceptable working condition, and bring instrument to each class.

### MUS 133 : Hawaiian Music Performance 2

Continues to develop a Hawaiian music repertoire and intermediate-level performance skills that build on MUS 132 Hawaiian Music Performance 1. Student will be mentored by faculty and established guest musicians.

Credits 2 Lab Hours 30 Lecture Hours 15 Teaching Equivalent 2.50 Designation

DA

#### **Prerequisites**

MUS 132 with grade C or better; or consent. Access to a guitar or 'ukulele in acceptable working condition, and bring instrument to each class.

# MUS 167 : Evolution of American Popular Music

Traces the history of American popular music, including soul, blues, rhythm and blues, country and western, Dixieland, gospel, folk, and rock.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Designation
DH

### MUS 180 : Basic Theory and Aural Skills

Teaches basic concepts of music theory, notation, and reading applied to dictation and sight-singing. Introduces reading and sight-singing to students with limited skills in music. Develops listening and writing skills necessary to compose music.

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Designation

DA

Recommended Prep MUS 108.

#### MUS 203: Instrumental Ensemble

Rehearsal and performance group for instrumentalists. Repertoire ranges from the Renaissance and Baroque to contemporary music, including major works for chorus and opera. (May be repeated without limit for credit.)

Credits 1 Lecture/Lab Credits 30 Teaching Equivalent 1.67 Designation

DA

**Prerequisites** 

Consent by audition.

#### MUS 221C: Piano 3

Further develops basic keyboard skills established during the first two semesters, including both reading and playing by ear.
Expands repertoire to a variety of styles, including classical, pop, jazz, and rock. Provides experience playing a solo in a recital. (Formerly MUS 216)

Credits 2
Lecture Hours 15
Lecture/Lab Credits 30
Teaching Equivalent 2.50
Designation
DA

**Prerequisites** 

MUS 122C with grade C or better, or consent.

### MUS 253 : Elementary Music in Action

Introduces components of music, specifically time, pitch, media, musical expression, and form. Demonstrates how these interact with each other to comprise a musical experience. Presents correlation between music and brain development in early childhood. Intended for education majors.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA

# MUS 271 : Intro to Music Technology

Develops an understanding of history and application of electronics in musical composition and performance. Facilitates the creative process in music through the application of technology.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DH

**Recommended Prep** MUS 108, 121C, or 121D.

# MUS 272 : Digital Recording Techniques

Plan and conduct recording sessions using computer-based digital audio (DAW) workstations, choose and position microphones, select and adjust digital and analog signal processors to create various styles of music.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DH

### MUS 273 : Applied Recording and Performance

Collaborate on recording projects, take a variety of roles as musician, producer, and audio engineer according to individual interest. Perform on the musical instrument(s) of the student's choice, including voice, and operate modern audio technology during the recording and mixing of performances.

Credits 3 Lecture Hours 30 Lecture/Lab Credits 30 Teaching Equivalent 3.33 Designation

DΑ

#### **Prerequisites**

MUS 271 with grade C or better, or consent. Students should be able to play guitar, 'ukulele, bass, keyboard, percussion, or other instrument (at instructor discretion) or sing with elementary ability. Students should own and bring to class their own instrument unless other arrangement is made with instructor.

### MUS 295 : Hawaiian Music Capstone

Develops a comprehensive
Hawaiian music repertoire and
advanced performance skills
through mentoring with established
musicians, regular rehearsals,
recording sessions, and public
performances. Student must be
available to rehearse, perform, and
attend recording sessions outside
of normal class hours.

Credits 2 Lecture Hours 15 Lecture/Lab Credits 30 Teaching Equivalent 2.50 Prerequisites

MUS 132 and MUS/HWST 176, both with grade C or better, or consent; enrollment is restricted to students accepted into the ASC in Hawaiian Music. Students must own or have access to a guitar, 'ukulele, bass guitar, keyboard, or upright bass in acceptable working condition, and bring instrument to each class. If instrument requires electronic amplification, student must bring necessary equipment to each class.

### Nursing

**Learning Outcomes** 

- 1. Demonstrate professional actions based on core nursing values, professional standards of practice, and the law.
- 2. Develop insight through reflective practice, self-analysis, and self-care.
- 3. Engage in ongoing self-directed learning and provides care based on evidence supported by research
- 4. Demonstrate leadership in nursing and health care.
- 5. Collaborate as part of a healthcare team.
- 6. Practice within, utilize and contribute to the broader health care system.

- 7. Practice client-centered care.
- 8. Communicate Effectively.
- 9. Demonstrate clinical judgment/ critical thinking in the delivery of care to clients while maintaining safety.

### NURS 12 : ARCH: Diseases, Special Diets, Medications

Prepares the adult residential care home operator to observe the resident for signs and symptoms of common diseases, make medications available, and prepare for special diets.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Recommended Prep NURS 100.

#### NURS 13 : ARCH: Helping Therapies & Behavior Management

Prepares the adult residential care home operator to assist in the provision of occupational, physical, recreational, and diversional therapy. Identifies the operator's role in fostering mental health and care of the mentally ill and mentally retarded.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Recommended Prep NURS 100.

# NURS 14 : ARCH: Regulations, Accounts, Community Resources

Prepares adult residential care home operator to implement specified regulations of Chapter 100, prepare simple accounting records, and identify community resources available to resident operators.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Recommended Prep NURS 100.

#### **NURS 100: Nurse Assistant**

Prepares nurse assistants to care for acute, semi-acute, or convalescent clients in the hospital, long-term care, or home setting. Prepares nurse assistant to work under the supervision of a registered or practical nurse. Serves as a beginning level health care course for those interested in the health care field. Prepares nurse assistants for national certification.

Credits 6 Lab Hours 90 Lecture Hours 60 Teaching Equivalent 6.25 Prerequisites

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

### NURS 100C : Nursing Assistant Clinical

Prepares nurse assistants to care for acute, semi-acute, or convalescent clients in the hospital, long-term care, or home setting. Provides bedside clinical experience. Prepares nurse assistants for national certification. (CR/NC grade only.)

Credits 1
Teaching Equivalent 1.88
Clinical Hours 45
Prerequisites

ENG 19 with grade C or better, or placement at least ENG 22; or consent.

#### **Corequisite Courses**

NURS 100L: Nursing Assistant Lab NURS 100T: Nursing Assistant Theory

#### **NURS 100L: Nursing Assistant** Lab

Prepares nurse assistants to care for acute, semi-acute, or convalescent clients in the hospital. long-term care, or home setting. Develops hands on nursing skills required for clinical setting. Prepares nurse assistants for national certification. (CR/NC grade only.)

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 **Prerequisites** 

ENG 19 with grade C or better, or placement at least ENG 22; or consent.

#### **Corequisite Courses**

NURS 100C: Nursing Assistant

Clinical

NURS 100T: Nursing Assistant

Theory

#### **NURS 100T: Nursing Assistant** Theory

Prepares nurse assistants to care for acute, semi-acute, or convalescent clients in the hospital, long-term care, or home setting. Prepares nurse assistant to work under the supervision of a registered or practical nurse. Serves as a beginning level health care course for those interested in the health care field. Prepares nurse assistants for national certification. (Letter grade only.)

Credits 4 Lecture Hours 60 Teaching Equivalent 4.00 **Prerequisites** 

ENG 19 with grade C or better, or placement at least ENG 22; or consent.

#### **Corequisite Courses**

NURS 100C: Nursing Assistant

Clinical

NURS 100L: Nursing Assistant Lab

#### **NURS 110C: Nursing Fundamentals Clinical**

Provides experience with clients in outpatient and long term care clinical settings. Includes an emphasis on the nursing process, critical thinking and the practice of nursing skills. Introduces deviations from the normal state of health and evidence-based nursing interventions for the concepts of safety, mobility, tissue integrity, nutrition, glucose regulation, elimination, perfusion, and oxygenation for adults across the life span. (CR/NC grade only.)

Credits 3 **Teaching Equivalent** 5.63 **Clinical Hours** 135

**Prerequisites** 

Admission to the Practical Nursing Program.

**Corequisite Courses** 

**NURS 110T: Nursing Fundamentals** 

**NURS 110L: Nursing Fundamentals** 

#### **NURS 110L: Nursing Fundamentals Lab**

Focuses on assessment techniques and performance of fundamental nursing skills. (CR/NC grade only.)

Credits 3 Lecture/Lab Credits 90 Teaching Equivalent 5.00 **Prerequisites** 

Admission to the Practical Nursing Program.

