

# COURSE INFORMATION

## COURSES DESCRIPTIONS

<b>Courses Descriptions.....</b>	<b>1</b>	LANGUAGE: CHUUKES (CK).....	198
AGRICULTURE AND LIFE SCIENCES (AL).....	2	Language: Chamorro (CM).....	198
ANTHROPOLOGY (AN).....	16	LANGUAGE:FRENCH (FR).....	201
ART (AR).....	18	LANGUAGE:GERMAN (GN).....	201
AMERICAN SIGN LANGUAGE (ASL).....	23	LANGUAGE:JAPANESE (JA).....	201
BUSINESS ADMINISTRATION (BA).....	23	LANGUAGE: KOREAN (KO).....	203
BIOLOGY (BI).....	40	LANGUAGE:POHNPEIAN (PN).....	203
CIV&ENVIRNMNTL ENG. SCIENCE (CEE).....	52	LANGUAGE:SPANISH (SN).....	203
CHEMISTRY (CH).....	56	LANGUAGE:TAGALOG (TA).....	203
COMMUNICATION AND MEDIA (CO).....	62		
COMPUTER SCIENCE (CS).....	67		
CYBERSECURITY MANAGEMENT (CSM).....	71		
CRITICAL THINKING (CT).....	72		
EDUCATION (ED).....	72		
ENGLISH (EN).....	102		
ENVIRONMENTAL SCIENCE (EV).....	109		
FINE ARTS (FA).....	114		
FIRST YEAR SEMINAR (FY).....	114		
GEOGRAPHY (GE).....	115		
HISTORY (HI).....	116		
HEALTH SCIENCES (HS).....	119		
LINGUISTICS (LN).....	123		
LIBRARY SCIENCE (LS).....	126		
LEGAL STUDIES (CJ) (LW).....	129		
MATHEMATICS (MA).....	132		
MICRONESIAN STUDIES (MI).....	138		
MILITARY SCIENCE (MSL).....	141		
MUSIC (MU).....	145		
NATURAL SCIENCE (NS).....	148		
NURSING (NU).....	150		
PUBLIC ADMIN (PA).....	156		
PHYSICAL EDUCATION (PE).....	165		
PHYSICS (PH).....	168		
PHILOSOPHY (PI).....	169		
College of Arts and Sciences (PM).....	172		
POLITICAL SCIENCE (PS).....	172		
PSYCHOLOGY (PY).....	175		
SOCIOLOGY (SO).....	185		
SOCIAL WORK (SW).....	190		
THEATRE (TH).....	195		
WOMEN&GENDER STUDIES (WG).....	196		
LANGUAGE:CHINESE (CI).....	198		

## **AGRICULTURE AND LIFE SCIENCES (AL)**

### **AL 101 INTRODUCTION TO AGRICULTURE**

FALL/SPRING/ALL YEARS

3 credit hours

This course is designed to introduce the science of agriculture. This course explains principles behind the discipline that feeds, shelters, and clothes the world's population. Three hours of lecture. Prerequisite: MA085 or higher. Corequisite: Enrollment in AL101L a three hour laboratory class.

### **AL 101L INTRODUCTION TO AGRICULTURE LAB**

FALL/SPRING/ALL YEARS

1 credit hour

AL101L is the laboratory portion of AL101 and MUST be taken concurrently with lecture course. Prerequisite: MA085a-b or MA089 or higher. Corequisite: AL101.

### **AL 102 INTRODUCTION TO PLANT SCIENCE**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course introduces students to basic scientific knowledge of plants. Students will learn scientific principles relevant to understanding plant growth and development, plant nutrition, green organisms in the environment and plant improvement. Lab experiments will give students experience in observing, collecting data, and writing reports on plant growth and reproduction. The course consists of online activities that are the equivalent of three hours of lecture weekly. Prerequisites: MA085a-b or MA089 or higher. Corequisite: AL102L. **DISTANCE EDUCATION** This online course is an introduction to the study of living plants and their relationship to the environment. Topics include plant cells, tissues, growth, reproduction, metabolism, genetics, classification, and evolution. The course focuses on the impact of light, temperature, soil and other environmental components on plant growth. Lab experiments will illustrate basic principles of plant biology. The lecture and exams will be available online. There will be 3 hours of lab weekly in the classroom. Corequisite: AL102L. Prerequisites: MA 085a-b or MA089 or higher.

### **AL 102L INTRODUCTION TO PLANT SCIENCE LAB**

FALL/SPRING/ALL YEARS

1 credit hour

AL102L is the laboratory portion of AL102 and MUST be taken concurrently. The course consists of lab activities included in a lab kit that the students must purchase at the beginning of the semester. There is an option to register for either a classroom section or a section in which the students do the experiments at home and do not meet in the classroom. Prerequisite: MA085a-b or MA089 or higher. Corequisite: AL102

### **AL 109 INSECT WORLD**

FALL ONLY/EVEN YEARS

3 credit hours

This course is an overview of insect biology for non-scientists. Emphasis is on insect behavior, ecology and structural/ morphological adaptations. Lab is geared toward identifying common insects and experimentally examining aspects of insect biology. Lab is geared toward identifying common insects and experimentally examining aspects of insect biology. Concurrent enrollment in AL109 and AL109L is required. Prerequisite: MA085a-b or MA089 or higher.

### **AL 109L INSECT WORLD LAB**

FALL ONLY/EVEN YEARS

1 credit hour

AL109L is the laboratory portion of AL109 and MUST be taken concurrently with lecture course. Prerequisite: MA085 a-b or MA089 or higher.

### **AL 130 INTRO TO SCIENCE FOR EDUCATORS**

SPRING ONLY/EVEN YEARS

3 credit hours

This is a one-semester course in general science as an introduction to science education and covers scientific inquiry, life sciences and physical sciences. The course consists of three hours of lecture weekly. The lab section of this course must be taken concurrently. Prerequisite: MA-115.

## **AL 130L INTRO TO SCIENCE FOR EDUCATORS' LAB**

SPRING ONLY/EVEN YEARS

1 credit hour

This is a one-semester course in general science as an introduction to science education and covers scientific inquiry, earth and space sciences, life sciences and physical sciences. This course is the laboratory section taken concurrently with the lecture section. Prerequisites: MA115. Corequisite: AL130.

## **AL 136 SCIENCE OF AQUACULTURE**

SPRING ONLY/ALL YEARS

3 credit hours

This course is to introduce the students to the basics of aquaculture (principles and practices) with emphasis in the areas of culture system, nutrition and feeding, reproductive biology, production techniques, water quality management, disease, health management, processing, marketing, and economics of commercially important aquaculture species. It is also designed to help students gain hand on experience in observing, sampling, analyzing and interpreting the dynamics of water parameters of culture system, and learn technical skills to monitor the animal production performance of the common aquaculture species on Guam. Student is required to take AL136 and AL136L concurrently. Three hours of lecture and three hours of lab (AL136L) weekly. Prerequisites: MA085 a-b or MA089 or higher.

## **AL 136L SCIENCE OF AQUACULTURE LAB**

SPRING ONLY/ALL YEARS

1 credit hour

AL136L is the laboratory portion of AL136 and MUST be taken concurrently with lecture course. Prerequisites: MA085a-b or MA089 or higher.

## **AL 140 SCIENTIFIC PRINCIPLES OF FOOD PREPARATION**

FALL ONLY/ALL YEARS

3 credit hours

This course covers the fundamental processes of food preparation as well as the relationship between scientific principles and cooking procedures. Includes three hours of lecture and three hours of lab weekly. Prerequisite: MA085 a-b or MA089 and EN109. Corequisite: AL140L.

## **AL 140L SCIENTIFIC PRINCIPLES OF FOOD PREPARATION LAB**

FALL ONLY/ALL YEARS

1 credit hour

This is the laboratory portion of AL140 and MUST be taken concurrently with lecture course. Includes three hours of lecture and three hours of lab weekly. Prerequisite: MA085 a-b or MA089 and EN109. Corequisite: AL140.

## **AL 185 HUMAN NUTRITION**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course introduces the basic principles of human nutrition, including nutrients, food sources for nutrients, and the national recommendations for a healthy diet. Applied nutrition and the study of current nutrition issues in health, the environment, and the Pacific region are critically reviewed.

## **AL 211 INTRODUCTION TO ANIMAL SCIENCE**

FALL ONLY/ALL YEARS

3 credit hours

This course covers adaptation, distribution and numbers of livestock throughout the world; significance and economic importance; trends in livestock production; introduction to feeding, breeding, disease control, growth, and physiology. Three hours of lecture. Corequisite: AL211L, the three hours of laboratory companion course. Prerequisite: MA085 a-b or MA089 or higher, and BI157-157L or AL101.

## **AL 211L INTRODUCTION TO ANIMAL SCIENCE LAB**

FALL ONLY/ALL YEARS

1 credit hour

AL211L is the laboratory portion of AL211 and **MUST** be taken concurrently with lecture course. Prerequisite: MA085a-b or MA089 or higher, and BI157-157L or AL101-101L. Corequisite: AL211.

## **AL 281 PRINCIPLES OF HORTICULTURAL SCIENCE**

SPRING ONLY/ALL YEARS

3 credit hours

This course introduces principles of plant-soil-climate relations and physical characteristics in horticultural crop production, current practices included. Emphasis is on the practical aspects of producing vegetable, fruit and ornamental crops in the tropics. Three hours of lecture and three hours lab weekly. Laboratories will consist of field activities, field trips, and guest lectures. AL281L is the laboratory portion of AL281 and **MUST** be taken concurrently. Prerequisite: MA115 or higher and AL102 or BI157 or BI158. Co-requisite: AL281L.

## **AL 281L PRINCIPLES OF HORTICULTURAL SCIENCE LAB**

SPRING ONLY/ALL YEARS

1 credit hour

This course introduces principles of plant-soil-climate relations and physical characteristics in horticultural crop production, current practices included. Emphasis is on the practical aspects of producing vegetable, fruit and ornamental crops in the tropics. Three hours of lecture and three hours lab weekly. Laboratories will consist of field activities, field trips, and guest lectures. AL281L is the laboratory portion of AL281 and **MUST** be taken concurrently. Prerequisite: MA115 or higher, AL101 AL101L and AL102 AL102L or BI157 BI157L or BI158 BI158L. Corequisite: AL281.

## **AL 300 FOOD PROCESSING TECHNOLOGY**

FALL ONLY/ODD YEARS

3 credit hours

This course covers basic food processing principles and preservation techniques to extend shelf-life of foods by inhibiting microbiological or biochemical changes and retaining food sensory characteristics and nutritional quality. Emphasis is on food properties and processing theory, raw material preparation, fermentation technology, blanching, pasteurization, sterilization, dehydration, chilling, freezing, and packaging. Prerequisites: AL101, AL101L, AL140, AL185 and BI225-BI225L. Corequisite: AL300L.

## **AL 300L FOOD PROCESSING TECHNOLOGY LAB**

FALL ONLY/ODD YEARS

1 credit hour

AL300L is the laboratory portion of AL300 and must be taken concurrently. The course consists of lab activities using various technologies to extend shelf-life of foods or process shelf-stable food products. Prerequisites: AL101, AL101L, AL140, AL185, and BI225-BI225L. Corequisite: AL300.

## **AL 309 YOUTH AT RISK**

FALL ONLY/ODD YEARS

3 credit hours

This course presents an overview of methods for practitioners' use to help prevent problems experienced by youth such as drug and alcohol abuse, teen pregnancy, sexually transmitted disease, suicide and school dropout. The approach to prevention includes the application of principles from human development, sociology, psychology, social work and education. Individual, family, school and community factors are considered to assess current issues for program development in Micronesia and Guam. Pre requisites: PY101 or SO101 or consent of instructor.

## **AL 311 PRINCIPLES OF AGRICULTURAL ENGINEER**

### **AS REQUIRED**

3 credit hours

The course introduces the engineering principles in agriculture as applied to land measurements, surveying and map making, farm water management, irrigation scheduling, and farm electrification. Emphasis is placed on learning how to apply the engineering principles for solving real-life problems in agriculture from calculating how many hours it will take to plow a field to how long to hands-on learning experience in the area of surveying, irrigation, farm machinery, and farm electricity. There are three hours of lecture and three hours of laboratory weekly. Concurrent enrollment in AL311 and AL311L is required. Prerequisite: MA161a or higher. Corequisite: AL311L.

## **AL 311L PRINCIPLES OF AGRICULTURAL ENGINEER LAB**

### **AS REQUIRED**

1 credit hour

AL311L is the laboratory portion of AL311 and MUST be taken concurrently with lecture course. Prerequisite: MA161a or higher.

## **AL 321 HORTICULTURAL PLANT ID AND PROPAGATION**

### **FALL ONLY/EVEN YEARS**

3 credit hours

This course is designed for students who would like to identify the plants that are important to Guam's culture, economy, and environment. The course covers the application of higher plant nomenclature and provides practical experience in the plant identification of fruits, vegetables, weeds, ornamentals and native plants. The principles of plant propagation will be discussed using the best practices for propagating the plants covered in the course. Concurrent enrollment in AL321L is required.

## **AL 321L HORTICULTURAL PLANT ID AND PROPAGATION LAB**

### **FALL ONLY/EVEN YEARS**

1 credit hour

AL321L (1) is the laboratory portion of AL321 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisite: AL281. Corequisite: AL321.

## **AL 323 PLANT PATHOLOGY**

### **FALL ONLY/EVEN YEARS**

3 credit hours

Principles underlying the nature and control of plant disease that are related to crop production and horticulture are introduced in this course. Topics examined include the microorganisms and environmental conditions that cause disease, their dispersal mechanisms and reproductive cycles, and prevention and control options available to manage and contain plant disease. This course meets for three hours of lecture weekly. Concurrent enrollment with AL323L is required. Prerequisites: AL101/L and AL102/L or BI157/L and BI158/L.

## **AL 323L PLANT PATHOLOGY LAB**

### **FALL ONLY/EVEN YEARS**

1 credit hour

This is the laboratory course for AL323. Concurrent enrollment in AL323 is required. This course meets for three hours of laboratory weekly. Prerequisites: AL101/L and AL102/L OR BI157/L and BI158/L.

## **AL 330 NUTRITION THROUGHOUT THE LIFESPAN**

### **FALL ONLY/ALL YEARS**

3 credit hours

Online

The nutritional requirements and diet recommendations of three different life span stages are examined. The stages include: (1) pregnancy and infancy, (2) early childhood and adolescence, and (3) adulthood and aging. Emphasis is placed on the special demands the various lifecycle stages impose on normal nutrition. Pre requisite: AL185. ED201 recommended.

## **AL 335 NUTRITION FOR HEALTH, FITNESS AND SPORT**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This course focuses on nutrition for active people engaged in exercise for sport performance, recreation, or health and fitness. Nutritional needs for sport-specific training, weight status, team sports, and special populations will be discussed. Prerequisites: BI157-157L and BI158-158L, or BI124-124L and BI125-125L with grade of C or better, and AL185.

## **AL 340 PEST MANAGEMENT**

SPRING ONLY/ODD YEARS

3 credit hours

A capstone agriculture course that draws from the student's experience in soil science, horticulture, biology, entomology, and plant pathology to introduce the student to common agricultural pests (insects, plant pathogens and weeds) and their management. As part of the lecture portion of the course, students will be expected to pass the University of Guam Private Pesticide Applicators course and the Nation Plant Diagnostic Network (NPDN) First Detector Course. Laboratory portion of the course will include field trips, exercises in the Cooperative Extension & Outreach. Plant Diagnostic Clinic and lab work in pest identification and pest control. The course meets for three hours of lecture and three hours of laboratory weekly. AL340L is the laboratory portion of AL340 and MUST be taken concurrently. Corequisite: AL340L. Prerequisites: AL281. Suggested courses but not required are biology, entomology, plant pathology and plant identification.

## **AL 340L PEST MANAGEMENT LAB**

SPRING ONLY/ODD YEARS

1 credit hour

AL340L is the laboratory portion of AL340 and MUST be taken concurrently with lecture course.

## **AL 342 FOOD SAFETY AND SANITATION**

SPRING ONLY/ODD YEARS

3 credit hours

This course examines biological, chemical, and physical hazards that cause foodborne illness. Students learn risk factors, food safety measures, and sanitation principles to eliminate foodborne pathogens during food preparation and service and to protect consumers from foodborne illness. Pre requisites: BI157-157L and BI158-158L, or BI124-124L and BI125-125L or consent of instructor.

## **AL 345 GENERAL ENTOMOLOGY**

FALL ONLY/ODD YEARS

3 credit hours

This course is an overview of insect biology with emphasis on fundamental problems encountered by insects, and the structural and functional adaptations used to overcome these problems. The laboratory focuses on insect identification. The course meets for three hours of lecture weekly. Concurrent enrollment in AL/BI345L is required. Prerequisites: BI157/L or AL109/L or AL281/L.

## **AL 345L GENERAL ENTOMOLOGY LABORATORY**

FALL ONLY/ODD YEARS

1 credit hour

This course is a corequisite of AL/BI345 and MUST be taken concurrently. The laboratory focuses on insect identification. An insect collection is required. The course meets for three hours of laboratory weekly. Prerequisites: BI157/L or AL109/L or AL281/L. Corequisite: AL/BI345.

## **AL 351 PERSONAL AND FAMILY FINANCIAL MANAGEMENT**

FALL ONLY/ALL YEARS

3 credit hours

Information is presented to understand the role of family financial management in western society. The course provides the students with the information they need to develop a lifetime financial plan. Essential components for developing a financial plan and behaviors that put the individual and family on the path to affluence/financial security are covered. These include determining financial goals, monitoring spending, financial statements, saving, cash and credit management, student loans, mortgages, emergency funds, retirement accounts, insurance, investment options and wills. The goal is to prepare students to wisely manage the funds they will receive as they develop their working career. Prerequisite: MA110 or higher.

## **AL 380 PRINCIPLES OF SOIL SCIENCE**

FALL ONLY/ALL YEARS

3 credit hours

This course delves into the basic principles of the fundamentals of the chemical, physical, and biological properties of soils; their formation, fertility, and management, and the effects of inorganic and organic chemicals on soil processes and properties as they relate to environmental pollution. Two hours of lecture, one-hour recitation and three hours laboratory weekly. Prerequisites: MA115 or higher and any two chemistry courses and concurrent enrollment in AL/NS380L is required.

## **AL 380L PRINCIPLES OF SOIL SCIENCE LABORATORY**

FALL ONLY/ALL YEARS

1 credit hour

This course is a corequisite of AL/NS380 and MUST be taken concurrently. The course meets for three hours of laboratory weekly. Prerequisites: MA115 or higher and any two chemistry courses.

## **AL 389 EXTENSION PROGRAMS & PLANNING**

SPRING ONLY/ALL YEARS

3 credit hours

The course reviews development and educational philosophy of the Cooperative Extension & Outreach in the U.S., Guam, and the Pacific Basin. Extension educational programs, planning and development methods, teaching tools, and related topics are explored. Prerequisites: EN111 and PY101 or SO101 or consent of instructor.

## **AL 392 LABORATORY TEACHING ASSISTANTSHIP**

FALL/SPRING/ALL YEARS

1 credit hour

This course provides practical educational experience in undergraduate Agriculture and Life Sciences courses. Prerequisites: Completion, with a grade of "B" or better, of the course for which the assistantship is offered, junior standing and consent of instructor.

## **AL 401 COMMUNITY PLANNING**

AS REQUIRED

3 credit hours

This course is an introduction to community planning and social theories of communities with application activities designed to provide understanding of community problems and concerns; relationships of physical form to environment and function; aesthetic principles and cultural values; and planning as a synthesis of economic, political, social, cultural, physical, and administrative factors. Emphasis is on helping village communities understand the special circumstances related to growth and development pressures. Prerequisite: SO101.

## **AL 423 PLANT DISEASE CLINIC**

AS REQUIRED

3 credit hours

This course expands on the content knowledge and laboratory techniques introduced in AL323/L by focusing on diagnosis, management and epidemiology of local plant diseases. In the laboratory section, students develop archival collections of local plant disease specimens and work to confirm pathogen identity. The course meets for three hours of lecture weekly. Corequisite: AL423L. Prerequisite: AL323/L or consent of instructor.

## **AL 423L PLANT DISEASE CLINIC LABORATORY**

AS REQUIRED

1 credit hour

This is the laboratory section of AL423. Concurrent enrollment in AL423 and AL423L is required. Course meets for three hours of laboratory weekly. Prerequisite: AL323/L or consent of instructor.

## **AL 430 SCIENTIFIC PHOTOGRAPHY**

SPRING ONLY/EVEN YEARS

3 credit hours

Photography is one of the primary means through which scientific observation and research is documented and presented to colleagues and the public. By developing technical observational and aesthetic skills, students will learn how to extract relevant information from nature using macro-photography, photomicrography, special techniques and digital processing. Students will learn the basics of photography and the use of a computer as the digital darkroom. This course includes two hours of lecture and three hours of laboratory. AL/BI430L is the laboratory portion of AL/BI430 and MUST be taken concurrently. Prerequisites: BI158/158L or AL281. Corequisite: AL/BI430L.

## **AL 430L SCIENTIFIC PHOTOGRAPHY LABORATORY**

SPRING ONLY/EVEN YEARS

1 credit hour

Photography is one of the primary means through which scientific observation and research is documented and presented to colleagues and the public. By developing technical observational and aesthetic skills, students will learn how to extract relevant information from nature using macro-photography, photomicrography, special techniques and digital processing. Students will learn the basics of photography and the use of a computer as the digital darkroom. This course includes two hours of lecture and three hours of laboratory. AL/BI430L is the laboratory portion of AL/BI430 and MUST be taken concurrently. Prerequisite: BI158/158L OR AL281. Corequisite: AL/BI430.

## **AL 439 COMMUNITY NUTRITION**

SPRING ONLY/ODD YEARS

3 credit hours

This course integrates concepts of education and nutrition. It is designed for the student who wants a broad-based understanding of the strategies that can be used to educate groups or individuals about concepts of nutrition. Prerequisites: AL185 and AL330 or consent of instructor. ED300 recommended.

## **AL 439G COMMUNITY NUTRITION**

SPRING ONLY/ODD YEARS

3 credit hours

This course applies knowledge gained from nutrition across the lifespan to nutrition education. Concepts in nutrition education, community programming, and public health are introduced. It is designed for the student who desires to promote health and nutrition with community groups using community nutrition concepts and strategies. Students taking this course for graduate credit will have additional requirements. Prerequisites: AL330 or consent of instructor. ED300 recommended, not required.



## **AL 443 TECHNOLOGIES FOR SUSTAINABLE TROPICAL AGRICULTURE**

SPRING ONLY/ODD YEARS

3 credit hours

This course provides students with knowledge of agricultural sustainability through the practice of technologies that efficiently utilize resources that aim to improve and sustain soil and water quality and quantity. Students will gain knowledge of the technologies for improving sustainability on agriculture operations, conservation practices that mitigate degradation of soil and water quality in agricultural operations through sustainable management. Students will learn management strategies and technologies that aim to obtain optimum agricultural production, reduce negative environmental impacts, and sustain natural resources. The course meets for three hours of lecture and three hours of laboratory weekly. AL443L/G is the laboratory portion of AL443/G and MUST be taken concurrently. Prerequisites: MA161a, AL211, AL281, or consent of instructor. Corequisite: AL443L/G.

## **AL 443G TECHNOLOGIES FOR SUSTAINABLE TROPICAL AGRICULTURE**

SPRING ONLY/ODD YEARS

3 credit hours

This course provides students with knowledge of Agricultural sustainability through the practice of technologies that efficiently utilize resources that aim to improve and sustain soil and water quality and quantity. Students will gain knowledge of the technologies for improving sustainability on agriculture operations, conservation practices that mitigate degradation of soil and water utility in agricultural operation through sustainable management. Students will learn management strategies and technologies that aim to obtain optimum agricultural production, reduce negative environmental impacts, and sustain natural resources. The course meets for three hours of lecture and three hours of laboratory weekly. AL443L/G is the laboratory portion of AL443/G and MUST be taken concurrently. Corequisite: AL443L/G. Prerequisites: MA161A, AL211, AL281 or consent of instructor.

## **AL 443L TECHNOLOGIES FOR SUSTAINABLE TROPICAL AGRICULTURE LABORATORY**

SPRING ONLY/ODD YEARS

1 credit hour

This course provides students with knowledge of agricultural sustainability through the practice of technologies that efficiently utilize resources that aim to improve and sustain soil and water quality and quantity. Students will gain knowledge of the technologies for improving sustainability on agriculture operations, conservation practices that mitigate degradation of soil and water quality in agricultural operations through sustainable management. Students will learn management strategies and technologies that aim to obtain optimum agricultural production, reduce negative environmental impacts, and sustain natural resources. Laboratories will be conducted three hours weekly, and will consist of field activities, field trips, and guest lectures. AL443L/G is the laboratory portion of AL443/G and MUST be taken concurrently. Prerequisites: MA161a, AL211, AL281, or consent of instructor. Corequisite: AL443/G.

## **AL 443L/G TECHNOLOGIES FOR SUSTAINABLE TROPICAL AGRICULTURE LABORATORY**

SPRING ONLY/ODD YEARS

1 credit hour

This course provides students with knowledge of agricultural sustainability through the practice of technologies that efficiently utilize resources that aim to improve and sustain soil and water quality and quantity. Students will gain knowledge of the technologies for improving sustainability on agriculture operations, conservation practices that mitigate degradation of soil and water quality in agricultural operations through sustainable management. Students will learn management strategies and technologies that aim to obtain optimum agricultural production, reduce negative environmental impacts, and sustain natural resources. Laboratories will be conducted three hours weekly, and will consist of field activities, field trips, and guest lectures. AL443L/G is the laboratory portion of AL443/G and MUST be taken concurrently. Corequisite: AL443/G. Prerequisites: MA161a, AL211, AL281, or consent of instructor.

## **AL 445 FOOD CHEMISTRY**

SPRING ONLY/EVEN YEARS

3 credit hours

This course focuses on the chemical and functional properties of food constituents. Students learn the effects of processing and storage on the stability of chemical components, nutrition values, and quality of foods.

Prerequisite: BI157/157L and BI158/158L or CH102/102L and CH103/103L. Corequisite: AL445L.

## **AL 445G FOOD CHEMISTRY**

SPRING ONLY/ODD YEARS

3 credit hours

This course focuses on the chemical and functional properties of food constituents. Students learn the effects of processing and storage on the stability of chemical components, nutrition values, and quality of foods.

Prerequisite: BI157/157L and BI158/158L or CH102/102L and CH103/103L. Corequisite: AL445G/L.

## **AL 445G/L FOOD CHEMISTRY LABORATORY**

SPRING ONLY/EVEN YEARS

1 credit hour

AL445L is the laboratory portion of AL445 and MUST be taken concurrently. The course consists of lab activities of using various analytical methods to analyze food constituents and determine functional properties and stability of food components. Prerequisite: BI157/157L and BI158/158L or CH102/102L and CH103/103L.

Corequisite AL445G.

## **AL 445L FOOD CHEMISTRY LABORATORY**

SPRING ONLY/EVEN YEARS

1 credit hour

AL445L is the laboratory portion of AL445 and MUST be taken concurrently. The course consists of lab activities of using various analytical methods to analyze food constituents and determine functional properties and stability of food components. Prerequisite: BI157/157L and BI158/158L or CH102/102L and CH103/103L.

Corequisite AL445.

## **AL 450 FAMILY RESOURCES**

SPRING ONLY/ODD YEARS

3 credit hours

This course studies family resource identification and management in relation to a successful household. Family goals and communication, financial management, principles and techniques in managing time, energy and money are stressed. Housing, family life cycle, seniors and government resources are topics included. A family and community foundation provides the basis to understand family resource management. The course explores how family and community needs assessments to determine what community resources exists, identification of gaps and the impacts to families. Prerequisites: BA110, and PY101 or SO101 or consent of instructor.

## **AL 451 AGRICULTURAL BUSINESS MANAGEMENT**

SPRING ONLY/ODD YEARS

3 credit hours

This course examines the role of the manager in the organization and operation of the farm or agri-business. Will cover developing conservation plans, farm business plans, and enterprise budget, as well as other business planning and financial management tools. Prerequisites: MA115 or higher and AL351 or BA110.

## **AL 451G AGRICULTURAL BUSINESS MANAGEMENT**

SPRING ONLY/ODD YEARS

3 credit hours

This course examines the role of the manager in the organization and operation of the farm or agri-business. Will cover developing conservation plans, farm business plans, and enterprise budget, as well as other business planning and financial management tools. Prerequisites: MA115 or higher and AL351 or BA110.

## **AL 455 NUTRITIONAL ASSESSMENT**

SPRING ONLY/ODD YEARS

3 credit hours

An in-depth survey of the methods used in the assessment of food and nutrient intakes to include nutritional status of communities, groups, and individuals in both health and disease. Prerequisite: AL330.

## **AL 455G NUTRITIONAL ASSESSMENT**

SPRING ONLY/ODD YEARS

3 credit hours

An in-depth survey and hands-on experience of methods used in the assessment of food and nutrient intakes to include nutritional status of communities, groups, and individuals in both health and disease. Prerequisites: AL330.

## **AL 460 ADVANCED HUMAN NUTRITION**

FALL ONLY/EVEN YEARS

4 credit hours

This course covers the metabolism and macro- and micronutrients, including structure, digestion, absorption, transport, and cellular functions in human nutrition; energy metabolism and balance; and physiologic basis underlying dietary recommendations for human health. Prerequisites: BI157/157L and BI158/158L, or BI124/124L and BI125/125L with grade of C or better; CH101; and AL445 or instructor's consent.

## **AL 460G ADVANCED HUMAN NUTRITION**

FALL ONLY/EVEN YEARS

4 credit hours

This course covers the metabolism and macro- and micronutrients, including structure, digestion, absorption, transport, and cellular functions in human nutrition; energy metabolism and balance; and physiologic basis underlying dietary recommendations for human health. Prerequisites: CH310a; BI157, BI157L and BI158, BI158L, or BI124-124L and BI125-125L with grade of C or better; and AL445, or instructor consent.

## **AL 470 NUTRITION EDUCATION AND COUNSELING**

FALL ONLY/ODD YEARS

3 credit hours

This course presents students with current strategies used to provide nutrition and education counseling for individuals and groups to promote behavior change and apply nutrition recommendations as a total health approach. Pre-requisites: AL455 and AL439.

## **AL 475 MEDICAL NUTRITION THERAPY**

SPRING ONLY/EVEN YEARS

3 credit hours

Advances knowledge in the nutritional care process and focuses on the health professional and their role in designing modified diets for specific disease states based on current research and standards of care. Prerequisites: AL185 and AL455, or instructor consent.

## **AL 481 ENVIRONMENTAL SOIL SCIENCE**

SPRING ONLY/ODD YEARS

3 credit hours

An overview of soil properties and their impact on the environment will be discussed. Topics covered include: soil erosion, soil conservation, soil enhancement, non-point source pollution, soil contamination, and waste management. Students will develop skills in soil and water contaminant analysis and environmental assessment. This course consists of three hours of lecture weekly. Concurrent enrollment in AL481L is required. Prerequisites: AL/NS380 and MA161a or higher.

## **AL 481G ENVIRONMENTAL SOIL SCIENCE**

SPRING ONLY/ODD YEARS

3 credit hours

This course uses the principles of soil science with practical demonstrations to study the relationships among contemporary agriculture, natural resources and the environment. It gives an overview of management techniques for erosion control and soil and water conservation with focus on rill and interrill erosion. This course also discusses non-point source pollution and control practices involving disposal of organic wastes on agricultural and forestlands. This course will also equip students with skills useful for environmental assessment and soil contaminants analysis. Techniques used for bioremediation of contaminated soils and how soil can be managed to filter out contaminants will be introduced. The course has three hours of lecture and three hours of laboratory per week. Prerequisites: AG380, MA161a and two Chemistry Courses (CH102, CH103) or BI100

## **AL 481L ENVIRONMENTAL SOIL SCIENCE LABORATORY**

SPRING ONLY/ODD YEARS

1 credit hour

This is the laboratory section of AL481. Concurrent enrollment in AL481 is required. This course meets for three hours of laboratory weekly. Prerequisites: AL/NS380 and MA161a or higher.

## **AL 481L/G ENVIRONMENTAL SOIL SCIENCE LABORATORY**

SPRING ONLY/ODD YEARS

1 credit hour

This is the laboratory section of AL481. Concurrent enrollment in AL481 is required. This course meets for three hours of laboratory weekly. Prerequisites: AL/NS380 and MA161a or higher.

## **AL 484 TROPICAL VEGETABLE PRODUCTION**

SPRING ONLY/ODD YEARS

3 credit hours

This course is a lecture portion of the tropical vegetable production course. Topics include botany and classification of vegetable, crops production and management systems, plant growth and vegetable cultivar development and testing, and vegetable seed production technology. This course meets for three hours lecture and three hours laboratory weekly. Prerequisites: AL281 and other plant science or biology courses. Corequisite AL484L.

## **AL 484L TROPICAL VEGETABLE PRODUCTION LAB**

SPRING ONLY/ODD YEARS

1 credit hour

This course is a laboratory portion of the tropical vegetable production course. Prerequisite: AL281 and other plant science or biology courses. Corequisite AL484.

## **AL 485 TROPICAL FRUITS HORTICULTURE**

SPRING ONLY/EVEN YEARS

3 credit hours

This course covers tropical fruits, their botany, taxonomy and uses, including detailed study of important fruits and their impact on life in the tropics. Topics to be covered are: relationship of the environment; plant structures and cultural practices to yield and quality propagation methods; seed viability, dormancy and seed treatments, fertilizers, growth regulators, and modification of season of production; and stock and scion relationships. The course meets for three hours lecture weekly. Concurrent enrollment in AL485L is required. Prerequisite: AL281.

## **AL 485L TROPICAL FRUITS HORTICULTURE LABORATORY**

SPRING ONLY/EVEN YEARS

1 credit hour

This course is the laboratory section of AL485. The course meets for three hours laboratory weekly. Concurrent enrollment in AL485 is required. Prerequisite: AL281.

## **AL 486 ORNAMENTAL CROP PRODUCTION IN THE TROPICS**

SPRING ONLY/ODD YEARS

3 credit hours

This course covers topics related to the production of ornamental plants in the tropics. Lectures cover the propagation, management and post-harvest handling of specific crops. Meets for three hours of lecture weekly. Concurrent enrollment in AL486L is required. Prerequisite: AL281.

## **AL 486L ORNAMENTAL CROP PRODUCTION IN THE PACIFIC LABORATORY**

SPRING ONLY/ODD YEARS

1 credit hour

AL486L is the laboratory portion of AL486 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisite: AL281. Corequisite: AL486.

## **AL 490 SPECIAL PROJECTS**

FALL/SPRING/ALL YEARS

2 - 3 credit hours

The ALS Special Project course is a pre-requisite course to the AL499 Capstone Seminar. This course is designed to give the student field or laboratory experience within the UOG Research and Extension framework. UOG faculty-directed projects are designed for individual students. The student is required to complete 45 contact hours per credit hour (i.e. 90 hours for 2 credits or 135 hours for 3 credits) of directed research or extension during the semester. The student may repeat this course once. Jr/Sr standing AND Consent of Instructor. Prerequisites: EN111, CO210 and AL281 or AL330.

## **AL 498 INTERNSHIP**

FALL/SPRING/ALL YEARS

2 - 3 credit hours

The ALS Internship course is a pre-requisite course to the AL499 Capstone Seminar. This course is designed to give the student field experience outside the university. Students are required to work in a professional or technical, advisor-approved area under the supervision of an expert in the field. The student must complete 45 contact hours per credit (i.e. 90 hrs total for 2 credits, 135 hrs total for 3 credits) as an intern at an off-campus professional or technical venue. The student is also required to meet with their advisor for pre-, mid-, and post- assessments. The student may repeat this course once; a maximum of 4 credit hours may be applied to the ALS degree. Prerequisites: EN111, CO210 and AL281 or AL330.

## **AL 499 CAPSTONE SEMINAR**

FALL/SPRING/ALL YEARS

3 credit hours

In this course, Agriculture and Life Sciences seniors complete a variety of written and oral assignments designed to demonstrate mastery in analysis and synthesis of accumulated, learned knowledge in their chosen field with special emphasis on their prerequisite Internship or Special Projects experience. Students complete 1.5 hrs of directed activities and 1.5 hrs of independent work weekly. Prerequisites: AL490 or AL498.

## **AL 505 NUTRITIONAL EPIDEMIOLOGY**

SPRING ONLY/ODD YEARS

3 credit hours

This is a 3-credit course that explores the complex relationships between diet and the major diseases of Western civilization, such as cancer and atherosclerosis. Topics that will be covered include: research strategies in nutritional epidemiology; methods of dietary assessment (using data on food intake, biochemical indicators of diet, and measures of body size and composition); reproducibility and validity of dietary assessment methods; nutrition surveillance; and diet-disease associations. Prerequisites: BI/EV507.

## **AL 536 ADVANCES IN SUSTAINABLE AQUACULTURE**

FALL ONLY/ODD YEARS

3 credit hours

This course is intended to cover the recent advance in sustainable aquaculture research, development and application, including culture system, aquaculture nutrition, reproductive biology, genetic selective breeding, health management, production techniques, aquatic environmental management, seafood processing technology, off commercially important aquaculture species. It is also designed to provide in-depth knowledge of the molecular techniques currently used in aquaculture research, with emphasis on some applications in developing a sustainable aquaculture in the tropical regions. Prerequisite: AL136 or consent of instructor.

## **AL 539 PUBLIC HEALTH NUTRITION**

FALL ONLY/ODD YEARS

3 credit hours

This course covers farm animal products and provides a general overview of the livestock and poultry industry, relative to biological concepts such as genetics, nutrition, reproduction and disease prevention. This includes biotechnology along with environmental challenges. Prerequisites: AL439/G and AL430.

## **AL 542 ADVANCED FOOD SAFETY**

FALL ONLY/EVEN YEARS

3 credit hours

This course covers biological, chemical, and physical agents of foodborne diseases and provides a farm-to-fork perspective overview of food safety, including the fundamental principles, laboratory and analytical methods, risk assessment and hazard analysis, safe operations and technology, and food safety topics, issues, and regulations. Prerequisites: BI157, BI-157L, BI158, BI158L, BI124, BI124L, BI125, BI125L, BI110, BI110L, BI225, BI225L and AL342.

## **AL 563 MGMT & RECYCLING OF ORGANIC WASTE**

FALL ONLY/ODD YEARS

3 credit hours

This course focuses on various management practices and technologies dealing with handling, storage, and conversation of animal waste and plant by-products to useful energy, animal feed, and fertilizer. Recycling and processing methods such as drying rendering, composting, fermentation, extruding, and bio-gas production are also covered. Prerequisites: consent of instructor. This course focuses on various management practices and technologies dealing with handling, storage, and conversion of animal waste and plant by-products to useful energy, animal feed, and fertilizer. Recycling and processing methods such as drying, rendering, composting, fermentation, extruding, and bio-gas production are also covered. Prerequisites: consent of instructor.

## **AL 566 AGROECOCLOGY FOR ISLAND SUSTAINABILITY**

SPRING ONLY/EVEN YEARS

3 credit hours

Agroecology is the science of applying ecological concepts and principles to the design and management of sustainable food/agricultural production systems. The lecture topics include comparing structural and functional differences between natural ecosystems and agroecosystems with an emphasis on the tropical islands. The students study the resource-conservation and diversification of plant materials for agricultural sustainability. This course is offered to graduate students who have interested in studying plant, soil, and natural resource science, environmental science, agricultural and food bio-security, socio- and human ecology and general biological sciences. This course includes three hours of lecture weekly. Prerequisite: BI100 or AL101 or AL102, or consent of instructor.

## **AL 570 SUSTAINABLE ANIMAL PRODUCTION SYSTEMS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course covers farm animal products and provides a general overview of the livestock and poultry industry, relative to biological concepts such as genetics, nutrition, reproduction and disease prevention. This includes biotechnology along with environmental challenges.

Prerequisites: AL-211 AND AL-211L, and/or Instructors Consent.

## **AL 581 PRINCIPLE OF PLANT NUTRITION**

SPRING ONLY/EVEN YEARS

3 credit hours

This course covers plant metabolism and the assimilation of nutrients, their functions in plant and their contributions to plant growth and crop production. The course presents a wide range of topics which cut across the boundaries of soil sciences, plant physiology and biochemistry, as well as some of the ecological conditions pertaining to the tropical and humid environments. Prerequisites: CH102 and CH103.

## **AL 594 CANCER HEALTH DISPARITIES**

FALL ONLY/ALL YEARS

3 credit hours

This course explores and examines how social, cultural, historic, biologic, economic, environmental, and lifestyle factors contribute to differences in outcomes across the cancer continuum among racial and ethnic minorities and the medically underserved. This course provides core grounding in understanding why cancer health disparities exist and persist and explore approached for advancing cancer health equity. The course draws heavily from the experience of clinical practitioners, researchers, administrators, public health professionals and community-based organizations to provide real-world examples of prioritizing cancer health equity in both research and practice.

## **AL 595 SCIENTIFIC WRITING AND LITERATURE**

FALL ONLY/ALL YEARS

2 credit hours

Survey of biological literature as an assist in thesis and manuscript preparation in the areas of writing, proofreading, literature citation, figure, and table preparation. Two hours of lecture weekly.

## **AL 689 Internship for Aquaculture**

2 - 3 credit hours

## **AL 691 SEMINAR AND CURRENT TOPICS**

SPRING ONLY/ALL YEARS

1 credit hour

This course is graduate seminar course that combines formal student presentations with invited presentations by faculty and community members involved with agriculture and life sciences and related subjects. The course consists of 1-hour sessions each week throughout the semester.

## **AL 692 TEACHING/RESEARCH ASSISTANTSHIP**

FALL/SPRING/ALL YEARS

1 credit hour

This course provides practical educational experience in graduate Sustainable Agriculture, Food, and Natural Resources' courses. PREREQUISITE: INSTRUCTOR'S CONSENT.

## **AL 695 THESIS**

FALL/SPRING/ALL YEARS

1 - 6 credit hours

The ALS 695 Thesis course is a final course of the SAFNR graduate program. This course is designed to give the student field and research experience within the UOG Research and Extension framework to complete and defend Thesis work. UOG faculty-directed projects are designed for individual students. The student is required to complete two 3-credit courses (i.e. 135 hours for 3 credits) directed research during their last two semesters. Prerequisite: Instructor's consent.

## **AL 698 INTERNSHIP IN SUSTAINABLE AGRICULTURE, FOOD AND NATURAL RESOURCES**

FALL/SPRING/ALL YEARS

1 - 3 credit hours

The internship course provides students with opportunities to work in the academic and professional areas of their interest under the supervision of the expert in the field. For the internship course, a AL698 Student Contract Form needs to be signed by Student, Course Instructor, Student's Advisor, Chair of the graduate program, Dean of the college, and Supervisor of the participating party such as another academic institution, a government agency, a private business, or a non-profit organization engaged in activities that relate to sustainable agriculture, food, nutrition, and natural resources. Each credit (1 credit) requires 40 hours of job training per semester and the 3-credit internship course requires 120 hours. Students may take up to a maximum of six credit hours for completion of the program.