#### **Corequisite Courses**

**NURS 110C: Nursing Fundamentals** Clinical

**NURS 110T: Nursing Fundamentals** 

Theory

#### **NURS 110T: Nursing Fundamentals Theory**

Provides a comprehensive overview of the discipline of nursing. Topics include nursing as a profession, principles and skills of nursing practice, health promotion, physical assessment, client education, documentation, and therapeutic communication. Focuses on health management and maintenance; prevention of illness and infection control. Includes an emphasis on the nursing process, evidence based nursing practice and acquisition of critical thinking skills. Introduces deviations from the normal state of health and evidence-based nursing interventions for the concepts of safety, mobility, tissue integrity, nutrition, glucose regulation, elimination, perfusion, and oxygenation for adults across the life span. (Letter grade only.)

Credits 4 **Lecture Hours** 60 Teaching Equivalent 4.00 **Prerequisites** 

Admission to the Practical Nursing Program.

#### **Corequisite Courses**

**NURS 110C: Nursing Fundamentals** Clinical

**NURS 110L: Nursing Fundamentals** Lab

### NURS 111 : Introduction to Professional Nursing

Focuses on the provision of competent nursing care from a legal, ethical, cultural and spiritual viewpoint. Also examines nursing history, professional nursing organizations, healthcare trends, interdisciplinary teamwork, workplace civility, therapeutic and professional communication and end of life care.(Letter grade only.)

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00 Prerequisites

Admission to the Practical Nursing Program.

#### **Corequisite Courses**

NURS 110T: Nursing Fundamentals Theory

NURS 110L: Nursing Fundamentals

NURS 110C: Nursing Fundamentals Clinical

# NURS 115C : Maternal Newborn and Child Development

Focuses on clinical experience and critical thinking in outpatient settings that provide pediatric and maternal/newborn health services in the community. (CR/NC grade only.)

Credits 2

Teaching Equivalent 3.75 Clinical Hours 90 Prerequisites

NURS110T and NURS 111 both with a grade C or better; and both NURS 110L and NURS 110C with grade CR. **Corequisite Courses** 

NURS 115T: Maternal Newborn and Child Development Theory NURS 115L: Maternal Newborn and Child Development Lab

### NURS 115L: Maternal Newborn and Child Development Lab

Builds on skills and concepts of previous nursing courses with emphasis on essential nursing skills required to provide care for maternal, newborn, toddler and school age populations. (CR/NC grade only.)

Credits 2

Lecture/Lab Credits 60 Teaching Equivalent 3.33 Prerequisites

NURS110T and NURS 111 both with a grade C or better; and both NURS 110L and NURS 110C with grade CR.

#### **Corequisite Courses**

NURS 115C: Maternal Newborn and Child Development

NURS 115T: Maternal Newborn and Child Development Theory

# NURS 115T: Maternal Newborn and Child Development Theory

Builds on concepts of previous nursing courses with emphasis on utilization of the nursing process to provide care for maternal, newborn, toddler and school age populations. Students will explore the concepts of health promotion, disease prevention and alterations in health related to women and children. Emphasis is on culturally competent, client-centered care of childbearing families in clinical and community settings. (Letter grade only)

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00 Prerequisites

NURS 110T and NURS 111 both with a grade of C or better and NURS 110L and NURS 110C both with grade CR.

#### **Corequisite Courses**

NURS 115C: Maternal Newborn and Child Development NURS 115L: Maternal Newborn and Child Development Lab

#### NURS 120C : Integration of Nursing Practice Clinical

Focuses on caring for clients with alterations in cellular regulation, mood, cognition, perfusion, oxygenation, nutrition and sensory perception in the context of practical nursing. Preparation for licensure examination and professional role attainment of the nurse graduate is emphasized.(CR/NC only.)

Credits 4

Teaching Equivalent 7.50 Clinical Hours 180 Prerequisites

NURS 115T with a grade of C or better, and both NURS 115L, NURS 115C with grade CR.

#### **Corequisite Courses**

Practice Lab

NURS 120T: Integration of Nursing Practice Theory NURS 120L: Integration of Nursing

NURS 121T: Basic Principles of Crisis Management Theory NURS 121L: Basic Principles of Crisis Management Lab

#### NURS 120L : Integration of Nursing Practice Lab

Examines focused nursing assessments for clients with alterations in health for the concepts of infection, cellular regulation, mood, cognition, addiction and sensory perception. (CR/NC grade only.)

Credits 2 Lecture/Lab Credits 60 Teaching Equivalent 3.33

**Prerequisites** 

NURS 115T with a grade of C or better, and both NURS 115L, NURS 115C with grade CR.

#### **Corequisite Courses**

Crisis Management Lab

NURS 120C: Integration of Nursing Practice Clinical NURS 120T: Integration of Nursing Practice Theory NURS 121T: Basic Principles of Crisis Management Theory NURS 121L: Basic Principles of

#### NURS 120T : Integration of Nursing Practice Theory

Examines pathophysiology of common diseases for adults across the life span with focused nursing assessments. Application of previous knowledge is integrated with an emphasis on prevention of complications through client teaching, client safety, and evidence-based nursing intervention. Concepts of infection, cellular regulation, mood, cognition, addiction and sensory perception are explored in the context of practical nursing practice. Preparation for license examination and professional role attainment of the nurse graduate is emphasized. (Letter grade only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

NURS 115T with a grade of C or better, and both NURS 115L, NURS 115C with grade CR.

#### **Corequisite Courses**

NURS 120C: Integration of Nursing Practice Clinical NURS 120L: Integration of Nursing Practice Lab

NURS 121T: Basic Principles of Crisis Management Theory NURS 121L: Basic Principles of Crisis Management Lab

### NURS 121L : Basic Principles of Crisis Management Lab

Provides simulated crisis scenarios for students to utilize crisis management tools for practice. Includes an emphasis on the nursing process, evidence based nursing practice and acquisition of critical thinking skills. (CR/NC grade only.)

Credits 2

Lecture/Lab Credits 60 Teaching Equivalent 3.33 Prerequisites

NURS 115T with a grade of C or better, and both NURS 115L, NURS 115C with grade CR.

#### **Corequisite Courses**

NURS 120C: Integration of Nursing Practice Clinical

NURS 120L: Integration of Nursing Practice Lab

NURS 120T: Integration of Nursing Practice Theory

NURS 121T: Basic Principles of Crisis Management Theory

# NURS 121T : Basic Principles of Crisis Management Theory

Provides a comprehensive introduction to the various types of crises, their identification, and intervention techniques. Types of crises include medical, psychological, psychiatric, self-harm, violence, safety, security, internal disasters, evacuation, external disasters, and mass casualty. Includes an emphasis on the nursing process, evidence based nursing practice and acquisition of critical thinking skills. (Letter grade only)

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Prerequisites

NURS 115T with a grade of C or better, and both NURS 115L, NURS 115C with grade CR.

#### **Corequisite Courses**

NURS 120C: Integration of Nursing Practice Clinical

NURS 120L: Integration of Nursing

Practice Lab

NURS 120T: Integration of Nursing Practice Theory

NURS 121L: Basic Principles of Crisis Management Lab

# NURS 210C : Health Promotion Across the Life Span Clinical

Clinical course focuses on a health promotion model of care, assessment, and clinical practice. (CR/NC grade only.)

Credits 3

Teaching Equivalent 5.63 Clinical Hours 135 Prerequisites

Admission to the Nursing Program.

#### **Corequisite Courses**

NURS 210T: Health Promotion Across the Life Span

NURS 210L: Health Promotion

Across the Life Span

#### NURS 210L : Health Promotion Across the Life Span

Laboratory experience focuses on assessment techniques and fundamental nursing skills. Introduces nurse's roles, code of ethics, and evidence-based practice. (CR/NC grade only.)

Credits 3 Lab Hours 135

Teaching Equivalent 7.50 Prerequisites

Admission to the Nursing Program.

**Corequisite Courses** 

NURS 210T: Health Promotion Across the Life Span NURS 210C: Health Promotion Across the Life Span Clinical

#### NURS 210T : Health Promotion Across the Life Span

Focuses on identifying needs of the total person across the life-span in a wellness/health promotion model of care. Introduces the role of the nurse, nursing code of ethics, and the nursing process with emphasis on learning self-health and client health practices. To support self and client health practices, students learn to access research evidence about healthy lifestyle patterns and risk factors for disease/illness, apply growth and development theory, interview clients in a culturally sensitive manner, and work as members of a multidisciplinary team utilizing reflective thinking and self-analysis. (Letter grade only.)

Credits 3 Lecture Hours 45

Teaching Equivalent 3.00 Prerequisites

Admission to the Nursing Program. **Corequisite Courses** 

NURS 210C: Health Promotion Across the Life Span Clinical NURS 210L: Health Promotion Across the Life Span

#### NURS 211 : Professionalism in Nursing I

Focuses on the history of nursing practice and education.
Emphasizes the ethical and legal aspects of nursing and the professional responsibilities in the practice of nursing. (Letter grade only.)

Credits 1
Lecture Hours 15
Teaching Equivalent 1.00
Prerequisites
Admission to the Nursing Program.