## **ANTHROPOLOGY (AN)**

### **AN 101 INTRODUCTION TO ANTHROPOLOGY**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course is an introduction to anthropology: the comparative study of human beings. The basic principles of archaeology, cultural anthropology, linguistics and physical anthropology are explored as they relate to the study of human beings, and to each other as sub disciplines of anthropology.

### **AN 203 INTRODUCTION TO ARCHAEOLOGY**

FALL ONLY/ALL YEARS

3 credit hours

This course presents a broad overview of the practice and principles of archaeology introducing regional, maritime, and international approaches. The course covers locating sites, site surveying, mapping, sampling, excavation, and the recording of cultural remains, alongside contemporary issues in cultural resource management. In-class learning is supplemented with intensive field course preparation and participation.

## **AN 212 CULTURAL ANTHROPOLOGY**

FALL ONLY/ALL YEARS

3 credit hours

This course involves the study of culture, the central concept of anthropology. Traditional and contemporary theories regarding the nature, structure and dynamics of culture are examined, as well as human social institutions: marriage and the family, kinship and descent, social organization, subsistence patterns, economic systems, political organization, social control, religion and magic and the arts.

## **AN 222 BIOLOGICAL ANTHROPOLOGY**

AS REQUIRED

4 credit hours

(As Resources Permit) This course surveys the subfield of modern Biological (Physical) Anthropology, with a focus on the study and interpretation of human and non-human primate evolution, contemporary human biological diversity, and the bicultural, ecological and historical dynamics of selective factors including diseases that have impacted - and continue to impact on - the human condition. A three-hour weekly lab is required.

## **AN 234 LINGUISTIC ANTHROPOLOGY LINGUISTIC ANTHROPOLOGY**

FALL ONLY/ALL YEARS

3 credit hours

This course presents linguistic questions, methods, and tools used within anthropology with special attention to the relation between Oceanic language and culture. Participants will develop an introductory understanding of the profound implications that language has for the formation maintenance and change of cultural practices and social events.



## **AN 320 PEOPLE OF THE PACIFIC**

SPRING ONLY/ALL YEARS

3 credit hours

AN320 is a study of the cultural anthropology of Melanesia, Micronesia, and Polynesia, the most ethnographically diverse region on the planet. Themes may include art, colonialism, ethnocentrism, first contact, gender, inequality, intoxication, power, race relations, religion, ritual, social change, sorcery and tattooing.

## **AN 321 VISUAL ANTHROPOLOGY**

SPRING ONLY/ALL YEARS

3 credit hours

Visual Anthropology combines filmic theory and practice towards new understandings of cultural anthropology and contemporary society. This course offers undergraduates an opportunity to creatively engage in the direction and production of ethnographic films regarding issues affecting themselves and their community.

## **AN 341 CULTURAL ECOLOGY**

FALL ONLY/ODD YEARS

3 credit hours

This course examines the linkages and interactions between human cultures and the environment, particularly of subsistence peoples in the tropics and the Pacific. Traditional and contemporary theories and approaches of human adaptation to and modification of the environment are examined.

## **AN 344 AGING: MYTH AND REALITIES**

FALL ONLY/ALL YEARS

3 credit hours

This course explores the major issues and concepts pertinent to gerontology, the study of the aging process. The prevailing theories of the social/biological aging process, and the economics, physical and psychological problems that might arise in late life are presented, and students learn how these factors impinge on the well-being of the older person and the social structure of a community. Aging as it occurs in different societies and throughout history is discussed. Social myths and stereotypes are explored. An overview of existing aging policies and special programs for seniors is included, as is a section on dying, death and grieving.

## **AN 369 SPECIAL TOPICS**

FALL/SPRING/ALL YEARS

3 credit hours

This course provides students with advanced study of specific topics within the field of anthropology. The course may be repeated for credit when different topics are covered.

## **AN 370 PRESERVING CULTURAL HERITAGE**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

What is "cultural heritage"? What does it encompass? Do we need to preserve these things? How? Why? Using examples from different parts of the world, as well as in Micronesia and Guam, this course aims to give students a critical understanding of heritage conservation from an anthropological perspective. The course will introduce basic concepts and cultural contexts of the occurrence and development of cultural heritage conservation, and discuss important issues in this field, including the economic, social and political meanings of heritage in contemporary societies, the impetus of preserving heritage, and the use of heritage as a social and political implement by the state, scholars, and different communities for their own interests.

## **AN 381 ASIA-PACIFIC MARITIME ARCHAEOLOGY**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This course introduces students to the distinctive maritime heritage of the Asia-Pacific region as an example of the world's maritime archaeology to illustrate past and contemporary connections that communities have with the ocean and its resources.

## **AN 413 RESEARCH METHODS IN ANTHROPOLOGY**

FALL ONLY/ALL YEARS

3 credit hours

This course covers the use of bibliography, reference tools, and research methods in Anthropology. Presentation and cooperative evaluation of research materials, methods, and projects is required. Course may not be repeated for credit.

## **AN 421 CROSS-CULTURAL & SOCIOLOGICAL PROBLEMS OF GUAM & MICRONESIA**

SPRING ONLY/ODD YEARS

3 credit hours

This course analyzes and evaluates the changing cultural patterns of Guam, the Commonwealth of the Northern Marianas, the Republic of Belau, the Federated States of Micronesia and the Republic of the Marshall Islands. New techniques and materials in the social science area pertaining to cross-cultural understanding are considered.

## **AN 462 ADVANCED FIELD METHODS IN ARCHAEOLOGY**

AS REQUIRED

3 - 6 credit hours

As Resources Permit This course offers advanced training of archaeological field methodology for advanced students who already have prior knowledge of archaeological field methods. In addition to focusing on aspects of research design, advanced recovery techniques and data collation and processing, students will develop on-site decision-making and problem-solving skills. This course aims to train advanced students to a level where they can direct archaeological excavation with supervision. Can be repeated for credit if content is different.

## **AN 498 INTERNSHIP IN ANTHROPOLOGY**

FALL/SPRING/ALL YEARS

4 credit hours

This course is designed to introduce students to the application and relevance of anthropology in the workplace, and is suitable for anthropology students of junior or senior standing. Placement with an appropriate host organization will be coordinated in association with the student's advisor. The student works a designated number of hours over the course of the semester, and holds regular meetings with the appropriate instructor. A final assignment will draw upon the knowledge and skills gained during the period of the internship. Can be retaken for credit if content is different.

## **ART (AR)**

## **AR 101 INTRODUCTION TO ART**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This is a course covering the major art trends and their place in history, art media and technique, and criteria for evaluating the visual arts.

## **AR 102 STUDIO FOR NON-MAJORS**

FALL/SPRING/ALL YEARS

3 credit hours

This course is an exploration of visual ideas and images in drawing, painting, printmaking, and other studio techniques. It involves studio work and fieldtrips.

## **AR 103 DRAWING I**

FALL/SPRING/ALL YEARS

3 credit hours

This course develops the student's visual perception and his or her ability to make a visual statement through various drawing media.

## **AR 104 BASIC DESIGN**

FALL ONLY/ALL YEARS

3 credit hours

Basic Design is an introduction to the principles and elements of two-dimensional visual organization.

## **AR 203 DRAWING II**

SPRING ONLY/ALL YEARS

3 credit hours

Drawing II provides additional experience in drawing with emphasis on the ability to interpret visual forms in a creative and individualized manner. Prerequisite: AR103 or consent of instructor.

## **AR 204 3-DIMENSIONAL DESIGN**

SPRING ONLY/ODD YEARS

3 credit hours

This course introduces methods, materials, techniques, principles of organization, and elements of design applied to the third dimension as a means to understanding sculptural form. Prerequisite: AR104 or consent of instructor.

## **AR 205 BASIC WATERCOLOR PAINTING**

FALL ONLY/ALL YEARS

3 credit hours

Transparent and opaque watercolor techniques are introduced. Emphasis is placed upon creative utilization for the development of original, personal statement and the understanding of the effects and variety of different watercolor techniques. Prerequisite: AR103 or consent of instructor.

## **AR 206 BASIC PAINTING**

SPRING ONLY/ALL YEARS

3 credit hours

This course explores problems in color and form with an introduction to painting media. Prerequisite: AR103 or consent of instructor.

## **AR 208 BASIC SCULPTURE**

FALL ONLY/ALL YEARS

3 credit hours

Sculpture methods and techniques are explored in this course. Emphasis is placed on creative utilization of materials and techniques and the development of a personal direction. Prerequisite: AR103 or AR104 or consent of instructor.

## **AR 210 BASIC PRINTMAKING**

FALL ONLY/ALL YEARS

3 credit hours

This is a studio course in which printmaking techniques in block printing and monotype printing are introduced. Prerequisites: AR103 or AR104 or consent of instructor.

## **AR 211 BASIC PHOTOGRAPHY**

FALL/SPRING/ALL YEARS

3 credit hours

This introductory course enables students to understand and properly use the camera and darkroom with emphasis on composition and visual communications. Prerequisite: Students must have a 35mm SLR camera with interchangeable lenses.

## **AR 220 BASIC CERAMICS**

FALL/SPRING/ALL YEARS

3 credit hours

This course is a study of ceramic materials and processes. Emphasis is on developing the student's skills and creativity.

## **AR 240 COMPUTER GRAPHIC DESIGN**

FALL/SPRING/ALL YEARS

3 credit hours

An entry-level that involves learning to create eye-catching graphics dealing with the interaction of text and image along with the fundamental components of graphic communication. Students apply their artistic skills using industry-standard software. Prerequisite: AR102, AR103 and AR104 or consent of the instructor.

## **AR 303 LIFE DRAWING**

FALL ONLY/ALL YEARS

3 credit hours

This course is a development of the creative potential of the figure in art through the various drawing media. Prerequisite: AR103 and AR203 or consent of instructor.

## **AR 305 INTERMEDIATE WATERCOLOR PAINTING**

FALL ONLY/ALL YEARS

3 credit hours

This course provides a continuation of the study of techniques of AR205. Prerequisite: AR205.

## **AR 306 INTERMEDIATE PAINTING**

SPRING ONLY/ALL YEARS

3 credit hours

This course provides a continuation of the painting techniques introduced in Basic Painting with emphasis on the problems of visual organization. Prerequisite: AR206.

## **AR 308 INTERMEDIATE SCULPTURE**

FALL ONLY/ALL YEARS

3 credit hours

This course provides a continuation of the techniques introduced in Basic Sculpture with emphasis on developing the student's skills and creativity. Prerequisite: AR208.

## **AR 310 INTERMEDIATE PRINTMAKING**

SPRING ONLY/ALL YEARS

3 credit hours

This is a studio course in which printmaking techniques in intaglio printing and screen-printing are introduced. Prerequisite: AR103 or AR104 or consent of instructor.

## **AR 311 INTERMEDIATE PHOTOGRAPHY**

SPRING ONLY/ODD YEARS

3 credit hours

Various photographic techniques are analyzed to suit individual creative concerns. A wider range of photographic techniques is explored and the development of the student's personal photographic language is stressed.

## **AR 320 INTERMEDIATE CERAMICS**

SPRING ONLY/ALL YEARS

3 credit hours

This course covers a continuation of the processes introduced in Basic Ceramics including ceramic clays, techniques, and kiln construction. Emphasis is placed on creative utilization of materials and techniques and the development of a personal direction. Prerequisite: AR220.

## **AR 322 HISTORY OF TRADITIONAL JAPANESE ART**

FALL ONLY/ODD YEARS

3 credit hours

This course is a historical survey of traditional Japanese Art from Neolithic era to the Meiji period (1860's). Prerequisite: AR101 or consent of instructor.

## **AR 323 GALLERY MANAGEMENT & EXHIBITION DESIGN**

SPRING ONLY/ALL YEARS

3 credit hours

This is a course that explores the technical aspects of gallery management and exhibition design. Prerequisite: AR101 or consent of instructor.

## **AR 326 ANALYSIS OF SPECIMENS AND DOCUMENTATION**

FALL ONLY/ALL YEARS

3 credit hours

This is a course that allows the student access to the permanent collection of the Isla Center for the Arts that consists of over 500 objects. Regions represented in the permanent collection include Micronesia, Japan, Papua New Guinea, and Europe. Proper handling and documentation techniques are introduced to emphasize the historical, cultural, and technical/artistic aspects of the objects in the collection. Prerequisite: AR101 or consent of the instructor.

## **AR 331 HISTORY OF ART I**

SPRING ONLY/EVEN YEARS

3 credit hours

This course covers the history of art from the prehistoric through the Gothic periods. Prerequisite: AR101 or consent of the instructor.

## **AR 332 HISTORY OF ART II**

SPRING ONLY/ODD YEARS

3 credit hours

This course covers the history of art from the Renaissance through the twentieth century. Prerequisite: AR101 or consent of the instructor.

## **AR 340 DIGITAL IMAGING TECHNIQUES**

FALL/SPRING/ALL YEARS

3 credit hours

Students explore digital imaging using scanners, digital cameras, and industry-standard software to develop and further refine skills in working with images, words, and ideas as they create solutions to a series of design problems. Concept-driven assignments have strong drawing components. Basic knowledge of industry-standard software along with use of digital camera preferred but not required. Prerequisites: AR-103 Drawing I and AR-104 Basic Design or consent of instructor.

## **AR 384 ENVIRONMENTAL ART**

SPRING ONLY/ALL YEARS

3 credit hours

This course enables students to create art in response to the assignments and concepts within broad areas of contemporary environmental art research, and theories. These may include tangible or conceptual projects undertaken by either individuals or groups of students in the class. Emphasis of the course is determined by the expertise of the instructor: students are required to research given movements and theories within environmental art areas and are asked to respond creatively and produce artworks in response to the given concept. In this course, students generate ideas and create in variety of 2D and 3D art methods, including installations, land art, eco-art, art objects, art books, sculpture, painting, printmaking, drawing, and combinations of different methodologies.

## **AR 404 ADVANCED WATERCOLOR PAINTING I**

FALL ONLY/ALL YEARS

3 credit hours

The emphasis of this course is on the development of the student's ability to define and express original and personal artistic statements. Prerequisite: AR305.

## **AR 405 ADVANCED WATERCOLOR PAINTING II**

FALL ONLY/ALL YEARS

3 credit hours

This is a continuation of AR404 to further extend the student's awareness and experience. Prerequisite: AR404.

## **AR 406 ADVANCED PAINTING I**

SPRING ONLY/ALL YEARS

3 credit hours

Emphasis is placed upon the student's ability to define and express an original point of view. Prerequisite: AR306.

## **AR 407 ADVANCED PAINTING II**

SPRING ONLY/ALL YEARS

3 credit hours

This is a continuation of AR406 to further extend the student's awareness and experience. Prerequisite: AR406.

## **AR 408 ADVANCED SCULPTURE I**

SPRING ONLY/ALL YEARS

3 credit hours

This course continues AR308. An emphasis is placed on alerting the student to his own creative potential. Prerequisite: AR308 or consent of instructor.

## **AR 409 ADVANCED SCULPTURE II**

SPRING ONLY/ALL YEARS

3 credit hours

This is a continuation of AR408. This course involves individual projects and development of individual style. Prerequisite: AR408.

## **AR 410 ADVANCED PRINTMAKING I**

FALL ONLY/ALL YEARS

3 credit hours

This course offers the art student additional work in printmaking, with the option of focusing on only one, or several of the printmaking processes which include block printing (relief), silkscreen printing (serigraphy), intaglio printing (etching, engraving, dry point). Prerequisite: AR210, AR310.

## **AR 410A ADVANCED PRINTMAKING**

SPRING ONLY/SPRING ONLY

3 credit hours

This course offers the art student additional work in printmaking with the option of focusing on only one, or several of the printmaking processes which include block printing (relief), silkscreen printing (serigraphy), intaglio printing (etching, engraving, drypoint, aquatint and mezzotint) and lithography. AR210 Basic Printmaking or AR310 Intermediate Printmaking are required prerequisites.

## **AR 411 ADVANCED PRINTMAKING II**

SPRING ONLY/ALL YEARS

3 credit hours

This course is a continuation of AR410. It offers the art student additional work in printmaking, with the option of focusing on additional printmaking processes which include block printing, silkscreen printing, intaglio printing and lithography. Prerequisite: AR410.

## **AR 420 ADVANCED CERAMICS I**

SPRING ONLY/ALL YEARS

3 credit hours

This course is a continuation of AR320 and involves development of individual style and individual projects. Emphasis is placed on creative utilization of materials and techniques and the development of a personal direction. Prerequisite: AR320.

## **AR 421 ADVANCED CERAMICS II**

SPRING ONLY/ALL YEARS

3 credit hours

This course is a continuation of AR420 and involves continued refinement of individual style and individual projects. Emphasis is placed on creative utilization of materials and techniques and the development of personal direction. Prerequisite: AR420.

## **AMERICAN SIGN LANGUAGE (ASL)**

### **ASL 100 AMERICAN SIGN LANGUAGE**

FALL/SPRING/ALL YEARS

4 credit hours

Online/Hybrid

This course introduces students to basic skills in American Sign Language (ASL) and person-to-person communication in signs. Students learn about vocabulary, grammatical structures, appropriate facial, gestural expressions, and the use of signing space in a variety of interactions.

## **BUSINESS ADMINISTRATION (BA)**

### **BA 110 PRINCIPLES OF ECONOMICS**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course introduces the principles, terminology and fundamental concepts of microeconomics and macroeconomics. It is a foundation for understanding the scope and methods of the economic perspective applied to issues faced by modern capitalist societies. Topics include the role of economics in society, the structure of economic activity, the behavior of firms and households in a market economy, the role of government and institutions of public policy in the United States. Relevant examples from Guam, Micronesia and the Pacific Rim will be explored. Prerequisites: MA110.

### **BA 130 INTRODUCTION TO COMPUTERS AND APPLICATIONS**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course introduces students to basic computing concepts and the use of computers in management settings. Prerequisite: MA110 or MA115 with a C grade or better.

## **BA 131 INTRODUCTION TO INFORMATION MANAGEMENT**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course surveys the broad array of information management topics in business including information technology and computational tools, information sourcing, information management and data organization, information networks, ethics, legal and social implications of information systems, technical personnel and professional groups, and the changing impacts of information technology in a global environment. The course will also provide vigorous training on business productivity application software, with emphasis on applied skills on spreadsheet. Prerequisite: MA110 or MA115 or MA161 a/b with a C grade or better.

### **BA 180 BUSINESS ESSENTIALS**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course is designed to increase student awareness of business programs and the business professions. It is required for all entering students intending to pursue a BBAA or BBA degree. This course is designed to help students get the most out of their academic experience by offering ongoing orientation to business studies, business professionals, professional requirements and expectations, success skills, and career planning. This course will cover the practical applications of a business degree including how to prepare a portfolio, and a professional resume. Co-requisite: EN-110 and CO-210.

### **BA 200 PRINCIPLES OF FINANCIAL ACCOUNTING**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

The first semester covers basic accounting principles of financial accounting and techniques within a framework of sound modern theory. Prerequisite: BA130 or BA230 or BA131 and MA110 or MA115 or MA161a/b or MA165 with a C grade or better.

## **BA 201 PRINCIPLES OF MANAGERIAL ACCOUNTING**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course covers fundamental accounting principles for partnerships and corporations; introduction to management accounting and cost accounting practice work is included to meet current trends in technology. Prerequisite: BA200 with a C grade or better.

## **BA 203 PREPARATION FOR THE ACCOUNTING PROFESSION**

3 credit hours

Online/Hybrid

This course is an introduction of the theory and practice of accounting in financial and managerial accounting. Emphasis is on analyzing, summarizing, reporting, interpreting financial information, managerial accounting concepts for external and internal analysis, reporting and decision-making. Prerequisite: BA201 with a grade of "C" or better. Instructor consent.

## **BA 220 BASIC BUSINESS FINANCE**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course covers the finance function in business; procurement and utilization of funds; costs and problems associated with acquiring funds; forecasting profits gained through their use; and the organization necessary to carry out the finance function in business. Prerequisites: BA201 and BA210 or MA151 or PA205 with a C grade or better in both courses.

## **BA 230 DATA PROCESSING AND DATA ADMINISTRATION WITH MAC APPLICATION**

FALL ONLY/ODD YEARS

3 credit hours

Hybrid

This course develops skills in the areas of spreadsheets, database management and cloud computing. Prerequisites: MA110 or MA115 or MA161a/b or MA165 with a C grade or better.

## **BA 240 MANAGEMENT OF ORGANIZATIONS**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course is the study of the nature of business organizations and the functions of the manager within the organization. It also introduces theories and concepts underlying domestic and global management. Students are introduced to case analysis as a method for analyzing business and management issues. Prerequisite: BA180 for students following catalog years 2018-19 and thereafter.

## **BA 241 HUMAN RESOURCE MANAGEMENT**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers the principles and techniques employed in the management of international human resources. Key areas such as employee selection, training, development and performance appraisal are introduced. Approaches to gender, cultural, and ethnic diversity are stressed throughout the course. Students will develop a basic understanding of differences between HR functions in public and private sector systems. Prerequisite: Placement in EN111 and MA110 or higher.

## **BA 251 GUAM'S TOURISM PRODUCT**

AS REQUIRED

3 credit hours

This course is an inventory of the visitor industry on Guam that focuses on the island's attractions and its identity as a distinct tourist destination, as well as the public and private organizations that are associated with tourism and individual companies operating within the major tourism sectors. Guam's tourism policy, planning, and development are also examined from the perspective of its various stakeholders.



## **BA 252 INTERNATIONAL TOURISM**

FALL/SPRING/ALL YEARS

3 credit hours

This course examines the dynamics of international tourism from various management perspectives. Special emphasis is placed on the market characteristics and distribution channels of inbound-outbound tourism affecting the Pacific Rim. Prerequisite: BA240.

## **BA 260 FUNDAMENTALS OF MARKETING**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers the principles, practices, and concepts involved in the performance of business activities, which direct the transfer of goods and the acquisition of services from producer to consumer or user. Included are the study of marketing functions and institutions; activities having to do with effecting change in ownership and possession of goods and services; and the study of applied economics relating to the creation of time, place and possession utility.

## **BA 300 INTERMEDIATE ACCOUNTING I**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

Intermediate accounting provides technical knowledge in regard to the application of conceptual accounting knowledge to specific practice circumstances and the understanding of a wide scope and range of accounting topics. Prerequisite: BA201 with a C grade or better, Instructor's consent, and pass the Accounting Major Competency Exam.

## **BA 301 INTERMEDIATE ACCOUNTING II**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

Provides technical knowledge in regard to the application of conceptual accounting knowledge to specific practice circumstances and the understanding of a wide scope and range of accounting topics. Prerequisite: BA300 with a C grade or better.

## **BA 303 GOVERNMENTAL ACCOUNTING FOR NON-ACCOUNTING MAJORS**

FALL ONLY/ALL YEARS

3 credit hours

Online/Hybrid

This course is an introduction to the theory and procedure of general accounting practices of the non-profit segment of the economy. The semester covers the application of accounting information in planning and control for non-profit organizations.

## **BA 304 INCOME TAXATION**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course covers federal income taxation that pertains to individuals, corporations, partnerships, and estates and trusts. Particular emphasis is given to areas of gross income, deductions and credits. Prerequisites: BA300 with a C grade or better.

## **BA 305 COST AND MANAGERIAL ACCOUNTING**

FALL/SPRING/ALL YEARS

3 credit hours

This is a study of the fundamental managerial and cost accounting concepts and their application to the planning and control of the firm. Topics include cost accounting, budgeting, cost allocation, capital budgeting, and introduction to modern concepts like ABC, JIT and cost of quality. Prerequisite: BA300 with a C grade or better.

## **BA 306 ADVANCED COST AND MANAGERIAL ACCOUNTING**

AS REQUIRED

3 credit hours

This is a study of advanced topics in managerial and cost accounting. The course includes research on the application of managerial and cost accounting in the modern manufacturing environment. Prerequisite: BA305 with a C grade or better.

## **BA 307 INTERNATIONAL ACCOUNTING**

FALL/SPRING/ALL YEARS

3 credit hours

This course is designed to provide an understanding of international accounting issues to students who will be involved in international business as business and capital markets become more global. Prerequisite: BA301 with a C grade or better.

## **BA 310 APPLIED STATISTICS FOR BUSINESS DECISION**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course provides advanced concepts in the modern theory and methodology of statistics as applied to business and economics. It builds upon fundamental statistics and the use of spreadsheet software, emphasizing their application to business decisions-making and problem solving. The course is the second in a series of two required BBA Foundation courses, the first being one of the following PA205 Basic Statistics for Business and Economics, MA151 Introductory Statistics, or PA205 Data and Basic Statistics for Government Business. Prerequisites: BA240 and PA205 or MA151 with a C grade or better in both courses.

## **BA 311 INTERMEDIATE MACRO-ECONOMIC THEORY**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This course offers an in-depth discussion of Keynesian-NeoKeynesian-Neoclassical models of aggregate economic activity and the use of these models to shed light on such public policy questions as unemployment, inflation, taxation, poverty, trade, growth, money and interest rates. Prerequisite: PA205 or MA151 with a C grade or better.

## **BA 312 INTERMEDIATE MICRO-ECONOMIC THEORY**

SPRING ONLY/ALL YEARS

3 credit hours

This course offers an in-depth discussion of models relating to consumer behavior, market demand and price theory, the theory of the firm, and the impact of different market structures for outputs and inputs. Time permitting, the subjects of choice under uncertainty, welfare economics and general equilibrium theory are covered. Prerequisite: PA205 or MA151 with a C grade or better.

## **BA 321 MONEY AND BANKING**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This is the study of money, credit, and money markets; the structure and origins of the commercial banking and Federal Reserve Systems; and the application of monetary and fiscal policy within the American economy. Prerequisite: BA110 with a C grade or better.

## **BA 322 PERSONAL FINANCIAL PLANNING**

FALL/SPRING/ALL YEARS

3 credit hours

This course is a software and web-based program that offers students the opportunity to develop a financial career plan for their personal and professional use. Elements of financial planning are presented and include: career aspects of financial planning; financial goals and objectives; personal financial statements and budget; cash and credit management; personal tax planning; housing, insurance and investment decisions; and retirement.

## **BA 323 CORPORATE FINANCE**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This is an advanced course in the study of the elements of financial management in a business organization. Topics include financial forecasting, break-even analysis, capital budgeting, investment banking, capital financing and international finance. Prerequisite: BA220 with a C grade or better.

## **BA 330 INFORMATION TECHNOLOGY AND NETWORKS FOR BUSINESS**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course provides foundation concepts of information technology and data networks as a basic business infrastructure. It addresses the emerging roles of technology and communication networks in business operations. The course surveys popular and anticipated technology adopted by businesses, examines strengths and weaknesses of these technologies, and evaluates the cost and productivity implications of the deployment of technology. The course also addresses managerial and organizational issues surrounding the selection and implementation of technology, including the broad spectrum of telecommunication services.

## **BA 333 MANAGEMENT INFORMATION SYSTEMS**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This is a survey of information system topics from the managerial viewpoint. Major topics are an overview of MIS, systems analysis and design, database management, data communication, decision support systems and expert systems. Prerequisites: BA-131, BA-240 and BA-335 with a C grade or better in all courses.

## **BA 334 BUSINESS ANALYTICS**

SPRING ONLY/EVEN YEARS

3 credit hours

Online

This course covers the fundamental concepts and tools needed to understand the emerging role of business analytics in organizations. It discusses the application of basic business analytics tools in a spreadsheet environment, and how to effectively use and interpret analytic models and results for making better business decisions. Prerequisites: BA-131 or BA-230, and any one of the following: PA-205 BA-210 or MA-151. For BBA Major, prerequisites: BA-131 and any one of the following PA-205, BA-210 or MA-151.

## **BA 335 CYBERSECURITY AND CLOUD SERVICE**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course surveys the importance of cybersecurity and cloud service in the business world. The first part of the course covers the introductory concepts of cybersecurity. It helps learners to gain the understanding of the principles that frame and define cybersecurity, and how to implement cybersecurity practices in the corporate environment. The second part of the course surveys the current trend of the cloud service. A student may receive credit for either BA330 or BA335, but not a combination of the two. Prerequisite: BA130 or BA131 or BA230.

## **BA 341 INTERNATIONAL BUSINESS ENVIRONMENT**

SPRING ONLY/ALL YEARS

3 credit hours

This course consists of readings and analysis of social, economic, political, legal, and technological forces with which business organizations must contend. The course focuses on East Asia.

## **BA 342A ENTREPRENEURSHIP AND INNOVATION Concepts**

FALL/SPRING/ALL YEARS

3 credit hours

Provides an overview of the principles, theories, and practice of entrepreneurship and innovation and how to take ideas and turn them into a viable business enterprise. Emphases will be placed on the student understanding of how past entrepreneurs have used innovation methods to launch entrepreneurial ventures; and the foundations and terminology of entrepreneurship. Prerequisite: BA110, and BA180, BA240 or concurrent OR Peregrine Exam Subtopics of Basic Business Management and Business Communication, or with Instructor's consent.

## **BA 342B ENTREPRENEURSHIP: ISSUES AND SOLUTIONS IN BUSINESS START-UPS**

FALL ONLY/ALL YEARS

3 credit hours

Provides an overview of why small businesses fail and how to reduce this risk. Major functional areas of business will be covered through the use of case studies including the areas of: finance, human resources, operations management, distribution channels, marketing, IT, and laws and government regulations. Prerequisite: BA240 and BA342A with a C grade or better in both courses.

## **BA 345 MANAGING THE EMPLOYEE & WORK ENVIRONMENT**

FALL/SPRING/ALL YEARS

3 credit hours

This business and public administration management course examines employee management issues, practices and environmental forces that all managers, especially human resource (HR) managers, need in the workplace when managing diverse workforces. Focus will be on work environment practices, issues and applications including required record keeping and compliance activities. This course will help prepare students for eventual professional human resource management certification in these areas. Prerequisite: BA241 with a C grade or better or Instructor's consent.

## **BA 347 LEADERSHIP AND COLLABORATION IN ORGANIZATIONS AND SOCIETY**

FALL/SPRING/ALL YEARS

3 credit hours

Online

The course integrates personal leadership with collaboration and networking for organizational performance and societal gain. The course strengthens practical leadership and collaborative skills. Prerequisite: BA240 for BBA majors or PA210 for PA majors.

## **BA 350 HOTEL MANAGEMENT**

SPRING ONLY/ALL YEARS

3 credit hours

This course examines the organization and characteristics of hotels and how they are effectively managed by applying the four management functions of planning, organizing, directing, and controlling. Case studies of successful general managers are examined from the perspective of their duties, responsibilities, challenges, rewards, and lifestyles. Prerequisite: BA240 with a C grade or better.

## **BA 351 TOURISM AND INNOVATION**

SPRING ONLY/ALL YEARS

3 credit hours

This course examines innovation processes and structures in the development of a business plan that integrates the knowledge of managerial functions in the context of the tourism business environment. Prerequisites: BA-240 BA-252.

## **BA 352 FOOD AND BEVERAGE MANAGEMENT**

SPRING ONLY/ODD YEARS

3 credit hours

This course examines the principles of food and beverage management as a profit center in hotels. Components include the management of food production, restaurants and bars, banquets and catering, and room service. Prerequisite: BA240.

### **BA 353 HOSPITALITY SERVICES MANAGEMENT**

3 credit hours

This course provides a well-rounded approach to management issues facing various hospitality service operations, including service and support businesses that cater to tourists in the tourism industry. This course prepares students in the region seeking entry into the industry either as employees or entrepreneurs in the small and medium-sized enterprises that make up the majority of the travel and tourism sector. Prerequisites: BA-240 BA-252.

### **BA 361 CONSUMER BEHAVIOR**

FALL ONLY/ODD YEARS

3 credit hours

This is an interdisciplinary approach to the study of consumers and decision-making units for the purpose of systematically defining and selecting the organization's target market(s). The emphasis is on understanding behavioral science concepts, theories, and research findings with managerial applications. Prerequisite: BA260 with a C grade or better.

### **BA 363 ADVERTISING AND SALES PROMOTION**

SPRING ONLY/ALL YEARS

3 credit hours

This course covers basic concepts and functions of advertising and sales promotion; personal selling; point-of-sale promotion; consumer motivation; problems in utilizing and measuring effectiveness of advertising and sales promotion techniques. Prerequisite: BA260 with a C grade or better.

### **BA 380 E-BUSINESS**

SPRING ONLY/ALL YEARS

3 credit hours

This course examines the use of the internet and electronic technology in business operations. The focus is on the emerging paradigm shift in business that has been affected by e-business models and their implications for conducting business, including the marketing of products and services via the Internet. Prerequisites: BA260.

### **BA 386 LOGISTICS AND SUPPLY CHAIN MANAGEMENT**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course examines the flow of products and information through a business with the objective of achieving sustainable competitive advantage and optimizing firm value. Students learn how to control, manage and improve the systems, processes and flow of materials and information from suppliers to customers. Prerequisite: BA240 and BA260.

### **BA 390 SPCL PROJ: RESRCH SEMINR IN INTNL ECON**

3 credit hours

SPECIAL PROJECT: RESEARCH SEMINAR IN INTERNATIONAL ECONOMICS: THEORIES, POLICIES, AND APPLICATIONS This course is designed to be a two-part, 3-credit course on international economics to be conducted as a research seminar. Part 1 includes several class meetings to discuss topics in international economics and write your research paper on a pre-approved topic. Part 2 requires active participation in a two-day international academic conference on the theme of "Doing Business in the Global Economy: Economic, Political, Social, Cultural and Technological Environments Affecting Business Decisions." Students are encouraged to read conference papers ahead of time, ask questions and interact actively during the conference, write a paper and present at the conference and submit the paper for peer-review for possible in an academic journal.

### **BA 400 ADVANCED ACCOUNTING**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers accounting principles and procedures peculiar to specialized areas such as partnerships, combinations, consolidations, foreign transactions and operations, and securities exchange commission reporting. Prerequisites: BA301 with a C grade or better.

## **BA 401 GOVERNMENT ACCOUNTING**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course covers state and local accounting, non-profit accounting, accounting for grant monies, and federal accounting. Government accounting is different from commercial accounting, as this course will provide the student with a working knowledge of all echelons of governmental accounting within the United States. Prerequisite: BA301 with a C grade or better.

## **BA 402 ACCOUNTING SYSTEMS**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course offers an analysis of theoretical models illustrating structure design and installation of specific accounting systems with emphasis on computer applications. Prerequisites: BA301, BA305 and BA330 or BA334 with a C grade or better in all 3 courses.

## **BA 403 AUDITING I**

FALL/SPRING/ALL YEARS

3 credit hours

This is an introduction to auditing theory and the techniques used in examination and verification of financial statements. Prerequisite: BA402 with a C grade or better.

## **BA 404 ADVANCED INCOME TAXATION**

AS REQUIRED

3 credit hours

This course covers advance Federal Income Taxation with emphasis on research in the application of tax rules and regulations that pertain individuals, corporations, partnership, and estate and trusts. Prerequisites: BA304 with a C grade or better.

## **BA 405 ACCOUNTING INTERNSHIP**

FALL/SPRING/ALL YEARS

3 credit hours

The course prepares students for entering the accounting profession by providing them with practical experience with an accounting firm, industry firm, government, or not-for-profit organizations. The course is designed for graduating seniors who have demonstrated proficiency in the foundation and major coursework required of the accounting program. Prerequisite: Instructor's consent and graduating senior.

## **BA 406 ETHICS FOR THE ACCOUNTANT**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course is designed to provide accounting professionals and intensive treatment of post-Sarbanes-Oxley ethics (also post Enron-WorldCom era). Prerequisite: Graduating Senior and Instructors consent.

## **BA 408 AUDITING II**

AS REQUIRED

3 credit hours

This course is designed to provide accounting majors a hands-on experience in the use of techniques for the planning and conduct of audits of financial statements. Prerequisite: BA403 with a C grade or better and Instructor's consent.

## **BA 409 SPECIAL STUDIES IN ACCOUNTING**

FALL/SPRING/ALL YEARS

3 credit hours

The integration of concept and skills related to financial and managerial accounting and analysis, and the ability to make sound professional judgements. Prerequisites: BA-305, BA-400, and BA-402 with a grade "C" grade or better.

## **BA 410 MANAGERIAL ECONOMICS**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers phases of business economics most useful to managers of organizations: defining goals, measuring and forecasting demand, costs, and competition. Prerequisite: BA310 with a C grade or better.

## **BA 420 INTERNATIONAL CORPORATE FINANCE**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This course examines the problems, techniques, and policies of financial decision-making in an enterprise operating in the international business environment. Class discussion includes the nature and purpose of international business, balance of payments, foreign exchange risk, currency markets, and managing three types of international monetary risk, direct investment decisions and the international debt crisis. Prerequisite: BA220 with a C grade or better.

## **BA 421 INVESTMENTS AND REAL ESTATE**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This is an introductory course in the techniques of investing in the capital markets. A variety of investment vehicles are introduced, including: stocks, bonds, convertibles, warrants, stock options, mutual funds, precious metals, and real estate. Prerequisite: BA220 with a C grade or better.

## **BA 431 TOPICS IN THE MANAGEMENT OF TECHNOLOGY AND INNOVATION**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This course provides concepts, tools and processes for enabling managers and firms to use technology and innovation for strategic competitive advantage. Students learn about current topics in technology and innovation. The course is only available to seniors in the BBA Business Professional and Business Honors pathways. Prerequisite: BA131, BA335, BA386, and BA333 or BA334 or BA380; Senior standing and Instructor's consent.

## **BA 440 ORGANIZATIONAL BEHAVIOR**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course examines psychological aspects of management; analysis of behavior patterns in organizational relationships; integration of individuals and groups into effective, efficient- organizational structures. Prerequisites: BA240 and SO101 or PY101.

## **BA 441 OPERATIONS AND PROJECT MANAGEMENT**

SPRING ONLY/ALL YEARS

3 credit hours

This is a survey course. The objective of the course is to provide the student with an understanding of those managerial concepts and quantitative tools required in the design, operations, and control of an operation system in any type of an organization. Special emphasis is placed on process management and continuous improvement. Prerequisite: PA205 or MA151 or with a C grade or better.

### **BA 443 COMPENSATION, BENEFITS AND PERFORMANCE EVALUATION**

FALL/SPRING/ALL YEARS

3 credit hours

This business and public administration management course provides students with theoretical and practical knowledge of the design and implementation of effective compensation, benefits and performance evaluation programs. This course will help prepare students for eventual professional human resource management certification in these areas. Prerequisite: BA241 with a C grade or better or consent of instructor.

### **BA 444 STAFFING AND EMPLOYEE DEVELOPMENT**

FALL/SPRING/ALL YEARS

3 credit hours

This business and public administration management course provides students with theoretical and practical knowledge about recruitment, selections, staffing and employee development. This course will help prepare students for eventual professional human resource management certification in these areas. Prerequisite: BA241 with a C grade or better or Instructor's consent.

### **BA 446 ENTREPRENEURSHIP: NEW VENTURE CREATION**

SPRING ONLY/ALL YEARS

3 credit hours

This course provides an opportunity to develop a business plan through the application of the principles, theories and practices learned in the previous entrepreneurship courses. Emphasis will be placed on the practicability of the plan and the ability to present the concept as a viable and profitable business venture. Prerequisites: BA242 and BA342 with a C grade or better. Note: This course is cross listed with PE446.

### **BA 450 TOURISM RESEARCH AND MARKET DEVELOPMENT**

SPRING ONLY/ODD YEARS

3 credit hours

This course examines the innovative and dynamic environment of international tourism marketing. It discusses the nuances of tourism products and services that require the development of distinctive marketing approaches and strategies. It reviews the various techniques utilized to conduct tourism research and the analysis and application of their findings in order to formulate effective marketing plans and remain competitive in the international market place. The Internet will be utilized as a database for market research and as tool for market penetration. Prerequisites: BA260 with a C grade or better.

### **BA 451 TOURISM/HOTEL INTERNSHIP**

FALL/SPRING/ALL YEARS

3 credit hours

This is a trainee, residency, or intern program in which the student works in a technical or professional area under the supervision of an expert in the field. Prerequisite: Instructor's consent.

### **BA 453 TOURISM POLICY, PLANNING AND DEVELOPMENT**

FALL ONLY/ALL YEARS

3 credit hours

This course examines the numerous issues that a community must consider in establishing and guiding a successful tourism industry. Among the topics are selecting the type of tourism that is most appropriate for a community, the identification and utilization of necessary resources, and the regulation of tourism. Prerequisite: BA240 with a C grade or better.



## **BA 460 INTERNATIONAL MARKETING**

FALL ONLY/ALL YEARS

3 credit hours

The course covers the principles, practices, and concepts of marketing involved in exporting and importing. Included are studies of tariffs, embargoes, cartels, exchange rates, foreign markets, foreign investments, the role of foreign aid, and related legislation. Prerequisite: BA260 with a C grade or better.

## **BA 461 MARKETING CHANNEL MANAGEMENT**

FALL ONLY/EVEN YEARS

3 credit hours

This course addresses the principles, functions and analysis of problems in retailing; location and layout; and merchandise planning, buying and selling, organization, expense analysis and control. Prerequisite: BA260 with a C grade or better.

## **BA 462 MARKETING RESEARCH**

FALL ONLY/ALL YEARS

3 credit hours

This course covers the principles, procedures, and concepts involved in gathering, recording, and analyzing facts about problems relating to the sale and transfer of goods and services from producer to consumer. Included are studies of relation- preparation of commodities for sale, physical distribution, wholesale and retail merchandising, and financial problems. Prerequisites: BA260 and BA310.

## **BA 463 MARKETING MANAGEMENT**

SPRING ONLY/ALL YEARS

3 credit hours

This course builds on the concepts and theories covered in the introductory, Marketing subjects, as well as those learned in subsequent Marketing course work. As a capstone marketing major course, this course focuses on strategic marketing analysis and planning at both the corporate and SBU levels. Prerequisites: BA260 and BA462 with a C grade or better - Graduating Senior.

## **BA 480 BUSINESS STRATEGY AND POLICY**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course is the capstone of the Bachelor of Business Administration (BBA) degree program, integration concepts and skills learned in the BBA Foundation and BBA pathways. Strategic business problems are examined from executive management and firm perspectives. Prerequisite: BA483, Graduating Senior and Instructor's consent.

## **BA 481 PRACTICAL APPLICATION IN SMALL BUSINESS MANAGEMENT**

FALL/SPRING/ALL YEARS

3 credit hours

This course provides instruction and experience in small business. It addresses both Entrepreneurship and the management of small business operations. The course also has a practical orientation. Students intern for 80 hours with the Guam Small Business Development Center (SBDC), assisting small businesses as defined by the U.S. Small Business Administration. Prerequisites: BA260 and Senior standing.

## **BA 482A BUSINESS SERVICE LEARNING: SENIOR TEAM FIELD PROJECT**

FALL/SPRING/ALL YEARS

3 credit hours

This is an experiential learning course in which the student works individually or as part of a team in a technical or professional area under the direct supervision of an individual with experience in a major area of business. Depending on their BBA pathway, students select one of the following: (i) BA482a Business Service Learning: Senior Team Field Project, which is available to students in the General Business pathway; (ii) BA482b Business Service Learning: Business/ Research Internship, which is available to students in the Business Professional pathway and the Business Honors pathway; and (iii) BA482c Business Service Learning: Business Formation/ Innovation/ Transformation, which is available to students in the Business Honors pathway. Prerequisites: To register and participate, students must have completed all BBA Foundation requirements. Students are expected to have completed the preponderance of their business coursework with the exception of BA480 Business Policy and Strategy. Prerequisites: Senior Standing and Instructor's consent are required.

## **BA 482B BUSINESS SERVICE LEARNING: BUSINESS/ RESEARCH INTERNSHIP**

FALL/SPRING/ALL YEARS

3 credit hours

This is an experiential learning course in which the student works individually or as part of a team in a technical or professional area under the direct supervision of an individual with experience in a major area of business. Depending on their BBA pathway, students select one of the following: (i) BA482a Business Service Learning: Senior Team Field Project, which is available to students in the General Business pathway; (ii) BA482b Business Service Learning: Business/ Research Internship, which is available to students in the Business Professional pathway and the Business Honors pathway; and (iii) BA482c Business Service Learning: Business Formation/ Innovation/ Transformation, which is available to students in the Business Honors pathway. Prerequisites: To register and participate, students must have completed all BBA Foundation requirements. Students are expected to have completed the preponderance of their business coursework with the exception of BA480 Business Policy and Strategy. Prerequisites: Senior Standing and Instructor's consent are required.

### **BA 482C BUSINESS SERVICE LEARNING: BUSINESS FORMATION/ INNOVATION/ TRANSFORMATION**

FALL/SPRING/ALL YEARS

3 credit hours

This is an experiential learning course in which the student works individually or as part of a team in a technical or professional area under the direct supervision of an individual with experience in a major area of business. Depending on their BBA pathway, students select one of the following: (i) BA482a Business Service Learning: Senior Team Field Project, which is available to students in the General Business pathway; (ii) BA482b Business Service Learning: Business/ Research Internship, which is available to students in the Business Professional pathway and the Business Honors pathway; and (iii) BA482c Business Service Learning: Business Formation/ Innovation/ Transformation, which is available to students in the Business Honors pathway. Prerequisites: To register and participate, students must have completed all BBA Foundation requirements. Students are expected to have completed the preponderance of their business coursework with the exception of BA480 Business Policy and Strategy. Prerequisites: Senior Standing and Instructor's consent are required.

### **BA 483 BUSINESS PROFESSIONAL AND CAREER DEVELOPMENT**

FALL/SPRING/ALL YEARS

2 credit hours

This hybrid, two-credit course provides additional professional development in business fundamentals as well as tools for career development. The course offers online course evaluation and academic leveling modules that refresh, bolster and evaluate student learning in the fundamental business skills of accounting, business statistics, finance, human resources, marketing and operations management. The course provides a variety of practical and challenging career exercises that explore career choice and prepare students for managing their careers. Prerequisites: BA220, BA260, BA-310 and BA241 or BA440; Senior

### **BA 491 SEMINAR IN MARKETING**

FALL/SPRING/AS REQUIRED

3 credit hours

The Seminar provides the opportunity for study and discussion of significant topics and problems in the field of marketing. Prerequisites: BA260 and PA205 or MA151 or BA210.

### **BA 494 SS: DATA ANALYTICS FOR ACCOUNTING**

SUMMER

3 credit hours

This course will discuss specialized areas of data analytics in business, financial reporting, and auditing. Participants will examine a variety of analytic tools and software being used today; and research the latest issues affecting the profession and industry such as Artificial and Business Intelligence, Cyber Security, Bitcoin, Block Chain, Data Breaches, and Business Disruption. Prerequisites: BA-230 and BA-300.

### **BA 494G SS: DATA ANALYTICS FOR ACCOUNTING**

SUMMER

3 credit hours

This course will discuss specialized areas of data analytics in business, financial reporting, and auditing. Participants will examine a variety of analytic tools and software being used today; and research the latest issues affecting the profession and industry such as Artificial and Business Intelligence, Cyber Security, Bitcoin, Block Chain, Data Breaches, and Business Disruption. Prerequisites: BA-230 and BA-300.

## **BA 500 PROFESSIONAL ACCOUNTING RESEARCH & COMM**

FALL/SPRING/ALL YEARS

3 credit hours

Online

Overview of methods for professional researching, organizing, analyzing, and presenting information in financial accounting, auditing, and taxation. Presentation of concepts and techniques for developing a business style of writing and creating documents such as memorandums, letters, and reports. Emphasis on written and oral assignments that develop communication skills for the accounting profession. Introduction to academic research and analysis of literature. Prerequisite: Acceptance into the Master of Accountancy program. Students require computer skills, proficiency with Microsoft Office (PowerPoint, Word, etc.), and a reliable browser.

## **BA 502 INFO SYSTEMS & DATA ANALYTICS FOR ACCTNT**

SUMMER/ALL YEARS

3 credit hours

Online

In this course, students will learn data analytics models and methods involving accounting information, theory and practice of information systems, and computer based systems controls for management and decision-making of engagements in audit and taxation. Students will also learn how to use and manage various analytical tools to achieve these objectives. Prerequisite: Complete Term 3 of cohort-based Master of Accountancy program. Students require computer skills, proficiency with Microsoft Office (PowerPoint, Word, etc.), and a reliable browser.

## **BA 503 ADVANCED AUDITING & FRAUD EXAMINATION**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This course builds on undergraduate auditing concepts and understanding to enhance comprehension of the audit process and advanced auditing techniques, and to apply this knowledge to fraud examination and forensic accounting. Students will be introduced to fraud detection and fraud investigation techniques, valuation of closely held businesses, lost profits analyses, and various types of litigation support services. Prerequisite: Complete Term 1 of cohort-based Master of Accountancy program. Students require computer skills, proficiency with Microsoft Office (PowerPoint, Word, etc.), and a reliable browser.

## **BA 504 FINANCIAL STATEMENT ANALYSIS & VALUATION**

FALL ONLY/ALL YEARS

3 credit hours

Online

This course provides students with frameworks for financial statement analysis and valuation of financial and non-financial data. Students will learn how to integrate concepts from accounting and other disciplines such as economics, finance, and business strategy to determine the impact of managerial decisions. Prerequisite: Complete Term 3. Students require computer skills, proficiency with Microsoft Office (PowerPoint, Word, etc.), and a reliable browser.

## **BA 507 CORPORATE GOVERNANCE & ETHICS**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This course introduces students to professional ethics guidance and standards of conduct for tax and audit, and enterprise risk management frameworks. Students will also develop an understanding of corporate governance issues and decision-making. Case studies will be used to highlight and exercise the key concepts and frameworks in the course. Prerequisite: Acceptance into the Master of Accountancy program. Students require computer skills, proficiency with Microsoft Office (PowerPoint, Word, etc.), and a reliable browser.

## **BA 594 SPECIAL TOPICS: APPLIED MANAGERIAL ECONOMICS**

3 credit hours

## **BA 600 FINANCIAL ACCOUNTING & REPORTING**

FALL ONLY/ALL YEARS

3 credit hours

Online

This course prepares students for the Financial Accounting and Reporting part of the CAP examination. Students will demonstrate knowledge and proficiency in financial accounting and reporting frameworks used by business entities (public and nonpublic), not-for-profit entities and state and local government entities. Prerequisite: Complete Term 3. Students require computer skills, proficiency with Microsoft Office (PowerPoint, Word, etc.), and a reliable browser.

## **BA 601 CASE STUDIES IN MANAGEMENT**

FALL ONLY/ALL YEARS

3 credit hours

Online

The course is broken up into four sections, accommodating brief intervals between inter-term periods that define the one-year master's program. The intent of this course is to introduce the student to case study methods as a means of establishing schema for moving the decision-making process from problem definition to quality control measures via strategic design.

## **BA 604 REGULTN (CPA EXM:REG) & TAX PLANNG**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This course prepares students for the Regulation part of the CPA examination. Students will demonstrate knowledge and proficiency in four broad areas: ethics and professional responsibilities in tax practice, licensing and disciplinary systems, federal tax procedures, and legal duties and responsibilities. Prerequisite: Students require computer skills, proficiency with Microsoft Office (PowerPoint, Word, etc.), and a reliable browser.

## **BA 605 BUS ANALYSIS & REPORTNG (CPA EXM:BAR)**

SUMMER/ALL YEARS

3 credit hours

Online

This course prepares students for the Business Analysis & Reporting (BAR) part of the CPA examination. Students will demonstrate knowledge and proficiency in these broad areas: corporate, governance, economic concepts and analysis, financial management, operations management, and government accounting. Prerequisite: None

## **BA 606 AUDITING & ATTESTATION (CPA EXAM:AUD)**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This course prepares students for the auditing and attestation part of the U.S. CPA examination. This course focuses on understanding, applying and evaluating auditing standards and procedures for attest and non-attest engagements including assessing risk and developing a planned response, performing procedures and obtaining evidence and forming conclusions and reporting. Professional responsibilities and frameworks will be reviewed and observed within this context.

Prerequisite: Complete Term 1. Students require computer skills, proficiency with Microsoft Office (PowerPoint, Word, etc.), and a reliable browser.

## **BA 610 MANAGERIAL ECONOMICS**

SPRING ONLY/ALL YEARS

3 credit hours

Online

The course begins with an overview of macroeconomic issues. Indicators of macroeconomic performance are identified and managers are given a preview of the tools and resources used to evaluate and forecast economic conditions. Applications of microeconomic theory to strategic management in these market conditions are presented. Basic concepts of supply, demand, market price, output, production, and resource allocation provide a framework for strategic analysis in emerging markets where firms have market/monopoly power. Other topics address sophisticated pricing policies, transfer pricing, models of competition and cooperation, managing under uncertainty, asymmetric information and externalities. The course provides a framework and analytical tools to enhance decision-making within the manager's organization.

## **BA 611 STRATEGIC MARKETING MANAGEMENT**

SUMMER/ALL YEARS

3 credit hours

Online

This advanced marketing management course focuses on strategic marketing analysis and planning at both the corporate and SBU levels. It will use the concepts and theories underlying marketing decision-making and the tools needed to analyze and understand complex marketing situations found in today's ever-changing marketplace. The course is designed to help managers develop and execute appropriate managerial strategies. An emphasis of this course will be on developing executive-level decision-making skills, which students are most likely to encounter during their current and future careers. Students will learn to apply analytical marketing perspectives, decision tools, and concepts to strategic management decisions to achieve organizational goals and objectives. The subject has been organized around the marketing planning process, strategic decision-making, market analysis, competitive analysis, and financial analysis, and the application of these to "real world" situations.

## **BA 613 STRATEGIC LEADERSHIP AND ETHICS**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This seminar provides managers with the tools to explore and evaluate leadership theories and their application from a strategic perspective, taking into consideration their limitations and delimitations as they are applied in real work settings. Emphasis will be placed on professional work experience.

## **BA 620 FINANCIAL MANAGEMENT**

SUMMER/ALL YEARS

3 credit hours

Online/Hybrid

This course introduces financial management principles and investment decisions from a strategic, pragmatic perspective. Although theory is broached, emphasis is placed on practical application. Topical areas include financial statement analysis, working capital management, capital structure optimization, investment selection, and sources of funding.

## **BA 621 MANAGERIAL ACCOUNTING**

SPRING ONLY/ALL YEARS

3 credit hours

Online

The course begins with a review of accounting concepts, standards and practices of financial reporting that serve the needs of decision makers including preparation and analysis of financial statements. The course then extends these concepts to business managers' decision making and evaluation of performance including the use of accounting information for planning and control. The application of accounting to decision models used by today's rapidly changing organizations are addressed along with mechanics of cost accounting and management accounting in resource allocation as in capital budgeting, and performance evaluation. Throughout the course, statistical approaches are applied to the analysis of information.

## **BA 622 STATISTICAL ANALYSIS AND ECONOMETRIC TECHNIQUES**

SUMMER/ALL YEARS

3 credit hours

Online

The course begins with the basic concepts and methods of management science that relies on statistical analysis techniques as well as the art of decision-making under circumstances of constrained optimization. It introduces statistical ideas as they apply to managers. Two ideas dominate: describing data and modeling variability and randomness using probability models. The course provides tools and data analysis models for decision making that use hypothesis testing, linear programming and simulation. It also provides an understanding of the definitions and limitations of a variety of standard econometric measures.

## **BA 630 GLOBAL HUMAN RESOURCE MANAGEMENT**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This graduate Human Resource Management (HRM) course explores regional and international HR principles, strategies, and practices. Key areas such as U.S. and country-specific compensation and benefits, staffing, employee development, and performance appraisal are covered. Students will develop an in-depth understanding of HRM functions in regional and international arenas.

## **BA 632 OPERATIONS AND PROJECT MANAGEMENT**

FALL ONLY/ALL YEARS

3 credit hours

Online

This graduate Operations Management course explores modern theory and practice for planning and controlling the operations function, both in manufacturing and service organizations. Quantitative tools of analysis used to support decision-making in the various activities of operations management are reviewed. Regional and international applications and issues will be included.

## **BA 701 ACCOUNTING CAPSTONE EXPERIENCE**

FALL ONLY/ALL YEARS

3 credit hours

Online

This capstone course builds on the concepts of all courses taken within the Master of Accounting and provides students with an opportunity to integrate and apply their knowledge using evidence-based learning. Assignments also include an academic research paper using action research methodology that comprehensively assesses an important current issue or emerging trend in the field of accounting. Prerequisite: Complete Term 4. Students require computer skills, proficiency with Microsoft Office (PowerPoint, Word, etc.), and a reliable browser.

## **BA 710 ADVANCE TOPICS IN INTERNATIONAL BUSINESS**

SUMMER/ALL YEARS

3 credit hours

Online

This course offers students the opportunity to explore the workings of the international business arena and to demonstrate an understanding of global markets as it relates to their professional field through undertakings that encourage business system adaptation to new environments. It further promotes the importance of ethical and socially responsible decision making in different cultural settings.

## **BA 711 BUSINESS CAPSTONE EXPERIENCE**

FALL ONLY/ALL YEARS

3 credit hours

Online

The Business Capstone course is the culminating professional experience for the PMBA student. It extends over the final two terms of their program. Within teams of two or three, PMBA students will participate in the development of an applied research project that synthesizes the students' learning throughout their tenure in the PMBA program. The nature of the applied project can consist of a strategic management project, an entrepreneurial project, or a special study project.

## **BIOLOGY (BI)**

### **BI 100 ENVIRONMENTAL BIOLOGY**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This is a one-semester course in general principles of environmental biology, conservation of the environment, and human ecology. It does count as credit toward a major in biology and toward the general education requirements. The course consists of three hours of lecture weekly. The lab, BI100L, MUST be taken concurrently. Corequisite: BI100L.

### **BI 100L ENVIRONMENTAL BIOLOGY LABORATORY**

FALL/SPRING/ALL YEARS

1 credit hour

BI100L is the laboratory portion of BI100 and MUST be taken concurrently. The course consists of one three-hour laboratory per week. Corequisite: BI100.

### **BI 103 MARINE BIOLOGY**

SPRING ONLY/ALL YEARS

3 credit hours

This course is an introduction to the biology of the marine environment, with particular emphasis on marine environments of Micronesia and their importance to man. Laboratory exercises and field trips bring students into personal contact with local marine organisms and their habitats. It includes three hours of lecture weekly. The lab, BI103L, MUST be taken concurrently. Corequisite: BI103L.

### **BI 103L MARINE BIOLOGY LABORATORY**

SPRING ONLY/ALL YEARS

1 credit hour

BI103L is the laboratory portion of BI103 and MUST be taken concurrently. The course consists of one three-hour laboratory per week. Corequisite: BI103.

### **BI 110 HUMAN BIOLOGY**

AS REQUIRED

3 credit hours

Online

This is an introductory course designed for non-major undergraduate students as well as for students interested in choosing Biology as their major and who may have no background in Biology. This course emphasizes core biological concepts as it relates to human life ? how our bodies work, how our genes, environmental factors and disease causing organisms affect our health. This course is held online. The laboratory, BI110L must be taken concurrently and takes place face ?to-face. Prerequisites: MA085 a-b or MA089 or placement; EN110 Placement or above; Co requisite: BI110L.



## **BI 110L HUMAN BIOLOGY LABORATORY**

### **AS REQUIRED**

1 credit hour

This is an introductory biology laboratory course with a human focus that must be taken concurrently with the BI110 Human Biology Lecture course. Experiments involving a variety of biological systems are conducted in order to investigate fundamental biological concepts and to understand how our bodies function. Basic molecules and genes in order to improve food production, produce medically important products, and to treat disease in humans. This course includes three hours of laboratory work per week. Corequisite: BI110; Prerequisite: MA085 a-b or MA089 or Placement; Placement in EN110 or above.

## **BI 124 HUMAN ANATOMY AND PHYSIOLOGY I**

### **FALL ONLY/ALL YEARS**

3 credit hours

Online/Hybrid

This is the first part of a two-semester course in the study of the structure and function of the human body. This part will examine the integumentary, skeletal, muscular, and nervous systems from the level of cells, to tissues, to organs, to the whole organism. Homeostatic control mechanisms in the healthy human for these systems will be stressed. The course includes 3 hours of lecture each week. The lab, BI 124L should be taken concurrently. Prerequisite or concurrent enrollment in both EN110 and MA110 (or higher). Corequisite: BI124L.

## **BI 124L HUMAN ANATOMY & PHYSIOLOGY I LABORATORY**

### **FALL ONLY/ALL YEARS**

1 credit hour

BI124L is the laboratory portion of BI124 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisite or concurrent enrollment in both EN110 and MA110 (or higher). Corequisite: BI124.

## **BI 125 HUMAN ANATOMY & PHYSIOLOGY II**

### **SPRING ONLY/ALL YEARS**

3 credit hours

This is the second part of a two-semester course in the study of the structure and functions of the systems of the human body. In this part, aspects of the nervous, circulatory, immune, digestive, reproductive, and excretory systems are investigated. The course consists of three hours of lecture weekly. The lab, BI125L, MUST be taken concurrently. Prerequisite: BI124, BI124L and prerequisite or concurrent enrollment in both EN110 and MA110 (or higher). Corequisite: BI125L.

## **BI 125L HUMAN ANATOMY & PHYSIO II LABORATORY**

### **SPRING ONLY/ALL YEARS**

1 credit hour

BI125L is the laboratory portion of BI125 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisite: BI124, BI124L and Prerequisite or concurrent enrollment in both EN110 and MA110 (or higher). Corequisite: BI125.

## **BI 157 PRINCIPLES OF BIOLOGY I**

### **SPRING ONLY/ALL YEARS**

3 credit hours

The first semester of a two-semester course covers basics of evolutionary theory and Sub-cellular through cellular biology. It is required for all biology majors and may be used by others to satisfy the general education requirements. It includes three hours of lecture weekly. The lab, BI 157L, MUST be taken concurrently. Prerequisite: Grade C grade or better in both BI100 and BI100L or concurrent enrollment in both EN110 and MA110 (or higher). Students majoring in other programs or minoring in Biology may substitute another introductory science class for BI100 and BI100L or request a waiver of the prerequisite. Corequisite: BI157L.

## **BI 157L PRINCIPLES OF BIOLOGY I LABORATORY**

SPRING ONLY/ALL YEARS

1 credit hour

BI157L is the laboratory portion of BI157 and **MUST** be taken concurrently. A major portion of this course focuses on original student research that emphasizes scientific experimentation, data analysis, and report writing. The course consists of one three-hour laboratory period per week. Students majoring in other programs or minoring in Biology may substitute another introductory science class for BI100, BI100L or request a waiver of the prerequisite. Prerequisite: Grade C or better grade in both BI100 and BI100L or concurrent enrollment in both EN110 and MA110 (or higher). Corequisite: BI157.

## **BI 158 PRINCIPLES OF BIOLOGY II**

FALL ONLY/ALL YEARS

3 credit hours

The second semester of a two-semester course covers the fundamental of organismal through super-organismal biology. It is required of all biology majors and may be used by others to satisfy the general education requirements. It includes three hours of lecture weekly. The lab, BI158L, **MUST** be taken concurrently. Prerequisites: Grade C or better grade in both BI157 and BI157L or concurrent enrollment in both EN110 and MA110 (or higher). Corequisite: BI158L.

## **BI 158L PRINCIPLES OF BIOLOGY II LABORATORY**

FALL ONLY/ALL YEARS

1 credit hour

BI158L is the laboratory portion of BI158 and **MUST** be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisites: Grade C or better grade in both BI157 and BI157L or concurrent enrollment in both EN110 and MA110 (or higher). Corequisite: BI158.

## **BI 201 NATURAL HISTORY OF GUAM**

AS REQUIRED

3 credit hours

This course is a natural history of Guam that includes the development of the Mariana Islands arc, geologic history, physical geography, and a survey of the major groups of plants and animals. The course is presented by using a variety of methods including lectures, slide presentations, field specimen studies and field trips.

## **BI 225 BASIC MICROBIOLOGY**

FALL ONLY/ALL YEARS

3 credit hours

Online

This course is a survey of the characteristics and significance of microorganisms from environmental, industrial, and medical perspectives. It includes two 2-hour laboratories and 3 hours of lecture weekly. Prerequisites: CH100, CH100L, CH101, CH101L (note: For Biology Majors: CH102, CH102L and CH103, CH103L) AND Grades of C or better in BI157, BI157L and BI158, BI158L or BI124, BI124L and BI125, BI125L. Corequisite: BI225L.

## **BI 225L BASIC MICROBIOLOGY LABORATORY**

FALL ONLY/ALL YEARS

1 credit hour

BI225L is the laboratory portion of BI225 and **MUST** be taken concurrently. The course consists of two 2-hour laboratories and 3 hours of lecture weekly. Prerequisites: CH100, CH100L, CH101, CH101L (note: For Biology Majors: CH102, CH102L and CH103, CH103L) AND Grades of C or better in BI157, BI157L and BI158, BI158L or BI124, BI124L and BI125, BI125L. Corequisite: BI225.

## **BI 302 PLANT BIOLOGY**

FALL ONLY/EVEN YEARS

3 credit hours

This course builds on the basic knowledge of plant biology. Students learn the structure and function of various plant groups on a comparative basis, following the timeline of plant evolution. This course is essential for students who are interested in advanced topics in plant science or graduate study using plants as model organisms. Prerequisites: BI157, BI157L, BI158 and BI158L. Co-requisite: BI302L.

## **BI 302L PLANT BIOLOGY LABORATORY**

FALL ONLY/EVEN YEARS

1 credit hour

BI302L is the laboratory component of BI302 and MUST be taken concurrently. The laboratory explores plant forms and levels of organizations with an emphasis on viewing and documenting anatomical features under a microscope. Prerequisites: BI157 & BI157L, BI158 & BI158L. Corequisite: BI302.

## **BI 303 INVERTEBRATE ZOOLOGY**

SPRING ONLY/ODD YEARS

3 credit hours

This course examines the diversity of what are commonly called "animals" from an evolutionary perspective. Initially, the focus will be on how animals are described and classified. Then, diversity of animals will be explored through focus on particular phyla--examining the functional anatomy organ systems, evolutionary relationships, diversity, developmental patterns, and how they live their lives. The last portion of the course will examine first chordates. The course includes 3 hours of lecture each week. The lab (BI303L) must be taken concurrently. Prerequisite: BI157, BI157L and BI158, BI158L. Corequisite: BI303L.

## **BI 303L INVERTEBRATE ZOOLOGY LABORATORY**

SPRING ONLY/ODD YEARS

1 credit hour

BI303L is the laboratory portion of BI303 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisite: BI157, BI157L and BI158, BI158L. Corequisite: BI303.

## **BI 310 EVOLUTION**

SPRING ONLY/ALL YEARS

3 credit hours

This course is an introduction to the modern theory of evolution. The focus of the course is on the mechanisms that cause the evolution of adaptations and new species. The pattern of evolution in the fossil record is analyzed to understand the causes of speciation and extinction patterns. The ability of evolutionary theory to inform studies in other areas of biology (such as genetics, morphology, and ecology) is stressed. The course consists of three hours of lecture weekly. Prerequisite: Grades of C or better in BI157, BI157L, BI158, BI158L and BI315, BI315L.

## **BI 315 GENERAL GENETICS**

FALL ONLY/ALL YEARS

3 credit hours

Basic principles of heredity, including biochemical genetics and population aspects, are covered. The course includes three hours of lecture weekly. The lab, BI315L, MUST be taken concurrently. Prerequisites: Grades of C or better in BI157, BI157L and (or concurrent enrollment in) BI158, BI158L. Corequisite: BI315L.

## **BI 315L GENERAL GENETICS LABORATORY**

FALL ONLY/ALL YEARS

1 credit hour

BI315L is the laboratory portion of BI315 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisite: Grades of C or better in BI157, BI157L and (or concurrent enrollment in) BI158, BI158L. Corequisite: BI315.

## **BI 320 SCIENTIFIC REPORT WRITING**

SPRING ONLY/ALL YEARS

2 credit hours

Effective use of scientific data, literature and presentation software to write, illustrate and orally present a structurally correct and cohesive report using scientific format and the appropriate discourse genres for each section.

Prerequisites: BI321 and EN111.

## **BI 321 SCIENTIFIC ARGUMENTS**

SPRING ONLY/ALL YEARS

2 credit hours

Writing and analyzing scientific arguments for effectively presenting scientific work, career aspirations and for getting accepted to graduate school. Prerequisites: BI310.

## **BI 323 PLANT PATHOLOGY**

FALL ONLY/EVEN YEARS

3 credit hours

Principles underlying the nature and control of plant disease that are related to crop production and horticulture are introduced in this course. Topics examined include the microorganisms and environmental conditions that cause disease, their dispersal mechanisms and reproductive cycles, and prevention and control options available to manage and contain plant disease. This course meets for three hours of lecture weekly. Concurrent enrollment with AL323L is required. Prerequisites: AL101/L and AL102/L or BI157/L and BI158/L.

## **BI 323L PLANT PATHOLOGY LAB**

FALL ONLY/EVEN YEARS

1 credit hour

This is the laboratory course for BI323. Concurrent enrollment in AL323 is required. This course meets for three hours of laboratory weekly. Prerequisites: AL101/L and AL102/L OR BI157/L and BI158/L.

## **BI 333 COMPARATIVE VERTEBRATE ANATOMY**

FALL ONLY/ODD YEARS

3 credit hours

This course is a study of the basic morphology of vertebrates, with lecture emphasis on the evolution of vertebrate systems and laboratory emphasis on dissection of these systems in selected vertebrates. It includes three hours of lecture weekly. The lab, BI333L, MUST be taken concurrently. Prerequisite: BI157, BI157L, BI158, BI158L and BI310. Corequisite: BI333L.

## **BI 333L COMPARATIVE VERTEBRATE ANATOMY LABORATORY**

FALL ONLY/ODD YEARS

1 credit hour

BI333L is the laboratory portion of BI333 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisite: BI157, BI157L, BI158, BI158L and BI310. Corequisite: BI333.

## **BI 345 GENERAL ENTOMOLOGY**

FALL ONLY/ODD YEARS

3 credit hours

This course is an overview of insect biology with emphasis on fundamental problems encountered by insects, and the structural and functional adaptations used to overcome these problems. The laboratory focuses on insect identification. The course meets for three hours of lecture weekly. Concurrent enrollment in AL/B1345L is required. Prerequisites: BI157/L or AL109/L or AL281/L.

## **BI 345L GENERAL ENTOMOLOGY LABORATORY**

FALL ONLY/ODD YEARS

1 credit hour

This course is a corequisite of AL/B1345 and must be taken concurrently. The laboratory focuses on insect identification. An insect collection is required. The course meets for three hours of laboratory weekly. Prerequisites: BI157/L or AL109/L or AL281/L.

## **BI 350 ETHOLOGY**

SPRING ONLY/ALL YEARS

3 credit hours

This course is an introductory survey of the field of Ethology. Ethology is the study of animal behavior, particularly under natural conditions. It encompasses proximate (genetic, neurophysiological) and ultimate (evolutionary) causes of animal behavior, and employs both field and laboratory research approaches. The course will show the influence of genetics, physiology, ecology, and the natural selection, and evolution on the expression of behavioral traits. This course consists of three hours of lecture per week. The lab, BI350L, MUST be taken concurrently. Prerequisites: BI157, BI157L, BI158, BI158L, BI310 (or concurrent enrollment) and Instructor's consent. Corequisite: BI350L.

## **BI 350L ETHOLOGY LABORATORY**

SPRING ONLY/ALL YEARS

1 credit hour

BI350L is the laboratory portion of BI350 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisites: BI157, BI157L, BI158, BI158L, BI310 (or concurrent enrollment) and Instructor's consent. Corequisite: BI350.

## **BI 365 PLANT SYSTEMATICS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course covers the concepts and practices of modern plant systematics, emphasizing on Guam vascular plants identification, computational algorithms in bioinformatics and molecular phylogeny reconstruction, and species concept differentiation. The lab, MUST be taken concurrently. This course is particularly useful for students interested in evolutionary biology, conservation biology, ecological and environmental consultancy, or natural resource management. Prerequisites: BI310. Corequisite: BI365L.

## **BI 365L PLANT SYSTEMATICS LABORATORY**

SPRING ONLY/EVEN YEARS

1 credit hour

BI365L is the laboratory portion of BI365 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisite: BI310. Corequisite: BI365.

## **BI 380 OCEANOGRAPHY**

FALL ONLY/ALL YEARS

3 credit hours

This course is an introductory survey of the biological, physical, chemical, geological, and meteorological aspects of the oceans and their basins including a history of oceanographic studies and techniques. The course consists of three hours of lecture weekly. The lab, BI380L, MUST be taken concurrently. Prerequisite: BI100, BI100L, BI157, BI157L, BI158 and BI158L or equivalent and MA161a or higher. Corequisite: BI380L.

## **BI 380L OCEANOGRAPHY LABORATORY**

FALL ONLY/ALL YEARS

1 credit hour

BI380L is the laboratory portion of BI380 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Corequisite: BI380.

## **BI 392 LABORATORY TEACHING AND ASSISTING**

FALL/SPRING/ALL YEARS

1 - 3 credit hours

This course provides for practical educational experience in undergraduate course laboratories. It may be taken more than once for credit. Prerequisites: Completion of the course in which the laboratory is offered, or of an equivalent course, and consent of instructor.

## **BI 410 ECOLOGY**

SPRING ONLY/ALL YEARS

3 credit hours

A study of fundamental concepts and methods of ecology illustrated by the examination of local natural systems; vegetational, faunal, and physical factors of the environment are considered. The course includes three hours of lecture weekly and six hours of laboratory weekly. Prerequisites: BI412 & BI412L, BI321, and any ONE of the following lecture & lab pairs: BI225 & BI225L or BI302 & BI302L or BI 303 & BI303L or BI333 & BI333L or BI365 & BI365L.

## **BI 410L ECOLOGY LABORATORY**

SPRING ONLY/ALL YEARS

2 credit hours

BI410L is the laboratory component of BI410 and MUST be taken concurrently. This course consist of a weekly six-hour laboratory emphasizing field and laboratory methods in ecology and analyst of ecology data. Prerequisites: BI320 and BI412 and BI412L. Corequisite: BI410.

## **BI 412 BIOMETRICS**

FALL ONLY/ALL YEARS

3 credit hours

This is a basic course in the design and analysis of biological experiments. Emphasis is given to analysis of biological and medical data. The course consists of three hours of lecture weekly. The lab, BI412L MUST be taken concurrently. Prerequisite: MA115 and BI321. Corequisite: BI412L.

## **BI 412L BIOMETRICS LABORATORY**

FALL ONLY/ALL YEARS

1 credit hour

BI412L is the laboratory portion of BI412 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisite: MA115 and BI321. Corequisite: BI412.

## **BI 416 CELLULAR & MOLECULAR BIOLOGY**

SPRING ONLY/ALL YEARS

3 credit hours

This course focuses on the advanced molecular cell biology approaches including recombinant DNA technology, advanced microscopy, protein interaction technologies, and model in vivo & in vitro experimental systems that have led to an unprecedented level of understanding of the structure and function of the cell, the fundamental unit of life. Student will learn to find rational explanations and unifying concepts from a large and rapidly evolving body of knowledge, in order to understand the mechanism by which the cell functions as well as the molecular basis of disease. Principle topics include cellular macromolecules & regulatory factors, membrane structure & membrane transport, cell nucleus & gene expression, cell signaling, the immune system, and cancer biology. This course prepares students for careers in bio-medical research, medicine, biotechnology & agriculture related industry. The lab, BI416L MUST be taken concurrently. Prerequisites: CH102, CH102L, CH103, CH103L, BI315 & BI315L. Corequisite: BI416L.

## **BI 416L CELLULAR & MOLECULAR BIOLOGY LABORATORY**

SPRING ONLY/ALL YEARS

1 credit hour

BI416L is the laboratory portion of BI416 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisites CH102, CH102L & CH103, CH103L, BI315 & BI315L. Corequisite: BI416.

## **BI 419 BIOCHEMISTRY**

SPRING ONLY/ALL YEARS

3 credit hours

This course covers the principles of protein chemistry and enzyme nomenclature, catalysis, kinetics, and control. It includes three hours of lecture weekly. The lab, BI/CH419L, MUST be taken concurrently. Prerequisite: CH310a, CH311, CH310b and CH312 or concurrent enrollment, Corequisite: BI/CH419L.

## **BI 419G BIOCHEMISTRY**

SPRING ONLY/ALL YEARS

3 credit hours

This course covers the principles of protein chemistry and enzyme nomenclature, catalysis, kinetics and control. It includes three hours of lecture weekly. The lab, BI/CH419L, MUST be taken concurrently. Prerequisites: CH310a, CH311, CH310b and CH312; or concurrent enrollment. Corequisite: BI/CH419L.

## **BI 419G/L BIOCHEMISTRY LABORATORY**

SPRING ONLY/ALL YEARS

1 credit hour

This course is the laboratory portion of BI/CH419G and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisites: CH310a, CH311, CH310b and CH312 or concurrent enrollment. Corequisite: BI/CH419G.

## **BI 419L BIOCHEMISTRY LABORATORY**

SPRING ONLY/ALL YEARS

1 credit hour

BI/CH419L is the laboratory portion of BI/CH419 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisites: CH310a, CH311, CH310b and CH312 or concurrent enrollment. Corequisite: BI/CH419.

## **BI 425 MOLECULAR MEDICINE**

SPRING ONLY/ODD YEARS

3 credit hours

This course is designed for students who are planning on entering graduate and professional programs in the biological and medical sciences or careers in the biotechnology industry. This course highlights current concepts and trends in molecular biology as well as the latest developments in novel molecular approaches for detection and treatment of diseases. Selected topics in Immunology, Cardiovascular Biology, Tumor Viruses and Cancer Biology, Viral Pathogenesis, and Neurobiology are the focus of this course. Prerequisite: BI416 & BI416L, or equivalent. Corequisite: BI425/G/L.

## **BI 425G MOLECULAR MEDICINE**

SPRING ONLY/AS REQUIRED

3 credit hours

This course is designed for students who are planning on entering graduate and professional programs in the biological and medical sciences or careers in the biotechnology industry. This course highlights current concepts and trends in molecular biology as well as the latest developments in novel molecular approaches for detection and treatment of diseases. Selected topics in Immunology, Cardiovascular Biology, Tumor Viruses and Cancer Biology, Viral Pathogenesis, and Neurobiology are the focus of this course. Prerequisite: BI416 & BI416L, or equivalent. Corequisite: BI425/G/L.

## **BI 425L MOLECULAR MEDICINE LABORATORY**

SPRING ONLY/ODD YEARS

2 credit hours

BI 425L is the molecular biology laboratory course that is taken concurrently with BI425. In this course, expression and control of eukaryotic genes is investigated in a research project format. Laboratory work involves the use of RNA & DNA techniques, protein methods, reporter gene assays, fluorescence microscopy, and the use of molecular biological computer databases to predict structure and function from nucleic acid & protein sequences. Prerequisites: BI416 & BI416L, or equivalent. Corequisite: BI425.

## **BI 430 SCIENTIFIC PHOTOGRAPHY**

SPRING ONLY/EVEN YEARS

3 credit hours

Photography is one of the primary means through which scientific observation and research is documented and presented to colleagues and the public. By developing technical observational and aesthetic skills, students will learn how to extract relevant information from nature using macro-photography, photomicrography, special techniques and digital processing. Students will learn the basics of photography and the use of a computer as the digital darkroom. This course includes two hours of lecture and three hours of laboratory; weekly. Laboratories will either be field activities or hands-on experience in the classroom. AL/BI430L is the laboratory portion of AL/BI430 and MUST be taken concurrently. Corequisite: AL/BI430L.

## **BI 430L SCIENTIFIC PHOTOGRAPHY LABORATORY**

1 credit hour

Photography is one of the primary means through which scientific observation and research is documented and presented to colleagues and the public. By developing technical observational and aesthetic skills, students will learn how to extract relevant information from nature using macro-photography, photomicrography, special techniques and digital processing. Students will learn the basics of photography and the use of a computer as the digital darkroom. BI/AL430L is the laboratory portion of BI/AL430 and MUST be taken concurrently. The course consists of two hours of lecture and three hours laboratory period per week. Corequisite: BI/AL430.

## **BI 432 PHARMACOLOGY**

FALL ONLY/ODD YEARS

3 credit hours

Hybrid

This upper division course will provide a foundation of pharmacology that builds upon basic physiological principles. Pharmacology will introduce Phase I and Phase II metabolism, major drug classes, and mechanism of action for pharmacologic agents. The course is well suited for biomedical track students and those interested in pursuing graduate or pharmacy school. This is a hybrid course and some lectures will take place online, while others will be in class. Prerequisites: BI158, CH103, BI321. Recommended: BI124, BI12L and BI125, BI125L.

## **BI 474 MARINE BOTANY**

SPRING ONLY/ODD YEARS

4 credit hours

This course provides students an in-depth exploration of the marine plants in the region with an emphasis on how the physiology and ecology of seaweeds and microalgae relate to environmental conditions in the sea. Prerequisites: BI302.

## **BI 474G MARINE BOTANY**

SPRING ONLY/ODD YEARS

4 credit hours

This course provides students an in-depth exploration of the marine plants in the region with an emphasis on how the physiology and ecology of seaweeds and microalgae relate to environmental conditions in the sea. Prerequisite: BI302.

## **BI 475 ADVANCE ANIMAL PHYSIOLOGY**

SPRING ONLY/ALL YEARS

3 credit hours

Advanced Animal Physiology will acquaint students with the principles of animal form and function by examining how a diversity of animals cope with environmental challenges. Animal Physiology integrates the evolution of physiological system examined across major taxa, ranging from protists through vertebrates and across levels of biological organization from molecules to populations. Topics cover how the law of chemistry and physics govern the physiology of cell signaling, endocrine regulation, osmoregulation, gas exchange, thermoregulation, circulation, locomotion, basic and advanced neurophysiology, learning and memory and receptor physiology. These principles are examined within the context of physiological diversity among animals and their evolutionary processes. Prerequisite: BI320, BI315L, and BI321. Co requisite: BI475L



## **BI 475G ADVANCED ANIMAL PHYSIOLOGY**

SPRING ONLY/ALL YEARS

3 credit hours

Advanced Animal Physiology will acquaint students with the principles of animal form and function by examining how a diversity of animals cope with environmental challenges. Animal Physiology integrates the evolution of physiological system examined across major taxa, ranging from protists through vertebrates and across levels of biological organization from molecules to populations. Topics cover how the law of chemistry and physics govern the physiology of cell signaling, endocrine regulation, osmoregulation, gas exchange, thermoregulation, circulation, locomotion, basic and advanced neurophysiology, learning and memory and receptor physiology. These principles are examined within the context of physiological diversity among animals and their evolutionary processes. Prerequisite: BI320, BI315L, and BI321. Corequisite: BI475L.

## **BI 475G/L ADVANCED ANIMAL PHYSIOLOGY**

SPRING ONLY/ALL YEARS

3 credit hours

Advanced Animal Physiology will acquaint students with the principles of animal form and function by examining how a diversity of animals cope with environmental challenges. Animal Physiology integrates the evolution of physiological system examined across major taxa, ranging from protists through vertebrates and across levels of biological organization from molecules to populations. Topics cover how the law of chemistry and physics govern the physiology of cell signaling, endocrine regulation, osmoregulation, gas exchange, thermoregulation, circulation, locomotion, basic and advanced neurophysiology, learning and memory and receptor physiology. These principles are examined within the context of physiological diversity among animals and their evolutionary processes. Prerequisite: BI320, BI315L, and BI321. Co requisite: BI475L

## **BI 475L ADVANCED ANIMAL PHYSIOLOGY LABORATORY**

SPRING ONLY/ALL YEARS

1 credit hour

Advanced Animal Physiology will acquaint students with the principles of animal form and function by examining how a diversity of animals cope with environmental challenges. Animal Physiology integrates the evolution of physiological system examined across major taxa, ranging from protists through vertebrates and across levels of biological organization from molecules to populations. Topics cover how the law of chemistry and physics govern the physiology of cell signaling, endocrine regulation, osmoregulation, gas exchange, thermoregulation, circulation, locomotion, basic and advanced neurophysiology, learning and memory and receptor physiology. These principles are examined within the context of physiological diversity among animals and their evolutionary processes. The lecture course, BI475, must be taken concurrently. Prerequisite: BI320, BI315L, and BI321. Co requisite: BI475

## **BI 503 BIOLOGICAL LITERATURE AND SCIENTIFIC WRITING**

SPRING ONLY/ALL YEARS

2 credit hours

Survey of biological literature as an assist in thesis and manuscript preparation in the areas of writing, proofreading, literature citation, figure and table preparation. Two hours of lecture weekly.

## **BI 507 ADVANCED STATISTICAL METHODS**

FALL ONLY/ALL YEARS

4 credit hours

An advanced course in applied statistical methods as used in the biological and environmental sciences stressing the design and analysis of experimental and observational studies. Lectures will be 3 hours per week. Prerequisites: MA385 or equivalent.

## **BI 508 SCIENTIFIC COMPETENCE AND INTEGRITY**

FALL ONLY/ALL YEARS

3 credit hours

This course examines historical, philosophical, methodological, ethical, and moral aspects of scientific thought and practice in the context of both historical and contemporary issues in natural and environmental science. Readings and discussions are built around classical examples such as the scientific controversy over Continental Drift and Plate Tectonics as well as contemporary environmental issues, ranging from global concerns such as climate and sea level change, to local public concerns such as solid waste management and the safety of tap water. The central objective of the course is to develop the skills and habits of sound critical thinking essential to the progress, ethical practice, and moral application of science.

## **BI 515 ADVANCES IN BIOGEOGRAPHY**

FALL ONLY/EVEN YEARS

3 credit hours

This course presents the fundamentals of biogeography, and then focuses on recent advances in theory and method. Topics include the distribution of plants and animals over space and time, defining metapopulations, reconstructing biogeographic history and the theory of island biogeography. Students will be given hands-on experience with the latest analytical tools used for hypothesis testing. Emphasis will be on marine organisms, including algae, invertebrates and fish. Three hours of lectures per week.

## **BI 520 CURRENT TOPICS IN CELLULAR BIOLOGY**

SPRING ONLY/ODD YEARS

3 credit hours

Important background information in biochemistry, cellular physiology, and molecular biology, with emphasis on recent scientific articles, new techniques and advances in the field. Application of new techniques and advances toward biotechnology and medicine will be discussed. Students will be required to actively participate in discussions, critique scientific articles, make oral presentations, and write a research paper. Prerequisite: BI101a-b or equivalent, or consent of instructor.