#### **NURS 212: Pathophysiology**

Introduces nursing students to patho-physiologic concepts which serve as a foundation to understanding the basis of illness and injury and their corresponding spectrum of human response. These concepts will serve as a foundation for the formulation of clinical decisions and care planning. (Letter grade only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

Admission to the Nursing Program.

### NURS 220A : Health and Illness I $\Delta$

Introduces assessment and common interventions (including technical skills) for clients with illnesses common across the life span, as well as those prevalent in Hawai'i. The client and family's understanding and acceptance of their illnesses, coupled with clinical practice guidelines and evidencebased research, are used to guide clinical judgments in nursing care. Roles of the interdisciplinary team, legal aspects of delegation, cultural issues, ethical issues, health policy, and health care delivery systems are explored in the context of nursing care. Nursing Professional Fee required. (Letter grade only.)

Credits 5 Lab Hours 135 Lecture Hours 30 Teaching Equivalent 6.88 Prerequisites

NURS 210, 211, and 212, all with grade C or better, or consent.

### NURS 220B : Health and Illness I B

Introduces assessment and common interventions (including technical skills) for clients with illnesses common across the life span, as well as those prevalent in Hawai'i. The client and family's understanding and acceptance of their illnesses, coupled with clinical practice guidelines and evidencebased research are used to guide clinical judgments in nursing care. Roles of the interdisciplinary team, legal aspects of delegation, cultural issues, ethical issues, health policy, and health care delivery systems are explored in the context of nursing care. Nursing Professional Fee required. (Letter grade only.)

Credits 5 Lab Hours 135 Lecture Hours 30 Teaching Equivalent 6.88 Prerequisites

NURS 220A with grade C or better (or concurrent), or consent.

# NURS 220C : Health & Illness I Clinical

Clinical experience with assessment and implementation of common interventions for clients with illnesses across the life span. (CR/NC grade only.)

Credits 3

Teaching Equivalent 5.63 Clinical Hours 135 Prerequisites

NURS 210T, NURS 211, and NURS 212, all with grade C or better; and both NURS 210C and NURS 210L with grade CR.

#### **Corequisite Courses**

NURS 220T: Health & Illness I NURS 220L: Health & Illness I Lab

#### NURS 220L: Health & Illness I Lab

Lab course focuses on using nursing assessment to support identification of risk factors and detection/prevention of complications from illness. Nursing skills are introduced, practiced and integrated into clinical experiences. (CR/NC grade only.)

Credits 3 Lab Hours 135

Teaching Equivalent 7.50 Prerequisites

NURS 210T, NURS 211, and NURS 212, all with grade C or better; and both NURS 210C and NURS 210L with grade CR.

#### **Corequisite Courses**

NURS 220T: Health & Illness I NURS 220C: Health & Illness I Clinical

#### NURS 220T: Health & Illness I

Introduces assessment and common interventions (including technical skills) for clients with illnesses common across the life span, as well as those prevalent in Hawai'i. The client and family understanding and acceptance of their illnesses, coupled with clinical practice guidelines and evidenced based research, are used to guide clinical judgements in nursing care. Roles of the interdisciplinary team, legal aspects of delegation, cultural issues, ethical issues, health policy, and health care delivery systems are explored in the context of nursing care. Nursing Professional Fee required. (Letter grade only.)

Credits 4 Lecture Hours 60 Teaching Equivalent 4.00 Prerequisites

NURS 210T, NURS 211, and NURS 212, all with grade C or better; and both NURS 210C and NURS 210L with grade CR.

**Corequisite Courses** 

NURS 220C: Health & Illness I Clinical

NURS 220L: Health & Illness I Lab

### NURS 230C : Clinical Immersion I Clinical

Focuses on monitoring a variety of subjective and objective data in the clinical setting with prioritized nursing intervention. (CR/NC grade only.)

Credits 2

Teaching Equivalent 3.75 Clinical Hours 90 Prerequisites

NURS 220T with grade C or better; and both NURS 220C and NURS 220L with grade CR.

#### **Corequisite Courses**

NURS 230T: Health & Illness II: Family Health

NURS 230L: Clinical Immersion I Lab

### NURS 230L : Clinical Immersion I Lab

Focuses on developing new nursing skills and prioritized intervention plans for clients in a variety of clients in a acute and long term care settings. (CR/NC grade only.)

Credits 1 Lab Hours 45

**Teaching Equivalent** 2.50 **Prerequisites** 

NURS 220T with grade C or better; and both NURS 220C and NURS220L with grade CR.

**Corequisite Courses** 

NURS 230T: Health & Illness II: Family Health

NURS 230C: Clinical Immersion I Clinical

### NURS 230T : Health & Illness II: Family Health

Focuses on monitoring a variety of subjective and objective data, identify obvious health patterns and deviations, and developing prioritized intervention plans for specific populations. Implements new nursing skills with supervision. Develops own beginning leadership abilities and acknowledges delegation as a needed modality to improve patient care. (Letter grade only.)

Credits 1

Lecture Hours 15 Teaching Equivalent 1.00 Prerequisites

NURS 220T with grade C or better; and both NURS 220C and NURS 220L with grade CR.

**Corequisite Courses** 

NURS 230C: Clinical Immersion I

NURS 230L: Clinical Immersion I

Lab

#### NURS 261 : Advanced Electro-Cardiogram Interpretation

Develops advanced nursing theory related to interpretation of 12-lead EKG. Focuses on EKG changes that occur with myocardial infraction, axis deviation, artificial pacemaker, defibrillation, and cardioversion.

Credits 1

Lecture Hours 15 Teaching Equivalent 1.00 Prerequisites

Licensed RN or LPN, or consent.

#### NURS 301: Introduction to Evidence-Base Practice & Health Promotion

Introduces the Hawai'i Statewide Nursing Consortium (HSNC) competencies and spiraling of concepts and is based on the assumption of student responsibility for learning. Places emphasis on research evidence to support nursing care.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

Registered Nurse Licensure, or consent.

## NURS 320C : Health & Illness II: Family Health Clinical

Nursing care and health promotion for maternal-newborn and pediatric clients and families in acute care and community settings. Utilization of family theories and assessment tools when providing culturally sensitive, client-centered care. (CR/NC grade only.)

Credits 3

**Teaching Equivalent** 5.63 **Clinical Hours** 135

**Prerequisites** 

NURS 230T with grade C or better; and both NURS 230C and NURS 230L with grade CR.

#### **Corequisite Courses**

NURS 320T: Health & Illness II: Family Health NURS 320L: Health & Illness II: Family Health Lab

### NURS 320L : Health & Illness II: Family Health Lab

Laboratory experience focuses on assessment techniques and nursing skills for maternal-newborn and pediatric clients.(CR/NC grade only.)

Credits 3

Lab Hours 135

Teaching Equivalent 7.50 Prerequisites

NURS 230T with grade C or better; and both NURS 230L and NURS 230C with grade CR.

#### **Corequisite Courses**

NURS 320T: Health & Illness II: Family Health NURS 320C: Health & Illness II:

Family Health Clinical

### NURS 320T : Health & Illness II: Family Health

Introduces the learner to assessment and common interventions (including relevant technical procedures) for care of clients across the lifespan, including pregnancy and childbirth. In this course the family is the client and is viewed in both health and illness. Nursing practice is guided by combinations of family theories and associated assessment tools. Clinical practice guidelines and/or standardized procedures in normal developmental processes of the family and in disease and illness are considered in relationship to their impact on providing culturally sensitive, client-centered care. Professional fee required. (Letter grade only.)

Credits 4

Lecture Hours 60

**Teaching Equivalent** 4.00 **Prerequisites** 

NURS 230T with grade C or better; and both NURS 230C and NURS 230L with grade CR.

#### **Corequisite Courses**

NURS 320C: Health & Illness II: Family Health Clinical NURS 320L: Health & Illness II: Family Health Lab

### NURS 360C : Health & Illness III Clinical

Clinical course focuses on complex situations requiring the application of strong recognition, skills and rapid decision making. (CR/NC grade only.)

Credits 3

Teaching Equivalent 5.63 Clinical Hours 135 Prerequisites

NURS 320T with a grade C or better; and both NURS 320L and NURS 320C with grade CR.

**Corequisite Courses** 

NURS 360T: Health & Illness III NURS 360L: Health & Illness III Lab

### NURS 360L : Health & Illness III Lab

Lab course focuses on complex situations requiring the application of strong recognition, skills and rapid decision making. Evidence base supporting assessment and nursing intervention is explored. (CR/NC grade only.)

Credits 3 Lab Hours 135 Teaching Equivalent 7.50 Prerequisites

NURS 320T with grade C or better; and both NURS 320C and NURS 320L with grade CR.

#### **Corequisite Courses**

NURS 360T: Health & Illness III NURS 360C: Health & Illness III Clinical

#### NURS 360T: Health & Illness III

Builds on Health & Illness I & II. focusing on more complex and/or unstable client care situations some of which require strong recognition skills and rapid decision making. The evidence base supporting appropriate focused assessment and effective, efficient nursing intervention is explored. Life span and developmental factors, cultural variables, and legal aspects of care frame the ethical decision-making employed in client choices for treatment or palliative care within the acute care, psychiatric, and home health settings. Case scenarios incorporate prioritizing care needs, delegation and supervision, family & client teaching for discharge planning, home health care and/or end of life care. Nursing Professional Fee required. (Letter grade only.)

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Prerequisites

NURS 320T with grade C or better; and both NURS 320C and NURS 320L with grade CR.

**Corequisite Courses** 

NURS 360C: Health & Illness III

Clinical

NURS 360L: Health & Illness III Lab

#### NURS 362 : Professionalism in Nursing II

Focuses on nursing responsibility with regard to current issues in nursing and health care. Included is the nurse's role as a contributing member of the profession and the community. The theoretical basis for designing and implementing systems of nursing at the beginning level of patient management in an institutional setting will be explored. Principles of organizational structure, leadership, decision-making, priority setting, and change will be discussed. (Letter grade only.)

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00 Prerequisites NURS 320 with grade B or better.

#### NURS 363 : Introduction to Nursing Research

Introduces the research process and provides an understanding of the applicability of the scientific approach to nursing. (Letter grade only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

ETH

#### **Prerequisites**

MATH 115 with grade C or better; or AS in Nursing, or consent.

#### NURS 366 : Advanced Cardio-Pulmonary Theory

Develops advanced nursing theory related to the care of clients and the support of significant others for clients with cardiopulmonary dysfunction. Focuses on anatomy, physiology and physical assessment of the cardiac and respiratory system. Application of the nursing process to specific cardiac and respiratory disorders. (Letter grade only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

NURS 230 with grade B or better, or licensed RN, or consent.

# Occupational Safety & Health

#### OSH 100 : First Aid, CPR, and Automated External Defibrillator (AED)

Introduces standard first aid procedures. Describes immediate care given in case of an accident, sudden illness, or other medical emergency. Explains procedures to stop bleeding, treat poisoning, restore breathing, immobilize broken bones, and administer CPR. Successful students will receive a certificate for Adult First Aid/ CPR/ AED valid for two years. (Formerly HLTH 31)

Credits 1

Lecture Hours 15 Teaching Equivalent 1.00

### OSH 110 : Occupational Safety & Health for Construction

Introduces construction industry workers to their rights employer responsibilities, and how to file a complaint as well as how to identify, abate, avoid, and prevent job related hazards. Students will receive OSHA 10 Hour Training for Construction card upon completion of this course with grade C or better. (Formerly OSH 10)

Credits 1

Lecture Hours 15 Teaching Equivalent 1.00

# OSH 120 : Occupational Safety & Health for General Industry

Introduces general industry workers to their rights, employer responsibilities, and how to file a complaint as well as how to identify, abate, avoid, and prevent job related hazards. Students will receive OSHA 10 Hour Training for General Industry card upon completion of this course with grade C or better. (Formerly OSH 20)

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00

### Oceanography

### OCN 64 : Hawaiian Marine Life Identification

Teaches field identification of fishes, invertebrates, and marine algae. Studies ecology of coral reef species. Requires memorization of scientific names. Practices identification in the classroom and in the ocean for field research purposes. Course does not fulfill Natural Science core requirements. This course does fulfill requirements for acceptance into Quantitative Underwater Ecological Surveying Techniques (QUEST). **Credits** 3

Lecture Hours 45
Teaching Equivalent 3.00
Recommended Prep

Enrollment in Marine Option Program.

# OCN 101 : Intro to Marine Option Program

Explores the University of Hawai'i system wide Marine Option Program through HITS interactive television, discussions, and field trips. Course does not fulfill Natural Science core requirements.

Credits 1 Lecture Hours 15 Teaching Equivalent 1.00

### OCN 140 : Open Water SCUBA Certification

Covers the full spectrum of diving activities. Discusses equipment and its maintenance, dive physiology and physics, safety procedures, dive planning, dive tables, and environmental conditions. Teaches skills for safe diving by means of classroom lectures and open-water sessions, including seven ocean dives. Students successfully completing the course receive an Open Water Certification card from an internationally recognized SCUBA training organization. Total cost of \$145 includes equipment rental, textbook, workbook, diving logbook and tables, and certification. (Credit/No-Credit only.)

Credits 2 Lecture Hours 48

### OCN 191v : Field Experience in Marine Naturalist Training

Provides internship experiences in marine-related agencies and businesses. Does not fulfill Natural Science core requirement. (May be repeated for a maximum of 9 credits.)

Credits 1-3

### Lecture/Lab Credits 1 Prerequisites

Enrollment in Certificate of Competence Marine Naturalist I or Il program or Marine Option Program, or consent.

#### **OCN 201: Science of the Sea**

Introduces basic concepts of geological, physical, chemical, and biological oceanography.
Emphasizes relationships between land-based and marine-based sciences.

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Designation

DP

#### **Prerequisites**

ENG 22 with grade C or better or placement at ENG 100, and MATH 75X with grade C or better or placement at least MATH 82, or consent.

#### OCN 201L: Science of the Sea Lab

Introduces instrumentation and methods used in oceanographic observations and research. Demonstrates oceanographic principles through laboratory and field data collection and analysis.

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Designation

DY

#### **Prerequisites**

OCN 201 with grade C or better (or concurrent); and MATH 82 with grade C or better, or placement at least MATH 100, or consent.

### OCN 270 : Communicating Ocean Sciences

Combines instruction on effective ways of communicating scientific knowledge with direct experiences in K-12 classrooms or informal education sites. Emphasizes and demonstrates inquiry-based teaching methods and learning pedagogy.

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

OCN 201 or ZOOL 200, either with grade C or better, or enrollment in Marine Option Program, or consent.

### OCN 293v : Ocean Internships & Research

With faculty guidance, students design and carry out marine-related internships, practical research projects, or field experiences on or off campus. This course does not fulfill Natural Science core requirements. (May be repeated for a maximum of 9 credits.)

Credits 1-3

Lecture/Lab Credits 1
Prerequisites

Enrolled in Marine Option Program.

Prerequisite or Corequisite

OCN 201 and ZOOL 200.

### OCN 351: Coastal Methods and Analysis

Includes planning of field and laboratory data collection and experimentation in the coastal environment. Covers hypothesis development, experimental design, statistical analysis of data, data interpretation, scientific writing, and presentations.

Credits 2 Lecture Hours 30 Teaching Equivalent 2.00 Designation DP

Recommended Prep CHEM 161 and 161L.

Prerequisites

OCN 201, OCN 201L, ZOOL 200, ZOOL 200L, and MATH 115, all with grade C or better; or consent.

# OCN 351L : Coastal Methods & Analysis Lab

Laboratory to accompany OCN 351.

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Designation

**Recommended Prep** CHEM 161 and 161L.

**Prerequisites** 

OCN 201, OCN 201L, ZOOL 200, ZOOL 200L, and MATH 115, all with grade C or better; or consent.

Corequisites OCN 351.

### Pacific Island Studies

#### PACS 108 : Pacific Worlds: Introduction to Pacific Island Studies

Introduces students to the geography, societies, histories, cultures, contemporary issues, and the arts of Oceania, including Hawai'i. Combines lecture and discussion that emphasizes Pacific Islander perspectives and experiences.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Designation

DS

#### **Prerequisites**

Credits 1

ENG 22 with grade C or better, or placement at ENG 100, or consent.

### Pharmacology

### PHRM 105 : Administration of Medications

Applies basic concepts required for medication administration as a delegated task in community-based settings such as assisted living, day care, or care homes. Includes choice of equipment, proper technique, hazards, complications, and patient care. Includes subcutaneous and intradermal injections, preparation and administration of oral medications, and immunizations.

Lecture Hours 15
Teaching Equivalent 1.00
Recommended Prep
NURS 100 with grade C or better.
Prerequisite or Corequisite
PHRM 107 with grade C or better, or consent.

### PHRM 106 : Introduction to Pharmacy Technology

Introduces students to the role and responsibilities of the pharmacy technician in the current health care environment. Describes basic pharmacy functions in retail, institutional, home health, and ambulatory care settings. (Letter grade only.)

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

BIOL 100, and BUSN 189 or at least MATH 75X with grade C or better, or consent.