## **BI 525 EVOLUTIONARY BIOLOGY**

FALL ONLY/EVEN YEARS

3 credit hours

This course provides a survey of the origin and evolution of life on Earth, exploring the history and major features of evolutionary change through time and the mechanisms responsible for those changes. The course will also consider evolutionary aspects of genetics, development, ecology, biogeography, systematics and paleontology. Prerequisite: Genetics or consent of instructor.

## **BI 529A ENVIRONMENTAL CONTAMINATION & TOXICOLOGY I: FUNDAMENTAL PRINCIPLES & BASIC CONCEPTS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course covers the fundamental principles and mechanisms governing the interaction of pollutants with natural systems. The basic concepts of classical and environmental toxicology are also addressed with emphasis on contaminant absorption, distribution, metabolism, systemic toxicology, carcinogenesis, toxicity testing and risk assessment. The course concludes with a general introduction to air, land and water pollution. Three hours of lectures weekly. Prerequisites: BI157, BI158, CH102 and CH103 or equivalent.

## **BI 529B ENVIRONMENTAL CONTAMINATION & TOXICOLOGY II: MAJOR CLASSES OF ENVIRONMENTAL POLLUTANTS**

SPRING ONLY/ODD YEARS

3 credit hours

This course focuses on classic and contemporary groups of environmental contaminants and their impact on organisms, ecosystems and man. Physical and chemical properties of each contaminant group are discussed in relation to their environmental distribution, fate and toxicity. Occupational health related pollution problems and pollution monitoring strategies are also discussed. Three hours of lectures a week. Prerequisites: BI157, BI158, CH102 and CH102, or equivalent, or consent of instructor. EV/BI529a is also highly recommended as it provides the foundations upon which EV/BI529b is built. Undergraduates may enroll in the course with instructor's consent.

## **BI 531 BEHAVIORAL ECOLOGY**

FALL ONLY/ODD YEARS

3 credit hours

Review and discussions of current topics in behavioral ecology. These include game theory, foraging strategies, mating systems, predator-prey interactions, animal communication, and the ecological determinants of social behavior. Prerequisite: BI101a-b or equivalent, or consent of instructor.

## **BI 540 ICHTHYOLOGY**

SPRING ONLY/EVEN YEARS

3 credit hours

This course is a survey of the classification and morphology of fishes with emphasis on local forms. It includes three hours of lecture weekly. The lab, BI440L, MUST be taken concurrently. Prerequisite: BI157-157L and BI158-158L or equivalent. Corequisite: BI440L.

## **BI 540L ICHTHYOLOGY LABORATORY**

SPRING ONLY/EVEN YEARS

1 credit hour

This course is the laboratory portion of BI540G and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisite: BI157-157L and BI158-158L or equivalent. Corequisite: BI540G.

## **BI 546 MARINE INVERTEBRATES**

FALL ONLY/EVEN YEARS

4 credit hours

Survey of the classification and morphology of marine invertebrates, with emphasis on local forms. Six hours of lecture-laboratory weekly.

## **BI 557 POPULATION ECOLOGY**

FALL ONLY/ODD YEARS

3 credit hours

This course provides a quantitative background of the processes and principles associated with population dynamics. Both theoretical approaches and applied modeling techniques are used to help students visualize patterns observed in natural systems. The course is relevant for both marine and terrestrial biology or environmental science graduate students, however, examples are mainly focused on marine ecosystems, and coral reefs in particular. Prerequisites: BI157-157L and BI158-158L. Corequisite: BI410.

## **BI 557L POPULATION ECOLOGY LABORATORY**

FALL ONLY/ODD YEARS

1 credit hour

This lab is required for BI/EV557, "Population Ecology". The labs provide a quantitative background of the processes and principles associated with population dynamics. Labs consist of applied modeling techniques to help students visualize patterns observed in natural systems. The course is relevant for both marine and terrestrial biology or environmental science graduate students, however, examples are mainly focused on marine ecosystems, and coral reefs in particular. Prerequisites: BI157-157L and BI158-158L. Corequisite: BI410.

## **BI 581 PHYSICAL OCEANOGRAPHY**

SPRING ONLY/EVEN YEARS

3 credit hours

This course is intended to give students a view to how wind, radiation, gravity, friction, and the Earth's rotation determine the ocean's temperature and salinity patterns and currents. Some important processes we study include heat budget of the oceans, exchange of heat with the atmosphere and the role of the ocean in climate, surface mixed layer waves in the ocean, geostrophy, Ekman transport, and Rossby waves. Students learn how to explain physical features of the ocean ranging from microscopic turbulence to global circulation. Prerequisites: MA203 or consent of instructor. Recommended: MA204, PH-251 and PH-252.

## **BI 615 FOUNDATIONS OF BIOINFORMATICS**

FALL ONLY/ODD YEARS

2 credit hours

This course provides an introduction to computational approaches to analyze molecular genetic data. The lecture will focus on the theoretical foundations of how genomes are sequenced and reconstructed, how genes and their functions are inferred, and how the evolution of organisms at the levels ranging from populations to species can be reconstructed using molecular data. The Objective of this lecture course is to gain the conceptual understanding necessary to analyze molecular genetic data. Pre-requisites: BI315/BI315L General Genetics or equivalent; concurrent enrollment in BI615L.

## **BI 615L FNDTNS OF BIOINFORMATICS LAB**

FALL ONLY/ODD YEARS

1 credit hour

Hands-on exercises will introduce students to the usage of commonly-used bioinformatics tools. The Linux operating system and its built-in computer scripting environments will be used to automate repetitive tasks and facilitate high-throughput data analyses. The objective of this course is to gain the practical skills necessary to analyze molecular genetic data with an emphasis on laying the foundation to facilitate extracting information from big datasets in the era of genomics. Prerequisites: BI-315/BI-315L General Genetics or equivalent; concurrent enrollment in BI615.

## **BI 691 SEMINAR**

FALL/SPRING/ALL YEARS

1 credit hour

## **BI 694L SPECIAL TOPICS: FOUNDATIONS OF BIOINFORMATICS LAB**

FALL ONLY/ODD YEARS

1 credit hour

Hands-on exercises will introduce students to the usage of commonly-used bioinformatics tools. The Linux operating system and its built-in computer scripting environments will be used to automate repetitive tasks and facilitate high-throughput data analyses. The objective of this course is to gain the practical skills necessary to analyze molecular genetic data with an emphasis on laying the foundation to facilitate extracting information from big datasets in the era of genomics. Prerequisites: BI-315/BI-315L General Genetics or equivalent; Concurrent enrollment in BI694.

## **BI 695 THESIS**

FALL/SPRING/ALL YEARS

1 - 6 credit hours

## **CIV&ENVIRNMNTL ENG. SCIENCE (CEE)**

### **CEE 100 ENGINEERING ORIENTATION**

FALL/SPRING/ALL YEARS

1 credit hour

This course is designed to give freshmen students an insight into the nature of technology and the engineer's role in society, introduce students to engineering statistics, ethics, professionalism, and sustainability, members of the faculty and guest speakers present lectures dealing with the various engineering disciplines and related areas.

### **CEE 101 ENGINEERING GRAPHICS**

FALL/SPRING/ALL YEARS

3 credit hours

Concepts and methods of communications by graphical means; freehand and instrument drawing, orthogonal projections, and descriptive geometry are covered in this course.

## **CEE 201 ENGINEERING STATICS**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers vector algebra and elementary vector calculus, equilibrium of particles and rigid bodies, equivalent and resultant force systems. Geometric properties of areas and solids, analysis of beams, trusses, frames and machines and frictional effects are also covered. Prerequisites: PH-251 and EN-111.

## **CEE 202 ENGINEERING DYNAMICS**

FALL/SPRING/ALL YEARS

3 credit hours

Kinematics and kinetics of particles and rigid bodies applying a vector approach. Topics include motions of a particle and a rigid body; relative motion; kinetics of translation, rotation, and plane motion; principles of work and energy; principles of impulse and momentum; impact. Prerequisites: MA204 or concurrent enrollment and CEE-201.

## **CEE 203 MECHANICS OF MATERIALS**

FALL/SPRING/ALL YEARS

3 credit hours

Concepts of stress and strain; stress-strain relationships. Behavior of structural members subjected to tension, compression, shear, bending, torsion, and combined loading. Deflections and elastic curves, shear and bending moment diagrams for beams and column theory. Prerequisites: CEE-201.

## **CEE 204 MECHANICS OF FLUIDS**

FALL ONLY/ALL YEARS

3 credit hours

Physical properties of fluids, fluid statics, mass Momentum and energy conversation, Bernoulli Equation, dimensional analysis, friction, and head Loss, flow in closed conduits, forces over Immersed bodies. Prerequisite: CEE-201 and MA-203.

## **CEE 301 STRUCTURAL ANALYSIS**

FALL ONLY/ALL YEARS

3 credit hours

Analysis of statically determinate and indeterminate structures including deformation compatibility, slope deflection and moment distribution. Deflections of beams and frames by moment-area theorems and conjugate beam analogy. Influence lines and an introduction to the stiffness method and a software package for structural analysis. Prerequisite: CEE-203.

## **CEE 302 ENGINEERING HYDRAULICS**

SPRING ONLY/ALL YEARS

3 credit hours

Introduction of hydrological properties for the sustainable design. Hydraulics of closed conduits and open channel flow with the emphasis on engineering applications. Pump hydraulics, urban drainages, and Statistical analysis for the flood event, and floodplain determination and management. Prerequisite: CEE-204 and concurrent enrollment in CEE-302L.

## **CEE 302L ENGINEERING HYDRAULICS LAB**

SPRING ONLY/ALL YEARS

1 credit hour

This course involves conducting a number of lab experiments to support and verify the principles taught in Fluid Mechanics and Hydraulics courses. Prerequisite: concurrent enrollment in CEE302.

## **CEE 303 GEOTECHNICAL ENGINEERING**

FALL ONLY/ALL YEARS

3 credit hours

Introduction to soil mechanics including classification and index properties of soils, soil permeability and flow in soil, stresses in soils, compressibility, consolidation, shear strength, soil improvement, and introduction to geosynthetics. Prerequisites: CEE203 and concurrent enrollment in CEE303L

### **CEE 303L GEOTECHNICAL ENGINEERING LABORATORY**

FALL ONLY/ALL YEARS

1 credit hour

An introduction to experimental determination of civil engineering properties of soil and their behavior, identification, grain size analysis, Atterberg limits, compaction, permeability, consolidation, and shear strength. Also, an introduction to sampling of soil materials, and substantial emphasis on writing lab reports. Prerequisite: CEE-203 and concurrent enrollment in CEE-303.

### **CEE 304 CIVIL ENGINEERING MATERIALS**

FALL ONLY/ALL YEARS

3 credit hours

A study of principal materials used for engineering purposes with special attention to mechanical properties and their importance to the engineer. Topics include introduction to mechanical properties and their importance to the engineer. Topics include introduction to mechanical behavior of materials, characteristics of metals, characteristics of wood, evaluation of aggregates, design of Portland cement concrete and asphalt concrete, and hands-on experience in testing of civil engineering materials. Concurrent enrollment in CEE-304L. Prerequisite: CEE203

### **CEE 304L CIVIL ENGINEERING MATERIALS LABORATORY**

FALL ONLY/ALL YEARS

1 credit hour

A study of the principal material used for engineering purposes with special attention to mechanical properties and their importance to the engineer. Hands-on experience in testing of civil engineering materials. Concurrent enrollment in CEE304.

### **CEE 305 EARTH STRUCTURES DESIGN**

SPRING ONLY/ALL YEARS

3 credit hours

Earth pressure theories, design of earth retaining structures, including reinforced cantilever walls, sheet pile walls, mechanically stabilized earth walls, engineered earth slopes and stability, use of geosynthetics. Lecture three hours per week. Prerequisite: CEE-303 and CEE-303L.

### **CEE 306 REINFORCED CONCRETE STRUCTURES DESIGN**

SPRING ONLY/ALL YEARS

3 credit hours

Analysis and design of reinforced concrete structural systems and elements including beams, slabs, columns, foundations and retaining walls. Both ASD and LRFD design methodologies are discussed. The design process is based on the ACI Prerequisite: CEE-301.

### **CEE 307 INTRODUCTION TO ENVIRONMENTAL ENGINEERING**

SPRING ONLY/ALL YEARS

3 credit hours

This course lays a foundation for further coursework in the environmental and civil-sanitary engineering disciplines. Information about the nature and scope of environmental problems will be presented along with an overview of current engineering practices involved in their correction. Methodologies for solving these problems will be introduced along with the underlying principles of environment chemistry and microbiology that they employ. Topics of study will include water and wastewater treatment, air pollution control, solid-waste management, and sustainable design for the environmental remediation. Prerequisites: CH103, MA203 and CEE 204.

## **CEE 308L INTRO TO SURVEYING AND LAB**

SPRING ONLY/ALL YEARS

3 credit hours

This is an introductory course to surveying Techniques and includes theory as well lab Sessions. Principles of plan surveying. Measurement of horizontal distance, difference in Elevation, and angles. Traverse surveys and Computations. Horizontal and vertical curves. Principles of stadia. Topographic surveys. Cross-sectioning & earthwork. Prerequisites: PH-251, MA-203 and EN-111.

## **CEE 401 STEEL STRUCTURES DESIGN**

FALL ONLY/ALL YEARS

3 credit hours

This course is an introductory course in the design of steel structures. The behavior and design of structural steel members and steel-frame buildings including tension members, compression members, flexural members, connections, and beam-columns. To provide necessary context, the course will also investigate structural steel material, design methodologies, loading on steel buildings. AISC Manual of Steel Construction in LRFD concept is used. Prerequisites: CEE-301

## **CEE 402 FOUNDATION ENGINEERING**

FALL ONLY/ALL YEARS

3 credit hours

Effect of geotechnical conditions on the behavior, proportioning, and choice of foundation type; bearing capacity theories, consolidation, shrink-swell, and settlement, shallow and deep foundations, subsurface exploration methods, study of foundation case histories, introduction to sustainability, risk and reliability in geotechnical engineering projects. Prerequisite: CEE 303 and CEE303L.

## **CEE 403 FUNDAMENTAL OF TRANSPORTATION ENGINEERING**

SPRING ONLY/ALL YEARS

3 credit hours

History of transportation modes, transportation systems, new transport technologies, traffic operations and control, economic evaluation of transport alternatives, introduction to transportation planning, design, statistical comparison of spot mean speeds in decision making, operation of transportation systems with an emphasis on highway design, horizontal and vertical alignment, cross-sections, earthwork, drainage, pavement materials for highways, pavement foundation design, traffic surveys, introduction to the role of sustainability in pavements. Prerequisites: CEE-301, CEE-303, CEE303L and CEE-306.

## **CEE 404 CIVIL ENGINEERING DESIGN I**

FALL ONLY/ALL YEARS

2 credit hours

This course is the first semester of a one-year independent study under the supervision of a faculty member, which includes analytical, experimental, computational, or case-study type work. A final report must be submitted near the end of the second semester accompanied with an A3 size poster. The project will be assessed through both report writing and oral presentation. The mark will be given as a single unit for both the courses "CEE404 Civil Engineering Design 1" and "CEE404 Civil Engineering Design 2", with a total of 4 credits. Prerequisite: All CEE 300 level courses and Instructors consent.

## **CEE 405 CIVIL ENGINEERING DESIGN II**

SPRING ONLY/ALL YEARS

2 credit hours

This course is the second semester of a one-year independent study under the supervision of a faculty member, which includes analytical, experimental, computational, or case-study type work. A final report must be submitted near the end of the second semester accompanied with an A3 size poster. The project will be assessed through both report writing and oral presentation. The mark will be given as a single unit for both the courses "CEE403 Civil Engineering Design 1" and "CEE404 Civil Engineering Design 2", with a total of 4 credits. Prerequisite: CEE404 and Instructors consent.

## **CEE 406 INTRODUCTION TO CONSTRUCTION MANAGEMENT**

SPRING ONLY/ALL YEARS

3 credit hours

Fundamental concepts in managing construction Projects. Introduction to overall construction Process including planning, design, delivery Methods construction contracts, equipment and Labor productivity, cost estimating, scheduling, Quality assurance and safety. Prerequisites: CEE 303, CEE303L, CEE 304 and CEE304L.

## **CEE 407 CIVIL ENGINEERING PROFESSION**

SPRING ONLY/ALL YEARS

1 credit hour

PROFESSIONAL, ETHICAL, SOCIETAL, AND LEGAL ISSUES IMPACTING CIVIL ENGINEERING PRACTICE. PREREQUISITES: CEE 302, CEE 303, & CEE 304

## **CHEMISTRY (CH)**

## **CH 100 INTRODUCTION TO INORGANIC CHEMISTRY**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This is a one-semester course for students preparing for technical training in natural sciences or laboratory work. The course covers the elementary principles of inorganic chemistry emphasizing nomenclature, stoichiometry, and solution chemistry. It includes three hours of lecture weekly. The lab, CH100L, MUST be taken concurrently. Prerequisite: Completion of MA085 a-b or MA089. Corequisite: CH100L.

## **CH 100L INTRODUCTION TO INORGANIC CHEMISTRY LABORATORY**

FALL/SPRING/ALL YEARS

1 credit hour

Online/Hybrid

CH100L is the laboratory portion of CH100 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Corequisite: CH100.

## **CH 101 INTRODUCTION TO ORGANIC CHEMISTRY**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers basic concepts in organic chemistry and is tailored for students preparing for technical training in the natural sciences. The course covers the chemical and physical properties of simple carbon compounds and its applications. Corequisite: CH101L. Prerequisite: CH100 and CH100L, or consent of instructor.

## **CH 101L INTRODUCTION TO ORGANIC CHEMISTRY LABORATORY**

FALL/SPRING/ALL YEARS

1 credit hour

CH101L is the laboratory component of CH101 and must be taken concurrently. The course consists of one three-hour laboratory period per week. Corequisite: CH101 Prerequisite: CH100 and CH100L.

## **CH 102 GENERAL CHEMISTRY**

FALL ONLY/ALL YEARS

3 credit hours

This course is designed for science majors and minors and emphasizes an in-depth study of modern chemical principles, theories, and laws pertaining to atomic structure, nature of the chemical bond, and stoichiometric considerations of all aspects of inorganic chemistry. It includes three hours of lecture weekly. The lab, CH102L, MUST be taken concurrently. Prerequisite: Demonstrated proficiency at the MA161 level or concurrent enrollment in 161a. Corequisite: CH102L.

## **CH 102L GENERAL CHEMISTRY LABORATORY**

FALL ONLY/ALL YEARS

1 credit hour

CH102L is the laboratory portion of CH102 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Corequisite: CH102.



## CH 103 GENERAL CHEMISTRY

SPRING ONLY/ALL YEARS

3 credit hours

This course is a continuation of CH102-102L with further study of reactions and stoichiometric problems. The periodic table is studied with emphasis on physical and chemical group properties. Thermo chemistry, electrochemistry, nuclear chemistry and organic chemistry are introduced with respect to data gathering and simple deduction. It includes three hours of lecture weekly. The lab, CH103L, MUST be taken concurrently. Prerequisites: CH102-102L, and MA161a or MA161b or MA165 or higher level, or placement at this level. (CH100-100L may be substituted for CH102-102L by program consent). Corequisite: CH103L.

## CH 103L GENERAL CHEMISTRY LABORATORY

SPRING ONLY/ALL YEARS

1 credit hour

CH103L is the laboratory portion of CH103 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Corequisite: CH103.

## CH 110 CHEMISTRY AND SOCIETY

FALL ONLY/ALL YEARS

3 credit hours

Online

This is an introductory course that covers a broad perspective on the knowledge and insights that chemistry provide to our environment and society. The course will offer online (via Moodle platform) and will highlight topics related to basic principles of chemistry, modern applications of chemistry, and environmental issues of chemistry. It is intended for non-science major students who might not have a background in chemistry. Instructors consent.

## CH 110L CHEMISTRY AND SOCIETY LABORATORY

FALL ONLY/ALL YEARS

1 credit hour

Online

This course introduces students to the fundamental of scientific method. Students will conduct experimentation through a virtual laboratory and produce laboratory report online. The laboratory exercises will complement the topics covered in the theory, including, gas laws, stoichiometry, acids and bases, and quantitative analysis. Other topics that demonstrate the relevance of chemistry in our everyday experience will be included as needed. All the labs will be conducted online (virtually) at [www.latenitelabs.com](http://www.latenitelabs.com), which is a well-established platform for conducting virtual experiments and currently used by Schools and Universities in USA. Corequisite: CH110.

## CH 310A ORGANIC CHEMISTRY

FALL ONLY/ALL YEARS

3 credit hours

This is a full-year lecture sequence covering the general principles of organic chemistry with emphasis on structure, stereochemistry, nomenclature, basic reactions and mechanisms and the occurrence and uses of main classes of compounds. Prerequisite: CH103-103L.

## CH 310B ORGANIC CHEMISTRY

SPRING ONLY/ALL YEARS

3 credit hours

This is a full-year lecture sequence covering the general principles of organic chemistry with emphasis on structure, stereochemistry, nomenclature, basic reactions and mechanisms and the occurrence and uses of main classes of compounds. Prerequisite: CH103-103L.

## **CH 311 BASIC LABORATORY TECHNIQUES IN ORGANIC CHEMISTRY**

FALL ONLY/ALL YEARS

2 credit hours

This course consists of laboratory work in organic chemistry with emphasis on the development of manipulative skills in such techniques as distillations, reduced pressure fractionations, chromatography, and crystallization, and constructions of apparatus utilized in the preparations, purification, identification and study of simple organic compounds. Six hours of laboratory are held per week. Corequisite: CH310a.

## **CH 312 LABORATORY TECHNIQUES IN ORGANIC CHEMISTRY**

SPRING ONLY/ALL YEARS

2 credit hours

This course is a continuation of CH311 with emphasis on continued development of manipulative skills as required by preparation, purification, identification and study of more complex organic compounds. It consists of six hours of laboratory work per week. Prerequisite: CH311. Corequisite: CH310b.

## **CH 330 QUANTITATIVE ANALYSIS**

FALL ONLY/ODD YEARS

3 credit hours

This course is a study of select quantitative schemes as utilized in volumetric and gravimetric analyses with emphasis upon acquiring an understanding of the basic theoretical principles involved. Laboratory emphasis is on the development of useful techniques consistent with the present state of the art and reduction to laboratory practice of the theories studied. It includes three hours of lecture weekly. The lab, CH330L, MUST be taken concurrently. Prerequisite: CH103-103L. Corequisite: CH330L.

## **CH 330L QUANTITATIVE ANALYSIS LABORATORY**

FALL ONLY/ODD YEARS

2 credit hours

CH330L is the laboratory portion of CH330 and MUST be taken concurrently. The course consists of six hours of laboratory work per week. Corequisite: CH330.

## **CH 350 FOUNDATIONS OF PHYSICAL CHEMISTRY**

FALL ONLY/EVEN YEARS

3 credit hours

This is a one-semester lecture course covering the basic principles and general applications of physical chemistry. Laws of thermodynamics, thermochemical equilibria, ionic equilibria, phase equilibria, chemical kinetics, electrochemistry, surface chemistry, photochemistry, basic spectroscopy/ imaging and macromolecules are studied. It includes three hours lecture weekly. Prerequisites: MA203, CH103, CH103/L. Corequisite: CH350L.

## **CH 350L Foundations of Physical Chemistry LABORATORY**

FALL ONLY/EVEN YEARS

1 credit hour

This course is the laboratory component of CH350. It covers the experimental exercise that relates to the topics dealt with in the lecture. Topics covered will include thermodynamics, kinetics, spectroscopy, equilibrium, acid-base equilibrium, and electrochemistry. Prerequisites: MA203, CH103, CH103/L. Co-requisite: CH350.

## **CH 392 LABORATORY TEACHING AND ASSISTING**

FALL/SPRING/ALL YEARS

1 - 3 credit hours

This course provides for practical educational experience in undergraduate course laboratories. It may be taken more than once for credit. Prerequisite: Completion of course in which laboratory is offered, or of an equivalent course and consent of instructor.

## **CH 400 CHEMISTRY SERVICE LEARNING**

FALL/SPRING/ALL YEARS

1 - 2 credit hours

Chemistry Service-Learning course is patterned after Service-Learning initiative established by the American Chemical Society. Service Learning is part of an education program that integrates community service with classroom instruction to enhance learning, teach civic responsibility, and strengthen communities. For the chemical sciences, service-learning projects can vary greatly depending on community needs and the instructor's curriculum. Projects can include environmental testing, water clean-up, chemical safety workshops, classroom assistance in an elementary-high school, support and assistance in chemistry outreach, and volunteer mentoring or tutoring for elementary, middle or high school students. The course will require 45 hours per credit. Prerequisites: CH-310a CH-310b CH-311 CH-312 CH-330 CH-330L or consent of instructor.

## **CH 410 INSTRUMENT METHODS OF ANALYSIS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course is a study of potentiometric, colorimetric, spectrophotometric, polarographic, calorimetric and other instrument methods of analysis, as available. Emphasis is on practical utilization of instrumentation in the field of analytical chemistry. It includes three hours of lecture weekly. The lab, CH410L, MUST be taken concurrently. Prerequisites: CH310a-b, 311, 312, 330, and MA161a-b or consent of program. Corequisite: CH410L.

## **CH 410L INSTRUMENT MTHDS OF ANALYS LAB**

SPRING ONLY/EVEN YEARS

2 credit hours

Ch 410L is the laboratory portion of CH 410 and MUST be taken concurrently. Corequisite: CH 410

## **CH 413 FORENSIC CHEMISTRY**

SPRING ONLY/EVEN YEARS

3 credit hours

This course builds on the principles and applications of analytical methods in chemistry to forensic science field. The course will cover quality assurance and quality control, chemical equilibria, physical evidence, drug analysis, toxicology, explosives, combustion and arson, firearms, colors, and paints. Instrumentation and forensic analysis methods will be covered. Corequisite: CH-413L Prerequisites: CH-310b CH-312 CH-350 CH-350L CH330 CH330L and Instructors consent.

## **CH 413L FORENSIC CHEMISTRY LABORATORY**

1 credit hour

This course will cover the experimental methods used in forensic analysis. It will focus on chemical and instrumental methods for identifying and quantifying substances for forensic investigations. Chemical test and instrumental methods will apply including gas chromatograph. Fourier Transform Infra-red. Atomic Absorption Spectroscopy, and Ultra-violet Spectroscopy. Corequisite: CH-413 Prerequisites: CH-310b CH-312 CH-350 CH-350L CH330 CH330L and Instructors consent.

## **CH 419 BIOCHEMISTRY**

SPRING ONLY/ALL YEARS

3 credit hours

This course covers the principles of protein chemistry and enzyme nomenclature, catalysis, kinetics and control. It includes three hours of lecture weekly. The lab, BI/CH419L, MUST be taken concurrently. Prerequisites: CH310a, CH310b, CH311 and CH312; or concurrent enrollment. Corequisite: BI/CH419L.

## **CH 419G BIOCHEMISTRY**

SPRING ONLY/ALL YEARS

3 credit hours

This course covers the principles of protein chemistry and enzyme nomenclature, catalysis, kinetics and control. It includes three hours of lecture weekly. The lab, BI/CH419L, MUST be taken concurrently. Prerequisites: CH310a, CH311, CH310b and CH312; or concurrent enrollment. Corequisite: BI/CH419G/L.

## **CH 419G/L BIOCHEMISTRY LABORATORY**

SPRING ONLY/ALL YEARS

1 credit hour

This course is the laboratory portion of BI/CH419G and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Prerequisites: CH310a, CH311, CH310b and CH312; or concurrent enrollment. Corequisite: BICH419G.

## **CH 419L BIOCHEMISTRY LABORATORY**

SPRING ONLY/ALL YEARS

1 credit hour

CH/BI419L is the laboratory portion of CH/BI419 and MUST be taken concurrently. The course consists of one three-hour laboratory per week. Prerequisites: CH310a, CH311, CH310b and CH312; or concurrent enrollment. Corequisite: CH/BI419.

## **CH 420 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY**

SPRING ONLY/EVEN YEARS

3 credit hours

Principles and applications of NMR spectroscopy, utilizing examples from organic, inorganic, and biological chemistry are covered. The course involves three hours of classroom study per week. Prerequisites: CH310a-b, CH312, MA204 and consent of instructor.

## **CH 430 INORGANIC CHEMISTRY**

SPRING ONLY/EVEN YEARS

3 credit hours

This course is a study of topics such as bonding models in inorganic chemistry, structure and reactivity of the covalent bond, experimental determination of molecular structure, chemical forces, coordination chemistry from theoretical, structural and reaction mechanistic perspectives, chemical applications of group theory and molecular symmetry. It includes three hours of lecture per week. Prerequisites: CH103-103L, MA204 or consent of program.

## **CH 450A PHYSICAL CHEMISTRY**

FALL ONLY/EVEN YEARS

4 credit hours

This is a full-year lecture sequence covering the application of physical principles to chemistry with theoretical, mathematical treatment. Laws of thermodynamics, thermochemical equilibria, ionic equilibria, phase equilibria, chemical kinetics, quantum theory, molecular structure, statistical mechanics, electrochemistry, surface chemistry and photochemistry are studied. It includes four hours lecture weekly. Prerequisites: MA203, MA204 and MA205 or consent of program.

## **CH 450B PHYSICAL CHEMISTRY**

SPRING ONLY/ODD YEARS

4 credit hours

This is a full-year lecture sequence covering the application of physical principles to chemistry with theoretical, mathematical treatment. Laws of thermodynamics, thermochemical equilibria, ionic equilibria, phase equilibria, chemical kinetics, quantum theory, molecular structure, statistical mechanics, electrochemistry, surface chemistry and photochemistry are studied. It includes four hours lecture weekly. Prerequisites: MA203, MA204 and MA205 or consent of program.

## **CH 451 PHYSICAL CHEMISTRY I LABORATORY**

SPRING ONLY/ODD YEARS

2 credit hours

This course covers the mathematical tools normally utilized in experimental physical chemistry and experimental contact with thermodynamics, chemical equilibrium, chemical kinetics, and phase equilibrium. It consists of six hours of laboratory weekly. Prerequisite: Consent of program.

## **CH 480 SPECIAL TOPICS IN CHEMISTRY**

FALL/SPRING/ALL YEARS

2 - 3 credit hours

This course will provide an in-depth study of a specific area or areas of chemistry that are novel, and not represented in the regular offerings within the program. The topics offered may include offerings in forensic chemistry, food chemistry, polymer chemistry, advance in the thermodynamics, medicinal chemistry, environmental chemistry, wine chemistry, chemical sensor, electrochemistry, bioanalytical chemistry, coordination chemistry, nanoparticles, natural products, organic synthesis, metabolomics, nuclear chemistry, industrial chemistry, surface chemistry, geochemistry, or other areas of interest or expertise. This course also provides customized opportunities to capitalize on the currently expertise in teaching and research being conducted at the Chemistry Program and related fields in the natural science, including visiting scholars. Prerequisites: CH-310a, CH-310b, CH-311, CH-312, CH-330, CH-330L, MA-203 and Instructors Consent.

## **CH 491 CHEMISTRY SEMINAR**

FALL/SPRING/ALL YEARS

1 - 2 credit hours

This is a course designed to familiarize the student with research or reviews and surveys of chemical literature. Students will conduct research on selected topic using chemical literature and present the findings in a seminar presentation. Students may also choose to prepare a seminar paper in addition to the seminar presentation for 2 credits. It may be taken more than once for credit with the consent of the program. Prerequisites: Upper division status and consent of program.

## **CH 495 RESEARCH METHODS IN CHEMISTRY**

AS REQUIRED

4 credit hours

This course will provide students with in depth research experience in a specific topic in chemical sciences. Students will undertake a project on the selected topic under the close guidance of a selected faculty. The research methods will involve the formulation of a hypothesis, conducting a literature survey, writing of project proposal, designing and conducting experimentation, data collection and analysis, and presentation of results. Students will be required to write a full project report and present their data at a seminar or conference at the end of the course. The experimental requirement for this research course will require advanced planning and preparation. Thus students planning to take this course are strongly advised to inform the chair of the program and the instructor at least one semester prior to taking this course. Prerequisites: CH330/330L, CH310A/310B, CH311, CH312 and consent of instructor. This course can serve as an upper division elective course for the Chemistry majors. It can also be taken to fulfill the elective requirement for graduate programs in either Environmental Science, or Biology, or Sustainable Agriculture Food and Natural Resources.

## **CH 495G RESEARCH METHODS IN CHEMISTRY**

### **AS REQUIRED**

4 credit hours

This course will provide students with in depth research experience in a specific topic in chemical sciences. Students will undertake a project on the selected topic under the close guidance of a selected faculty. The research methods will involve the formulation of a hypothesis, conducting a literature survey, writing of project proposal, designing and conducting experimentation, data collection and analysis, and presentation of results. Students will be required to write a full project report and present their data at a seminar or conference at the end of the course. The experimental requirement for this research course will require advanced planning and preparation. Thus students planning to take this course are strongly advised to inform the chair of the program and the instructor at least one semester prior to taking this course. Prerequisites: CH330/330L, CH310A/310B, CH311, CH312 or consent of instructor. This course can serve as an upper division elective course for the Chemistry majors. It can also be taken to fulfill the elective requirement for graduate programs in either Environmental Science, or Biology, or Sustainable Agriculture Food and Natural Resources. This course can serve as an upper division elective course for the chemistry majors. It can also be taken to fulfill the elective requirement for graduate programs in either Environmental Science, or Biology, or Sustainable Agriculture Food and Natural Resources.

## **CH 498 CHEMISTRY INTERNSHIP**

1 - 3 credit hours

This course will provide students with practical skills and application of chemical knowledge in a chemistry related work environment. Students will also learn and apply communication and interaction skills in a work environment. Students desiring to take this course must have the internship course approved by the Program. Arrangement of an internship for credit is a collaborative process between the student, the supervising organization, and the academic department. An internship agreement form must be signed by all parties before the final approval of the course. The internship work must be primarily chemistry in nature. Students must complete the respective numbers of hours for the desired credit: 45 hours per credit, 90 hours for 2 credits, and 135 hours for 3 credits. Prerequisites: CH-310a, CH-310b, CH-311, CH-312 and CH-330 CH-330L. Instructors Consent.

## **COMMUNICATION AND MEDIA (CO)**

### **CO 106 INTRODUCTION TO MASS COMMUNICATION**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course is a survey of the history, theory, and practice of mass media on Guam, in the United States, and in the world.

### **CO 200 VOICE AND ARTICULATION**

AS RESOURCES PERMIT

3 credit hours

This course is a study of the speech mechanism and how it functions. It emphasizes phonetics and Standard American English pronunciations, as well as changes in the speaking voice. It is especially designed for education majors, non-native speakers of English, and those who desire improvement in their speaking performance.

## **CO 210 FUNDAMENTALS OF COMMUNICATION**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course introduces students to public speaking and person-to-person communication, as well as to group and intercultural communication. Students learn about basic speech preparation and delivery, as well as effective communication skills suited to the people with whom they interact in a variety of everyday contexts. Oral presentations may include demonstrative, informative, and/or persuasive speeches of 6-8 minutes in length.

Prerequisites: EN110 placement.

## **CO 226 MEDIA WRITING**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

The theory and practice in gathering and presenting news for the print media is covered in this course. Students work may appear in the Triton's Call. Prerequisite: EN110 placement.

## **CO 228 FILM AND TELEVISION CRITICISM**

FALL ONLY/ALL YEARS

3 credit hours

This course is as an introduction to the theoretical and historical approaches to cinema creation and TV narrative programming. The class is specifically an exploration of the critical tools that help interpret meaning from film and television. Students will develop visual literacy and research skills as they analyze, discuss, research and write about acclaimed film and filmmakers as well as select TV genres. Prerequisites: EN110 and EN111.

## **CO 236 BROADCAST PRODUCTION**

FALL ONLY/ALL YEARS

3 credit hours

This course is an examination of the various elements involved in television production. It includes lab experiences and hands on group production exercises and projects. Students will become familiar with single camera digital cinematography, lighting, audio for video/film, and non-linear editing using Adobe Premiere. Multiple-camera studio techniques are also introduced. Students will complete projects eligible for the University of Guam International Film Festival.

## **CO 240 PHOTO JOURNALISM**

FALL ONLY/EVEN YEARS

3 credit hours

Hybrid

Production, selection and use of photographs in newspaper and magazines are covered in this course. Students must have 35 mm camera. Prerequisite: CO226 or consent of instructor.

## **CO 250 ARGUMENTATION**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This course covers the theory of reasoned discourse, the principles of critical thinking, and the practice of argumentation and advocacy as applied in public discussion and debate of controversial issues.

## **CO 310 INTERCULTURAL COMMUNICATION**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This course presents the theory and insights into the practice of communication between persons of variant cultures. It focuses on building intercultural communication competence by gaining an understanding of differences in communication behaviors, expectations and values. Prerequisite: CO210, EN110.

## **CO 320 INTERPERSONAL COMMUNICATION**

SPRING ONLY/EVEN YEARS

3 credit hours

Theory and practice of interpersonal interaction: including personal growth, cooperation, conflict, negotiation and gaming. Prerequisite: CO210 or consent of instructor.

## **CO 326 ADVANCED REPORTING**

SPRING ONLY/EVEN YEARS

3 credit hours

This course covers the theory and practice of special news gathering skills; including investigative reporting, feature writing and precision journalism. Prerequisite: CO226.

## **CO 327 ADVERTISING IN THE MASS MEDIA**

FALL ONLY/ALL YEARS

3 credit hours

This course is an in-depth examination of advertising's impact on society and how mass communication advertisements are created. It covers the history, concepts and strategies of advertising, as well as creation and placement of mass media messages. Prerequisite: CO106 or consent of instructor.

## **CO 328 INDEPENDENT NARRATIVE FILMMAKING**

SPRING ONLY/ALL YEARS

3 credit hours

This is a comprehensive upper division cinema production class that develops student's abilities and direct professional narrative films. Students will focus on completing two short length films for regional and national student festival circuits.

## **CO 330 SMALL GROUP COMMUNICATION**

FALL ONLY/ODD YEARS

3 credit hours

This course focuses on the skills involved in the processing of information, making of decisions, leadership, control, and conflict resolution in problem-solving discussions. Prerequisite: CO210.

## **CO 336 BROADCAST JOURNALISM**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This course covers the theory and practice of writing and presenting news for the broadcast media. It includes individual and group projects in writing, reporting and interviewing techniques. Prerequisite: CO236, concurrent enrollment or consent of instructor.

## **CO 340 PERSUASION**

FALL ONLY/EVEN YEARS

3 credit hours

Hybrid

Persuasion covers the use of persuasive techniques in a variety of communication settings, ranging from public speaking situations to consumer contact with the mass media. Prerequisite: CO210.

## **CO 350 PUBLIC SPEAKING**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

Public Speaking covers the theory and study of rhetoric in public settings. The course is designed to assess individual public speaking behaviors and apply principles of rhetoric for improvement in speech preparation and delivery. Prerequisite: CO210 or consent of instructor.

## **CO 356 EDITING AND LAYOUT DESIGN**

SPRING ONLY/EVEN YEARS

3 credit hours

This is an upper division course in editing, page layout, and design of newspaper, newsletters, and other print publications with emphasis on computerized desktop publishing procedures. Semester projects may include work on the campus newspaper, Triton's Call, at the discretion of the instructor. Prerequisite: CO226 or consent of Instructor.



## **CO 357 MEDIA COMPUTER GRAPHICS**

SPRING ONLY/ALL YEARS

3 credit hours

This course introduces students to advanced elements of motion graphic design and digital manipulation for effective visual special effects used in TV and films. Students learn how to create meaningful movie trailers, action scenes with special effects and motion graphic openings for video News formats. The class is complementary to all upper division promotional and video production classes, including CO327 Advertising in Mass Media, CO336 Broadcast Journalism, CO328 Independent Narrative Filmmaking and CO426 Documentary Process. Prerequisite: CO 236 Broadcast Production.

## **CO 360 PUBLIC RELATIONS IN BUS AND PROFESSIONS**

FALL ONLY/ALL YEARS

3 credit hours

This is an introductory survey and skill course in basic public relations among various interest groups, i.e., commercial, educational, private and governmental sectors. Prerequisite: CO210.

## **CO 370 ORGANIZATIONAL COMMUNICATION**

SPRING ONLY/ODD YEARS

3 credit hours

This course provides an overview of the various theories and approaches which have been developed to understand human processes in organizations. It focuses on the impact of globalization and emerging communication technology on organizational processes, as well as the influence of organizational structure and hierarchy on communication and other organizational outcomes. Prerequisite: CO210.

## **CO 385 PRINT MEDIA EXPERIENCE**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This course provides students with practical on-campus journalism experience. Students work on the university newspaper, Triton's Call, under faculty supervision, reporting and writing on events relevant to the University community. Prerequisite: CO226 or concurrent enrollment.

## **CO 386 MASS MEDIA EXPERIENCE: BROADCASTING**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This course provides students with practical experience at local media outlets and the opportunity to apply knowledge gained in their previous courses to a real-world work environment. Prerequisite: CO236 or concurrent enrollment or consent of the instructor.

## **CO 398 COMMUNICATION INTERNSHIP**

FALL/SPRING/ALL YEARS

3 credit hours

This upper division course provides an optional, practical internship experience for students which will enhance their preparation for the professional world. Each student works 90 hours as an intern at a local business, organization, or government agency while also meeting with Instructor to integrate their educational knowledge and skills with their external experience. Prerequisites: 12 credit hours of Communication courses, junior standing or consent of instructor.

## **CO 410 SPECIAL TOPICS IN COMMUNICATION STUDIES**

AS REQUIRED

3 credit hours

This course provides the opportunity for intensive study of a specific area of communication theory and practice. It may be repeated for credit, with transcript showing the topic studied.

## **CO 426 DOCUMENTARY PROCESS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course enables students to learn the processes by which historical, social, cultural events and/or phenomena are prepared for presentation on public media. Emphasis is on research, writing, and production concepts.

Prerequisite: CO106, CO236 or consent of instructor.

## **CO 436 DIGITAL COMMUNICATIONS TECHNOLOGIES**

FALL ONLY/EVEN YEARS

3 credit hours

This course surveys the theory, practice ethical Issues, and design of contemporary and new and Emerging digital communication technologies. The Course will focus on the problems and Possibilities of such technologies. Students will Be actively engaged in class written assignments and hands-on projects. Prerequisites: CO-106 and EN-111.

## **CO 450 COMMUNICATION THEORY AND RESEARCH**

FALL ONLY/ALL YEARS

3 credit hours

This course is a survey of classical and recent communication theory and research, with emphasis on pertinent speech and mass communication professional literature, resources, and organizations, theory of scientific observation, methodology, and research, and modern Communication theory and research trends. Prerequisites: 6 credits of upper division communication courses.

## **CO 460 INTERGRATED PUBLIC RELATIONS CAMPAIGNS**

SPRING ONLY/ALL YEARS

3 credit hours

This course offers practical experience in the development of public relations campaigns for clients. It focuses on the application of public relations theory in the development and analysis of campaigns, with a particular emphasis on events intended to enhance an organization's reputation with various target audiences. Topics to be explored are relationship-building, creative messaging, and digital marketing. Prerequisites: CO-210, CO-327, CO-360 or consent of the instructor.

## **CO 491 CURRENT ISSUES IN COMMUNICATION AND SOCIETY**

FALL/SPRING/ALL YEARS

3 credit hours

This seminar examines appropriate communication behavior. The discussions explore the need for ethical guidelines in all venues of communication with particular emphasis on conflict resolution, consensus reaching, and team-building. The seminar offers alternatives to the Western model of "communication as a contest." This course is a capstone for Communication majors in that it integrates key concepts from other courses as well as skills learned through the general education program. Prerequisites: CO210. Senior-level status.

## **CO 498 COMMUNICATION INTERNSHIP**

FALL/SPRING/ALL YEARS

3 credit hours

This course is designed as a "bridge" experience between the academic and professional worlds for Communication majors in their senior year. It offers students advanced training in professional skills prior to graduation. Each student works a number of hours each week as an intern at a local business or agency, while also meeting with the Instructor for cognitive integration of their learning experiences. Prerequisite: 18 credit hours of Communication courses, senior standing.

## COMPUTER SCIENCE (CS)

### CS 200 COMPUTER APPLICATIONS

FALL/SPRING/ALL YEARS

3 credit hours

The course covers basic concepts in modern computers and their applications. Course topics include components of a computer, computer networks and Inter, computer software, categories of computers, computer applications in society, computer ethics and security, and so on. Homework and projects include Microsoft Windows, Microsoft Office (Word, Excel, and PowerPoint), webpage design and multimedia applications. Prerequisite: MA-085 a-b or MA-089 or math placement (higher than MA-085b or MA-089) or consent of instructor.

### CS 201 PROGRAMMING I

FALL/SPRING/ALL YEARS

4 credit hours

This course introduces high level computer programming languages with emphasis on program design, coding, debugging, testing, and proper documentation with applications. Prerequisite: CS200, MA161a with a "C" or higher or MA165 with a "C" or higher.

### CS 202 PROGRAMMING II

FALL/SPRING/ALL YEARS

4 credit hours

Online/Hybrid

This course introduces problem-solving methods by using an object-oriented programming language. Topics include data types, decisions and loops, objects and classes, arrays and array-lists, algorithms and methods, encapsulation and polymorphism, inheritance and interface, graphical user interfaces, and exception handling. Prerequisites: CS200 and CS201; or consent of instructor.

### CS 271 DISCRETE STRUCTURES

FALL ONLY/ALL YEARS

3 credit hours

Online

This course provides students with the foundations of discrete mathematics as they apply to computer science. Topics include functions, relations, sets, simple proof techniques, Boolean algebra, propositional and predicate logic, fundamentals of counting, graphs, trees, hash table, maps, and discrete probability. Prerequisites: MA-161B/MA-165 and CS-202 (Grade of C or higher).

### CS 280 PROGRAMMING PRACTICUM

FALL ONLY/ALL YEARS

4 credit hours

This is an intensive programming course covering concepts learned in the previous programming courses; Procedural and object-oriented design, documentation, arrays, classes, file input/output, recursion, dynamic variable, pointers. All programming assignments will be done in the closed labs, with outside work limited to reading and studying text and supplementary material, doing suggested exercises. This course meets four times a week, 3 hours each time in the lab. Prerequisite: CS-202 Programming II or GCC CS-206 Java I.

### CS 303 DATA STRUCTURES AND ALGORITHM ANALYSIS

FALL/SPRING/ALL YEARS

3 credit hours

The course covers the following concepts: Basic data structures; graph, search paths and spanning trees; algorithm design and analysis of sorting, merging and searching; memory management, hashing, dynamic storage allocation; integration of data structures into system design. Prerequisite: CS202 or consent of instructor.

## **CS 305 ASSEMBLY LANGUAGE AND COMPUTER ORGANIZATION**

FALL ONLY/ALL YEARS

3 credit hours

This course covers the organization and structure of the major components of a modern computer: combinational circuits, sequential circuits, simulation of circuits, coding, computer organization and architecture, including a detailed study of a micro-computer or minicomputer and the use of Assembly language. Prerequisite: CS202 and CS303, or consent of instructor.

## **CS 315 INTRODUCTION TO DATABASE MANAGEMENT SYSTEMS**

SPRING ONLY/ALL YEARS

3 credit hours

This course covers the following concepts: Definition of file components, access methods and file operations; algorithms for efficient implementation of data structures; characteristics of bulk storage media for mainframe and microcomputer or minicomputer; introduction to database management systems. Prerequisite: CS202 or consent of instructor.

## **CS 360 INTRODUCTION TO OPERATING SYSTEMS**

FALL ONLY/ALL YEARS

3 credit hours

This course covers the following concepts: Operating system history and services; file Systems; memory management; process Management-concurrent processes, communication, Semaphores, monitors, deadlocks; resource Management processor and disk scheduling; Security and protection systems. It meets for Three hours lecture weekly. Prerequisite: CS-202, CS-303 or Consent of instructor.

## **CS 365 COMPUTER ARCHITECTURE**

SPRING ONLY/ALL YEARS

3 credit hours

This course is an in-depth analysis of one or more operating systems, system data structure, hardware architecture, interrupt handling. Other topics may include parallel hardware architectures and performance analysis. Prerequisite: CS202 CS303 and CS305, or consent of instructor.

## **CS 371 ETHICS AND PROFESSIONALISM**

FALL ONLY/ALL YEARS

3 credit hours

This course introduces students to the societal and ethical obligations of computer science, information technology, and electrical/computer engineering practice. Topics include obligations of professional practice, electronic privacy, intellectual property, ethical issues in networking, computer security, computer reliability, and whistleblowing. Prerequisite: Junior standing.

## **CS 373 DATA STRUCTURES & ALGORITHMS**

SPRING ONLY/ALL YEARS

4 credit hours

This course strengthens students' understanding of data structures and their algorithms for the foundation they need to successfully design, implement, and maintain software system. Topics include stack, queues, lists, trees, priority queues, advanced tree structures, hashing tables, dictionaries and set. Associate algorithms will be studied as well as recursion and various searching and sorting algorithms. Students explore design and implementation of data structures and algorithms in object-oriented programming environment. Corequisite: CS-271 Discrete Structures. Prerequisite: CS-280 Programming Lab Practicum or passing the Examination of Programming Proficiency (EPP)

## **CS 375 COMPUTER ORGANIZATION AND ARCHITECTURE**

SPRING ONLY/ALL YEARS

3 credit hours

This course provides students with deeper understanding of the hardware environment upon which all computing is based and the interface it provides to higher software layers. The topics include digital logic, representation of data in machine level, assembly level machine organization, memory system organization and architecture, and interfacing and communication. Prerequisites: CS-202 CS-271 with grade C or higher.

## **CS 377 DATABASE DESIGN AND IMPLEMENTATION**

FALL ONLY/ALL YEARS

3 credit hours

This course introduces student to the concepts and theories of database systems. Topics include: information models and systems; the database environment; data modeling; conceptual modeling using the entity-relationship approach and mapping to relational tables; the relational model including the relational data structure, integrity rules and relational algebra and relational calculus; normalization; data definition and manipulation in SQL; conceptual, logical and physical database design, security transaction management; query processing; and advanced topics in database systems. Prerequisites: CS-373, BA-230 OR OA-210 Database Management System (at GCC).

## **CS 380 ORG OF PROGRAMMING LANGUAGES**

FALL ONLY/ALL YEARS

3 credit hours

The course examines general concepts of programming languages; scope and binding rules, applications and implementation of language concepts, including the study of two or more of the languages: ADA, ALGOL, PL/1, MODULA-2, SNOBOL, LISP, C and PASCAL. Prerequisite: CS202 and CS303, or consent of instructor.

## **CS 383 ORGANIZATION OF PROGRAMMING LANGUAGES**

FALL ONLY/ALL YEARS

3 credit hours

This course introduces the fundamental constructs of programming languages and principles of translation. Topics include history of programming languages, various programming paradigms, language design issues and criteria, and a formal method of describing syntax and introduction of lexical and syntax analysis. Prerequisites: CS-373 and CS-375 with grade C or higher.

## **CS 385 INTRODUCTION TO OPERATING SYSTEM**

FALL ONLY/ALL YEARS

3 credit hours

The course will study the introductory concepts in operating systems: historical development of batch, multi-programmed, and interactive systems; virtual memory, process, and thread management; interrupt and trap handlers, abstraction layer, message passing; kernel tasks and kernel design issues; signals and inter process communication; synchronization, concurrency, and deadlock problems. Prerequisite: CS-375 with grade C or higher.

## **CS 403 DATA COMMUNICATION & COMPUTER NETWORKS**

SPRING ONLY/ALL YEARS

4 credit hours

This course includes 3 lecture hours and 1 hands-on experimental hour. The course covers basic concepts and industrial principles of data communication and computer networks, OSI and TCP/IP protocols and Standards, data and signals, distributed computing; local and wide area networks. The experimental hour covers the hand-on knowledge and real-world skills for Network Administrators of Windows, Unix/Linux or Novel Netware networks systems. Prerequisite: CS-202 and CS-360, or consent of instructor.

## **CS 420 COMPUTER & NETWORK SECURITY**

FALL ONLY/ALL YEARS

3 credit hours

This course introduces the general principles of computer and network security from an applied viewpoint. Includes physical security, operating system, security, network security, database security, web security, cryptography and so on. Students must present hand-on labs in computer and network securities. Prerequisite: CS-315 CS-360 CS-403 with a C or better; or consent of Instructor.

## **CS 425 SYSTEMS ANALYSIS & DESIGN (CAPSTONE COURSE)**

FALL/SPRING/ALL YEARS

3 credit hours

Systems Analysis and Design describes a well-defined process for developing information technology, people, and data resources to support business goals and requirements. Prerequisites: CS-315, CS-365 CS-380, CS-403 or consent of instructor.

## **CS 431 ADVANCED TOPICS IN COMPUTING**

FALL ONLY/ALL YEARS

3 credit hours

Online/Hybrid

This course is a study of selected topics in computing and information systems, such as computer graphics, computer modeling, information modeling, software engineering, design and analysis of software. With different subject matter, it may be repeated for credit. Prerequisites: Junior/senior level standing in computer science CS202 and CS303, or consent of instructor.

## **CS 477 SOFTWARE ENGINEERING**

FALL ONLY/ALL YEARS

3 credit hours

This course presents software engineering techniques and examines the software life-cycle, including software specification, design, implementation, testing and maintenance the course evaluates past and current trends in software development practice, the course gives an overview and discusses methods and techniques used in agile software processes, contrast agile approaches with traditional software development methods. Prerequisites: CS-373 and CS-377 with a grade of C or higher.

## **CS 485 DATA COMMUNICATIONS AND NETWORKING**

FALL ONLY/ALL YEARS

3 credit hours

This course is a student to the theory of computer networking focusing on the TCP/IP Internet protocols and covering the five layers: physical, data link network, transport, and application. The course covers communication on wired, wireless, and cellular networks. The course introduces secure communication and its incorporation into different layer of the model. Prerequisite: CS-385 with a grade of C or higher.

## **CS 492 PRACTICUM IN COMPUTER SCIENCE**

FALL/SPRING/ALL YEARS

3 credit hours

This is a project-oriented course in computer science for seniors. All projects will be chosen by students or assigned by the professor. This guided work will be supervised by a qualified professor or project director. Students need to submit project reports at regular intervals.

## **CS 498 COMPUTER SCIENCE INTERNSHIP**

SPRING ONLY/ALL YEARS

4 credit hours

This course provides senior students a whole-semester internship opportunity. Students can obtain practical training experiences in the fields of computer science or computer information systems, such as computer networks, database management, computer system management, and software design and implementation. During the semester, students work in a technical or professional area under the supervision of an expert in the field. Prerequisite: C or better in CS315, CS360 and CS403.

## **CYBERSECURITY MANAGEMENT (CSM)**

### **CSM 100 INTRODUCTION TO CYBERSECURITY MANAGEMENT**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course introduces students to the growing Legal, technical, managerial, economic, and social Issues surrounding crimes committed in cyberspace. The course discusses the nature of cybercrime from A management and international perspective and Focuses on how the borderless nature of cybercrime. Impacts law enforcement and cybersecurity in Public and business organizations.

### **CSM 200 FUNDAMENTAL OF COMPUTERS AND NETWORKING TECHNOLOGIES FOR CYBERSECURITY MANAGERS IN ORGANIZATIONS:UNDERSTANDING COMPUTER HARDWARE, NETWORKS AND THE INTERNET**

FALL/SPRING/ALL YEARS

3 credit hours

This course introduces students to the growing Legal, technical, managerial, economical and Social issues surrounding crimes committed in Cyberspace. The course discusses the nature of Cybercrime from a management and international Perspective and focuses on how the borderless Nature of cybercrime impacts law enforcement and Cybersecurity in public and business Organizations.

## **CSM 300 CYBERSECURITY MANAGEMENT TOOLS AND TECHNIQUES**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

Cybersecurity has become a topic of critical Importance in today's networked and interconnected Environment. The study of cybersecurity management Describes the tools, techniques, methods, and Strategies used by information security Professionals and managers to combat security Breaches and threats. This course provides an Overview of the field of information security and In-depth knowledge of the complex nature of cyber Threats and countermeasures. In this course Students will examine key strategies and Methodologies used to increase information Continuity in business and government Organizations and information security disaster Preparedness. Also presented are methods of Securing information systems using organizational Security controls, policies, and best practices With coverage extended to additional topics Including information privacy and regulations.

### **CSM 301 CYBERCRIME AND DIGITAL FORENSICS**

FALL/SPRING/ALL YEARS

3 credit hours

The global reach of the internet, the low marginal Cost of on-line activity, and the relative Anonymity of information technology users have Contributed to a wide escalation in cybercrimes. Consequently, information and communication Technologies (ict) are being increasingly employed To instigate threats to government, business and Global economies. This course provides an Overview of cybercrime and the forensic and Digital law enforcement practices put in place to Respond to them. The course will focus on the Types and extent of current cybercrimes, how Organizations respond to these crimes, including Protections afforded to computer users, the Policies that govern cybercrime detection and Prosecution, related law enforcement technologies.

## **CSM 302 LEGAL ISSUES AND CASES IN CYBERSECURITY AND THE LAW: LOCAL, NATIONAL AND INTERNATIONAL**

FALL/SPRING/ALL YEARS

3 credit hours

This course will introduce students to the key Issues in cybersecurity management and the law and Help them develop a basic understanding of the Technical, legal and ethical issues related to Cybersecurity . Case studies in cybersecurity Breaches and their legal consequences shall be Presented, discussed and analyzed in this course. At the end of the course, students will understand Today's cybersecurity legal and privacy related Challenges faced by leaders and manager of public And business organization (local national and International).

## **CRITICAL THINKING (CT)**

### **CT 101 CRITICAL THINKING**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This is an interdisciplinary foundation course in critical thinking. Students learn how to analyze, critically evaluate and construct arguments, detect common fallacies in reasoning, and propose logical and creative solutions to complex problems. Critical thinking skills are valuable in all disciplines and will benefit students in academic contexts and in life. Corequisites: EN109 or the equivalent.

## **EDUCATION (ED)**

### **ED 110 INTRODUCTION TO TEACHING**

FALL/SPRING/ALL YEARS

3 credit hours

This course assists the perspective teacher in Evaluating personal qualifications in the light Of criteria for successful classroom teaching and Helps the student make a well-informed decision for or against a career in teaching. In addition To the classroom assignments, nine hours of Classroom observation in elementary, middle and High school is required to pass this course. Student will work individually to write Reflections on their observations and present a 10-minute presentation on one of the episodes.

## **ED 201 HUMAN GROWTH AND DEVELOPMENT**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers the lifespan of human growth and development with special emphasis on the formative years of the child and the role of parents, caregivers and teachers. Through online and/or on-site observations, developmental patterns are studied in the physical, cognitive, social and emotional domains. Prerequisite: PY-101.

### **ED 215 INTRODUCTION TO EXCEPTIONAL INDIVIDUALS**

FALL/SPRING/ALL YEARS

3 credit hours

This is an introductory course that investigates exceptionalities, including gifted as well as disabling conditions. This course will focus on types of exceptionalities, etiological factors, dynamics, incidence, and the psychological implications of the various exceptionalities on the individuals, the family, including those with culturally and linguistically diverse backgrounds, and the social environment. Special Education majors must complete ED215 and ED292 prior to taking higher-level Special Education courses.

### **ED 265 CULTURE AND EDUCATION IN GUAM**

FALL/SPRING/ALL YEARS

3 credit hours

This is a study of Guam's cultural development focusing on periods of intense cultural conflict and interchange. It focuses on the island and the concomitant implications for educators. Differing educational approaches to the cultural environment, both past and present, are explored. It meets the Guam teacher certification requirement in culture or history.



## **ED 271 TECHNOLOGY APPLICATIONS FOR EDUCATORS**

FALL/SPRING/ALL YEARS

3 credit hours

This teaching methods course emphasizes the psychological and theoretical basis for using instructional media and technology in education. Students produce various instructional media and demonstrate the use of the newer technologies such as telecommunications, assistive technology, computers, and multimedia as educational tools.

## **ED 280 INTRODUCTION TO BILINGUALISM/BICULTURALISM**

FALL ONLY/ALL YEARS

3 credit hours

This course examines bilingualism/biculturalism and includes the sociological, psychological, linguistics, cultural, and educational aspects.

## **ED 292 PRACTICUM IN SPECIAL EDUCATION**

AS REQUIRED

3 credit hours

This practicum course deals with observations of various agencies serving exceptional individuals. Students are required to put in two (2) hours of observation a week and one-hour seminar. Prerequisite: ED215, or concurrent enrollment or consent of instructor. Special Education majors must take this course prior to taking higher-level special education courses. Grading System: A-F.

## **ED 300 EDUCATIONAL PSYCHOLOGY**

FALL/SPRING/ALL YEARS

3 credit hours

This course offers an analysis of the complex factors involved in learning, individual differences, motivation for learning, individual differences in learning, leadership, and socio-cultural factors as they affect the education of children and youth. Prerequisite: PY101, ED201.

## **ED 310 REMEDIATION OF INDIVIDUALS WITH LEARNING DISABILITIES/BEHAVIOR DISORDERS**

AS REQUIRED

3 credit hours

This is a methods course, which will provide an in-depth study of children and adolescents with specific learning disabilities. The course will focus on the identification, assessment, placement and delivery of services across all grade levels. It will include the adaptation of content, methodology and delivery of instruction to students with learning disabilities, including those with culturally and linguistically diverse backgrounds and social environment. Prerequisite: ED215 or consent of instructor.

## **ED 311 CURRICULUM FOR CHILDREN AND YOUTH WITH DISABILITIES**

AS REQUIRED

3 credit hours

This is curriculum course for working with students with disabilities. In this course the major focus is the discussion of the role practiced by special education personnel and other school based support individuals on the relevant curriculum needs for individuals with developmental disabilities. This includes the logical and systematic decision-making process for both short and long term planning, which involves the student, parent and teachers in setting curriculum content priorities in the planning process. Prerequisites: ED215 and ED292, or consent of instructor.

## **ED 312 GUIDANCE FOR EXCEPTIONAL INDIVIDUALS AND FAMILY**

### **AS REQUIRED**

3 credit hours

This course considers the counseling role of the professional in providing support to exceptional children with disabilities and their families. The improvement of mental health and adjustment of exceptional pupils being served is a major topic. This course includes some basic skills useful for counselors. Understanding of the stages of parental reaction to having a child with a disability, family dynamics, and special considerations one must take into account prior to working with a family (i.e. student age, family culturally competent strategies are learned, specifically in the areas of developing a counseling plan, developing trust, building relationships, and family needs assessment. Prerequisites: ED215 or consent of instructor.

## **ED 314 ASSESSMENT OF SKILLS FOR CHILDREN AND YOUTH WITH SPECIAL NEEDS**

### **AS REQUIRED**

3 credit hours

This is an assessment course for determining the present levels of educational performance of student with or without disabilities. The course addresses pre-placement assessments, determination of eligibility for special education programs, assessing daily progress in meeting learning goals and objectives and reevaluation strategies of students with disabilities. It will also address the understanding of psychoeducational reports and determining the instructional implication of such reports. School-wide assessments for both groups and individual's assessment, as will performance-based and authentic assessments will be reviewed. Prerequisite: ED215 or consent of instructor.

## **ED 315 METHODS OF TEACHING CHILDREN AND YOUTH WITH SPECIAL NEEDS**

### **AS REQUIRED**

3 credit hours

This is a method course, which will provide an in-depth educational study of children and adolescents with moderate to severe disabilities including mental retardation, autism, cerebral palsy, etc. The course will focus on the identification, assessment, placement and delivery of services across all grades levels in various educational settings. It will include the adaptation of content, methodology and delivery of instruction to all students, including those with culturally linguistically diverse backgrounds and social environment, with moderate to severe disabilities. Prerequisite: ED215 or consent of instructor.

## **ED 319 CHILDREN'S LITERATURE**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course emphasizes the reading and examination of all types of printed and audio-visual materials, a study of the history and development of children's literature, its value to the communication process, and the criteria for selection and utilization of books and closely related materials suited to the needs and tastes of elementary school children including exceptional children.

## **ED 321 LANGUAGE ARTS METHODS: SECONDARY**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers objectives, methods, materials and philosophy for instruction in the secondary school program. It is designed for majors English Education or language arts specialization students. Classroom observation is required. Prerequisites: ED110, ED-300, and Admissions to SOE and 12 credit hours in EN, CO, LN. Students should take ED-489 concurrently and course should be taken the semester before student teaching.

### **ED 322 SOCIAL SCIENCES METHODS: SECONDARY**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers objectives, methods, materials and philosophy for teaching social studies at the secondary school level, for History for Education or Government for Education majors or social studies specialization students. Observation in secondary social science classes is required. Prerequisites: ED-110, ED-192, ED-300, and Admissions to SOE and 12 credit hours in social sciences. Students should take ED-489 concurrently and course should be taken the semester before student teaching.

### **ED 323 MATHEMATICS METHODS: SECONDARY**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers objectives, methods, materials and philosophy for teaching the mathematics at the secondary school level, for majors and mathematics specialization students. Observation in secondary mathematics classes is required. Prerequisites: ED-110, ED-300, and Admissions to SOE and 12 credit hours in mathematics. Students should take ED-489 concurrently and course should be taken the semester before student teaching.

### **ED 324 SCIENCE METHODS: SECONDARY**

FALL/SPRING/ALL YEARS

3 credit hours

Science majors and general science specialization students are directed to objectives, methods, materials and philosophy of teaching science in the secondary schools. Observation in secondary science classes is required. Prerequisites: ED-110, ED-300, and Admissions to SOE and 12 credit hours in science. Students should take ED-489 concurrently and course should be taken the semester before student teaching.

### **ED 325 BUSINESS SUBJECTS METHODS: SECONDARY**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers objectives, methods, philosophies, and materials for the improvement of instruction in both skills and non-skill subjects in business. Observation in secondary school business classes is required. Prerequisites: ED-110, ED-300 and Admission to SOE and 12 credit hours in science. Students should take ED-489 concurrently and course should be taken the semester before student teaching.

### **ED 326 FINE ARTS METHODS, SECONDARY**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers objectives, methods, materials, and philosophy for teaching fine arts at the secondary school level, for majors and fine arts specialization students. Observation in secondary fine arts classes is required. Prerequisites: ED-110, ED-300 and Admission to SOE and 12 credit hours in art or music. Students should take ED-489 concurrently and course should be taken the semester before student teaching.

### **ED 327 CONSUMER FAMILY SCIENCES METHODS: SECONDARY**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers objectives, methods, and philosophies for teaching Consumer Family Science (CFS) in middle and high school. Observations and participation in CFS classes in secondary schools are required. Prerequisites: ED-110, ED-300 and Admission to SOE and 12 credit hours CFS. Students should take ED-489 concurrently and course should be taken the semester before student teaching.

## **ED 328 CAREER AND TECHNICAL EDUCATION METHODS I**

AS REQUIRED

3 credit hours

This course aids the prospective teacher in developing and implementing Career and Technical Education (CTE) curriculum and teaching methods in the classroom with emphasis on research finding. Observation in CTE classes is required. Prerequisites: ED-110, ED-300 and Admission to SOE and 12 credits hours in CFS. Students should take ED-489 concurrently and course should be taken the semester before student teaching.

## **ED 329 VOCATIONAL/TECHNICAL METHOD II**

SPRING ONLY/ALL YEARS

3 credit hours

This course is an extension of ED328 and provides students an opportunity to strengthen their skills in Vocational/Technical Curriculum Development and instructional techniques. Students also prepare and utilize instructional material that support individualized learning. Prerequisite: ED328.

## **ED 330 LANGUAGE ARTS IN EARLY CHILDHOOD**

AS REQUIRED

3 credit hours

This course covers methods and materials appropriate to teach language arts to young children including the development of oral and written language. Practicum is required. Prerequisite: ED251.

## **ED 331 TEACHING THE YOUNG CHILD**

AS REQUIRED/ALL YEARS

3 credit hours

This course covers school experiences appropriate for young children, which provide the foundation for continued learning throughout school and later life. Observation and Practicum is required. Prerequisite: ED251.

## **ED 332 CURRICULUM FOR YOUNG CHILDREN**

AS REQUIRED/ALL YEARS

3 credit hours

This course covers instructional methods and materials appropriate to teaching young children with emphasis on science, social studies, mathematics, health and physical education. Practicum is required. Prerequisite: ED251.

## **ED 333 CREATIVE ARTS IN EARLY CHILDHOOD**

AS REQUIRED/ALL YEARS

3 credit hours

Methods of directing children's experience in the fine arts and encouraging creativity are presented. Practicum is required. Prerequisite: ED251.

## **ED 334 SOLVING DISCIPLINE PROBLEMS: STRATEGIES FOR CLASSROOM TEACHERS**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

Teachers who work with young children need the most effective ways to address problems. In this course students will learn different problem-solving techniques that help children learn to accept responsibility and communicate with each other.

## **ED 336 BUILDING HOME AND SCHOOL RELATIONSHIPS IN EARLY CHILDHOOD EDUCATION**

AS REQUIRED/ALL YEARS

3 credit hours

This course will focus on the importance of parental involvement and how to build relationships that will ensure success in the classroom. Students will discuss the awareness, knowledge, and skills needed to work productively with children and their parents. Prerequisite: ED331.

### **ED 343 TRANSITION IN SPECIAL EDUCATION**

AS REQUIRED

3 credit hours

This course provides knowledge and skills necessary for implementing relevant career education, vocational, family living and transition programs critical to the individuals with disabilities becoming contributing members to society. Career awareness programs in the elementary, middle, and senior high schools are examined. This course is required for all Special Education majors. Prerequisite: ED215 or consent of instructor.

### **ED 350 EFFECTIVE TEACHING STRATEGIES FOR THE ELEMENTARY MULTICULTURAL CLASSROOM**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This is a study of techniques of classroom management, learning objectives, writing lesson and unit plans, and matching teaching strategies with learning styles. Prerequisites: ED-110, ED-192 or equivalent, ED-201, 300 or consent of instructor.

### **ED 351 FINE ARTS METHODS: ELEMENTARY**

SPRING ONLY/ALL YEARS

3 credit hours

This course gives students a working knowledge of the fundamentals of teaching music, arts, and drama. The abilities to keenly observe and perceive in order to create personal expressions that can serve as mortar for all learning are encouraged. Prerequisites: Any 100-200 level courses in Art Theater Music & ED-350 or concurrent enrollment

### **ED 353 SOCIAL STUDIES METHODS: ELEMENTARY**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This course covers objectives, methods, materials and philosophy of the elementary social studies program. Prerequisites: Any 100 or 200 level PS, GE, HI, AN, SO, BA/EC or LN course and ED-350 or concurrent enrollment. .

### **ED 354 SCIENCE METHODS: ELEMENTARY**

FALL ONLY/ALL YEARS

3 credit hours

Online

This course strives to develop an attitude of research and inquiry among students who are in teacher preparation as well as demonstrating methods to accomplish a similar goal with children. Prerequisites: Any 100 or 200 level BI, CH, NS or PH courses and ED350.

### **ED 355 LANGUAGE ARTS METHODS: ELEMENTARY**

SPRING ONLY/ALL YEARS

3 credit hours

This course stresses an understanding of the phases of language arts development and the selection and use of educational approaches to enhance this development. Both ED-355 and ED-357 to be taken concurrently. Prerequisites: EN-111 and ED-350 or concurrent enrollment. Corequisite: ED-357.

### **ED 356 MATHEMATICS METHODS: ELEMENTARY**

FALL ONLY/ALL YEARS

3 credit hours

Online

This course covers objectives, methods and materials for teaching mathematics in the elementary schools. Experience in planning and teaching mathematics lessons on several levels within the elementary level is required. Prerequisites: MA-110 and ED-350 or concurrent enrollment.

## **ED 357 READING METHODS: ELEMENTARY**

AS REQUIRED

3 credit hours

This course examines modern theory and practice in the various areas of reading instruction. Emphasis is placed on a basic developmental reading program in the classroom; organization and administration; adjustment to meet individual differences; reading readiness; basic reading skills; word analysis structural and phonetic); reading in the content subjects; and recreational reading. Classroom observation and participation are required. Practicum is required. Both ED355 and ED357 to be taken concurrently. Prerequisites: EN111 and ED350 or concurrent enrollment. Corequisite: ED355.

## **ED 363 P.E. AND HEALTH METHODS ELEMENTARY**

SPRING ONLY/ALL YEARS

3 credit hours

This course is designed to prepare elementary classroom teachers to teach Health and Physical Education in the elementary schools. Health and Physical Education concepts and skills that are contained in the professional association standards as well as the standards of teaching from the GPSS Teacher Standards and the conceptual framework adopted by the UOG school of Education are integral components. Prerequisite: AL-185 or HS200 and ED-350

## **ED 384 STUDENT ACADEMIC COUNSELOR TRAINING**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers the theory and practice of peer counseling with emphasis on study skill development and cross-cultural communication. Students gain experience as instructor aids in FY101. Prerequisites: EN111. Sophomore standing. Approval of Counseling Services Committee required.

## **ED 385A STRUCTURE OF THE LANGUAGE**

FALL ONLY/ALL YEARS

3 credit hours

This is the study of the structure of a target language which provides valuable information for second language teachers and teachers in bilingual/bicultural programs. The course may be repeated for credit when different target languages are studied. Prerequisite: Professionally assessed language competency.

## **ED 385B STRUCTURE OF THE LANGUAGE**

AS REQUIRED/ALL YEARS

3 credit hours

Online/Hybrid

This is the study of the structure of a target language which provides valuable information for second language teachers and teachers in bilingual/bicultural programs. The course may be repeated for credit when different target languages are studied. Prerequisite: Professionally assessed language competency.

## **ED 385C STRUCTURE OF THE LANGUAGE: CHAMORU ORTHOGRAPHY**

SUMMER/AS REQUIRED

3 credit hours

This is the study of the structure of the language which provides valuable information for second language and bilingual teachers. This course may be repeated for credits when different targeted languages are studied. Prerequisite: ED385a-b.

## **ED 392 METHODS PRACTICUM**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This course provides a field experience with the first upper division in the Elementary Education Program. Prerequisites: ED350; Effective Teaching in the Elementary Multicultural Classroom; consent of instructor.

## **ED 403 FOUNDATIONS OF EDUCATION**

SPRING ONLY

3 credit hours

Through a study of philosophy and principles which underlie American's schools, the forces which influence education (economic, historical, social and psychological) are examined. Open only to students with 60 hours or more earned college credits. Meets the requirement for ED110. Prerequisite: Upper division standing.

## **ED 404 FOUNDATIONS OF VOCATIONAL/TECHNICAL EDUCATION**

FALL ONLY/ALL YEARS

3 credit hours

This is an overview of the evolution and current developments in various forms of Vocational-Technical Education. It includes an introduction to differing philosophical perspectives, as well as an exploration and analysis of the technological, cultural, political, economic and legislative factors that affect current and future forms of Vocational and Technical Education.

## **ED 405 ORGANIZATION AND MANAGEMENT OF VOCATIONAL/TECHNICAL EDUCATION LABORATORIES**

SPRING ONLY/ALL YEARS

3 credit hours

This course assists students in the development of knowledge and skills necessary to organize and manage the Vocational/Technical Education Laboratories.

## **ED 406 EVALUATION AND THE IMPROVEMENT OF VOCATIONAL/TECHNICAL EDUCATION PROGRAMS**

SPRING ONLY/ALL YEARS

3 credit hours

Vocational teachers develop skills and acquire knowledge for the evaluation and reporting of vocational students' performance, determining student grades, evaluating instructional program effectiveness, and evaluating vocational programs. Prerequisite: ED404 or consent of instructor.

## **ED 411 CONTEMPORARY ISSUES IN COUNSELOR EDUCATION**

SPRING ONLY/ALL YEARS

3 credit hours

This is an approach to human endeavor as a matter of interpersonal relations with basic information concerning personality development, mental mechanisms and pathological personality types. It is aimed at the WHY of human behavior and intended for teachers. Prerequisite: Upper division standing or consent of instructor.

## **ED 420 YOUNG ADULT LITERATURE**

SPRING ONLY/ODD YEARS

3 credit hours

This is a survey of books and other forms of literature that are suitable for secondary school students with emphasis on current interests and materials. It is an introduction to basic aids for selection, as well as practice in techniques of reading guidance and promotional programs such as book talks, booklists, and film programs.

## **ED 442 SPECIAL EDUCATION LAW**

AS REQUIRED/ALL YEARS

3 credit hours

Online

This course develops the knowledge and skills necessary for pre-service, in-service and related personnel in the development and implementation of Individualized Education Plans (IEPs) for children and youth with disabilities, including those with culturally linguistically diverse backgrounds and social environment, who are eligible for Special Education services. The development of both long term and short-term goals and objectives within the guidelines of current Special Education legislation is a major focus of the course. Prerequisites: ED215 or consent of instructor.

## **ED 443 ASSISTIVE TECHNOLOGY IN SPECIAL EDUCATION**

AS REQUIRED

3 credit hours

This course is designed for special education and regular education teachers who expect to teach students with disabilities. Students learn to select, adapt, create, and use materials and assistive technology for students with disabilities. Prerequisite: ED215 or consent of instructor.

## **ED 443G ASSISTIVE TECHNOLOGY IN SPECIAL EDUCATION**

SPRING ONLY/ALL YEARS

3 credit hours

This course is designed for special education and regular education teachers who expect to teach students with disabilities. Students learn to select, adapt, create, and use materials and assistive technology for students with disabilities. Prerequisites: ED655 or consent of instructor.

## **ED 444 SOCIOCULTURAL ASPECTS OF EDUCATION**

SPRING ONLY/ALL YEARS

3 credit hours

This is a survey of sociological and psychological factors related to education of children outside the cultural and economic mainstream of American society, and includes a review of local resources and facilities to assist these pupils. Prerequisites: SO101, PY101 or consent of instructor.

## **ED 444G SOCIOCULTURAL ASPECTS OF EDUCATION**

AS REQUIRED

3 credit hours

This course is a survey of sociological and psychological factors related to the education of children outside the cultural and economic mainstream of American society. Review of local resources and facilities to assist these pupils. Prerequisite: SO101, PY101, or consent of instructor.

## **ED 446 INCLUDING CHILDREN WITH DISABILITIES IN THE REGULAR CLASSROOM**

FALL/SPRING/ALL YEARS

3 credit hours

This course is designed for special and general education teachers at both elementary and secondary level. It covers basic knowledge and skills necessary for teaching students with disabilities in order to be involved in and progress within the least restrictive environment. Emphasis is placed on the placement of students primarily within the general education setting unless it is determined that placement in this setting with supplementary aids and services has proven to be unsatisfactory. Special emphasis is also given to multicultural populations and settings, including those with culturally and linguistically diverse backgrounds, and the social environment. Prerequisites: Admission to SOE.

## **ED 446G INCLUDING CHILDREN WITH DISABILITIES IN THE REGULAR CLASSROOM**

FALL/SPRING/ALL YEARS

3 credit hours

This course is designed for special and general education teachers (both elementary and secondary). It covers basic knowledge and skills necessary for teaching students with disabilities in order to be involved in and progress within the least restrictive environment. Emphasis is placed on the placement of students primarily within the general education setting unless it is determined that placement in this setting with supplementary aids and services has proven to be unsatisfactory. Special emphasis is also given to multicultural populations and settings. Prerequisite: ED655 or consent of instructor.

## **ED 449 DIRECT INSTRUCTION TEACHING STRATEGY**

AS REQUIRED

4 credit hours

This competency-based course deals with the development of skills necessary for effectively teaching direct instruction programs dealing with basic skills of reading, spelling, language, or arithmetic. The specific conceptual content will vary depending on the specific levels of the program(s) taught. Prerequisites: ED300 or consent of instructor.



## **ED 449G DIRECT INSTRUCTION TEACHING STRATEGY**

### **AS REQUIRED**

4 credit hours

This competency-based course deals with the development of skills necessary for effectively teaching direct instructional programs dealing with basic skills of reading, spelling, language, or arithmetic. The specific conceptual content will vary depending on the specific level of program(s) taught. Prerequisite: ED300 or consent of instructor.

## **ED 451 AUDIO VISUAL EDUCATION**

FALL/SPRING/ALL YEARS

3 credit hours

This is a laboratory course in which instructional design and the selection, production, and utilization of media resources are studied. A survey of perception, communication and learning theories, as well as selected research studies applicable to the design of instructional systems are included. Prerequisites: ED300 or consent of instructor.

## **ED 452 COMPUTERS IN EDUCATION**

FALL/SPRING/ALL YEARS

3 credit hours

The course is designed to teach preservice and in-service teachers about micro-computers in education. It provides practical experience with computers, and aids students in learning the various types of software (applications, utilities, CAI/CMI) and their school and classroom uses. LOGO is taught. Issues involved in computer use in education are studied. No previous computer experience is necessary.

## **ED 452G COMPUTERS AND EDUCATION**

### **AS REQUIRED**

3 credit hours

The course is designed to teach pre-service and in-service teachers about micro-computers in education. It provides practical experience with computers, and aids students in learning the various types of software (applications, utilities, CAI/CMI) and their school and classroom uses. LOGO is taught. Issues involved in computer use in education are studied. No previous computer experience is necessary.

## **ED 457 BEHAVIOR MANAGEMENT IN SPECIAL EDUCATION**

AS REQUIRED/ALL YEARS

3 credit hours

This course focuses on managing student behavior (with or without disabilities) to improve classroom instruction and increase learning. This course is designed to help teachers to increase on-task behavior on academic tasks and decrease problem behaviors. The primary focus is on prevention and intervention for inappropriate behavior that interferes with teaching and learning. Emphasis is given to procedures for administration and management of the learning situation in the classroom in order to provide a positive learning environment. This course will also address issues related to discipline as specified in the Individuals with Disabilities Act (IDEA). Prerequisite: ED215.

## **ED 457G BEHAVIOR MANAGEMENT IN SPECIAL EDUCATION**

SPRING ONLY/EVEN YEARS

3 credit hours

This course is designed to provide classroom teachers and other school staff with the knowledge and skills necessary to promote school-wide discipline procedures, prevent discipline problems, and correct inappropriate behaviors. Focus will include preventive measures related to effective instruction. In addition, strategies on dealing with disruptive, distracting, and dangerous behaviors will be provided in order to ensure a safe and effective learning environment. Information on conducting functional assessments, developing positive behavioral support plans, and disciplining students with disabilities will also be covered in this course. Prerequisite: ED655.

## **ED 462 CONTENT AREA LITERACY**

FALL ONLY/ALL YEARS

3 credit hours

Online

This course is designed to meet those specific needs for instruction of reading in the middle and secondary school environment. Reading in the content area is emphasized and such concepts as readability levels, study skills and vocabulary development are covered utilizing the competency-based approach. Current strategies concerning remedial readers, motivation of the reluctant reader, material development and comprehension skills are related to this instructional level. Prerequisites: ED110, ED192, ED300 and Admission to SOE.

## **ED 463 CLASSROOM MANAGEMENT FOR A DIVERSE SCHOOL AND SOCIETY**

SPRING ONLY/ALL YEARS

3 credit hours

The course covers practical, theoretical, Philosophical, and ethical aspects of school and Society, the education profession, and secondary Schools with particular focus on classroom Management, school violence, school safety, Educational law, and other critical social issues. Prerequisites: Admission into the School of Education. Course should be taken just prior to student teaching.

## **ED 473 DEVELOPING COGNITIVE ABILITIES**

AS REQUIRED

3 credit hours

This course examines how to help pupils develop skills necessary to independent learning; strategies designed to help pupils make inferences and predications. Three processes essential to developing independent learners are emphasized: concept diagnosis, interpretation of data and application of knowledge.

## **ED 476 EFFECTIVE MIDDLE SCHOOLS**

FALL ONLY/ALL YEARS

3 credit hours

This course examines the middle school concept and movement; the rationale for designing educational programs for the middle grades (6-8). The course explores the implications of teacher learner, instructional leader and learning environment data for curriculum and instruction. It focuses on dealing with the complex problems facing the middle school teachers.

## **ED 480 SECOND LANGUAGE CURRICULUM AND MATERIALS DEVELOPMENT**

AS REQUIRED/ALL YEARS

3 credit hours

Online

The course surveys curriculum selection and evaluation and analyzes various methods of curriculum modification. It focuses on the selection of existing second language materials, adaptation of materials, and development of original materials for use in a second language or bilingual/bicultural classroom. Prerequisite: ED280.

## **ED 481 SECOND LANGUAGE TEACHING METHODOLOGY**

AS REQUIRED/ALL YEARS

3 credit hours

Online

This is an introduction to the large and growing field of second language pedagogy. The primary purpose of the course is to provide current and prospective second language teachers with knowledge of the theoretical bases and research which are related to second language learning. The secondary purpose is to consider the practical application of the theories and research within the second language classroom.

## **ED 481G SECOND LANGUAGE TEACHING METHODOLOGY**

AS REQUIRED

3 credit hours

Online

This is an introduction to the large and growing field of second language pedagogy. The primary purpose of the course is to provide current and prospective second language teachers with knowledge of the theoretical bases and research which are related to second language learning. The secondary purpose is to consider the practical application of the theories and research within the second language classroom.

## **ED 482 WORKING WITH SECOND LANGUAGE LEARNERS**

AS REQUIRED/ALL YEARS

3 credit hours

Online

This course deals with understanding the plight of the limited English proficient student in the mainstream classroom, and techniques and strategies for effectively teaching these students. A practicum is included.

## **ED 483 INTRODUCTION TO EARLY CHILDHOOD SPECIAL EDUCATION**

AS REQUIRED

3 credit hours

This course provides an overview of the rationale, policies, and procedures for Early Childhood Special Education Services. The etiology of disabilities and a description of children with handicaps are presented. Implications for educational intervention and service delivery for children from birth to 5 years are discussed. The course is designed to introduce students to the field of Early Childhood Special Education.

## **ED 483G INTRODUCTION TO EARLY CHILDHOOD SPECIAL EDUCATION**

FALL ONLY/ALL YEARS

3 credit hours

This course provides an overview of the rationale, policies, and procedures for Early Childhood Special Education Services. The etiology of disabilities and a description of children with handicaps will be presented. Implications for educational intervention and service delivery for children from birth to 5 years will be discussed. The course is designed to introduce students to the field of Early Childhood Special Education.