#### PHRM 107 : Pharmacology and Treatment of Diseases

Introduces basic pharmacological concepts and pharmacological treatment of common disease states. Discusses selected drug classifications with emphasis on pharmacokinetics and dynamics and mechanisms of action. Focuses on therapeutic effects of specific groups of drugs, their side effects, interactions, adverse reactions, and drug/ food interactions. Addresses the role drugs play in the prevention, diagnosis, and treatment of disease. (Letter grade only.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

BIOL 100 with grade C or better, or consent.

### PHRM 109 : Pharmacology Calculations

Develops computational skills for pharmaceutical measurements in order to properly calculate and provide the correct oral and parenteral dosages of drugs using information from prescriptions or medication orders. (Letter grade only.)

Credits 1

Lecture Hours 15

**Teaching Equivalent** 1.00 **Recommended Prep** 

PHRM 106 with grade C or better (or concurrent).

#### **Prerequisites**

MATH 75X with grade C or better, or placement at least MATH 82, or consent.

#### PHRM 192v: Work Practicum

Builds clinical skills as a Pharmacv Technician and prepares students for the national Pharmacy **Technician Certification** Examination. Provides students a hands-on work experience in a retail community pharmacy or institutional/hospital pharmacy under the supervision of a licensed Pharmacist preceptor. Provides opportunity to discuss and critique work experience in the pharmacy while completing a directed study program designed to assist students in preparing for the certification exam under direction of a Certified Pharmacy Technician (Instructor). (Credit/No Credit only.)

Credits 2 Lab Hours 45 Lecture Hours 15 Teaching Equivalent 3.33 Prerequisites

PHRM 106, 107, and 109, all with grade C or better.

### PHRM 203 : General Pharmacology

Discusses drugs with emphasis on sites and mechanism of action, toxicity, fate, and uses of major therapeutic agents.

Credits 3

Lecture Hours 45

**Teaching Equivalent** 3.00 **Designation** 

DB

#### **Prerequisites**

PHYL 141 and 141L, or BIOL 141 (HawCC), or BIOL 243 (UH-Hilo), or ZOOL 240 (LCC), or consent.

### Philosophy

### PHIL 100 : Introduction to Philosophy: Survey of Problems

Introduces the great philosophical issues, theories, and controversies.

Credits 3

**Lecture Hours** 45

**Teaching Equivalent** 3.00 **Designation** 

DH

# PHIL 102 : Introduction to Philosophy: Asian Traditions

Explores universal philosophical themes and problems from the Asian perspective. Focuses on Indian, Chinese, and Japanese traditions.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

DH

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

## PHIL 109 : Reasoning and Critical Thinking

Studies informal logic, practical reasoning, argument, and the use and misuse of language.
Emphasizes the development of critical thinking skills.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DH

#### **Recommended Prep**

ENG 100, and either ENG 102 or 210.

#### **PHIL 110: Introduction to Logic**

Develops the basic technique of logical analysis. Emphasizes symbolic logic, truth, validity, formal and informal fallacies. Examines inductive and deductive reasoning, and the criteria of evidence for reliable beliefs. Students who seek to apply PHIL 110 to fulfill the AA up to the 2007 catalog (and appropriate AS and AAS) degree requirements in Quantitative Reasoning must place into at least MATH 100.

Credits 3

Lecture Hours 45

**Teaching Equivalent** 3.00 **Prerequisites** 

ENG 100 with grade C or better, or consent.

#### PHIL 301: Ethical Theory

Investigates problems and methods in theory of moral conduct and decision-making. Discusses primary source materials, meta-ethics, and normative theories as well as applied ethics.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

DΗ

#### **Prerequisites**

ENG 100, and ENG 200 or 316 or PHIL 100, 101, 102, or 110, both with grade C or better, or consent.

#### **PHIL 323: Professional Ethics**

Examines major ethical theories and principles relevant to decision-making in professional situations. Includes experiential and self-reflective methodologies as well as theoretical perspectives.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DH

#### **Prerequisites**

ENG 200, ENG 209, or ENG 225, any with grade C or better; or consent.

### **Physics**

### PHYS 101 : Technical Automotive Physics

Introduces Newton's laws of motion, physical work and energy, fluids, heat, electric circuits, and transformers with emphasis on practical applications and laboratory exercises involving the principles of physics as related to automotive and mechanical trades.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

QM 107C with grade C or better, or consent.

### PHYS 105 : Principles of Technology

Introduces students to the fundamental theories and problem solving methods of physics as they relate to electronics & computer engineering technology. The content of the course includes mechanical motion, conservation laws, work-energy theorem, and thermodynamics. Emphasizes electromagnetic theory and its applications to electronics, electric circuits, and optics. Students are also introduced to basic atomic and nuclear theories.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

**Prerequisites** 

MATH 119 with grade C or better, or consent.

# PHYS 105L : Principles of Technology Lab

Lab to accompany PHYS 105.

Credits 1 Lab Hours 45 Teaching Equivalent 2.50 Designation DY

**Prerequisites** 

MATH 119 with grade C or better, or consent.

**Corequisites** PHYS 105.

#### PHYS 151: College Physics I

Presents fundamental theories and problem solving methods in mechanics, heat, and sound. Emphasizes applications of physical principles. Introduces experimental methods in mechanics, heat, and sound.

Credits 3 Lecture Hours 45

Teaching Equivalent 3.00

Designation

DP

**Prerequisites** 

MATH 140, or placement at least MATH 241

#### PHYS 151L: College Physics I Lab

Lab to accompany PHYS 151.

Credits 1

Lab Hours 45

**Teaching Equivalent** 2.50 **Designation** 

DY

#### **Prerequisites**

MATH 140, or placement at least MATH 241.

#### Corequisites

PHYS 151.

#### PHYS 152: College Physics II

Discusses electricity, magnetism, optics, and modern physics. Introduces experimental methods in electricity, magnetism, and optics. The second of a two-semester course in college physics.

Credits 3

Lecture Hours 45
Teaching Equivalent 3.00
Designation

DP

**Prerequisites** 

PHYS 151.

#### PHYS 152L: College Physics II Lab

Lab to accompany PHYS 152.

Credits 1

Lab Hours 45

**Teaching Equivalent** 2.50 **Designation** 

DY

**Prerequisites** 

PHYS 151.

Corequisites

PHYS 152.

#### PHYS 170: General Physics I

Presents fundamental principles in classical mechanics, thermodynamics and wave motion.

thermodynamics and wave motion. Emphasizes the mathematical techniques used in the explanation of physical phenomena. Introduces experimental methods in mechanics, heat, and sound with the emphasis on error analysis, measurement techniques, and report writing. For students majoring in the physical sciences, engineering, or mathematics.

Credits 4
Lecture Hours 60
Teaching Equivalent 4.00
Designation
DP

**-**

Prerequisites
MATH 241 (or concurrent).

MATT 241 (of concurrent).

PHYS 170L : General Physics I Lab

Lab to accompany PHYS 170. **Credits** 1

Lab Hours 45
Teaching Equivalent 2.50
Designation

DY

**Prerequisites** 

MATH 241(or concurrent).

**Corequisites** PHYS 170.

#### PHYS 219: Physics for Engineering Technology

Applies graphical simulations, computational analysis, and computer modeling in the study of electromagnetic systems. Studies electric charges and electromagnetic field theory. Investigates Maxwell's equations by utilizing applied graphical simulations and computational analysis. Includes hands-on exercises and inquiries using scientific method of experimentation, emphasizing applications in engineering technology.

Credits 2

Lecture Hours 30

**Teaching Equivalent** 2.00 **Designation** 

DP

#### **Prerequisites**

Admission to ENGT program; PHYS 105 and MATH 241, both with grade C or better; or consent.

#### PHYS 219L : Physics for Engineering Technology Lab

Lab to accompany PHYS 219.

Credits 1

Lab Hours 45

**Teaching Equivalent** 2.50 **Designation** 

DY

#### **Prerequisites**

Admission to ENGT program; PHYS 105 and MATH 241, both with grade C or better: or consent.

#### Corequisites

PHYS 219.

#### PHYS 272: General Physics II

Presents fundamental principles in electricity, magnetism, and geometrical optics. Introduces experimental methods in electricity, magnetism, electronics, and optics with emphasis on error analysis, measurement techniques, and report writing. For students majoring in the physical sciences, engineering, or mathematics.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

DP

#### **Prerequisites**

PHYS 170 with grade C or better, and MATH 242 (or concurrent).

### PHYS 272L : General Physics II Lab

Lab to accompany PHYS 272.

Credits 1

Lab Hours 45

**Teaching Equivalent** 2.50 **Designation** 

DY

#### **Prerequisites**

PHYS 170 with grade C or better, and MATH 242 (or concurrent).

#### Corequisites

PHYS 272.

### Physiology

### PHYL 141: Human Anatomy & Physiology I

Covers anatomy, physiology, and biochemistry of humans including terminology, cell structure, tissues, skin, and the skeletal, muscular, and nervous systems. (Formerly ZOOL 141.)

Credits 3

**Lecture Hours** 45

**Teaching Equivalent** 3.00 **Designation** 

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#### **Prerequisites**

BIOL 100, ZOOL 101, BIOC 241  $\rightarrow$ 141 (, BIOL 101, SCI 121, or high school biology, any with grade B or better; and ENG 22 with grade C or better or placement at ENG 100, or consent.

### PHYL 141L : Human Anatomy & Physiology I Lab

Laboratory to accompany PHYL 141. (Formerly ZOOL 141L.)

Credits 1 Lab Hours 45

Teaching Equivalent 2.50

Designation

DY

#### **Prerequisites**

BIOL 100, ZOOL 101, BIOC 241  $\rightarrow$ 141, BIOL 101, SCI 121, or high school Advanced Placement biology, any with grade B or better; and placement at ENG 100; or consent.

Corequisites PHYL 141.

# PHYL 142 : Human Anatomy & Physiology II

Covers anatomy, physiology, and biochemistry of humans including metabolism, genetics, and the cardiovascular, respiratory, digestive, excretory, endocrine, and reproductive systems. (Formerly ZOOL 142.)

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

DB

#### **Prerequisites**

PHYL 141, or consent.

# PHYL 142L : Human Anatomy & Physiology II Lab

Lab to accompany PHYL 142. (Formerly ZOOL 142L.)

Credits 1

Lab Hours 45

Teaching Equivalent 2.50

**Designation** 

DY

#### **Prerequisites**

PHYL 141, or consent.

Corequisites

PHYL 142.

### Political Science

### POLS 110 : Introduction to Political Science

Studies political institutions, systems, behavior, and issues. Analyzes American national government. Includes study of presidency, interest groups, elections, and general theories of the American political system.

Credits 3

Lecture Hours 45

**Teaching Equivalent** 3.00 **Designation** 

DS

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

### POLS 180 : Intro to Hawaiian Politics

Studies contemporary Hawaiian political institutions, processes, issues, and personalities at the State and County levels.
Emphasizes citizen roles and responsibilities in local politics.

Credits 3

Lecture Hours 45

**Teaching Equivalent** 3.00 **Designation** 

НІ

DS

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

### Psychology

### PSY/COM 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. (Crosslisted as COM 215.)

Credits 3

Lecture Hours 45
Teaching Equivalent 3.00

#### **PSY 100 : Survey of Psychology**

Focuses on basic concepts and principles of psychology in the areas of individual differences, motivation, emotion, perception, learning, methodology, test and measurement, history, abnormal, physiology and applied psychology. Emphasizes lectures, multimedia presentations, discussions, and experimentation.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

DS

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### PSY 170 : Psychology of Adjustment

Explores the application of psychology to the understanding, management, and enhancement of one's life.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

**Designation** DS

**Prerequisites** 

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### PSY 202: Psychology of Gender

Surveys 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.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00

Designation

DS

**Recommended Prep** 

ENG 100 with grade C or better.

**Prerequisites** 

PSY 100 with grade C or better, or consent.

### PSY 212 : Survey of Research Methods

Provides an overview of research design strategies used in psychological research. It covers the basic descriptive statistics and concepts within inferential statistics that are necessary for appreciation and comprehension of research findings. The course presents the student with the fundamentals of research that all psychology majors should know. Emphasis is placed on the critical evaluation of psychological research.

Credits 3

Lecture Hours 45
Teaching Equivalent 3.00
Designation

DS

#### **Prerequisites**

PSY 100 with grade C or better; and ENG 22 with grade C or better or placement at ENG 100; and MATH 75X with grade C or better or placement at least MATH 82; or consent.

#### **PSY 225: Statistical Techniques**

Uses statistical reasoning in the analysis of psychology data. Topics covered include descriptive statistics, probability, hypothesis testing, test for independent and dependent measures, analysis of variance, correlation and regression, and nonparametric measures. (Formerly PSY 213.)

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Designation

DS

**Prerequisites** 

PSY 100 and MATH 100, 103, 115 or higher, both with grade C or better, or consent.

#### PSY 240 : Developmental Psychology

Examines the principle features of each life stage from prenatal through aging and death.

Considers emotional, cognitive, physical, and social development at each stage.

Credits 3

Lecture Hours 45
Teaching Equivalent 3.00

**Designation** DS

**Recommended Prep** 

ENG 100 with grade C or better.

**Prerequisites** 

PSY 100 with grade C or better, or consent.

#### **PSY 250: Social Psychology**

Surveys the major theories, research methods, and applications of social psychology, the scientific study of the way in which people's thoughts, feelings, and behaviors are influenced by others. Topics may include social perception and cognition, the self, attitudes and attitude change, conformity, group processes, interpersonal attraction, altruism, aggression, and prejudice.

Credits 3

**Lecture Hours** 45

**Teaching Equivalent** 3.00 **Designation** 

DS

**Recommended Prep** 

ENG 100 with grade C or better.

**Prerequisites** 

PSY 100 with grade C or better, or consent.

# PSY 260 : Psychology of Personality

Surveys major theoretical approaches to the scientific study of personality. Topics include development, assessment, change, and cultural-social determinants, current research issues are emphasized.

Credits 3

Lecture Hours 45

**Teaching Equivalent** 3.00 **Designation** 

DS

**Recommended Prep** 

ENG 100 with grade C or better.

**Prerequisites** 

PSY 100 with grade C or better, or consent.

# PSY 352 : Psychology of Human Sexuality

Psychosocial aspects of human sexual relationships. Social psychology of emotional and physiological arousal, interpersonal attraction, and societal regulation of intimate relationships. (Formerly PSY 251.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DS

**Recommended Prep** PSY 250.

#### **Prerequisites**

PSY 100 and ENG 100, both with grade C or better, or consent.

### PSY 353 : Conflict Management & Resolution

Examines communication and behavior in interpersonal conflict through analysis of professional and personal relationships.

Assesses political, social, and cultural influences on conflict, and applies Western and Polynesian models of dispute resolution processes in relational conflict. (Crosslisted as COM 353)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DS

#### **Prerequisites**

Either PSY 100 or SOC 100 with grade C or better, and one (with grade C or better): BUS/COM 130, COM 145, COM 210, or PSY 253/COM 215; or consent.

### Quantitative Methods

### QM 107C : Quantitative Methods in Automotive Technology

Applies the quantitative methods, reasoning, and applications necessary to perform tasks and solve problems encountered by automotive technologists. Quantitative methods covered include computational operations; ratio, proportion, and percent; statistics and probability; and trigonometry. Applications include major automotive systems such as engines, drive train, chassis, and suspension. (Designed for AMT degree and certificates, but does not satisfy FS requirement for AA degrees.)

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

MATH 75X with a grade of C or better or placement at least MATH 82, and ENG 19 with grade C or better or placement at least ENG 22, or consent.

### Religion

### REL 150 : Intro to the World's Major Religions

Introduces basic elements of the world's major religions: Hinduism, Buddhism, Taoism, Confucianism, Judaism, Christianity, and Islam. Emphasizes themes in the great Asian traditions.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation FGC

#### **Prerequisites**

ENG 19 with grade C or better, or placement at least ENG 22, or consent.

### Science

### SCI 114 : Introduction to Scientific Method and Laboratory

Exposes students to the scientific method and reasoning through an intensive summer experience for Upward Bound high school participants rooted in Problembased Learning (PBL) focused on a real-world STEM-Industry partner problem following the scientific method. Infuses a primarily PBL experience with a local STEM-Industry partner question to catalyze learning. Introduces logic, problem-solving, evaluation process, lab methods, literature review, and technical writing. (May be repeated twice for credit.)

Credits 3 Lecture Hours 15 Lecture/Lab Credits 60 Teaching Equivalent 4.17 Designation

DP

#### **Prerequisites**

Admitted to the UH Upward Bound Math Science (UBMS) summer program.

### SCI 121 : Introduction to Science: Biological Science

Introduces characteristics of science, historical development of scientific concepts, and interactions of society with science, illustrated by topics from biological sciences. (Crosslisted as BIOL 101.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DB

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100.

### SCI 121L: Introduction to Science: Biological Science Lab

Lab to accompany SCI 121. (Crosslisted as BIOL 101L)

Credits 1 Lab Hours 45

Teaching Equivalent 2.50

Designation

DY

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100.

Corequisites SCI 121.

# SCI 122 : Intro to Science: Physical Science

Introduces characteristics of science, historical development of scientific concepts, and interactions of society with science, illustrated by topics from physical sciences.

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00

**Designation** DP

#### **Recommended Prep**

MATH 75X with grade C or better, or placement at least MATH 82.

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

### SCI 122L : Intro to Science: Physical Science Lab

Lab to accompany SCI 122.