## **ED 484G THE ART AND CRAFT OF TEACHING WRITING**

Intersession/ALL YEARS

3 credit hours

This course draws on current perspectives in language and literacy acquisition to help teachers set up a process-centered reading and writing classroom. Emphasis will be on the Authoring Cycle as a conceptual framework for a reading/writing curriculum in PK-12 classrooms. In addition, teachers will learn how to use the authoring cycle to construct meaning across the sign systems.

## **ED 486 BEST (BUILDING EFFECTIVE STRATEGIES FOR TEACHING)**

FALL ONLY/ALL YEARS

3 credit hours

Online

This course brings together novice and experienced teacher to work collaboratively on strategies to solve classroom problems via the action research methodology. The course will equip beginning teachers with pedagogical and professional skills; and experienced teachers with research skills, particularly those that are needed to carry out collaborative action research.

Prerequisite: current enrollment in or completion of ED392, or consent of advisor.

## **ED 486G BEST (BUILDING EFFECTIVE STRATEGIES FOR TEACHING)**

AS REQUIRED

3 credit hours

Online

This course brings together novice and experienced teachers to work collaboratively on strategies to solve classroom problems via the action research methodology. The course will equip beginning teachers with pedagogical and professional skills and experienced teachers with research skills, particularly those that are needed to carry out collaborative action research.

Prerequisite: Current enrollment in or completion of 392, or consent of advisor.

## **ED 488 SCHOOL LAW FOR TEACHERS**

FALL ONLY/ALL YEARS

3 credit hours

This course is design as an introductory class in legal basics for the prospective or recently assigned teacher in the public school system. The class will provide guidance in the everyday decision making that will help make the teacher actions more defensible in this modern era of litigation in the school scene.

## **ED 488G SCHOOL LAW FOR TEACHERS**

AS REQUIRED

3 credit hours

This course is designed as an introductory class in legal basics for the prospective or recently assigned teacher in the public school system. The class will provide guidance in the everyday decision making that will help make the teacher actions more defensible in this modern era of litigation in the school scene.

## **ED 489 EVALUATION**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers the fundamental principles and practices of classroom assessment and evaluation. Effective decision making and professional judgement, using assessment data is critical to the assessment process. Norm-referenced and criterion- referenced assessment instruments, crafting teacher-made assessment tools, using technology and effective formative and summative classroom assessment are major topics. Students are required to complete service learning hours as part of course requirements. Prerequisites: ED110, ED300, MA151.

## **ED 490 SPECIAL PROJECT**

FALL ONLY/FALL ONLY

3 credit hours

## **ED 492 PRACTICUM IN STUDENT TEACHING**

FALL/SPRING/ALL YEARS

12 credit hours

Note: Prior to Student Teaching/Internship all teacher candidates must take the following Praxis tests and pass with a score as set by the Guam Commission for Educator's Certification (GCEC): . Praxis II Content Knowledge/Subject Assessment and . Praxis II Principles of Learning and Teaching: K-6, or Praxis II Principles of Learning and Teaching: 7-12 General description for all ED492: The student is assigned to a cooperating teacher in an appropriate classroom. Regular observation, counseling and evaluation are provided by the School of Education faculty. Individual counseling and group seminars are required. (Grading System: Letter Grade System). General Prerequisites: Overall GPA of at least a 2.7 GPA in the teaching area; completion of all education courses. Senior standing and no general education courses can be taken concurrently without special permission from their program chairperson and field experience coordinator; application must be completed by announced deadline. Special Prerequisites: Secondary - Completion of all professional and related area course requirements. Student is also required to be present at the assigned school the entire school day and is encouraged to follow the Department of Education calendar. Special Education: Students must complete student teaching experiences in both elementary and secondary special education settings (split semester). Elementary, Early Childhood, Special Education and Secondary: Completion of all professional and related area course requirements. Students are advised to follow the Guam Public School System calendar.

## **ED 498 INTERNSHIP IN TEACHING:**

AS REQUIRED

12 credit hours

Note: Prior to Student Teaching/Internship all teacher candidates must take the following Praxis tests and pass with a score as set by the Guam Commission for Educator's Certification (GCEC): . Praxis II Content Knowledge/Subject Assessment and . Praxis II Principles of Learning and Teaching: K-6, or Praxis II Principles of Learning and Teaching: 7-12 This course provides teaching experience under intensive supervision in private or public schools. The student is assigned a cooperating teacher in the school who acts as a mentor teacher. Regular observation, counseling and evaluation are provided by the SOE. Internship requests from currently employed students or from applicants with unusual circumstances may be made in the form of a written letter of request to the Office of the Field Experience Coordinator. Individuals and or group conference is required. (Grading System: A-P-NC) letter grades. General Prerequisites: Current employment in a full-time teaching position and consent of the employer. Overall GPA of at least a 2.70 GPA for Degree students-- completion of all professional and related area requirements, for Certification students-- completion of all certification requirement; senior standing. Application completed by announced deadlines. ED498 must be completed to meet the degree requirements for student teaching.

## **ED 582 FOUNDATIONS OF TESOL**

FALL ONLY/ALL YEARS

3 credit hours

Online

In this introductory course, students will learn the basics in teaching English as a second or foreign language. All four language skills will be taught, with details about how they can be taught separately or integrated. A wide range of lessons with details activities and tools will be introduced. Prerequisite: Instructors consent required and Admission into M.Ed. TESOL cohort.

## **ED 583 MATERIALS DESIGN AND EVALUATION**

FALL ONLY/ALL YEARS

3 credit hours

Online

This course examine materials that are used in the ESL classroom. Adapting existing materials as well as developing authentic materials are discussed in detail. Basic techniques and strategies for creating new materials for learners from all language and age backgrounds are discussed. Prerequisites: ED661, ED660 and Instructors consent.

## **ED 584 PHONETICS AND PHONOLOGY**

FALL ONLY/ALL YEARS

3 credit hours

Online/Hybrid

This course provides a fundamental overview about the English phonetic system. Reasons and solutions for common pronunciation problems that ELLs have are examined. Methods for improving ELL's spoken English are explored. This course is comparative in nature in that it looks at the English phonetic system as compared to other languages. Prerequisites: ED661, ED660, ED601, Instructors consent and Admission into M.Ed. TESOL cohort.

## **ED 585 ENGLISH GRAMMAR**

FALL ONLY/ALL YEARS

3 credit hours

Online

This is the study of English structure which provides valuable information for second language teachers and teachers in bilingual/bicultural programs. Prerequisites: ED 661 and instructors consent.

## **ED 600 ISSUES & PHILOSOPHIES IN CULTURALLY DIVERSE SCHOOLS**

AS REQUIRED

3 credit hours

Advanced study concepts and procedures on Bilingual/Bicultural and Multicultural education and process in classroom instruction related to issues and philosophies which impact culturally diverse schools.

## **ED 601 INTRODUCTION TO RESEARCH METHODS**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course introduces students to quantitative and qualitative methods common in educational research. Students examine and evaluate research methods and design research programs.

## **ED 602 QUALITATIVE INQUIRY IN EDUCATION**

SPRING ONLY/ALL YEARS

3 credit hours

Online

A survey of qualitative research methods common in educational research. This course discusses the theoretical and methodological tenets underlying qualitative research and focuses on five specific qualitative methods: history, ethnography, case study, critical theory, and field study. Prerequisites: ED601, Graduate status and strong writing skills.

## **ED 603 QUANTITATIVE ANALYSIS**

FALL ONLY/ALL YEARS

3 credit hours

Online/Hybrid

This is a foundation course in conducting research that involves the collection, analysis and presentation of quantitative data. Classification of data, descriptive statistics, measurement of association, regression analysis and several parametric and nonparametric inferential statistics are included. Computer software will be relied upon to analyze and display data. Interpretation and critique of quantitative research is included. Prerequisites: ED601, Graduate standing; computer experience.

## **ED 604 RESOURCES FOR TEACHING AND LEARNING THROUGH GRANT WRITING**

SUMMER/ALL YEARS

3 credit hours

This course focuses on grant proposal writing covering the research and prospect identification process of foundation grants and government grants to include the relational process of grant approvals.

## **ED 605 FOUNDATIONS OF EDUCATION**

FALL ONLY/ALL YEARS

3 credit hours

This course is designed for perspective secondary teachers as an overview of factors involved in the educational process and to explore multiple issues that affect teaching and learning. It familiarizes students with the responsibilities of teachers and the general operations of a school. Prerequisite: Admission into the Certification or MAT Secondary Education Teaching Program.

## **ED 606 CHILD AND ADOLESCENT DEVELOPMENT**

SUMMER/ALL YEARS

3 credit hours

This course is an introduction to adolescent development. It emphasizes physical development, emotional growth, mental development, interests, attitudes and social behavior, moral development, and problems common to the age. It is designed to give the teacher insight into the issues adolescents encounter in and outside of school. Prerequisite: Admission into the Certification or MAT Secondary Education Teaching Program.

## **ED 607 LEARNING THEORIES**

SPRING ONLY/ALL YEARS

3 credit hours

This course focuses on adolescent learning in an educational setting. It offers an analysis of the complex factors involved in cognitive and social development, learner differences and information processing, motivation to succeed academically, and effective classroom management and assessment. Prerequisite: Admission into the Certification or MAT Secondary Education Teaching Program.

## **ED 608 CLASSROOM ASSESSMENT**

SPRING ONLY/ALL YEARS

3 credit hours

This course is an introduction to the theory and application of varied assessment methods used to improve teaching and promote student learning. It examines the use of traditional assessment practices, as well as alternative methods of classroom assessment. Various issues including grading, the assessment of students with special needs, and ethics in assessment is addressed. Prerequisite: Admission into the Certification or MAT Secondary Education Teaching Program.

## **ED 609 INSTRUCTIONAL TECHNOLOGY IN THE SECONDARY CLASSROOMS**

SUMMER/ALL YEARS

3 credit hours

This teaching methods course emphasizes the psychological and theoretical basis for using instructional media and technology in education. Students produce various instructional media and demonstrate the use of the newer technologies such as telecommunications, assistive technology, computers, and multimedia as educational tools. Prerequisite: Admission into the Certification or MAT Secondary Education Teaching Program.

## **ED 610 SCHOOL LEADERSHIP AND ADMINISTRATION**

FALL ONLY/ALL YEARS

3 credit hours

Introduction of the organization and direction of public and private schools to prospective administrators and supervisors.

## **ED 611 SCHOOL PERSONNEL MANAGEMENT**

SPRING ONLY/ALL YEARS

3 credit hours

Focuses on the responsibilities of administrators in improving the total educational program through effective administration of all personnel within an educational organization. Includes study of concerns relative to selection, assignment, development, and retention of personnel. Prerequisite: Consent of advisor.

## **ED 612 SCHOOL LAW**

SPRING ONLY/ALL YEARS

3 credit hours

This course is an overview of school law at the territorial (state) and national levels as it affects the organization, general policies and practices of public education. Emphasis is placed on constitutional rights and the related ramifications these pose for administrators. The context of the Guam scene is emphasized. Prerequisite: Consent of advisor.

## **ED 613 SCHOOL FINANCIAL MANAGEMENT**

FALL ONLY/ALL YEARS

3 credit hours

School business management, budgeting process, salary, scheduling, cost accounting, and purchasing procedures. Principles and practices of school financing, past, present, and future, on both national and local levels are considered. Prerequisite: Consent of advisor.

## **ED 614 CLINICAL SUPERVISION**

AS REQUIRED

3 credit hours

This course is designed for the practicing administrator and for master's degree candidates who will be certified as school site administrators. The focus is on the professional and personal development of an administrator through the use of contemporary clinical supervision techniques. The use of various observation instruments, the analysis of data and skills in conferencing are emphasized. Discussion will also center on the role of the evaluator in the legal aspects of teacher evaluation. Some attention is given to teacher participation on clinical educator teams which assist colleagues.

## **ED 615 DIVERSITY IN EDUCATION**

AS REQUIRED

3 credit hours

Diversity involves a variety of student needs including those of ethnicity, language, socioeconomic class, disabilities, and gender. It includes issues of race, class, sexuality, religion, and other social dynamics. Diversity implies that all students are different from one another relative to other aspects of diversity such attention span, capability to stay on task, and how they get along with one another. This course will focus on issues of student diversity at the secondary level and develop skills to reflectively teach and to continuously seek ways to facilitate meaningful learning through instructional practice sensitive to student diversity. Must be enrolled in the MAT Program.

## **ED 616A SECONDARY TEACHING METHODS - LANGUAGE ARTS**

SPRING/SUMMER/ALL YEARS

3 credit hours

Hybrid

Students registering for this class will register for the specific content area they seek certification in. Students seeking certification in another content area can take the class again to be certified in that area of specialty. This course covers a study of the secondary teaching methods which is field-based in the secondary classroom. The course is designed to provide the students with a variety of teaching strategies and skill building techniques in how to effectively bring about the teaching-learning process in a secondary classroom setting. Each student has the opportunity to apply their knowledge gained in the content to a variety of micro-teaching and curriculum planning experiences. Prerequisite: Admission into the Certification or MAT Secondary Education Teaching Program, or Consent of Advisor.



## **ED 616B SECONDARY TEACHING METHODS - SOCIAL SCIENCE**

SPRING/SUMMER/ALL YEARS

3 credit hours

Students registering for this class will register for the specific content area they seek certification in. Students seeking certification in another content area can take the class again to be certified in that area of specialty. This course covers a study of the secondary teaching methods which is field-based in the secondary classroom. The course is designed to provide the students with a variety of teaching strategies and skill building techniques in how to effectively bring about the teaching-learning process in a secondary classroom setting. Each student has the opportunity to apply their knowledge gained in the content to a variety of micro-teaching and curriculum planning experiences. Prerequisite: Admission into the Certification or MAT Secondary Education Teaching Program, or Consent of Advisor.

## **ED 616C SECONDARY TEACHING METHODS- MATHEMATICS**

SPRING/SUMMER/ALL YEARS

3 credit hours

Students registering for this class will register for the specific content area they seek certification in. Students seeking certification in another content area can take the class again to be certified in that area of specialty. This course covers a study of the secondary teaching methods which is field-based in the secondary classroom. The course is designed to provide the students with a variety of teaching strategies and skill building techniques in how to effectively bring about the teaching-learning process in a secondary classroom setting. Each student has the opportunity to apply their knowledge gained in the content to a variety of micro-teaching and curriculum planning experiences. Prerequisite: Admission into the Certification or MAT Secondary Education Teaching Program, or Consent of Advisor.

## **ED 616D SECONDARY TEACHING METHODS - SCIENCE**

SPRING/SUMMER/ALL YEARS

3 credit hours

Students registering for this class will register for the specific content area they seek certification in. Students seeking certification in another content area can take the class again to be certified in that area of specialty. This course covers a study of the secondary teaching methods which is field-based in the secondary classroom. The course is designed to provide the students with a variety of teaching strategies and skill building techniques in how to effectively bring about the teaching-learning process in a secondary classroom setting. Each student has the opportunity to apply their knowledge gained in the content to a variety of micro-teaching and curriculum planning experiences. Prerequisite: Admission into the Certification or MAT Secondary Education Teaching Program, or Consent of Advisor.

## **ED 616E SECONDARY TEACHING METHODS - BUSINESS**

SPRING/SUMMER/ALL YEARS

3 credit hours

Students registering for this class will register for the specific content area they seek certification in. Students seeking certification in another content area can take the class again to be certified in that area of specialty. This course covers a study of the secondary teaching methods which is field-based in the secondary classroom. The course is designed to provide the students with a variety of teaching strategies and skill building techniques in how to effectively bring about the teaching-learning process in a secondary classroom setting. Each student has the opportunity to apply their knowledge gained in the content to a variety of micro-teaching and curriculum planning experiences. Prerequisite: Admission into the Certification or MAT Secondary Education Teaching Program, or Consent of Advisor.

## **ED 616F SECONDARY TEACHING METHODS - FINE ARTS**

SPRING/SUMMER/ALL YEARS

3 credit hours

Students registering for this class will register for the specific content area they seek certification in. Students seeking certification in another content area can take the class again to be certified in that area of specialty. This course covers a study of the secondary teaching methods which is field-based in the secondary classroom. The course is designed to provide the students with a variety of teaching strategies and skill building techniques in how to effectively bring about the teaching-learning process in a secondary classroom setting. Each student has the opportunity to apply their knowledge gained in the content to a variety of micro-teaching and curriculum planning experiences. Prerequisite: Admission into the Certification or MAT Secondary Education Teaching Program, or Consent of Advisor.

## **ED 616G SECONDARY TEACHING METHODS - HOME ECONOMICS**

SPRING/SUMMER/ALL YEARS

3 credit hours

Students registering for this class will register for the specific content area they seek certification in. Students seeking certification in another content area can take the class again to be certified in that area of specialty. This course covers a study of the secondary teaching methods which is field-based in the secondary classroom. The course is designed to provide the students with a variety of teaching strategies and skill building techniques in how to effectively bring about the teaching-learning process in a secondary classroom setting. Each student has the opportunity to apply their knowledge gained in the content to a variety of micro-teaching and curriculum planning experiences. Prerequisite: Admission into the Certification or MAT Secondary Education Teaching Program, or Consent of Advisor.

## **ED 616H SECONDARY TEACHING METHODS - HEALTH/PE**

SPRING/SUMMER/ALL YEARS

3 credit hours

Students registering for this class will register for the specific content area they seek certification in. Students seeking certification in another content area can take the class again to be certified in that area of specialty. This course covers a study of the secondary teaching methods which is field-based in the secondary classroom. The course is designed to provide the students with a variety of teaching strategies and skill building techniques in how to effectively bring about the teaching-learning process in a secondary classroom setting. Each student has the opportunity to apply their knowledge gained in the content to a variety of micro-teaching and curriculum planning experiences. Prerequisite: Admission into the Certification or MAT Secondary Education Teaching Program, or Consent of Advisor.

## **ED 616I SECONDARY TEACHING METHODS - FOREIGN LANGUAGE**

SPRING/SUMMER/ALL YEARS

3 credit hours

Students registering for this class will register for the specific content area they seek certification in. Students seeking certification in another content area can take the class again to be certified in that area of specialty. This course covers a study of the secondary teaching methods which is field-based in the secondary classroom. The course is designed to provide the students with a variety of teaching strategies and skill building techniques in how to effectively bring about the teaching-learning process in a secondary classroom setting. Each student has the opportunity to apply their knowledge gained in the content to a variety of micro-teaching and curriculum planning experiences. Prerequisites: Admission into the Certification or MAT Secondary Education Teaching Program or consent of advisor.

## **ED 616J SECONDARY TEACHING METHODS - INSTRUCTIONAL TECHNOLOGY**

SPRING/SUMMER/ALL YEARS

3 credit hours

Students registering for this class will register for the specific content area they seek certification in. Students seeking certification in another content area can take the class again to be certified in that area of specialty. This course covers a study of the secondary teaching methods which is field-based in the secondary classroom. The course is designed to provide the students with a variety of teaching strategies and skill building techniques in how to effectively bring about the teaching-learning process in a secondary classroom setting. Each student has the opportunity to apply their knowledge gained in the content to a variety of micro-teaching and curriculum planning experiences. Prerequisite: Admission into the Certification or MAT Secondary Education Teaching Program, or Consent of Advisor.

## **ED 617 ACTION RESEARCH IN SECONDARY SETTINGS**

FALL ONLY/ALL YEARS

3 credit hours

Action research is a collaborative methodology which can be effective in creating school and community partnerships aimed at collecting and analyzing valid and reliable information for data-driven decision making. This course defines action research and reviews the historical and theoretical background of this research method. The student as teacher-researcher engaging in action research is a main focus. Skill in conducting the action-research process from planning to write up will be a major goal of the course. Students will design an action research plan in partnership with a GPSS high school or other school context and write up the study for possible publication. Students will be trained in the appropriate use of human subjects research and request IRB approval or exemption as determined by our Human Subjects Research Board. This is the capstone artifact for the Professional Certification Master's Degree Program. Must be enrolled in the MAT Program, or consent of advisor.

## **ED 618 INSTRUCTIONAL STRATEGIES FOR ELEMENTARY EDUCATORS**

AS REQUIRED

2 credit hours

This course is designed for perspective teachers in elementary education and examines the research and best practices in the selection, implementation, and evaluation of instructional strategies. This includes the development of lesson plans and connection to local and national standards. Students will have opportunities to apply their knowledge gained in a variety of microteaching and curriculum planning experiences. Prerequisite: Admission into the Certification or MAT Elementary Education Teaching Program.

## **ED 619 INTRODUCTION TO COUNSELING**

FALL ONLY/AS REQUIRED

3 credit hours

Designed to provide a broad overview of the field of counseling. It will introduce students to the counseling process, basic counseling skills, the role of culture in counseling, and the nature and scope of counseling resources in the schools and in the community. Prerequisite: Consent of advisor

## **ED 620 THE COUNSELING PROCESS: THEORY**

FALL ONLY/AS REQUIRED

3 credit hours

Overview of approaches to counseling. Emphasis is given to understanding the theoretical assumptions of each approach. Theories will be examined in their cultural context. Prerequisite: consent of advisor.

## **ED 621 THE COUNSELING PROCESS: INDIVIDUAL PRACTICE**

FALL ONLY/AS REQUIRED

3 credit hours

Study, discussion, and practice of useful counseling techniques. The creation and use of a facultative helping relationship is stressed. Prerequisite: ED619, ED620, and consent of advisor.

## **ED 622 GROUP COUNSELING**

SPRING ONLY/AS REQUIRED

3 credit hours

Designed to develop useful counseling techniques in group settings through the study of basic concepts, discussion, observation, and practice of group counseling techniques. Prerequisite: ED619, ED620, ED621, and consent of advisor.

## **ED 623 DYNAMICS OF INDIVIDUAL BEHAVIOR**

SPRING ONLY/AS REQUIRED

3 credit hours

Focuses upon understanding the dynamics of individual behavior, the formation of personality, and human development in general from a cross-cultural perspective. Prerequisite: ED619 and consent of advisor.

## **ED 624 INDIVIDUAL AND GROUP ASSESSMENT**

FALL ONLY/AS REQUIRED

3 credit hours

Study of psychological assessment and testing as they pertain to educational and community mental health center settings. Prerequisite: ED619 and consent of advisor.

## **ED 625 MULTICULTURAL COUNSELING**

SPRING ONLY/AS REQUIRED

3 credit hours

This course is designed to develop multicultural competence in counseling. The emphasis will be upon issues related to being in a therapeutic relationship that is multicultural. Prerequisite: ED619, ED620, ED621, and consent of advisor.

## **ED 626 PREVENTION AND OUTREACH**

SPRING ONLY/AS REQUIRED

3 credit hours

Application of theory and research to the contemporary and lifespan prevention of personal and psychological problems in educational, organizational, professional, and community settings. Prerequisite: Consent of Advisor.

## **ED 627 CAREER COUNSELING**

SPRING ONLY/AS REQUIRED

3 credit hours

Study of sources and use of information about occupations, vocational development theories, assessment instruments used in career counseling, and approaches used for vocational counseling. Prerequisite: consent of advisor

## **ED 628 FAMILY COUNSELING**

AS REQUIRED

3 credit hours

An overview of approaches in family counseling. The course focuses on upon understanding the dynamics of family interactions for effective counseling interventions. Prerequisite: ED619, ED620, ED621, and consent of advisor.

## **ED 629 PSYCHOLOGICAL TESTING**

AS REQUIRED

3 credit hours

In class supervised training in a wide variety of effective methods of psychological evaluation and decision making for counselors in applied settings. Prerequisite: consent of advisor

## **ED 630 INSTRUCTIONAL DESIGN SEMINAR**

AS REQUIRED

3 credit hours

Problems in systematically applying educational media technology to instruction and learning. Includes selecting appropriate modes of instruction based on clearly defined objectives, organization of instructional configurations, and media implementation.

## **ED 631 INSTRUCTIONAL APPLICATIONS OF HYPERMEDIA**

### **AS REQUIRED**

3 credit hours

Course is designed to develop skills needed to author interactive instructional hypermedia software. It will apply basic instructional design principles in the production of hypermedia programs. Prerequisite: ED451, ED452 and ED630.

## **ED 632 COMPUTER APPLICATIONS, GRAPHICS AND DESKTOP PUBLICATION**

### **AS REQUIRED**

3 credit hours

Hybrid

Application of communication theory and learning principles to design of graphic instructional materials to improve individual and group learning. Includes design, production, evaluation, and preparation of necessary utilization and study materials and guides.

## **ED 633 TELECOMMUNICATIONS AND DISTANCE LEARNING**

### **AS REQUIRED**

3 credit hours

Studies of interactive distance learning models for education and training; logistics and economics for satellite, ITFS, microwave, fiber-optic, cable, twisted-pair, compressed video, radio, and telephone/modem. Teleconferencing. Legislation and FCC regulations. Support systems: courier, FAX, voice mail, computers.

## **ED 634 INSTRUCTIONAL INTERACTIVE MULTIMEDIA**

### **AS REQUIRED**

3 credit hours

Application of instructional design, video production and computer theory to the production of Instructional Interactive Multimedia programs. Emphasis on production and examination of interactive video accompanied by hypermedia as a training and educational media. CD-ROM applications will be examined. Prerequisite: ED451, ED452, ED630 and ED631.

## **ED 635 PHOTOGRAPHIC VIDEO PRODUCTION**

### **AS REQUIRED**

3 credit hours

Develop skills in designing and producing, educational, informational and/or motivational slide/tape and video programs.

## **ED 636 UTILIZING MEDIA RESOURCES IN INSTRUCTION**

### **AS REQUIRED**

3 credit hours

A course focusing on the role of the advanced technologies of education such as telecommunications and interactive media in the instructional process. Emphasis is on the selection, utilization, and evaluation of these media resources for instruction. Applications for advanced technologies in the teaching learning process are stressed. Prerequisite: ED451 and ED452 or other Computer course or consent of instructor.

## **ED 637 INTEGRATING TECHNOLOGY IN THE CURRICULUM**

### **AS REQUIRED**

3 credit hours

This course is designed to prepare students to effectively integrate microcomputers in the curriculum. Students will develop conceptual frameworks, strategies and skills to utilize computers to support and enhance the curriculum. Prerequisite: ED452 equivalent.

## **ED 638 TEACHING WITH THE INTERNET**

### **AS REQUIRED**

3 credit hours

Online

This course focuses on how to use the Internet for teaching and learning. It helps students develop skills and strategies in integrating the Internet as an essential resource into the curriculum. Prerequisite: ED452 equivalent.

## **ED 639 INTEGRATED METHODOLOGIES: LITERACY AND SOCIAL STUDIES**

AS REQUIRED

3 credit hours

This course examines the basic theories, issues, methods, and materials for a developmental K-5 social studies and language arts program. It emphasizes literacy (including reading, as well as writing, speaking and listening) as tools for learning both social studies and language arts with a "literacy across the curriculum" approach. It addresses cultural diversity in social studies and language instruction, with emphasis on linguistic diversity. The course includes surveys of strategies to support reading and writing instruction and study skills across the curriculum, with an understanding of the various purposes of reading and writing within the subjects of social studies and language arts. This course will focus on theories of reading instruction, language and literacy development before school, emergent literacy, and the development of chronological awareness, phonics, and fluency in children from birth through grade 5. It will also detail strategies for teaching social studies and language arts through an interdisciplinary approach. Prerequisite: Instructors consent.

## **ED 640 LANGUAGE AND LITERACY DEVELOPMENT**

SUMMER/ALL YEARS

3 credit hours

Online

This course explores the theory and practice of literacy development and instruction across the K-12 school years as well as adults. Topics include models of reading and writing processes, emergent literacy, reading and writing instruction for diverse learners, assessment, and adult literacy. Students will be introduced to the theoretical and research base for various models of literacy development, reading and writing processes, and instructional practices. The field has moved from viewing literacy as a process of skills acquisition to viewing literacy as a psycholinguistic process that is socially based and constructivist in nature. This course will help teachers apply current views of how children and adolescents develop as readers and writers to their own teaching situations.

## **ED 641 MIDDLE/SECONDARY READING AND WRITING IN CONTENT AREAS**

SUMMER/ALL YEARS

3 credit hours

Online

Educators will learn how to support the needs of adolescent and young adults, helping them develop into confident and independent readers and writers. Focus will be on the improvement of literacy skills through meaningful, constructive engagements in reading and writing.

## **ED 642 SEMINAR IN LITERATURE FOR CHILDREN AND YOUNG ADULTS**

SUMMER/ALL YEARS

3 credit hours

Online

Increasingly, teachers are using literature in the language arts classroom and across the curriculum. In this course, students read and critically evaluate a wide range of books for preschoolers to young adults, considering such issues as developmental needs, linguistic complexity, genre, aesthetics, interest and cultural diversity. Reader response theory, among others, provides a framework for exploring how readers respond to texts through talk, drawing, writing, dramatic play, etc.

## **ED 643 PRACTICUM: LITERACY ASSESSMENT**

FALL ONLY/ALL YEARS

3 credit hours

Online

Students will learn how to use a range of formal and informal assessment tools and methods to diagnose and assess individual learners' reading and writing development, to guide instruction, and to involve the learner in self-assessment. The emphasis is on using assessment in the service of instruction in the classroom and clinical settings. This course is an advanced practicum focusing on the PK-12 grade levels. Supervised clinical practice is provided at the School of Education Literacy Center. Prerequisite: Consent of Advisor.

## **ED 644 PRACTICUM: LITERACY INSTRUCTIONAL LAB**

SPRING ONLY/ALL YEARS

3 credit hours

Online

Building on students' experience in ED643: Literacy Assessment, this course focuses on reading and writing instruction for children and adolescents with diverse learning needs. Students observe, diagnose, and instruct children at the School of Education Literacy Center. They will deepen their understanding of reading/writing processes and strengthen their skills in designing and implementing instruction that is responsive to the current knowledge, skills, interests, motivation and needs of individual learners. Students will also extend their knowledge of how to assess students, synthesize measurement data (both formal and informal) and present findings to parents and professionals in the form of a case report. This course is an advanced practicum focusing on the PK-12 grade levels. Supervised clinical practice is provided at the School of Education Literacy Center. Prerequisite: ED643.

## **ED 645 ADVANCED METHODS IN PK-12 SCHOOL LITERACY**

FALL ONLY/ALL YEARS

3 credit hours

Online

This course draws on the constructive nature of literacy development to teach PK-12 students. Emphasis will be placed on ways to motivate and engage students in literacy learning. Teachers will explore models of literacy learning and how they relate to literacy instruction. Literacy methods and strategies will be responsive to the sociocultural contexts of learning in diverse classroom populations. The ultimate goal is to foster students' willing engagement in reading and writing.

## **ED 646 THE ORGANIZATION AND SUPERVISION OF READING PROGRAMS**

SPRING ONLY/AS REQUIRED

3 credit hours

Online

Introduces students to organization, administration, and supervision of school reading programs (K-12). Students examine roles of reading personnel, evaluate major reading programs and develop, implement, and evaluate a reading program at the classroom and school level. Prerequisite: ED640, ED641 or ED645, or consent of advisor.

## **ED 647 ISSUES & RESEARCH IN LITERACY EDUCATION**

SUMMER/ALL YEARS

3 credit hours

Online

Students conduct a critical examination of current issues in literacy, including extensive reading of recent research literature relevant to those issues. The course is also intended as an opportunity to examine one significant issue in depth and develop a well-synthesized review of research - to use multiple expert informational resources, to read extensively, to write and present for a professional audience.

## **ED 648 INTEGRATED METHODOLOGIES: HEALTH AND PHYSICAL EDUCATION**

AS REQUIRED

1 credit hour

This course will provide perspective teachers in elementary education with the knowledge and skills to instruct quality physical education and physical activity classes in the elementary grades. Perspective elementary teachers will learn to provide inclusive, academically integrated, enjoyable activities that enhance motor development and academic skills in elementary students.

## **ED 649 CAPSTONE SEMINAR IN LANGUAGE AND LITERACY**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This seminar is designed as a final, integrative experience for students completing the master's degree program in language and literacy. Candidates create an Electronic Capstone Portfolio to showcase their growth in mastery of competencies identified by program goals, objectives and standards, their synthesis of graduate course work and experience, and the professionalism expected of an educator. Prerequisites: A candidate's Capstone Experience occurs during his/her last fall or spring semester of course work.

## **ED 650 ASSESSMENT OF INDIVIDUALS WITH DISABILITIES**

SPRING ONLY/ALL YEARS

3 credit hours

Course deals with various methods and approaches to psychological and educational assessment of special education students. Analysis and interpretations of tests and results will also be examined. A practicum component dealing with the administration, interpretation and uses of various tests will be heavily stressed. Prerequisite: An undergraduate or graduate course in evaluation, skill assessment or tests and measurement is critical.

## **ED 652 FAMILY AND SCHOOL CONSULTATION**

FALL ONLY/ALL YEARS

3 credit hours

Consideration of problem-solving strategies techniques, and methods that special educators utilize in consultation with families and regular education personnel. The roles of model, advisor, counselor, instructor, and program consultant are examined in relation to the individual program needs of students with disabilities and their families. Prerequisite: Courses in assessment, methods and materials, and curriculum development.

## **ED 654 MULTICULTURAL SPECIAL EDUCATION**

FALL ONLY/ALL YEARS

3 credit hours

Exploration of the unique needs and problems associated with providing special education services to students with disabilities in multicultural settings. Emphasis will be placed on students with limited English proficiency with a focus on appropriate assessment practices and program planning. Prerequisite: Basic tenets of special education, including assessment techniques and instructional planning. A course in cultural anthropology is recommended.

## **ED 655 PHILOSOPHIES AND PRACTICES IN SPECIAL EDUCATION**

AS REQUIRED

3 credit hours

This course is designed to introduce graduate students to the concept of disability and to the field of special education. The history, etiology, and characteristics of specific categories of disability will be examine, as will educational programs designed to meet the needs of school-aged students with disabilities. Topics germane to the study of disability and the field of special education, such as inclusion and impact of disability on families, will also be explored.

## **ED 656 ADVANCED TECHNIQUES AND PRACTICES IN THE EDUCATION OF STUDENTS WITH LEARNING DISABILITIES**

AS REQUIRED

3 credit hours

This is a method course, which will provide an in-depth study of children and adolescents with specific learning disabilities. The course will focus on the identification, assessment, placement and delivery of services across all grade levels. It will include the adaptation of content, methodology and delivery of instruction to students with learning disabilities. Prerequisites: ED655 or equivalent.



## **ED 657 ADVANCED TECHNIQUES AND PRACTICES IN THE EDUCATION OF STUDENTS WITH MODERATE TO SEVERE DISABILITIES**

### **AS REQUIRED**

3 credit hours

This is a method course which will provide an in-depth educational study of children and adolescents with moderate to severe disabilities including mental retardation, autism, cerebral palsy, etc. The course will focus on the identification assessment, placement and delivery of services across all grade levels in various educational settings. It will include the adaptation of content, methodology and delivery of instruction to all students with moderate to severe disabilities. Prerequisites: ED655 or equivalent.

## **ED 658A SPECIAL TOPICS IN SPECIAL EDUCATION: SPECIAL EDUCATION LAW**

### **AS REQUIRED**

3 credit hours

a) Special Topics in Special Education: Special Education Law, b) Special Topics in Special Education: Education of Children with Autism. Students may repeat this course with different special topics. Topic will vary to meet the needs of the students, the Guam Public School System and other educational agencies. Students may repeat this course with different special topics. Prerequisite: ED655.

## **ED 658B SPECIAL TOPICS IN SPECIAL EDUCATION: EDUCATION WITH CHILDREN WITH AUTISM**

### **AS REQUIRED**

3 credit hours

a) Special Topics in Special Education: Special Education Law, b) Special Topics in Special Education: Education of Children with Autism. Students may repeat this course with different special topics. Topic will vary to meet the needs of the students, the Guam Public School System and other educational agencies. Students may repeat this course with different special topics. Prerequisite: ED655.

## **ED 659 INTEGRATED METHODOLOGIES FOR ELEMENTARY MATH AND SCIENCE**

### **AS REQUIRED**

3 credit hours

This course is designed to promote excellence among elementary teacher candidates in the teaching of math and science using STEAM principles. It covers objectives, methods, materials and assessments appropriate for elementary learners in science, technology, engineering, arts and math. It is designed to strengthen candidates' ability to actively engage diverse learners, provide meaningful activities, and effectively assess outcomes and to foster pleasure and creativity in exploring and understanding content through the lens of STEAM.

## **ED 660 APPLIED LINGUISTICS**

### **FALL ONLY/ALL YEARS**

3 credit hours

Online

This course explores the field of applied linguistics, providing a multidisciplinary approach to the solution of language-related problems. The course focuses on implications of second language acquisition research and theories on language pedagogical methods; language policy and language planning; linguistics and poetics; stylistics; the use of literature in language pedagogy; and computer-assisted language learning and language research. Prerequisite: LN300.

## **ED 661 SECOND LANGUAGE CURRICULUM THEORY AND DEVELOPMENT**

### **FALL ONLY/ALL YEARS**

3 credit hours

Online

This course examines curriculum theory and provides the student with the criteria to design a curriculum for a second language and to evaluate the strategies and materials for teaching and language.

## **ED 662 SECOND LANGUAGE TESTING AND EVALUATION**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This is a course in which all the techniques of teaching a second language are united and related to their effectiveness according to parameters derived from language acquisition theory and statistical quantification. Prerequisite: Native or native-like proficiency in English and familiarity with a second language. Also, familiarity with basic arithmetic and algebra.

## **ED 663 SEMINAR IN PSYCHOLINGUISTICS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course provides fundamental knowledge of psycholinguistics and emphasizes its interdisciplinary nature. It encompasses the processes underlying the acquisition of a language and the factors that influence these processes. Prerequisite: LN300.

## **ED 664 SEMINAR IN BILINGUAL EDUCATION**

SPRING ONLY/EVEN YEARS

3 credit hours

This course deals with the various situations where bilingualism occurs. The course is divided into two aspects: a general, theoretical perspective and a contextual perspective of situations where two or more language coexists. In the first part, the focus and concepts that can be applied to the study of bilingualism in general will be traced. The second part will consider the manifestation of bilingualism in the individual and how he/she fits into society. Problems in situations where a great linguistic heterogeneity exists will be presented. Basic themes that confront education and language planning will also be considered, analyzing the contexts and proposing necessary measures for solutions. It will also attempt to raise the consciousness of the educator to his role within the bilingual community.

## **ED 667 READING AND WRITING FOR THE SECOND LANGUAGE STUDENT**

FALL ONLY/ODD YEARS

3 credit hours

This course examines first and second language reading and writing with respect to theory and methodology at various levels of proficiency. Prerequisite: ED600.

## **ED 668 TEACHING THE CONTENT AREAS TO SECOND LANGUAGE STUDENTS**

FALL ONLY/ALL YEARS

3 credit hours

This course discusses various methods, strategies, and techniques for teaching content to second language students. Adapting existing text or materials and developing appropriate materials are also discussed. The course is designed for both elementary and secondary teachers in the regular classroom where there may be one or several second language students. It is also appropriate for teachers of sheltered classes or for ESL resource specialist who wish to know more this topic and how they might assist the regular classroom teacher. Prerequisite: Prospective students should be currently working with second language students.

## **ED 669 CULTURE AND ITS INFLUENCE ON EDUCATION**

AS REQUIRED

3 credit hours

This course looks at culture and cultural values and explores their influence on the educational system - organization, curriculum, and implementation. The course is comparative in nature, examining the U.S. system and comparing it to others. Prerequisite: Graduate Status.

## **ED 670 EFFECTIVE MIDDLE SCHOOLS**

FALL ONLY/ALL YEARS

3 credit hours

Examination of the middle school concept and the rationale for designing educational programs for effective teaching of students at grades 6--8. The course will focus on the needs of middle school student, the effective application of the middle school concept and how teachers could effectively deal with issues related to the middle school.

## **ED 671 ISSUES AND TRENDS IN EDUCATION**

FALL ONLY/ALL YEARS

3 credit hours

This course examines contemporary issues and trends in education such as school reform and effectiveness, desegregation, cultural relevancy, curriculum innovation, and social change. Prerequisite: Graduate student and consent of advisor.

## **ED 672 PHILOSOPHY OF EDUCATION**

FALL ONLY/ALL YEARS

3 credit hours

This course will include examination of three basic areas of philosophy: (a) metaphysics or what is real; (b) epistemology, or what is true; and (c) axiology or what is good, and the relationship of these issues to educational theory and practice. This material will provide a framework for exploration of questions, issues and models of education. Prerequisite: Graduate student standing and consent of advisor.

## **ED 673 INCLUSION OF LINGUISTICALLY DIVERSE STUDENTS**

SPRING ONLY/ALL YEARS

3 credit hours

This course deals with understanding the plight of the limited English proficient student in the mainstream classroom, and techniques and strategies for effectively teaching these students.

## **ED 674 LIFESPAN TRANSITION COUNSELING**

AS REQUIRED

3 credit hours

This course provides instruction in practical counseling applications of transition theory and technique in the specific areas of applied gerontology (age/generations era/passages), cognition (memory loss & retraining), imagery (hypnosis & time), health psychology (sleep dysfunction), and existential thanatology (coping with death). Prerequisite: Consent of Advisor.

## **ED 675 GROUP COUNSELING PRACTICUM**

AS REQUIRED

3 credit hours

Supervised laboratory experience in group counseling techniques. May be taken concurrently or following ED622 Group Counseling. An elective opportunity to add the depth of a laboratory component to the required theory and research course ED622 and to meet current professional standards for training in group counseling. Prerequisite: ED619, ED620, ED621, ED622 (may be taken concurrently), and consent of advisor

## **ED 676 MENTORING PRACTICUM FOR COUNSELORS**

AS REQUIRED

3 credit hours

Individually supervised graduate experience of instruction and research in a university setting as preparation for contemporary counseling curricula, evaluation, research, and teaching at all educational levels. Addresses the recently highlighted national career counseling core career competencies of teaching, administration, advocacy, and professional network. Course may be repeated for a maximum of six credits. Prerequisite: consent of advisor

## **ED 677 ETHICAL AND LEGAL ISSUES IN COUNSELING**

FALL ONLY/AS REQUIRED

3 credit hours

This course is designed to help students in the profession of school and community/mental health counseling to identify and examine ethical, legal, and professional issues encountered in the counseling process and to explore ways to effectively deal with them. Students become familiar with both legal and psychological literature about these issues, including ethical decision-making protocols. Prerequisites: ED619, ED620, ED621 and Consent of advisor

## **ED 678 ORGANIZATION AND ADMINISTRATION OF SCHOOL COUNSELING PROGRAMS**

FALL ONLY/AS REQUIRED

3 credit hours

This course focuses on the designing, developing, implementing, and evaluating of contemporary and relevant school counseling programs in accordance with the American School Counselor Association (ASCA) National Model. Foundations of school counseling programs and results-based guidance approaches are examined. In addition, students learn leadership skills necessary to become change agents in order to deliver, manage, and evaluate developmentally appropriate and services to meet the needs of the school and surrounding community. Prerequisites: consent of advisor

## **ED 679 INTRODUCTION TO COMMUNITY COUNSELING**

FALL ONLY/AS REQUIRED

3 credit hours

This course is a seminar which includes fieldwork designed to acquaint the student with the functions and roles of the counselor in various community and agency settings. Prerequisites: ED619, ED620, ED621 and Consent of Advisor

## **ED 683 CLASSROOM MANAGEMENT**

FALL ONLY/ALL YEARS

3 credit hours

Course is designed to familiarize students with the primary factors affecting the effective functioning of classrooms and to provide practical knowledge for preventing and resolving management problems.