Credits 1
Lab Hours 45
Teaching Equivalent 2.50
Designation

#### **Recommended Prep**

MATH 75X with grade C or better, or placement at least MATH 82.

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

Corequisites

SCI 122.

DY

### SCI 165L: Introduction to Science Laboratory Techniques

Introduces students to lab safety and record keeping, scientific measurements, scientific instrumentation, solution chemistry, media preparation, basic cell biology, microbial biochemistry, and water quality testing and analysis.

Credits 1

**Lecture Hours** 45

**Teaching Equivalent** 2.50 **Designation** 

DY

#### **Recommended Prep**

CHEM 151 and 151L.

#### **Prerequisites**

BIOL 101 with grade C or better, and MATH 82 with grade C or better or placement at least MATH 100, or consent.

### SCI 214 : Problem-based Learning in STEM

Exposes student to the idea of Problem-based learning (PBL): an instructional approach that has been used successfully for over 30 years, and continues to gain acceptance in multiple disciplines. Trains and prepares STEM teachers to adopt and/or design a curriculum using PBL. Consists of two face-to-face sessions team-taught by a group of STEM faculty at the University of Hawai'i Maui College.

Credits 3 Lecture Hours 15 Lecture/Lab Credits 60 Teaching Equivalent 4.17 Prerequisites

DOE STEM teacher, or consent.

### SCI 265L : Environmental Testing

Introduces students to water quality regulations and monitoring procedures as it applies to the ocean, streams, and agriculture. Develop an understanding for the major water quality parameters, and why they are important to environmental and human health. Learn how to collect, prepare, and run environmental samples for laboratory analysis.

Credits 1 Lecture Hours 45 Teaching Equivalent 2.50 Designation

DY

#### **Recommended Prep**

ENG 100 and MATH 103.

#### **Prerequisites**

SCI 165L with grade C or better, or consent.

# SCI 295v : STEM Research Experience

Offers a research experience in science, technology, engineering and/or mathematics, emphasizing the application of the scientific method to a specific project. (May be repeated for a maximum of 6 credits.) (Letter grade only.)

Credits 1-3 Lecture Hours 45 Teaching Equivalent 0.20 Designation

DY

#### **Recommended Prep**

Completion of a lab science course as stipulated by the instructor.

#### **Prerequisites**

Instructor consent.

### Social Work

#### SW 200: The Field of Social Work

Orientation to the profession of social work; historical development, values and philosophy, scope and aims.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DS

**Recommended Prep** 

HSER 110.

**Prerequisites** 

ENG 100 with grade C or better, or consent.

### Sociology

# SOC 100 : Survey of General Sociology

Introduces the study of society and social relationships. Examines social structures and basic concepts including socialization, culture, inequality, and social change.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

DS

#### **SOC 215: Sociology Through Film**

Explores sociological concepts and issues through film as a visual text. Highlights the role of cinema as a means of socialization and provides a lens to view culture and the social world.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DS

### SOC 218 : Introduction to Social Problems

Discusses and analyzes a number of modern social problems. Evaluates proposed solutions to problems.

Credits 3

Lecture Hours 45

**Teaching Equivalent** 3.00 **Designation** 

DS

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

### SOC 231: Introduction to Juvenile Delinquency

Studies principles and procedures of arrest, detention, petition, summons, records, and adjudication of juvenile offenders. Introduces organization and function of the police juvenile unit, community diversion practices, and organization of Family Court. Reviews Hawai'i statutes and United States Supreme Court decisions affecting juvenile rights of due process. Considers societal context of juvenile problems, delinquency prevention, and treatment. (Crosslisted as AJ 210.)

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DS

# SOC 251: Introduction to Sociology of the Family

Analyzes family patterns, mate selection, parent-child interaction, socialization of roles, functions, family trends, and a cross-cultural look at the contemporary family.

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DS

### Spanish

#### SPAN 101: Elementary Spanish I

Introduces speaking, listening, reading, and writing skills of basic Spanish. Includes basic sentence structures. Designed for students with little or no Spanish background.

Credits 4

**Lecture Hours** 60

**Teaching Equivalent** 4.00

#### SPAN 102 : Elementary Spanish II

Continues SPAN 101. Introduces additional verb tenses and continues to expand Spanish speaking, listening, reading, and writing.

Credits 4

Lecture Hours 60

Teaching Equivalent 4.00

**Prerequisites** 

SPAN 101, or consent.

#### SPAN 180v : Spanish-English Language Exchange

Provides opportunities for students to engage in authentic conversation with native speakers of Spanish for the purpose of improving speaking and listening skills. Expands students' multicultural awareness through facilitated interaction with native speakers from a variety of countries, selected readings and reflective writings.

Credits 1-2

Lecture Hours 1

Designation

DH

#### **Prerequisites**

SPAN 102 or consent.

#### SPAN 201: Intermediate Spanish I

Second level course in Spanish listening, reading, speaking, and writing. Introduces more advanced patterns and vocabulary words. Introduces basic literature.

Credits 3

Lecture Hours 45

**Teaching Equivalent** 3.00

**Prerequisites** 

SPAN 102, or consent.

### SPAN 202 : Intermediate Spanish II

Continues SPAN 201. Completes introduction of major grammatical patterns of standard Spanish in reading, listening, writing, and speaking. Continues to explore different literary forms.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites SPAN 201, or consent.

#### **SPAN 272: Hispanic Culture**

Acquaints students with a variety of Hispanic countries and their culture, using film, short story, poetry, CD-ROM, and guest speakers. Uses previously acquired Spanish language skills to explore and appreciate Hispanic culture. Taught in Spanish and English.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Prerequisites
SPAN 201 with grade C or bei

SPAN 201 with grade C or better, or consent.

### Speech

#### SP 151: Personal & Public Speech

Introduces the major elements of speech. Develops competence in two-person, small group, and public speaking situations.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA

Recommended Prep Placement at ENG 100. SP 251 : Principles of Effective Public Speaking

Develops speech composition and delivery skills by providing extensive practice in preparing and presenting effective public speeches. Emphasizes critical thinking, clear reasoning, appropriate support, organization, outlining, audience analysis, and lively delivery skills.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA

Recommended Prep ENG 100.

**Prerequisites** 

ENG 22 with grade C or better, or placement at ENG 100, or consent.

### Sustainable Science Management

**Learning Outcomes** 

- Describe the functions, interrelationships, and limitations of human-developed and naturally occurring systems.
- Utilize systems and sustainability science tools to solve complex problems and design durable responses.
- Understand contemporary legal, technological, economic, cultural, and ethical infrastructure as it impacts sustainability.
- Utilize conventional and emerging methods to measure sustainability aspects of behaviors.
- 5. Integrate transdisciplinary knowledge; across cultural, social and educational realms; to identify and implement sustainable practices.

### SSM 101 : Sustainability in a Changing World

Identifies sustainability concepts which have become evident from early human movement toward Industrialization in the 1500s to present. Examines diverse approaches in resource use including water, energy, waste, land use, economies, and oceans. Introduces fundamental systems approaches to recognize interconnections and ramifications of practices. Identifies global sustainability issues and uses Hawai'i and island case studies as a means of better understanding their applied relevance.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation FGB

#### **Prerequisites**

ENG 19 with grade C or better or placement at least ENG 22, and at MATH 75X with grade C or better or placement at least MATH 82, or consent.

### SSM 201: Sustainable Building Design

Examines principles of green building, design and operations; including site planning and zoning, construction practices, energy efficiency, economics of green building, benefits and barriers, and the LEED rating system.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DP

#### **Prerequisites**

SSM 101 with grade C or better, or consent.

### SSM 202 : Sustainable Island Communities

Introduces concepts of sustainability on islands, specifically Hawai'i. Examines unique aspects of islands as related to sustainable management of limited resources, including land use planning, waste management, water, sustainable tourism, renewable energy resources, and natural resource management. Compares island communities to sustainable urban environments.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DP

**Prerequisites** 

SSM 101, HWST 107, HWST 207, or HIST 284, any with grade C or better, or consent.

### SSM 275 : Basic Energy Production

Introduces basic energy concepts including gravitational and kinetic energy, heat, electromagnetism, chemical energy and the transducers used to convert from one form of energy to another. Transitions from the electric power grid to integrating renewable energy sources into contemporary grids and distributed systems.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DP

#### **Prerequisites**

SSM 101 and ENG 100, both with grade C or better, and MATH 103 with grade C or better or placement at least MATH 135, or consent.

#### SSM 301: Sustainable Assessments and Indicators

Examines methods of assessing sustainability and distinguishing marketing claims from actual progress. Studies triple bottom line, cradle to cradle/grave, carbon neutrality, and carbon footprint; as well as life cycle assessment, energy analysis, and sustainability indicators that customize data collection and analysis. Final project develops a business case, adding indicators to demonstrate its integrity.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DS

#### **Prerequisites**

SSM 202, MATH 115, and MATH 135, all with grade C or better, or consent.