## **ED 687 CURRICULUM THEORY AND ASSESSMENT**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

The purpose of this course is to provide the educational leader with an understanding of the social and psychological bases for curriculum development, skills in small group leadership and communication, strategies for working with the various publics involved in curriculum change, and the conceptual base of development of curriculum theory. In addition, this course is designed for teachers to develop skills needed for determining social and academic student needs to enhance the systematic planning of curriculum.

## **ED 688 PERSONALITY AND MENTAL HEALTH**

SPRING ONLY/AS REQUIRED

3 credit hours

This course introduces traditional theories of personality with a focus on personality assessment instruments and the DSM-5 taxonomy of mental and personality disorders. Prerequisites: ED619, ED620, ED621 and Consent of Advisor

## **ED 689 ENRICHING THE LEARNING EXPERIENCE**

SPRING ONLY/ALL YEARS

3 credit hours

This course addresses research based best practices for enriching the learning experience. The course guides students in refining their use of a variety of current best teaching practices and facilitates skill building techniques in how to effectively bring about the teaching-learning process in any classroom setting. Each student has the opportunity to apply the knowledge gained in the content to a variety of teaching and curriculum planning experiences.

## **ED 690 SPECIAL PROJECT**

FALL/SPRING/ALL YEARS

3 - 6 credit hours

Hybrid

## **ED 691 OVERVIEW SEMINAR:**

FALL/SPRING/ALL YEARS

3 credit hours

This seminar is designed as a final, integrative experience for students at the thesis stage of the program. Students review major issues in the field from different theoretical and methodological perspectives and develop their own research, community service and/or professional exploration projects. In addition to presenting work-in-progress reports, providing feedback, and submitting a thesis/final project proposal, students reflect on their experiences in the program, reassess personal views and beliefs and set goals for further development.

## **ED 692 PRACTICUM:**

FALL/SPRING/AS REQUIRED

1 - 6 credit hours

**PRACTICUM (1-6)** A survey of action research theory and methods, focusing on theoretical, methodological, and ethical tenets with an emphasis on applied research in educational settings. **PRACTICUM TESOL (3)** This course is an advanced, supervised practicum in TESOL. The practicum provides an opportunity to teach in an English as a Second Language classroom setting. The course is designed to help candidates understand the connection between teaching and student learning by analyzing the multiple, dynamic relationships between planning, instruction, and assessment. Candidates will complete a Teacher Work Sample as an extended assignment to assess their instructional choices and strategies in relation to current research in pedagogy, curriculum standards, and content area knowledge. Prerequisite: Approval of advisor. **PRACTICUM IN COUNSELING (3)** The practice of counseling in a closely supervised clinical setting for a total of 100 hours, at least 40 of which are direct client contact hours as approved by instructor. Emphasizes is on the practical application of counseling skills and theories for advanced students in the counseling program. Prerequisite: ED619, ED620, ED621, ED622, ED623, ED624, ED625, ED677, and consent of advisor.

## **ED 695 THESIS:**

FALL/SPRING/ALL YEARS

1 - 6 credit hours

Online

## **ED 697 COMPREHENSIVE EXAM**

FALL/SPRING/ALL YEARS

0 credit hours

This course provides an opportunity to document the successful completion of the PRAXIS II or comprehensive exam. It is a way to ensure that a student's academic evaluation accurately reflects the additional requirement for PRAXIS II or comprehensive exam and does not provide a false indication that the student is ready to graduate.

## **ED 698 INTERNSHIP:**

FALL/SPRING/AS REQUIRED

3 - 6 credit hours

**INTERNSHIP IN ADMINISTRATION AND SUPERVISION** (3-6 credits) F/SP The practice of administration and supervision in an educational setting is the goal of the program. Through the internship, a prospective administrator is exposed to the day to day operations of a school or educational setting. It is a critical transition prior to full time appointment in a position. Prerequisite: At least three Administration/Supervision Specialization Graduate courses and consent of advisor. **INTERNSHIP IN COUNSELING** (3 credits) FA/SP/As Needed The practice of counseling in an approved closely supervised setting for a total of 600 hours, at least 240 of which are direct client contact hours as approved by instructor. Interns meet regularly on campus or on-site with the faculty instructor. This internship may be taken over one semester for 6 credits or two consecutive semesters. Prerequisite: ED619, ED620, ED621, ED622, ED623, ED624, ED625, ED677, ED692 and Consent of Advisor

## **ED 699 SPECIAL TOPICS**

FALL/SPRING/ALL YEARS

1 - 3 credit hours

May be repeated in a different topic area. Prerequisite: Graduate Status and instructor's approval.

## **ENGLISH (EN)**

### **EN 109 INTRODUCTION TO COLLEGE COMPOSITION**

FALL/SPRING/ALL YEARS

4 credit hours

This course introduces students to university-level composition. The course emphasizes critical reading and writing skills through the study of argument, analysis, and composing, all of which are fundamental to support success across academic disciplines. Students are required to take EN 109 based on their English placement score and must complete this course with a grade of "C" or better in order to progress in the composition sequence. Grades are A, B, C, D, F, I, or NC.

## **EN 110 FRESHMAN COMPOSITION**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This is a basic college composition course. Emphasis is on constructing grammatical sentences in standard written English, on developing unified paragraphs employing appropriate principles of organization, on developing papers employing appropriate principles of organization, and upon improving skills in critical reading of non-fiction prose. EN110 must be completed with a grade of "C" or better before taking EN111. Grades are A, B, C, D, F, I or NC. Prerequisites: Completion of EN109 or test out.

## **EN 111 WRITING FOR RESEARCH**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

In this course, students are introduced to the conversation model of scholarship and to the work of composing academic research from topic development to final edit. This course emphasizes the development and advancement of information literacy skills for the purpose of acquiring knowledge of and cultivating a practice for conducting academic research and composing research-related documents such as annotated bibliographies and research manuscripts. Throughout the course, students learn to skillfully navigate information systems to access both print and electronic sources of information related to their research endeavor, with special attention on ethical and legal use of information in their academic research processes and research products. Prerequisite: EN110 with a grade "C" or better. REVISED AS APPROVED 042116

## **EN 111H HONORS WRITING FOR RESEARCH**

SPRING ONLY/ALL YEARS

3 credit hours

This course provides students with experience in critical reading and writing of academic discourse, hands-on training in the use of library resources and technologies, access to and utilization of CD ROM and on-line databases, and practice in the development of bibliographies, research proposals, and research papers. As an Honors continuation of EN110, EN111H places emphasis on clarity, accuracy, and effectiveness in written English. Prerequisite: EN110. This course is open to students who are eligible to enroll in Honors courses.

## **EN 210 INTRODUCTION TO LITERATURE**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course is an introduction to poetry, the short story and drama. Prerequisite: EN110.

## **EN 210H HONORS INTRODUCTION TO LITERATURE**

SPRING ONLY/ALL YEARS

3 credit hours

This course offers students the opportunity to read, think about, and experience literary works from a variety of genres. Works with a philosophical dimension are especially treated when this course is paired with PI101H and is taught by a cooperative teaching team. Prerequisite: EN110. This course is open to students eligible to enroll in Honors courses.

## **EN 213 LITERATURE, MYTH AND CULTURE**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course examines significant myths, legends, and folklore from numerous world cultures, focusing especially on Guam, Micronesia, and the Pacific region. The course emphasizes mythology's influence upon literature, mythology's relevance to literary study, and mythology's role in shaping popular culture. Prerequisite: EN110.

## **EN 225 INTRODUCTION TO LITERARY CRITICISM**

FALL ONLY/ALL YEARS

3 credit hours

This survey course introduces methods and concepts of critical thought from classical to modern and contemporary approaches. It seeks to prepare students for the kinds of critical writing and interpretation done in upper-level literature and humanities courses. Prerequisite: EN111.

## **EN 311 CREATIVE WRITING:**

FALL/SPRING/ALL YEARS

3 credit hours

This course offers its students semester-long practice in writing such literary forms as the short story, the novel, the novella, stage drama, screen drama, verse, and/or the nonfiction essay. Since one literary form will normally be studied for an entire semester, the course may be repeated for credit with different subject matter.

## **EN 314 BRITISH LITERATURE**

SPRING ONLY/ALL YEARS

3 credit hours

This course offers a study of selected works and genres in British literature spanning at least three literary periods. Major works, authors, and literary movements are studied in their social and historical context. The course provides a thematic and chronological frame of reference to serve as a background to further studies in literature.

## **EN 316 PROFESSIONAL WRITING**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This course focuses on formal written communication in the professional workplace. Topics include planning, writing, revising, purpose, audience, style, organization, format, technology and strategies for persuasion when writing professional memoranda, documents and reports. The course emphasizes skills and content necessary to communicate effectively in the professional world.

## **EN 317 AMERICAN LITERATURE**

FALL/SPRING/ALL YEARS

3 credit hours

This course is a survey of significant works of American literature spanning at least three literary periods. The course is designed to provide a chronological frame of reference for the more detailed study of American literary movements, periods, authors, and types.

## **EN 318 WORLD LITERATURE**

FALL ONLY/ALL YEARS

3 credit hours

This course examines significant developments in world literature and intellectual history as they are reflected in literary texts. The course will focus primarily on geographical regions outside the United States and United Kingdom and will cover at least three literary periods.

## **EN 319 ADVANCED COMPOSITION**

FALL/SPRING/ALL YEARS

3 credit hours

The course involves the study and writing of different types of expository prose with some attention to other forms of rhetoric: narration, description, argumentation, and includes a review of grammar, punctuation, and sentence construction.

## **EN 320 OTHER VOICES**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This course is a survey of representative authors in the United States whose achievements require a redefinition of American literary history. Each semester the literature of one discourse community is studied: Native-American, African-American, Hispanic-American, Asian-American, or others. This course may be repeated when different subject matter is covered. Prerequisite: Any 200-level English course or consent of instructor.

## **EN 321 THE POETIC TRADITION**

SPRING ONLY/ODD YEARS

3 credit hours

This course focuses on structural, thematic and aesthetic discussions of poetry as an art form. Prerequisite: Any 200-level English course or consent of instructor.

## **EN 323 LITERATURE BY WOMEN**

FALL ONLY/ALL YEARS

3 credit hours

Online

This course explores representative literature by women around the globe and across time. The course reading covers a variety of literary forms which may include the novel, short story, poetry and such non-fiction as essays, journals, and diaries. Students acquire an understanding of these various literary forms and how women writers have used them to express religious, political, social and philosophical concerns. They also are introduced to a growing body of feminist literary theory. This course allows students to gain an understanding of the social-historical place of literature by women. Prerequisite: Any 200-level literature course or consent of instructor.

## **EN 333 LITERATURE OF GUAM, MICRONESIA, AND THE PACIFIC**

FALL ONLY/ALL YEARS

3 credit hours

This course provides an overview of the Pacific island literatures. It surveys myths, legends, folktales, historical and literary works of Guam, Micronesia and other Pacific island cultures. It also explores resources suitable for instruction in the schools.

## **EN 340 MAJOR AUTHORS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course allows students to study extensively the work, life, and times of a single writer and, in so doing, to understand the importance and relevance of that writer within both historical and modern contexts. The course may be repeated for credit when different authors are covered. Prerequisite: Any 200-level English course or consent of instructor.



## **EN 350 LITERARY GENRES**

FALL ONLY/ODD YEARS

3 credit hours

This course offers intensive study of major literary genres, including the short story, the novel, verse, drama, cinema, and television. Other genres that may be studied include (but are not limited to) Gothic fiction, science fiction, crime fiction, espionage fiction, children's literature, ecological literature, and sentimental literature. This course may be repeated when different subject genres are covered. Prerequisite: Any 200-level EN course or consent of the instructor.

## **EN 360 LITERARY HISTORY**

FALL ONLY/ALL YEARS

3 credit hours

This course offers a concentrated study of eminent works in the context of the historical period in which they appear. The social developments of the time and the accomplishments in the sciences and humanities provide an intellectual frame of reference. This course may be repeated when different literary histories are covered. Prerequisite: Any 200-level literature courses or consent of instructor.

## **EN 400 RHETORIC AND COMPOSITION**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

The course offers a study of rhetorical and composition theories with emphasis on classroom application of the current research on the teaching and study of writing. Student enrolled in this course should have completed, at least, nine credit hours of EN or LN upper-division courses.

## **EN 400H RHETORIC AND COMPOSITION**

SPRING ONLY/ALL YEARS

3 credit hours

The course offers a study of rhetorical and composition theories with emphasis on classroom application of the current research on the teaching and study of writing. Student enrolled in this course should have completed, at least, nine credit hours of EN upper-division courses.

## **EN 411 ADVANCED CREATIVE WRITING WORKSHOP**

SPRING ONLY/ALL YEARS

3 credit hours

This course provides advanced instruction in the theory and practice of creative writing for students who have successfully completed an introductory creative writing course and want to develop their craft in a workshop setting. Different forms may be offered from year to year, including short fiction; the novel; poetry; creative non-fiction; and film script and television writing. This course can be repeated when different forms are covered. Prerequisite: EN311 or consent of instructor.

## **EN 450 ENVIRONMENTAL LITERATURE**

SPRING ONLY/ALL YEARS

3 credit hours

This course offers intensive trans-disciplinary study of major environmental literary modes or as part of the history of ecocriticism in the United States, in the region, and on Guam. This course examines how the environmental movement has shaped and continues to reshape the academy, physically and philosophically. Prerequisite: Any 200-level English course or consent of instructor.

## **EN 460 LITERATURES IN ENGLISH**

FALL ONLY/ALL YEARS

3 credit hours

This course offers an intensive study of representative works of a particular author writing in English, or of a related group of authors (e.g., the metaphysical poets, Commonwealth novelists, Gothic writers, or Western Pacific Writers). With different subject matter the course may be taken more than once for credit. Prerequisite: Any 200-level literature course or consent of instructor.

## **EN 461 PACIFIC WOMEN WRITERS**

SPRING ONLY/ODD YEARS

3 credit hours

This course entails an intensive study of representative works of Pacific women writers to acquaint students with the contours of this emerging literature in terms of styles, themes, symbols, images, language, politics, and subject. Students will gain an understanding of the place of this literature in the larger context of Pacific Literature, Women's Literature, Minority Literature and Contemporary Literature in English. Prerequisite: Any 200-level literature course or consent of instructor.

## **EN 470 WORLD LITERATURES IN TRANSLATION**

FALL ONLY/EVEN YEARS

3 credit hours

Hybrid

EN470 is a focused study of western and non-western literary texts translated into English. The course may be offered in the literatures of Europe, Asia, Africa, Latin America, the Middle East, and others. The course may be repeated for credit when different subject matters or periods are covered. Prerequisite: Any 200-level literature course or consent of instructor.

## **EN 473 THE MODERN JAPANESE NOVEL**

FALL ONLY/ODD YEARS

3 credit hours

EN473 is a focused study of selected modern Japanese novels against a background of social, political, and cultural developments from the end of the Meiji period (circa 1912) to the present. The course may be repeated for credit when different subject matters or periods are covered. Prerequisite: Any 200-level literature course or consent of instructor.

## **EN 480 LITERARY THEORY**

SPRING ONLY/ALL YEARS

3 credit hours

This capstone course serves as a culminating experience for the undergraduate major in literature. It integrates key concepts from other literature courses and offers a detailed study of the origins, purposes, and varieties of literary theories, as well as the debates and controversies associated with those theories. The course emphasizes twentieth-century and contemporary critical approaches and movements. Prerequisite: EN225; nine credit hours in other literature courses; or consent of the instructor.

## **EN 501 GRADUATE RESEARCH & DOCUMENTATION**

FALL ONLY/AS REQUIRED

3 credit hours

Online

This seminar prepares students to meet the research writing requirements of the Master of Arts in English degree, including seminar papers and the Master's Thesis. The course focuses on research methodology as well as the critical, analytical, and rhetorical skills needed for successful graduate-level research in English studies. Students review sources, bibliographic literature, and appropriate indexes, both conventionally and electronically published. Students become skilled in the use of MLA and/or other documentation styles. Required of all candidates for the Masters of Arts in English.

## **EN 550 ENVIRONMENTAL LITERATURE**

SPRING ONLY/AS REQUIRED

3 credit hours

This course offers intensive trans-disciplinary study of major environmental literary modes or as part of the history of eco-criticism in the United States, in the region, and on Guam. This course examines how the environmental movement has shaped and continues to reshape the academy, physically and philosophically. Prerequisites: EN501 completed, concurrent enrollment, or consent of instructor.

## **EN 560 LITERATURES IN ENGLISH**

FALL ONLY/AS REQUIRED

3 credit hours

This course offers an intensive study of representative work of authors writing in English, or of a related group of authors (e.g., the metaphysical poets, Commonwealth novelists, or Western Pacific writers). With different subject matter the course may be taken more than once for credit. Prerequisites: Any 200-level literature course (in English) or permission of the instructor.

## **EN 561 PACIFIC WOMEN WRITERS**

SPRING ONLY/ODD YEARS

3 credit hours

This course entails an intensive study of representative works of Pacific Women Writers to acquaint students with the contours of this emerging literature in terms of styles, themes, symbols, images, language, politics, and subject. Students will gain an understanding of the place of this literature in the larger context of Pacific Literature, Women's Literature, Minority Literature and Contemporary Literature in English. Prerequisite: EN111; Any 200-level literature course or consent of instructor.

## **EN 570 LITERATURES IN TRANSLATION**

FALL ONLY/EVEN YEARS

3 credit hours

Hybrid

This course is a study of representative world literature to acquaint the student with the sweep of history as represented in great works of literature. The course may be offered in the literatures of Europe, Asia, Africa, Latin America, the Middle East, and others. The course may be repeated for credit when different subject matter or periods are covered.

## **EN 573 MODERN JAPANESE NOVEL IN TRANSLATION**

FALL ONLY/ODD YEARS

3 credit hours

This course features a study of selected modern Japanese novels against a background of social, political, and cultural developments from the end of the Meiji period (circa 1912) to the present. Prerequisite: Any 200 level literature course (in English) or permission of the instructor.

## **EN 580 LITERARY THEORY**

SPRING ONLY/ODD YEARS

3 credit hours

Mimetic, pragmatic, and objective theories are considered in relation to specific literary works. An emphasis is placed on twentieth-century criticism and contemporary critical movement and theories. Critical papers are required. Prerequisite: 12 credit hours in literature courses.

## **EN 611 SEMINAR: RHETORIC AND COMPOSITION**

FALL ONLY/AS REQUIRED

3 credit hours

This seminar informs students how rhetorical traditions inform the teaching and major theories of composition, especially those of modern and postmodern eras. The seminar examines how cultural factors such as history, ideology, gender, race, ethnicity, and politics affect composition pedagogy. Prerequisite: EN501 or consent of instructor.

## **EN 620 GRADUATE WRITING SEMINAR**

AS REQUIRED

3 credit hours

This graduate seminar in writing enables advanced students to develop manuscripts for professional development and publication. A workshop structure allows feedback and criticism from peers and instructor. The course may be repeated for credit when different subject matter is covered.

## **EN 630 SEMINAR: BRITISH LITERATURE**

FALL ONLY/AS REQUIRED

3 credit hours

This seminar offers detailed analyses of the major works of British authors. The topics can cover the works of one or more authors of one particular region, a movement, or a period. The course may be repeated for credit when different subject matters or periods are covered.

Prerequisite: EN501 or consent of instructor.

## **EN 640 SEMINAR: AMERICAN LITERATURE**

SPRING ONLY/AS REQUIRED

3 credit hours

This seminar offers detailed analyses of the major works of American authors. The topics can cover the works of one or more authors of one particular region, a movement, or a period. The course may be repeated for credit when different subject matters or periods are covered.

Prerequisite: EN501 or consent of instructor.

## **EN 650 TEACHING COLLEGE COMPOSITION WITH PRACTICUM**

AS REQUIRED

3 credit hours

This one-semester practicum is a requirement for graduate students to gain experience teaching EN085, EN100, and EN110 in the University of Guam's Composition program. Students will spend the first half of the semester in seminar. Students will engage in observation and teaching in the second half of the semester. Although designed for our University's specific needs, the course provides the theoretical and pedagogical content and the practicum experience necessary for teaching development and freshman composition in any diverse post-secondary setting.

Prerequisite: EN611 or consent of instructor.

## **EN 660 SEMINAR: LITERATURES IN ENGLISH**

AS REQUIRED

3 credit hours

This seminar provides intensive study of selected topics in the various literatures in English. Topics may include the work of a particular author, group of authors, movement, or period. The course may be repeated with different topics. Prerequisite: EN501 or consent of instructor.

## **EN 670 WORLD LITERATURES IN TRANSLATION**

SPRING ONLY/EVEN YEARS

3 credit hours

This seminar offers detailed analyses of the major works of famous world authors. The topics can cover the works of one or more authors of one particular region, a movement, or a period. The course may be repeated for credit when different subject matter or periods are covered. Prerequisite (or concurrent with): EN501.

## **EN 675 SEMINAR IN POSTCOLONIAL LITERATURE**

AS REQUIRED

3 credit hours

This course examines topics in postcolonial literature, including the literatures of empire, colonization, and cross-cultural encounters. Readings will focus on current postmodernist and postcolonial literatures to emphasize historical contexts, social attitudes, and contemporary theoretical methods. Prerequisite: EN501 or consent of instructor.

## **EN 680 CONTEMPORARY CRITICAL THEORY**

SPRING ONLY/AS REQUIRED

3 credit hours

This is a seminar in advanced topics and problems of contemporary critical theory. It will benefit students and teachers in literature, cultural history, and education. The course may be repeated with different topics. Prerequisite: EN501 or consent of instructor.

## **EN 691 GRADUATE SEMINAR**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course involves rigorous study of literary authors, genres, modes, or periods. Although EN691's content will be determined by its instructor and students, the course emphasizes literary study that incorporates various theoretical approaches; close reading of all assigned texts; audio, visual, and electronic components; intensive class discussions; research presentations; and seminar papers. The course may be repeated for credit when different subject matter or periods are covered. Prerequisite: EN501.

## **EN 695 THESIS**

FALL/SPRING/ALL YEARS

1 - 6 credit hours

There are two possible thesis options, Traditional or Creative. The thesis candidate prepares, for six hours of thesis credit, either a study embodying rigorous scholarly research or original creative work of near-publishable quality. This course may be repeated until all six thesis credits are successfully completed. Prerequisites: EN501, EN680, candidacy in the English Master's Program, and consent of instructor.

## **EN 699 INDEPENDENT READING**

FALL/SPRING/ALL YEARS

3 credit hours

## **ENVIRONMENTAL SCIENCE (EV)**

### **EV 503 BIOLOGICAL LITERATURE AND SCIENTIFIC WRITING**

SPRING ONLY/ALL YEARS

2 credit hours

Survey of biological literature as an assist in thesis and manuscript preparation in the areas of writing, proofreading, literature citation, figure and table preparation. Two hours of lecture weekly.

### **EV 504 ENVIRONMENTAL LITERATURE & SCIENTIFIC PRESENTATION**

SPRING ONLY/ALL YEARS

1 credit hour

This course is designed to develop skills in researching, preparing, and delivering high quality scientific oral presentations while introducing students to timely and worthwhile topics for thesis research or professional projects.

### **EV 506 PHYSICAL GEOGRAPHY OF MICRONESIA**

FALL ONLY/EVEN YEARS

3 credit hours

This course is a study of the origin and characteristics of the physical environments and biogeography of Micronesia through an analysis of physical geographic elements, their patterns of distribution, interrelationships, and problems. Prerequisites: Graduate standing or senior level.

### **EV 507 ADVANCED STATISTICAL METHODS**

FALL ONLY/ALL YEARS

4 credit hours

An advanced course in applied statistical methods as used in the biological and environmental sciences stressing the design and analysis of experimental and observational studies. Lectures will be 4 hours per week. Prerequisites: MA385 or equivalent.

## **EV 508 SCIENTIFIC COMPETENCE AND INTEGRITY**

FALL ONLY/ALL YEARS

3 credit hours

This course examines historical, philosophical, methodological, ethical, and moral aspects of scientific thought and practice in the context of both historical and contemporary issues in natural and environmental science. Readings and discussions are built around classical examples such as the scientific controversy over Continental Drift and Plate Tectonics as well as contemporary environmental issues, ranging from global concerns such as climate and sea level change, to local public concerns such as solid waste management and the safety of tap water. The central objective of the course is to develop the skills and habits of sound critical thinking essential to the progress, ethical practice, and moral application of science.

## **EV 510 ENVIRONMENTAL SCIENCE: BIOLOGY/ ECOLOGY**

FALL ONLY

3 credit hours

This course covers concepts of biology needed for further studies in environmental science. Ecological and biological principles are presented including an introduction to ecosystem ecology. Human impacts on the environment on a global and local scale are discussed. Three hours of lecture weekly.

## **EV 511 ENVIRONMENTAL SCIENCE: GEOSCIENCES/ ENGINEERING**

SPRING ONLY/ALL YEARS

3 credit hours

This course is a survey of the key aspects of geology and engineering with which individuals involved in environmental resources investigations should be familiar. Topics include the hydrologic cycle, surface hydrogeology, groundwater movement, engineering measurements, statistical analysis, instrumentation for environmental investigations, and fundamentals of engineering geology and environmental geology. Three hours of lecture a week plus field trips. Prerequisites: MA161a-b, CH100 and CH101 or equivalent.

## **EV 512 ENVIRONMENTAL SCIENCE: ECONOMICS- MANAGEMENT-LAW**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This course equips students with the fundamental elements of microeconomic theory, concepts of environmental economics, techniques of environmental management, and elements of environmental law that are essential for efficient and sustainable conservation, allocation, and management of natural resources, as well as the rational evaluation and effective maintenance of environmental safety and quality.

## **EV 513 ENVIRONMENTAL IMPACT ASSESSMENT**

FALL ONLY/EVEN YEARS

2 credit hours

Discussing, structuring, writing, and evaluating environmental impact assessments, particularly as they apply to Guam and other tropical islands. Course will focus on producing formal environmental impact statements for actual, proposed and hypothetical development projects on Guam.

## **EV 517 CULTURAL ECOLOGY**

FALL ONLY/ODD YEARS

3 credit hours

Cultural ecology looks at the relationship between humans and their biotic and physical environments. Using diachronic and comparative perspectives, this course will survey the cultural ecology of Micronesian islanders. Particular attention will be given to the following themes: history, theory, and methods of cultural ecology; comparison of different approaches to the study of cultural adaptation; adaptation in permissive and marginal environments; and culture change in spatial and temporal perspectives. The format emphasizes seminar discussions and student presentations, but will also include some lectures, slides, films and videos. Prerequisite: Consent of instructor, MI501, MI502, or MI503.

## **EV 525 EVOLUTIONARY BIOLOGY**

FALL ONLY/EVEN YEARS

3 credit hours

This course provides a survey of the origin and evolution of life on Earth, exploring the history and major features of evolutionary change through time and the mechanisms responsible for those changes. The course will also consider evolutionary aspects of genetics, development, ecology, biogeography, systematics and paleontology.

Prerequisite: Genetics or consent of instructor.

## **EV 529A ENVIRONMENTAL CONTAMINATION & TOXICOLOGY I: FUNDAMENTAL PRINCIPLES & BASIC CONCEPTS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course covers the fundamental principles and mechanisms governing the interaction of pollutants with natural systems. The basic concepts of classical and environmental toxicology are also addressed with emphasis on contaminant absorption, distribution, metabolism, systemic toxicology, carcinogenesis, toxicity testing and risk assessment. The course concludes with a general introduction to air, land and water pollution. Three hours of lectures weekly. Prerequisites: BI157, BI158, CH102 and CH103 or equivalent.

## **EV 529B ENVIRONMENTAL CONTAMINATION & TOXICOLOGY II: MAJOR CLASSES OF ENVIRONMENTAL POLLUTANTS**

SPRING ONLY/ODD YEARS

3 credit hours

This course focuses on classic and contemporary groups of environmental contaminants and their impact on organisms, ecosystems and man. Physical and chemical properties of each contaminant group are discussed in relation to their environmental distribution, fate and toxicity. Occupational health related pollution problems and pollution monitoring strategies are also discussed. Three hours of lectures a week. Prerequisites: BI157, BI158, CH102 and CH103, or equivalent, or consent of instructor. EV/BI529a is also highly recommended as it provides the foundations upon which EV/BI529b is built. Undergraduates may enroll in the course with instructor's consent.

## **EV 535 TROPICAL CLIMATE & CLIMATE VARIABILITY**

FALL ONLY/EVEN YEARS

3 credit hours

This course is a study of the climate of the world's tropical regions. Natural variations in rainfall are studied. Mechanisms for short-term fluctuations and long-term changes including El Niño, La Niña, Quasi-biennial stratospheric oscillations, and the ice ages are presented. Also discussed is what constitutes an optimal climate, and whether or not an ice age is worse than a warmer world. Prerequisites: BI412G, EV511, BI/EV503, or consent of instructor.

## **EV 536 HURRICANES AND TYPHOONS: AN OVERVIEW OF TROPICAL CYCLONES**

SPRING ONLY/ODD YEARS

3 credit hours

This course focuses on tropical cyclones and explores their structure and physics of formation. The climatology of tropical cyclones is examined ranging from the global distribution to inter-annual variability and possible changes to tropical cyclone climate from an anticipated greenhouse-gas-induced global warming. Prerequisites: MA203, PH251, PH210, CH102, CH102L, or consent of instructor.

## **EV 537 APPLICATION OF REMOTE SENSING TO WEATHER AND CLIMATE**

FALL ONLY/ODD YEARS

3 credit hours

This course focuses on the applications of remote sensing platforms for observing and forecasting the weather, and for monitoring earth's climate system. Students explore the history of the international meteorological satellite programs and the United States' effort to modernize its weather satellite constellation. The history of the weather radar is explored, which culminates in the nationwide installation of NEXRAD Doppler weather radars (one of which is on Guam). Principles of satellite and radar physics are introduced. Interpretation of the structure of weather systems from satellite and radar imagery is covered. The use and function of the many instruments onboard satellites are described. Students participate in real-time investigations of local and regional weather patterns using satellite and radar imagery. Prerequisites: MA203, PH210, PH251, CH102, CH102L, or consent of instructor.

## **EV 542 HYDROLOGY**

FALL ONLY/EVEN YEARS

3 credit hours

An in-depth coverage of the topics in engineering hydrology with which all individuals involved in environmental resources investigations should be familiar. Topics will include the hydrologic cycle, surface and groundwater movement and engineering measurements, instrumentation, and analyses appropriate for environmental investigations. Three hours of lecture a week plus field trips. Prerequisites: MA161a-b, or MA165; and MA385, MA387/L or BI412/L

## **EV 543 HYDROGEOLOGY**

FALL ONLY/ODD YEARS

4 credit hours

An introduction to applied hydrogeology, with emphasis on fundamental physical and geological concepts and methods of analysis. Covers physical principles of groundwater movement, geologic origin and characteristics of aquifers, basic water chemistry and interaction with geologic materials, introduction to well hydraulics and aquifer evaluation, and environmental applications. Two hours of lecture plus three-hour lab each week. Prerequisites: Elementary calculus (e.g., Math 203), basic college chemistry (e.g., Chem 102), and concurrent enrollment or completion of EV511 or permission of instructor.

## **EV 547 PACIFIC ISLAND GEOLOGIC AND CLIMATIC HISTORY**

SPRING ONLY/EVEN YEARS

3 credit hours

This course provides students with an understanding of the fundamental processes and effects of earth's geologic and climate history that have created the unique environment of the pacific basin and the specific processes and conditions that have shaped the environments of the pacific islands. The course concludes with an examination of geologic and climatic hazards of concern to pacific island residents. Prerequisites: science or engineering background, and instructor's permission

## **EV 557 POPULATION ECOLOGY**

FALL ONLY/ODD YEARS

3 credit hours

EV/BI 557 This course provides a quantitative background of the processes and principles associated with population dynamics. Both theoretical approaches and applied modeling techniques are used to help students visualize patterns observed in natural systems. The course is relevant for both marine and terrestrial biology or environmental science graduate students, however, examples are mainly focused on marine ecosystems, and coral reefs in particular. Prerequisites: BI157-157L and BI158-158L. Corequisite: BI410.



## **EV 557L POPULATION ECOLOGY LABORATORY**

FALL ONLY/ODD YEARS

1 credit hour

EV/BI 557L This lab is required for EV/BI557, "Population Ecology". The labs provide a quantitative background of the processes and principles associated with population dynamics. Labs consist of applied modeling techniques to help students visualize patterns observed in natural systems. The course is relevant for both marine and terrestrial biology or environmental science graduate students, however, examples are mainly focused on marine ecosystems, and coral reefs in particular. Prerequisites: BI157-157L and BI158-158L. Corequisite: BI410.

## **EV 558 ADVANCED GEOSPATIAL METHODS**

SPRING ONLY/ALL YEARS

4 credit hours

This course focuses on applications of geospatial technologies, including geographic information systems (GIS), remote sensing, and the global positioning system (GPS). It emphasizes applications of geospatial technologies to environment science and related fields. Topics include geospatial data collection and processing, visualization, analysis, and modeling; geospatial statistical analysis; mobile cloud based geospatial applications; and integration of geospatial technologies. Students will gain an understanding of Advanced Geospatial Techniques; demonstrate abilities to geospatial data collection, processing, and analysis by the means of GIS, remote sensing and GPS; and be able to solve practical problems in environmental science and related fields using geospatial technologies. The course aims to equip students with understanding and experience with the practical use of geospatial technologies in natural sciences, particularly environmental science. Prerequisites: Recommended prerequisites for Environmental Science Graduate Program, and fundamentals of GIS or equivalent, or consent of instructor. Undergraduate students may enroll in the course with the permission of instructor.

## **EV 561 URBAN LANDSCAPE MANAGEMENT**

FALL ONLY/EVEN YEARS

3 credit hours

This course focuses on the integration of ecological theory with vegetation management and includes aspects of horticulture, landscape design, recreation studies, planning and financial management. This course emphasizes the use and management of indigenous and introduced vegetation in the public landscape and explores both scientific and philosophical ideas on reasons for undertaking certain practices.

## **EV 570 ENVIRONMENTAL ECONOMICS**

FALL ONLY/EVEN YEARS

3 credit hours

This course provides a frame of thinking about environmental science in a context of economic analysis. As an applied course, students are prepared to use economic analyses in environmental cases to consider issues such as: valuing the environment; resource allocation over time; opportunity costs; cost/benefit analysis; analysis of environmental options and externalities; modeling economic and ecological systems; effects of population growth and demand on the global environment; and studies of environmental impacts and policy responses. Regional planning and policy issues will be profiled. Prerequisite: Consent of instructor.

## **EV 581 PHYSICAL OCEANOGRAPHY**

SPRING ONLY/EVEN YEARS

3 credit hours

This course is intended to give students a view to how wind, radiation, gravity, friction, and the Earth's rotation determine the ocean's temperature and salinity patterns and currents. Some important processes we study include heat budget of the oceans, exchange of heat with the atmosphere and the role of the ocean in climate, surface mixed layer waves in the ocean, geostrophy, Ekman transport, and Rossby waves. Students learn how to explain physical features of the ocean ranging from microscopic turbulence to global circulation. Prerequisites: MA-203 OR CONSENT OF INSTRUCTOR. Recommended: MA204, PH-251 and PH-252.

## **EV 590 SPECIAL PROJECT**

AS REQUIRED/AS REQUIRED

1 credit hour

## **EV 598 ENVIRONMENTAL SCIENCE INTERNSHIP**

FALL/SPRING/ALL YEARS

1 credit hour

Students gain professional skills in the environmental market place working with a mentor at a local environmental or engineering firm or an appropriate GovGuam or Federal Government agency. This course can be taken twice, but a maximum of two total credits will be allowed as electives toward the Master of Science Degree. Students are expected to intern between 10 and 12 hours per week per credit of EV598.

## **EV 695 ENVIRONMENTAL SCIENCE THESIS**

FALL/SPRING/ALL YEARS

1 - 6 credit hours

## **EV 698 ENVIRONMENTAL SCIENCE THESIS**

FALL/SPRING

1 - 6 credit hours

Environmental science professional track internship

## **FINE ARTS (FA)**

### **FA 231 SURVEY OF THE ARTS**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This interdisciplinary course is designed to increase student's critical awareness of the Fine Arts. Through a series of topics, the common ground shared by these Fine Arts as well as their unique modes of expression and expressive potential are explored. Prerequisite: Must be Fine Arts major or minor or consent of instructor.

### **FA 331 PHILOSOPHY OF THE ARTS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course offer as a study of the major philosophical positions taken in relation to the arts. Prerequisites: FA231 or consent of instructor.

### **FA 431 SURVIVAL IN THE ARTS**

SPRING ONLY/ODD YEARS

3 credit hours

This course is an investigation of the practical applications of a degree in the Fine Arts including how to prepare a portfolio, audition tapes and an Arts resume. Prerequisite: FA-231 or consent of instructor.

### **FIRST YEAR SEMINAR (FY)**

#### **FY 101 FIRST YEAR SEMINAR**

FALL/SPRING/ALL YEARS

3 credit hours

In this active and collaborative learning environment student are challenged to think deeply about their interests, talents, values, aspirations, and goals-and to articulate all of this into a Personal Mission Statement. The declaration of a compelling reason why students have endeavored to graduate from UOG is interwoven into the recognition and development of effective life skills and the establishment and practice of strong academic skills. The semester will culminate with a common intellectual experience where students will read a resiliency memoir and develop their own narrative of resilience. This shared experience will create at UOG a shared knowledge, a shared language, a shared code of ethics, and most importantly a shared championing of the value of higher education.

## **GEOGRAPHY (GE)**

### **GE 101 INTRODUCTION TO GEOGRAPHY**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course is an introduction to the field and methods of geography, the characteristics, distribution and interactions of physical and cultural geographic elements. The elements include climate, vegetation, soils, topography, settlement and population, transportation and trade, industry and land use.

### **GE 201 WORLD REGIONAL GEOGRAPHY**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

The study of human and physical aspects of world geography is covered in this course. Special emphasis is given to regions, continents, and major countries of the world and the relative geographic importance of those areas today.

### **GE 203 PRINCIPLES OF PHYSICAL GEOGRAPHY**

SPRING ONLY/ALL YEARS

4 credit hours

This course is primarily concerned with the principles and concepts of physical geography, and stresses the patterns and interrelationships of climate, vegetation, soils and landforms. Emphasis is placed on geographic processes, which have tropical and Pacific relevance. Three lecture hours and three-hour weekly laboratory or field trips.

### **GE 321 ECONOMIC GEOGRAPHY**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This course is a world survey of significant agricultural, industrial, and commercial regions and patterns resulting from man's exploitation of resources with special emphasis on their relationships to Guam.

## **GE 341 CULTURAL ECOLOGY**

FALL ONLY/ODD YEARS

3 credit hours

This course examines the linkages and interactions between human cultures and the environment, particularly of subsistence peoples in the tropics and the Pacific. Traditional and contemporary theories and approaches of human adaptation to and modification of the environment are examined. Prerequisites: GE101, AN101 or BI157/157L.

## **GE 401 GEOGRAPHY OF THE PACIFIC**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

The geography of the Pacific Basin and the western margins of the Pacific are surveyed in this course. Special emphasis is given to Guam and Micronesia.

## **GE 461 NATURAL RESOURCES CONSERVATION AND MANAGEMENT**

FALL ONLY/EVEN YEARS

3 credit hours

Hybrid

This course offers a study of the principles and problems of natural resource management and conservation with particular reference to Pacific islands and tropical resource systems. Lectures and readings stress an ecological approach and the role of environmental planning in land use management. Prerequisites: One 200 level GE course or consent of instructor.

## **GE 475 HUMAN ECOLOGY: PROBLEMS AND SOLUTIONS**

FALL ONLY/ODD YEARS

3 credit hours

This course examines the relationship between human populations and their environments in the context of the functional interdependence involving population, environment, organization, and technology. Special attention is given to an examination of world population, geography, and an analysis of the causes, consequences and solutions to modern day social and environmental problems. Prerequisite: SO101, SO202, and MA385, or consent of instructor.

## **GE 480 SPECIAL TOPICS IN GEOGRAPHY**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This course covers topics of interest in geography on physical and/or human geography subject matter. Current themes including natural resources, environment, climate change, GIS, remote sensing, culture, globalization, politics, economy, technology, sustainability and health may be explored for a defined region of interest within the Asia Pacific, within a historical context where indicated. Course may be repeated if topic is different.

## **GE 580 SPECIAL TOPICS IN GEOGRAPHY**

SPRING ONLY/ALL YEARS

3 credit hours

This course covers topics of interest in geography on physical and/or human geography subject matter. Current themes including natural resources, environment, climate change, GIS, remote sensing, culture, globalization, politics, economy, technology, sustainability and health may be explored. Students will conduct a research project for a defined region of interest within the Asia Pacific, within a historical context where indicated. Course may be repeated if topic is different.

## **HISTORY (HI)**

### **HI 121 WORLD HISTORY I**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course is a comprehensive study of world history from the formation of early complex societies to 1500.

### **HI 122 WORLD HISTORY II**

FALL/SPRING/ALL YEARS

3 credit hours

This course is a comprehensive study of world history from 1500 to the present.

### **HI 201 EARLY AMERICA**

FALL/SPRING/ALL YEARS

3 credit hours

In this course, students will survey the principal historical developments in the United States from colonial times to the end of Reconstruction in 1877.

### **HI 202 MODERN AMERICA**

FALL/SPRING/ALL YEARS

3 credit hours

In this course, students will survey the principal historical developments in the United States from the end of Reconstruction in 1877 to the present.

### **HI 211 HISTORY OF GUAM**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course surveys the political, socio-cultural, economic, and military history of Guam and its people since ancient times, reviewing historical changes through the eras of Spanish, Japanese and American colonial rule.

## **HI 243 HISTORY OF MICRONESIA**

FALL ONLY/ALL YEARS

3 credit hours

Online

This course is an introduction to the traditional and western history of the Micronesian islands.

## **HI 306 MODERN AMERICAN MILITARY HISTORY**

SPRING ONLY/ALL YEARS

3 credit hours

The subject matter of this course covers the growth and development of the United States Armed Forces from 1914 to the present, including the role of the American military in the preservation and development of the nation.

## **HI 308 THE HISTORIANS' CRAFT**

FALL ONLY/ALL YEARS

3 credit hours

This course introduced students to basic skills in the historian's trade, including the identification and analysis of primary and secondary source material, coverage of oral interviewing protocol, and an examination of some of the diverse theoretical approaches that inform historical reconstructions and interpretations of the past.

## **HI 313 RESEARCH METHODOLOGIES IN HISTORY**

FALL ONLY/ODD YEARS

3 credit hours

This course covers the analysis and use of historical sources, as well as an evaluation of historical research methods, and requires the completion of a substantial research paper. Prerequisite: HI308 or consent of instructor.

## **HI 371 HISTORY OF EAST ASIA TO 1600**

FALL ONLY

3 credit hours

Online

This course focuses on the characteristics of East Asian civilizations as they developed in pre-modern China, Japan, and Korea.