#### SSM 302: Environmental Health

Evaluates the impact that chemical, physical, and biological agents have on environmental ecosystems. Examines how political, economic, and demographic diversity affects the natural environment with particular emphasis on island settings.

Credits 3 Lecture Hours 45

**Teaching Equivalent** 3.00 **Designation** 

DB

#### **Prerequisites**

SSM 202, BIOL 171/171L, CHEM 151 or 161/161L, and MATH 135, all with grade C or better, or consent.

### SSM 375 : Renewable Energy Conversions and Processes

Analyzes and demonstrates technologies and processes for the conversion of energy sources to power. Examines conventional fossil fuels and turbines, solar photovoltaic cells, wind turbines, wave technology, tidal technology, small and large scale hydro power technology, bio-mass, bio-fuel, waste to energy, and fuel cell technology.

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Designation
DP

Recommended Prep

MATH 203 or 241.

#### **Prerequisites**

SSM 201, SSM 275, and MATH 135, and either CHEM 151 or 161/161L, all with grade C or better, or consent.

#### SSM 384 : Sustaining the Globalized Ocean

Examines the oceans as a life support system and the factors that increase pressure on marine sustainability. Explores the interactions between the marine environment and the economic, social, cultural and political features inherent to that system. Analyzes the effectiveness of the regulations and policies in place to ensure sustainable development in ocean environments.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation

DB

Recommended Prep ENG 200 or ENG 225.

**Prerequisites** 

SSM 202 and ZOOL 200, both with grade C or better, or consent.

#### SSM 392v : Sustainable Science Management Internship

Applies skills to workplace in an occupation within the student's area of interest in sustainable science management. Provides practical experience to develop knowledge and skills in the application of theory to actual problems in a non-classroom setting. Develops employment skills in the sustainable science management areas of energy, renewable energy, energy management, waste management, water and wastewater, policy, and related fields. Prepares students for the senior capstone project. (May be repeated for a maximum of 6 credits.)

Credits 1-3 Lecture Hours 0 Prerequisites

SSM major and at least one SSM upper division course with grade C or better.

# SSM 401 : Environmental Law, Policy, and Justice

Introduces legal and policy issues of environmental protection and decision-making. Explores the history, processes, and politics in the formulation and implementation of U.S. federal, state, and local environmental policies.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DS

**Recommended Prep** BLAW 200.

**Prerequisites** 

SSM 301, COM 215/PSY 253, and ENG 209, all with grade C or better; or consent.

#### SSM 402 : Water Resources Management

Examines typical means of managing freshwater resources with emphasis on island water and wastewater management techniques. Introduces water quality techniques and parameters as well as advanced wastewater treatment processes. Discovers principles of sustainability from hydraulics, hydrology, and distribution systems. Discusses water reuse and recycling practices on Maui.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DP

#### **Prerequisites**

SSM 202, BIOL 171/171L, CHEM 151 or 161/161L, and MATH 135, all with grade C or better, or consent.

### SSM 403 : Renewable Energy Integration

Analyzes and describes issues for integrating renewable energy onto a grid structure, the fundamentals of a smart grid, and energy storage technologies. Instructs students how to use software tools applicable to smart grid operation and maintenance. Explores different electrical energy storage technologies and their feasibility for intended applications.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DP

**Prerequisites** 

SSM 301, SSM 375, MGT 310, and MATH 203 or MATH 241, all with grade C or better; or consent.

### SSM 422 : Sustainable Systems Thinking

Explores the theory and application of established systems thinking practices, models and programs, as applied historically and in a sustainability context. Examines complex, multi-discipline problems and proposed solutions in real world scenarios. Develops skills using modeling software for tracking, illustrating, and verifying systems analysis.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Recommended Prep MATH 203 or MATH 241.

**Prerequisites** 

SSM 301, ENG 316, and MATH 135, all with grade C or better, or consent.

#### SSM 495 : SSM Capstone I

Provides an opportunity to demonstrate the techniques and understanding developed throughout the BAS Sustainable Science Management program in a final project. Includes energy auditing, computational analysis, sustainable strategic planning and financial assessment, water and resource conservation, impacts to human and ecosystem health, land use and transportation, policy and regulatory analysis, and social equity and ethical considerations.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

SSM 301, 302, 375, 401, 402, MGT 322, and ENG 316, all with grade C or better, or consent.

#### SSM 496 : SSM Capstone II

Provides an opportunity to demonstrate the techniques and understanding developed throughout the BAS Sustainable Science Management program in a final project. Includes energy auditing, computational analysis, sustainable strategic planning and financial assessment, water and resource conservation, impacts to human and ecosystem health, land use and transportation, policy and regulatory analysis, and social equity and ethical consideration.

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Prerequisites

SSM 495 with grade C or better, or consent.

### Telecommunications movement, and relaxation.

### TCOM 261: Introduction to Studio Production

Introduces the student to the world of TV studio production. Designed to give a working knowledge of video as it is utilized in broadcasting, cable operations, corporations, education, and independent production.

Emphasizes video as a profession, video communications, and the proper use and understanding of studio equipment.

Credits 3 Lecture/Lab Credits 90 Teaching Equivalent 5.00 Designation

DA

#### **Recommended Prep**

ENG 22 with grade C or better or placement at ENG 100, or consent.

### **Theatre**

### THEA 101: Intro to Drama and Theatre

Treats representative plays from Aeschylus' Agamemnon to Miller's Death of a Salesman as illustrative studies of changing forms in the theatre and dramatic literature. (Formerly DRAM 101.)

Credits 3

Lecture Hours 45 Teaching Equivalent 3.00 Designation

DA

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### THEA 221: Acting 1

Provides individual exercises and group rehearsals of beginning acting. Emphasizes voice, movement, and relaxation.
Students must perform in direction of class scenes. (Formerly DRAM 221.)

Credits 3 Lecture Hours 45 Teaching Equivalent 3.00 Designation DA

#### THEA 222: Acting 2

Continues THEA 221. Expands work on voice, movement, improvisation, and scene work. Requires performance of monologues and scenes from classic and contemporary plays. (Formerly DRAM 222.)

Credits 3
Lecture Hours 45
Teaching Equivalent 3.00
Designation

DA

#### **Prerequisites**

THEA 221, or consent.

### Welding

### **WELD 119C : Welding for Automotive Applications**

Introduces theory and practice of gas and arc welding of ferrous metals with automotive applications. Includes procedures in flat, horizontal, and overhead work for brazing, flame cutting, and welding of aluminum, stainless steel, and other metals. Designed as a support course for trades. (Formerly WELD 19C)

Credits 3 Lecture/Lab Credits 90 Teaching Equivalent 3.75

### WELD 119D: Welding for Construction Applications

Introduces theory and practices of arc and gas welding of ferrous metals dealing with building construction applications. Includes procedures in flat, horizontal, and overhead work for brazing, flame cutting, and welding of aluminum, stainless steel, and other metals. Designed as a support course for trades. (Formerly WELD 19D)

Credits 3 Lecture/Lab Credits 90 Teaching Equivalent 3.75

### Work Practicum

#### WP 151v: Work Practicum

Work Practicum (WP 151v) provides work experience on- or off-campus under supervision of a faculty member. Students and college instructors jointly develop learning outcomes. Work Practicum credits are based on one credit for each increment of 75 hours of supervised work. Students desiring to enroll must obtain permission from the course instructor. The course may be repeated for a maximum of nine credits. Grading is by CR/NC only.

### Zoology

#### **ZOOL 101: Principles of Zoology**

Surveys major animal groups with emphasis on structure, physiology, development, reproduction, evolution, ecology, behavior, and interactions with humans. (Crosslisted as BIOL 103.)

Credits 3

Lecture Hours 45

Teaching Equivalent 3.00

Designation

DB

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

### **ZOOL 101L : Principles of Zoology** Lab

Lab to accompany ZOOL 101. (Crosslisted as BIOL 103L.)

Credits 1

Lab Hours 45

Teaching Equivalent 2.50

Designation

DY

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### Corequisites

ZOOL 101.

#### **ZOOL 200: Marine Biology**

Surveys physical and biological characteristics of the marine environment. Discusses local marine flora and fauna. Surveys topics including fisheries, aquaculture, pollution, and marine resources.

Credits 3

**Lecture Hours** 45

Teaching Equivalent 3.00

Designation

DB

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent.

#### Corequisites

ZOOL 200L

#### **ZOOL 200L: Marine Biology Lab**

Lab to accompany ZOOL 200.

Credits 1

Lab Hours 45

Teaching Equivalent 2.50

Designation

DY

#### **Prerequisites**

ENG 22 with grade C or better, or placement at ENG 100, or consent. ZOOL 200.

#### Corequisites

ZOOL200.