## **HI 372 HISTORY OF EAST ASIA SINCE 1600**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This course examines continuity and change in East Asia (China, Japan and Korea) since 1600.

## **HI 406 THE US IN RECENT TIMES**

FALL ONLY/ODD YEARS

3 credit hours

Students in this course explore the major social, economic, cultural, diplomatic, and political developments in the United States since 1945.

## **HI 409 DIPLOMATIC HISTORY OF THE UNITED STATES**

FALL ONLY/EVEN YEARS

3 credit hours

Covering the period 1898 to the present, this course examines the emergence of the United States as a world power, and the factors that influenced the conduct of America's foreign policy.

## **HI 420 TOPICS IN WESTERN HISTORY**

SPRING ONLY/ALL YEARS

3 credit hours

This course is an intensive study of a specific topic or problem in Western History. With different subject matter, the course may be taken more than once for credit.

## **HI 420G TOPICS IN WESTERN HISTORY**

SPRING ONLY/ALL YEARS

3 credit hours

This course is an intensive study of a specific topic or problem in Western History. With different subject matter, the course may be taken more than once for credit.

Prerequisite: HI121 or HI122.

## **HI 441 HISTORY OF THE PHILIPPINES**

FALL ONLY/ODD YEARS

3 credit hours

Students in this course survey Philippine history and society from earliest times to the present.

## **HI 444 MODERN PACIFIC HISTORY FROM 1850 TO THE PRESENT**

SPRING ONLY/EVEN YEARS

3 credit hours

This course covers colonial and post-colonial rule in the Pacific.

## **HI 444G MODERN PACIFIC HISTORY FROM 1850 TO THE PRESENT**

SPRING ONLY/EVEN YEARS

3 credit hours

This course covers colonial and post-colonial rule in the Pacific. Prerequisite: HI121 or HI122.

## **HI 450 TOPICS IN PACIFIC HISTORY**

SPRING ONLY/ALL YEARS

3 credit hours

This course is an intensive study of a specific topic or problem in Pacific History. With different subject matter, this course may be taken more than once for credit.

## **HI 450G TOPICS IN PACIFIC HISTORY**

SPRING ONLY/ALL YEARS

3 credit hours

This course is an intensive study of a specific topic or problem in Pacific History. With different subject matter, this course may be taken more than once for credit.

Prerequisite: HI121 or HI122.

## **HI 455 TOPICS IN PRE-MODERN HISTORY**

AS REQUIRED/AS REQUIRED

3 credit hours

This course is an intensive study of a specific topic or problem in Pre-Modern History. With different subject matter, the course may be taken more than once for credit.

## **HI 474 HISTORY OF MODERN JAPAN**

SPRING ONLY/EVEN YEARS

3 credit hours

This course focuses on the political, social, diplomatic, and economic development of modern Japan from the beginning of the Tokugawa Shogunate (1603) to the present. Attention is also given to Japan's response to the West.

## **HI 474G HISTORY OF MODERN JAPAN**

SPRING ONLY/EVEN YEARS

3 credit hours

This course focuses on the political, social, diplomatic, and economic development of modern Japan from the beginning of the Tokugawa Shogunate (1603) to the present. Attention is also given to Japan's response to the west.

## **HI 476 HISTORY OF MODERN CHINA**

FALL ONLY/ODD YEARS

3 credit hours

This course examines the transition from traditional to modern China. China's entry into the modern world, and China under the Communist regime.

## **HI 478 THE HISTORY OF MODERN KOREA**

### **AS REQUIRED**

3 credit hours

This course emphasizes the evolution of Korea from the Yi Dynasty (1392-1910) to the present.

## **HI 478G THE HISTORY OF MODERN KOREA**

### **FALL ONLY/EVEN YEARS**

3 credit hours

This course emphasizes the evolution of Korea from the Yi Dynasty (1392-1910) to the present. Prerequisite: HI122.

## **HI 480 TOPICS IN ASIAN HISTORY**

### **FALL ONLY/AS REQUIRED**

3 credit hours

This course is an intensive study of specific topic or problem in Asian history. With different subject matter, the course may be taken more than once for credit.

## **HI 480G TOPICS IN ASIAN HISTORY**

### **FALL ONLY/ALL YEARS**

3 credit hours

This course is an intensive study of a specific topic or problem in Asian History. With different subject matter, this course may be taken more than once for credit. Prerequisite: HI121 or HI122.

## **HI 492 CAPSTONE IN HISTORY**

1 credit hour

This capstone course is taken by history majors in their senior year, culminating their degree program with a demonstration of their ability to apply historical knowledge, methods and theories. The capstone may take the form of a public presentation of a research paper or other history project in a manner that reflects students' synthesis of key concepts from their course work. Prerequisite: HI-308 and HI-413. Senior standing and consent of instructor.

## **HEALTH SCIENCES (HS)**

## **HS 104 CONDITIONING AND FITNESS**

### **FALL/SPRING/ALL YEARS**

1 credit hour

This is a program of exercise designed to develop strength, endurance, flexibility, coordination and power supplemented by weight training and aerobic conditioning.

## **HS 105 STRENGTH TRAINING**

### **FALL/SPRING/ALL YEARS**

1 credit hour

This activity course is primarily concerned with the development of muscular strength and the concurrent reduction of total body fat through a safe, personalized program of weight training. In addition to discussion on proper form and technique, the course considers the latest research findings on current topics such as steroid ingestion and protein supplementation.

## **HS 106 AEROBIC DANCE**

### **FALL/SPRING/ALL YEARS**

1 credit hour

This course offers fundamental instruction in exercise and physical fitness via fitness activities, with emphasis on regular, continuing and enjoyable participation. May be repeated for credit.

## **HS 111 BEGINNING TENNIS**

### **AS REQUIRED**

1 credit hour

This course introduces the basic aspects of the game of tennis including grips, forehand and backhand ground strokes, forehand and backhand volley, overhead and service. Scoring, etiquette, and the rules used in singles play are also covered.

## **HS 121 VOLLEYBALL**

### **AS REQUIRED**

1 credit hour

In this class dealing with the skills and fundamentals of volleyball, students are given the opportunity of developing the proper skills and techniques associated with volleyball and to participate in competitive games.

## **HS 122 BASKETBALL**

### **AS REQUIRED**

1 credit hour

Students are introduced to the basic skills, rules and regulations used in the sport of basketball. Various types of offensive and defensive formations are explained and demonstrated during class. Proper techniques of warming-up, conditioning and nutrition are also covered. (The last four weeks of class consist of competitive games, i.e., five-on-five and two-on-two, where the students are able to apply the skills and techniques which they have learned in class.)

## **HS 131 BEGINNING SWIMMING**

### **AS REQUIRED**

1 credit hour

This course is an introduction to swimming through instruction and development of basic swimming strokes and personal water safety skills for activities in or near the water. Opportunity is provided to complete the requirements of the Community Water Safety course and Level III or IV of the Learn-To-Swim Program of the American Red Cross.

## **HS 132 INTERMEDIATE SWIMMING**

### **AS REQUIRED**

1 credit hour

This course offers instruction and development in five basic swimming strokes, diving and appropriate water safety skills for personal safety and for assisting in a water emergency. Opportunity is provided to complete the requirements of the Community Water Safety course and Level IV or V of the Learn-To-Swim Program of the American Red Cross. Prerequisite: Ability to jump into deep water, level off, swim the front crawl stroke for 15 meters plus demonstrate any back stroke for 15 meters.

## **HS 142 AIKIDO**

### **FALL ONLY/ALL YEARS**

1 credit hour

This course covers rules, etiquette, basic roll, simple holds and breaking of such holds, and offers special conditioning exercises.

## **HS 143 TAE KWON DO**

### **SPRING ONLY/ALL YEARS**

1 credit hour

Tae Kwon Do, a Korean martial art, means roughly hand/foot art and is somewhat analogous to Japanese Karate. It contains an equal balance of philosophical, mental, and physical elements.

## **HS 144A FENCING**

### **AS REQUIRED**

1 credit hour

(A) This course is designed to acquaint the student with the art of fencing, to develop knowledge of the sport, and to develop some of the basic skills of fencing.

## **HS 144B FENCING**

### **AS REQUIRED**

1 credit hour

(B) Emphasis is placed upon improving basic skills and fundamentals of fencing.

## **HS 145 BEGINNING HATHA YOGA**

### **SPRING ONLY/ALL YEARS**

1 credit hour

This course introduces the physical practices of yoga. Students are taught a series of stretching and breathing exercises designed to increase flexibility, agility and balance. The exercises also promote deep relaxation and help relieve tension and anxiety. Instruction is given in a manner that allows students at different levels of physical fitness to develop at their own pace.



## **HS 200 HEALTH AND WELLNESS**

FALL/SPRING/ALL YEARS

3 credit hours

Online

Health and Wellness is designed to introduce students to the concepts of physical fitness and wellness and the lifetime benefits provided through participation in an individualized program. Its lecture component provides an in-depth understanding of the hows and whys of health fitness as well as information most useful in helping students make healthful adjustments to their current lifestyles. The course also offers participation in an individualized exercise program with a choice of several different activities. Pre and post testing are done to determine improvement in the areas of cardiovascular fitness, muscular strength, flexibility, and body composition.

## **HS 210 HUMAN BIOLOGY AND BEHAVIOR**

FALL ONLY/ALL YEARS

3 credit hours

Understanding the basics of human biology and the relation between human biology and behavior is crucial for students, especially those in the allied health and human service professions. This is an overview course designed for undergraduate students who have no background in human biology and behavior. This course emphasizes core biological concepts as they relate to human behavior and health - how our bodies work, how our genes, environmental factors and disease - causing organisms affect our health. Special focus is on recent advances in biology, biological and behavioral development across the human lifespan, human problems/illness and biology, public health and biology, and ecosystems.

## **HS 216 INTRODUCTION TO PUBLIC HEALTH**

FALL ONLY/ALL YEARS

3 credit hours

Online/Hybrid

This course offers an overview of public health and the discussion of current topics, recent events and the most up- to-date key issues that affect the public's health. The major areas of public health are presented together with many of the applications to epidemiology, surveillance, environmental health, illness prevention, and public health policy making. Prerequisite: HS200.

## **HS 322 KINESIOLOGY**

FALL ONLY/ALL YEARS

3 credit hours

Kinesiology is the study of the human body from the viewpoint of the physical sciences. It is an essential part of the educational experience of students of physical education, dance, sport, and physical medicine. The function of the course is to contribute not only to successful participation in various physical activities, but also to the improvement of the human structure through the intelligent selection of activities and the efficient use of the body. Prerequisites: Grade of C or better in EN111 and BI124-124L.

## **HS 324 EXERCISE PHYSIOLOGY**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This course is designed to assist potential teachers and others involved in activity programs to be safely effective in the gymnasium and on the athletic playing field. Study focuses on how the body, from a functional standpoint, responds and adjusts to exercise. Both acute and prolonged (chronic) exercises, as used in exercise training, are considered. Prerequisites: Grade of C or better in EN111, BI124-124L, BI125-125L, or consent of instructor required.

## **HS 350 TEST AND MEASUREMENT IN HUMAN PERFORMANCE**

SPRING ONLY/ALL YEARS

3 credit hours

Students are taught how to administer various tests designed to measure improvement in physical education in terms of health and physical services. The three areas of concern are current trends in health and physical education, the specific qualities to be measured, and the explanation of administrative procedures in the practical use of tests. Also covered is the careful use of tests to accurately examine the achievement of educational objectives.

## **HS 355 HUMAN SEXUALITY**

SPRING ONLY/ALL YEARS

3 credit hours

This course offers a broad overview of human sexuality from a multidisciplinary perspective: the biological, psychological, sociological, and cross-cultural. It provides some of the most current information in the field today and the opportunity for students to reflect on their personal values, attitudes, beliefs, and behaviors regarding sexuality and to consider critical practice issues in his/her field.

## **HS 405 EPIDEMIOLOGY**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course offers an overview of epidemiology and the epidemiologic approach to problems of health and disease. The major principles and methods of epidemiology are presented together with many of the applications of epidemiology to public health and clinical practice. Prerequisite: HS-216.

## **HS 405G EPIDEMIOLOGY**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course offers an overview of epidemiology and the epidemiology approach to problems of health and disease. The major principles and methods of epidemiology are presented together with many of the applications of epidemiology to public health and clinical practice. Prerequisite: Consent of Instructor.

## **HS 416 RESEARCH IN NURSING AND HEALTH SCIENCES**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This course focuses on the research process and the use of research in nursing. The roles of the consumer of research, critical thinker, and leader in professional nursing are integrated through the use of the research process. Prerequisites: HS405 MA387 and MA387L.

## **HS 451 RESEARCH AND REPORT WRITING**

SPRING ONLY/ALL YEARS

3 credit hours

This is a follow-up course to HS/NU416. Students will have the opportunity to use the work from HS/NU416 to write a research paper, report, and/or proposal for a grant. Prerequisite: HS416.

## **HS 491 CURRENT TOPICS IN HEALTH SCIENCES**

FALL/SPRING/ALL YEARS

3 credit hours

This course focuses on selected topics that are not otherwise covered in depth in regular Health Science courses. Themes that are covered include community partnerships and advanced topics in Health Science. Key concepts from the general education requirements and basic health sciences are integrated in this course. With different topics offered, this course may be repeated for credit. Prerequisite: HS216.

## **HS 498 INTERNSHIP IN HEALTH SCIENCES**

FALL/SPRING/ALL YEARS

6 credit hours

The course is a supervised internship or field placement in the areas of exercise science and health promotion which is designed to provide opportunities for experiential learning at an advanced level. Students pursue professional assignments (minimum of 20 hours per week) with an agency or organization which provides services related to the students preparation in physical education. Prerequisite/Corequisite: Consent of instructor.

## **LINGUISTICS (LN)**

### **LN 101 INTRODUCTION TO LANGUAGE**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

Exploring the use of language (English in particular), this course is intended for students without any previous background in the study of language. The course focuses on different ways in which English may be formed and used by different people in different situations. It also serves as an introduction to the study of the sounds, words, and sentences of English and other languages.

### **LN 300 INTRODUCTION TO LINGUISTICS**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This is an introduction to the nature and classification of language and to the methods used in contemporary linguistic science to analyze and describe languages, with attention to the practical application of linguistics. Prerequisite: EN111.

## **LN 350 LINGUISTICS AND THE LANGUAGE ARTS**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This course examines the many perspectives from which language may be viewed. It is intended to give students a broad view of the nature, acquisition, uses, and misuses of language as well as to remind them of the connections between language, culture, and society. Prerequisite: LN300 or consent of instructor.

## **LN 371 WORLD ENGLISHES**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This course examines the development of different varieties of standard English throughout the world. In the past half-century, English has exploded as the most widely used world language, and most of the users are non-native speakers. The result of worldwide contact with English, the evolution of English varieties, and cross-cultural similarities and difference in patterns of language use are addressed. Prerequisite: LN300 or consent of instructor.

## **LN 385 STRUCTURE OF ENGLISH**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

LN385 presents a general description of the structure of Standard English. The course focuses on sentence structure, word formation, word choice, and other aspects of Standard English that most people refer to as grammar. The course is of special value for future and current English teachers who will be teaching English and its use to their own students. Prerequisite: LN300 or consent of instructor.

## **LN 400 APPLIED LINGUISTICS**

FALL/SPRING/ALL YEARS

3 credit hours

This capstone course provides the culminating experience for students in their exploration of linguistics by offering a multidisciplinary approach to issues related to language acquisition and teaching. Integrating and connecting key concepts and methodologies from previous linguistics courses, this course will focus on the applications of linguistics and its subfields to language and learning theories that support various teaching methodologies; individual and cultural differences that affect second language learning; stylistics and the use of literature in language pedagogy; language policy and language planning; as well as issues of bilingualism, multilingualism, and multiculturalism. Prerequisite: LN300; senior status; or consent of the instructor.

## **LN 400G APPLIED LINGUISTICS**

FALL ONLY/ODD YEARS

3 credit hours

This course covers methods of teaching English as A second Language. It familiarizes students with test Drills, activities, and exercises used in ESL programs. Work on Materials Preparation dealing with phonological, Syntactical, and Semantic problems is included. Prerequisite: LN300

## **LN 402 HISTORY OF THE ENGLISH LANGUAGE**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This course is an historical survey of the sound, structure, and syntax of the English language from 900 A.D. to the present. Prerequisite: LN300 or consent of instructor.

## **LN 440 TOPICS IN LINGUISTICS**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

Courses included under this umbrella course provide undergraduate and graduate students with advanced study of specific topics within the study of language. These topics focus attention on language use, language analysis, and language learning. Special attention will be paid, where possible, to Pacific languages and cultures. The course may be repeated when topics vary. Prerequisite: LN300 or consent of instructor.

## **LN 440B TOPICS IN LINGUISTICS: PRAGMATICS**

FALL/SPRING/ALL YEARS

3 credit hours

Pragmatics presents an exploration of what we actually do with our language. Following a cross-cultural approach, the course analyzes the ways we use our language to do what we want it to do and say what we really mean in various contexts and situations. Prerequisites: LN300 or consent of instructor.

## **LN 440B/G TOPICS IN LINGUISTICS: PRAGMATICS**

FALL/SPRING/ALL YEARS

3 credit hours

Pragmatics presents an exploration of what we actually do with our language. Following a cross-cultural approach, the course analyzes the ways we use our language to do what we want it to do and say what we really mean in various contexts and situations. Prerequisites: LN300 or consent of instructor.

## **LN 440G TOPICS IN LINGUISTICS**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

Courses included under this umbrella course provide undergraduate and graduate students with advanced study of specific topics within the study of language. These topics focus attention on language use, language analysis, and language learning. Special attention will be paid, where possible, to Pacific languages and cultures. The course may be repeated for credit with different topics. Prerequisite: LN300 or consent of instructor.

## **LN 460 INTRODUCTION TO SOCIOLINGUISTICS**

FALL ONLY/ALL YEARS

3 credit hours

This course is an introduction to current sociolinguistic studies. Emphasis is placed on the nature of the speech community, speech events, societal bilingualism, and language constraints. Additional emphasis is placed on practical application of basic sociolinguistic concepts. Prerequisite: LN300 or consent of instructor.

## **LN 500 APPLIED LINGUISTICS**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers methods of teaching English as a second language. It familiarizes students with test drills, activities, and exercises used in ESL programs. Work on materials preparation dealing with phonological, syntactical, and semantic problems is included. Prerequisite: LN300 or consent of instructor.

## **LN 501 GRADUATE RESEARCH & DOCUMENTATION**

FALL ONLY/AS REQUIRED

3 credit hours

This seminar prepares students to meet the research writing requirements of the Master of Arts in English degree, including seminar papers and the Master's Thesis. The course focuses on research methodology as well as the critical, analytical, and rhetorical skills needed for successful graduate-level research in English studies. Students review sources, bibliographic literature, and appropriate indexes, both conventionally and electronically published. Students become skilled in the use of MLA and/or other documentation styles. Required of all candidates for the Masters of Arts in English.

## **LN 502 HISTORY OF THE ENGLISH LANGUAGE**

SPRING ONLY/EVEN YEARS

3 credit hours

This course traces the history and development of English sounds, morphology, syntax, orthography, and lexicon from Anglo Saxon times to the present. Topics include the relationship of English to other Indo-European languages, borrowing, sound change, syntactic change, morphological change, lexical change, changes in meaning over time, and some current varieties of world "Englishes." Prerequisite: LN300 or consent of instructor.

## **LN 560 INTRODUCTION TO SOCIOLINGUISTICS**

FALL ONLY/ODD YEARS

3 credit hours

This course is an introduction to current sociolinguistic studies. Emphasis is placed on the nature of the speech community, speech events, societal bilingualism, and language constraints. Additional emphasis is placed on practical application of basic sociolinguistic concepts. Prerequisite: LN300 or consent of instructor.

## **LN 620 GRADUATE WRITING SEMINAR**

AS REQUIRED

3 credit hours

Hybrid

This graduate seminar in writing enables advanced students to develop manuscripts for professional development and publication. A workshop structure allows feedback and criticism from peers and instructor. The course may be repeated for credit when different subject matter is covered.

## **LN 662 SECOND LANGUAGE TESTING AND EVALUATION**

FALL ONLY/ALL YEARS

3 credit hours

This is a course in which all the techniques of teaching a second language are united and related to their effectiveness according to parameters derived from language acquisition theory and statistical quantification. Prerequisite: Native or native-like proficiency in English and familiarity with a second language. Also, familiarity with basic arithmetic and algebra.

## **LN 663 SEMINAR IN PSYCHOLINGUISTICS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course provides fundamental knowledge of psycholinguistics and emphasizes its interdisciplinary nature. It encompasses the processes underlying the acquisition of a language and the factors that influence these processes. Prerequisite: LN300.

## **LN 680 CONTEMPORARY CRITICAL THEORY**

SPRING ONLY/AS REQUIRED

3 credit hours

This is a seminar in advanced topics and problems of contemporary critical theory. It will benefit students and teachers in literature, cultural history, and education. The course may be repeated with different topics. Prerequisite: EN501 or consent of instructor.

## **LN 691 GRADUATE SEMINAR**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course involves rigorous study of literary authors, genres, modes, or periods. Although EN691's content will be determined by its instructor and students, the course emphasizes literary study that incorporates various theoretical approaches; close reading of all assigned texts; audio, visual, and electronic components; intensive class discussions; research presentations; and seminar papers. The course may be repeated for credit when different subject matter or periods are covered. Prerequisite: EN501.

## **LN 695 THESIS**

FALL/SPRING/ALL YEARS

1 - 6 credit hours

There are two possible thesis options, Traditional or Creative. The thesis candidate prepares, for six hours of thesis credit, either a study embodying rigorous scholarly research or original creative work of near-publishable quality. This course may be repeated until all six thesis credits are successfully completed. Prerequisites: EN501, EN680, candidacy in the English Master's Program, and consent of instructor. Prerequisites: EN501, EN680, candidacy in the English Masters Program, and consent of instructor.

## **LIBRARY SCIENCE (LS)**

### **LS 312 SCHOOL LIBRARY/MEDIA ADMINISTRATION**

SPRING ONLY/ODD YEARS

3 credit hours

This is an introduction to school library media center philosophy, organization, administration and the role of the center in the instructional program. It is a study of the routines, methods, and records necessary for the daily operation and supervision of the center. The course examines the role of the librarian and the principal-teacher-student relationship.

## **LS 314 SCHOOL LIBRARY METHODS: TEACHING AND LEARNING IN THE SCHOOL LIBRARY**

FALL ONLY/ODD YEARS

3 credit hours

This course covers objectives, methods, philosophy and role of the school library media center in supporting curriculum and instruction. It introduces techniques to assist teachers in selecting and utilizing appropriate materials for individual, small group, and large group instruction. It covers development of library skills instruction and literature appreciation programs.

## **LS 315 REFERENCE AND INFORMATION SOURCES AND SERVICES**

SPRING ONLY/EVEN YEARS

3 credit hours

This course is a survey of basic print and electronic resources appropriate to reference and information services for elementary and secondary schools. It provides practice in evaluation, selection and use of reference sources, and examines the role of the school library media center in teaching information literacy.

## **LS 410 CATALOGING AND CLASSIFICATION OF SCHOOL LIBRARY MATERIALS**

FALL ONLY/EVEN YEARS

3 credit hours

This course is an introduction to the standard and descriptive cataloging, subject cataloging, and classification of library materials. The primary focus of the course is to present the purpose, theory and principles of cataloging and classification necessary for libraries in the 21st century, including Dewey Decimal Classification. Sears Subject Headings as well as schemes and tools applicable to digital resources. This includes construction of a main catalog for the school library, including audiovisual materials and digital resources and of processing materials from acquisition to circulation.

## **LS 410G CATALOGING AND CLASSIFICATION OF SCHOOL LIBRARY MATERIALS**

FALL ONLY/EVEN YEARS

3 credit hours

This course is an introduction to the standard and descriptive cataloging, subject cataloging, and classification of library materials. The primary focus of the course is to present the purpose, theory and principles of cataloging and classification necessary for libraries in the 21st century, including Dewey Decimal Classification. Sears Subject Headings as well as schemes and tools applicable to digital resources. This includes construction of a main catalog for the school library, including audiovisual materials and digital resources and of processing materials from acquisition to circulation.

## **LS 411 BUILDING SCHOOL LIBRARY COLLECTIONS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course covers intellectual, administrative, and practical aspects of building, maintaining and evaluating school library collections with particular reference to Guam and the Western Pacific. The critical examination and discussions about collection policies, community analysis and the needs of library users, strategies of selection and evaluation, analysis and evaluation of current reviewing media, school library standards, censorship, acquisitions procedures and management, library cooperation, copyright, contemporary publishing, and use of computers in acquisitions will serve as the basis for creating a comprehensive collection development and maintenance plan that is both responsive to the community needs as well as provides necessary protections for the collection.

## **LS 411G BUILDING SCHOOL LIBRARY COLLECTIONS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course is steeped in foundational knowledge all librarians need to be a strong educational support in building and maintaining library collections in academic, public, or school libraries with particular emphasis on the needs of the communities in Guam and Western Pacific. Learners will be able to conduct reviews of existing selection policies, evaluate current library standards, and create a comprehensive collection development and maintenance plan that is responsive to community needs. Learners will also create a plan to develop avenues of communication between the library and the community.

## **LS 419 PACIFIC CHILDREN'S LITERATURE**

FALL/SPRING/ALL YEARS

3 credit hours

This course focuses on the growing body of international literature created for children and adolescents, and on the issues that surround the development, selection and use of this literature. It emphasizes the reading and examination of all types of printed and audio-visual materials, a study of the history and development of children's literature, its value to the communication process, and the criteria for selection and utilization of books and closely related materials suited to the needs and tastes of elementary school children including exceptional children.

## **LS 419G PACIFIC CHILDREN'S LITERATURE**

SPRING ONLY/ALL YEARS

3 credit hours

This course focuses on the growing body of international literature created for children and adolescents, and on the issues that surround the development, selection and use of this literature. It emphasizes the reading and examination of all types of printed and audio-visual materials, a study of the history and development of children's literature, its value to the communication process, and the criteria for selection and utilization of books and closely related materials suited to the needs and tastes of elementary school children including exceptional children.

## **LS 420 YOUNG ADULT LITERATURE**

SPRING ONLY/ODD YEARS

3 credit hours

This course will help to prepare teachers and librarians to select and critique culturally relevant young adult literature for use by young readers and people who interact with them. A personal goal is to develop and appreciation for the genre and passion for exploring, critiquing, and reading young adult literature.

## **LS 420G YOUNG ADULT LITERATURE**

SPRING ONLY/ODD YEARS

3 credit hours

The course will help to prepare teachers and librarians to select and critique culturally relevant young adult literature for use by young readers and people who interact with them. A personal goal is to develop an appreciation for the genre and a passion for exploring, critiquing, and reading young adult literature.

## **LS 451 AUDIO VISUAL EDUCATION**

FALL/SPRING/ALL YEARS

3 credit hours

This is a laboratory course in which instructional design and the selection, production, and utilization of media resources are studied. A survey of perception, communication and learning theories, as well as selected research studies applicable to the design of instructional systems are included. Prerequisites: ED300 or consent of instructor.

## **LS 452 COMPUTERS IN EDUCATION**

FALL ONLY/ALL YEARS

3 credit hours

The course is designed to teach preservice and in-service teachers about microcomputers in education. It provides practical experience with computers, and aids students in learning the various types of software (applications, utilities, CAI/CMI) and their school and classroom uses. LOGO is taught. Issues involved in computer use in education are studied. No previous computer experience is necessary.



## **LS 453 MULTIMEDIA MATERIALS AND SERVICES**

FALL ONLY/EVEN YEARS

3 credit hours

This course is a survey of multimedia resources that supports learning and instruction in elementary and secondary schools. Examines policies and criteria for the selection, evaluation, acquisition, organization and maintenance of non-print media collections and electronic resources in school library media center. Prerequisites: ED451 and LS310 or consent

## **LEGAL STUDIES (CJ) (LW)**

### **LW 101 INTRODUCTION TO CRIMINAL JUSTICE**

FALL/SPRING/ALL YEARS

3 credit hours

This course is designed to produce an understanding of the underlying purpose of law enforcement by analyzing the functions of the police officer, courts, penal institutions and attorneys. The course also provides a survey of the criminal justice system focusing on its purpose, problems and functions.

### **LW 106 PERSONAL LAW**

FALL/SPRING/ALL YEARS

3 credit hours

Personal Law introduces basic legal principles and their application to everyday human relations.

### **LW 202 TRIAL AND EVIDENCE**

FALL/SPRING/ALL YEARS

3 credit hours

This course examines criminal procedure from investigation through arrest and trial. The rules of evidence and constitutional requirements regarding police investigations, search and seizure, arrests, confessions and admissibility of evidence in criminal trials are covered.

## **LW 220 SECURITY MANAGEMENT IN BUSINESS AND GOVERNMENT**

FALL/SPRING/ALL YEARS

3 credit hours

This course focuses on applying security management concepts and techniques to modern business and public sector operations. The course emphasizes security practices and crime control functions in a business and/or government environment.

## **LW 285 LEGAL REASONING, RESEARCH AND WRITING**

FALL/SPRING/ALL YEARS

3 credit hours

This course examines legal theory and reasoning and its application to legal research and writing. In-depth legal analysis will be conducted and key skills in researching case law, statutes and other legal sources will be developed. The legal writing portion of this course will develop legal citation skills and the preparation and writing of legal briefs and law office memoranda.

## **LW 306 CRIMINAL LAW**

FALL/SPRING/ALL YEARS

3 credit hours

The student studies the required elements of crimes under the common law and modern criminal statutes. Specific problems of application of the elements of crimes to law enforcement and the criminal justice system are emphasized.

## **LW 311 CORRECTIONAL SECURITY MANAGEMENT AND ADMINISTRATION**

FALL/SPRING/ALL YEARS

3 credit hours

The rationale, procedures and problems underlying sentencing and the correctional process are analyzed. The course also focuses on problems of recidivism and future trends in criminal corrections.

## **LW 360 ADMINISTRATIVE PROCEDURE**

FALL/SPRING/ALL YEARS

3 credit hours

This course prepares the paralegal to render legal assistance in the processes, procedures, and requirements established by administrative agencies through their enabling statutes and rules and regulations. Methods of informal and formal rulemaking and adjudication will be examined, as well as policy execution. This course will also explore administrative considerations in such areas as real estate transactions, procurement, bids, licensing, zoning, employment and program management are discussed.

## **LW 402 CONSTITUTIONAL LAW**

FALL/SPRING/ALL YEARS

3 credit hours

This course provides the student with underlying principles of constitutional interpretation, government organization and functions, and the application of the Bill of Rights to criminal justice. Special problems of constitutional principles applied to the criminal justice system are dealt with through the study of U.S. Supreme Court cases.

## **LW 404 ADMINISTRATION AND MANAGEMENT OF CRIMINAL JUSTICE ORGANIZATIONS**

FALL/SPRING/ALL YEARS

3 credit hours

This course examines the application of sound organizational theory and public administration and management practices in the criminal justice system. This course focuses on the interdependencies of the administrative systems of criminal justice agencies and strategies that are necessary for administrators to successfully manage these agencies.

## **LW 409A CURRENT NATIONAL TOPICS**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course incorporates applied research and real world applications in the field of criminal Justice under the guidance of a major professor. This courses examines current problems in law Enforcement and criminal justice at the Territorial and national leaves from an Administrative perspective, including review and Evaluation of solutions to current problems Developed by police and other criminal justice Agencies, academic disciplines and other sources. May be taken more than once if topic is different. A. Current national topics. B. Current island Pacific topics. C. Death investigations d. Major crimes investigations e. International Crime

## **LW 409B CURRENT PACIFIC ISLAND TOPICS**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course incorporates applied research and real World applications in the field of criminal Justice under the guidance of a major professor. This courses examines current problems in law Enforcement and criminal justice at the Territorial and national leaves from an Administrative perspective, including review and Evaluation of solutions to current problems Developed by police and other criminal justice Agencies, academic disciplines and other sources. May be taken more than once if topic is different. A. Current national topics. B. Current island Pacific topics. C. Death investigations d. Major crimes investigations e. International Crime

## **LW 409C DEATH INVESTIGATION**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course incorporates applied research and real World applications in the field of criminal Justice under the guidance of a major professor. This courses examines current problems in law Enforcement and criminal justice at the Territorial and national leaves from an Administrative perspective, including review and Evaluation of solutions to current problems Developed by police and other criminal justice Agencies, academic disciplines and other sources. May be taken more than once if topic is different. A. Current national topics. B. Current island Pacific topis. C. Death investigations d. Major crimes investigations e. International Crime

## **LW 409D MAJOR CRIMES INVESTIGATIONS**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course incorporates applied research and real World applications in the field of criminal Justice under the guidance of a major professor. This courses examines current problems in law Enforcement and criminal justice at the Territorial and national leaves from an Administrative perspective, including review and Evaluation of solutions to current problems Developed by police and other criminal justice Agencies, academic disciplines and other sources. May be taken more than once if topic is different. A. Current national topics. B. Current island Pacific topis. C. Death investigations d. Major crimes investigations e. International Crime

## **LW 409E INTERNATIONAL CRIME**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course incorporates applied research and real World applications in the field of criminal Justice under the guidance of a major professor. This courses examines current problems in law Enforcement and criminal justice at the Territorial and national leaves from an Administrative perspective, including review and Evaluation of solutions to current problems Developed by police and other criminal justice Agencies, academic disciplines and other sources. May be taken more than once if topic is different. A. Current national topics. B. Current island Pacific topis. C. Death investigations d. Major crimes investigations e. International Crime

## **LW 442 LAW AND ETHICS IN BUSINESS AND GOVERNMENT**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course examines the rules of law governing business transactions. Topics covered include the American legal system: definitions, classifications, and sources of law; court systems and procedures; tort laws; laws of contract: essentials of enforceable agreements, operation, and discharge; law of sales; and the Uniform Commercial Code.

## **LW 443 BUSINESS LAW II**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course covers law of agency and employer-employee relations including rights and liabilities of parties, and the termination of relationships; law of business organization: sole ownership, partnerships, and corporations; laws of negotiability, negotiations and discharge and debtors, creditors and bankruptcy. Prerequisite: LW442 with a C grade or better.

## **LW 480 CRIMINAL JUSTICE CAPSTONE**

FALL/SPRING/ALL YEARS

3 credit hours

This course is the capstone of the Bachelor of Science Criminal Justice (BSCJ) degree program integrating concepts and skills learned in the BSCJ Foundation. This is an integrative, problem-solving course in which the knowledge gained in the major is applied to case studies where the students will evaluate and provide solutions to actual problems. There is special emphasis on a student's abilities to utilize critical thinking skills to analyze strategic trends in public administration and demonstrate proficiency. Prerequisites: a) Graduating seniors only; b) Completion of PA405 and either PA305 or tvIA385; and c) Consent of the Instructor.

## **LW 490 SPECIAL PROJECT IN LEGAL STUDIES**

FALL/SPRING/ALL YEARS

1 - 3 credit hours

This special research course is intended to Provide criminal justice and public Administration majors with the contemporary Principles and techniques of research in the Principles of constitutional interpretation, Government organization and functions, and the Application of the bill of rights to criminal Justice.

## **LW 498 LEGAL STUDIES INTERNSHIP**

FALL/SPRING/ALL YEARS

3 credit hours

This course provides qualified students with the opportunity to gain experience in public and criminal justice administration. Students are placed in government agencies and related organizations and work under the supervision of a management official. Students must consult with the Internship Coordinator prior to enrolling. Prerequisite: Instructor's consent.

## **MATHEMATICS (MA)**

### **MA 085A FUNDAMENTALS OF MATHEMATICS**

FALL/SPRING/ALL YEARS

3 credit hours

MA085a-b is a two-semester sequence of courses that is a study of the fundamental concepts of high school mathematics, including arithmetic and algebra. Each course is lecture-based with laboratory sessions designed to provide the background necessary for advancement in mathematics. Each includes 3 lecture hours and 1.5 hours of laboratory for review /testing sessions weekly. MA085a includes whole, decimal and signed numbers, fractions, ratios, percent, operations, equations and inequalities. MA085b includes polynomials, factoring, rational and radical expressions, exponents and quadratic equations. A student may successfully complete either the MA085a~b sequence or the MA089 course for non-degree-units (NDUs), but may not receive NDUs for completion of both MA085a-b and MA089. Grades for students in MA085a must be C or better to enroll in MA085b. Grades for students in MA085b must be C or better to enroll in MA 110, MA 115, or MA 151. Prerequisite: Mathematics placement test.

### **MA 085B FUNDAMENTALS OF MATHEMATICS**

FALL/SPRING/ALL YEARS

3 credit hours

MA085a-b is a two-semester sequence of courses that is a study of the fundamental concepts of high school mathematics, including arithmetic and algebra. Each course is lecture-based with laboratory sessions designed to provide the background necessary for advancement in mathematics. Each includes 3 lecture hours and 1.5 hours of laboratory for review /testing sessions weekly. MA085a includes whole, decimal and signed numbers, fractions, ratios, percent, operations, equations and inequalities. MA085b includes polynomials, factoring, rational and radical expressions, exponents and quadratic equations. A student may successfully complete either the MA085a~b sequence or the MA089 course for non-degree-units (NDUs), but may not receive NDUs for completion of both MA085a-b and MA089. Grades for students in MA085a must be C or better to enroll in MA085b. Grades for students in MA085b must be C or better to enroll in MA 110, MA 115, or MA 151. Prerequisite: Mathematics placement test.

## **MA 089 FUNDAMENTALS OF MATHEMATICS**

FALL/SPRING/ALL YEARS

5 credit hours

This course is a study of the fundamental concepts of high school mathematics, including arithmetic and algebra.

This course is lecture-based and designed to provide the background necessary for advancement in mathematics.

It Includes 5 lecture hours weekly. This is the combined course of MA085a-b. Students must earn a grade of C or higher to enroll in MA110, MA115, or MA151.

Prerequisite: Mathematics Placement Test.

## **MA 110 BASIC MATHEMATICAL APPLICATIONS**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course explores the world of mathematical application for the management, life, and social sciences.

It covers linear, quadratic, polynomial, exponential and logarithmic function and their applications to finance and economics. This course also provides an introduction to solving systems of linear equations, matrix operations, and a graphical treatment of linear programming. This course satisfies the GE requirement, but does not satisfy any prerequisite for higher level mathematics courses. It is intended for those students who have no further needs in mathematics. Prerequisite: Grade of C or better in MA-085b or MA-089, completed within the previous 3 semesters, or placement.

## **MA 115 INTRODUCTORY COLLEGE ALGEBRA**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course prepares students for MA161a-b or MA165.

Topics include polynomial equations; radical expressions; systems of equations and inequalities; functions; inverse functions; graphing; rational, exponential, and logarithmic functions; and application problems. This course satisfies the GE requirement. It is intended for those students who continue their studies in mathematics after completing this course. Prerequisite: Grade of C or better in MA085b or MA089, completed within the previous 3 semesters, or placement.

## **MA 150 MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS**

FALL ONLY/ALL YEARS

3 credit hours

This course is intended for prospective elementary school teachers. The course provides elements of the mathematical content knowledge needed to understand and teach mathematics in elementary school. The course covers problem solving; the development of the numbers systems and operations; fractions, decimals and percent; the use of various manipulatives in teaching elementary mathematics; probability; statistics. It primarily focuses on geometry. Prerequisites: MA115 and MA151.

## **MA 151 INTRODUCTORY STATISTICS**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course presents statistical method as applied to the description and display of data, and to drawing conclusions from statistical data, and introduces the basic probability theory needed to understand use the techniques of elementary statistics. Prerequisite: Grade of C or better in MA085b or MA089, completed within the previous 3 semesters, or placement.

## **MA 161A COLLEGE ALGEBRA AND TRIGONOMETRY**

FALL/SPRING/ALL YEARS

3 credit hours

MA161a includes algebraic, exponential and logarithmic functions, systems of equations and inequalities. MA161b includes trigonometry, additional algebraic functions, sequences, series and probability. A student may receive credit for either the MA161a-b sequence or the MA 165 course, but not a combination of the two. Prerequisite: Grade of C or better in MA115 or Placement.

## **MA 161B COLLEGE ALGEBRA AND TRIGONOMETRY**

FALL/SPRING/ALL YEARS

3 credit hours

MA161a includes algebraic, exponential and logarithmic functions, systems of equations and inequalities. MA161b includes trigonometry, additional algebraic functions, sequences, series and probability. A student may receive credit for either the MA161a-b sequence or the MA 165 course, but not a combination of the two. Prerequisite: Grade of C or better in MA161a.

## **MA 165 PRECALCULUS**

FALL/SPRING/ALL YEARS

5 credit hours

Online/Hybrid

Topics include algebraic, exponential and logarithmic functions; systems of equations and inequalities; trigonometry; sequences and series. A student may receive credit for either the MA161a-b sequence or the MA 165 course, but not a combination of the two. Prerequisite: Grade of C or better in MA115 or Placement.

## **MA 203 CALCULUS I**

FALL/SPRING/ALL YEARS

5 credit hours

Online/Hybrid

This is the first semester of a standard calculus course. Topics include limits; continuity; the definition of derivatives; derivatives of algebraic and transcendental functions; product, quotient, and chain rules; applications; and Riemann Sums. Prerequisite: Grade of C or better in MA161b or MA165 or placement or equivalent.

## **MA 204 CALCULUS II**

FALL/SPRING/ALL YEARS

5 credit hours

Online/Hybrid

This is the second semester of a standard calculus course. Topics include techniques and applications of integration, differential equations, power series, and Taylor series. Prerequisite: Grade of C or better in MA203.

## **MA 205 MULTIVARIABLE CALCULUS**

FALL/SPRING/ALL YEARS

4 credit hours

This course covers the calculus of functions of several variables, including partial differentiation and multiple integration. It also covers introductory topics in vector calculus, including vector fields, line integration, Green's Theorem, and Stokes' Theorem. Prerequisite: Grade of C or better in MA204.

## **MA 301 DIFFERENTIAL EQUATIONS**

SPRING ONLY/ALL YEARS

3 credit hours

This course covers the study of the fundamental concepts of differential equations with applications. Prerequisite: Grade of C or better in MA204.

## **MA 302 FOUNDATIONS OF HIGHER MATHEMATICS**

SPRING ONLY/ALL YEARS

3 credit hours

This course provides a careful introduction to mathematical reasoning using definitions and proofs. Topics covered include set theory, logic and mathematical induction. Prerequisite: Grade of C or better in MA205, or C or better in MA341, or A- or better in MA204.

## **MA 341 LINEAR ALGEBRA**

FALL/SPRING/ALL YEARS

3 credit hours

Topics covered include vectors, systems of linear equations, matrices, eigenvalues and eigenvectors, vector spaces, determinants and linear transformations. Prerequisite: Grade of C or better in MA204, or A in MA203.

## **MA 351 DISCRETE STRUCTURES**

SPRING ONLY/ALL YEARS

3 credit hours

This course introduces the rigorous theoretical framework within which ideas about computer science can be expressed. Prerequisite: Grade of C or better in MA204.

## **MA 361 NUMBER THEORY**

SPRING ONLY/EVEN YEARS

3 credit hours

This course covers the study of the properties of integers, congruencies, Diophantine equations, prime numbers and residue classes. Prerequisite: Grades of C or better in both MA205 and MA302.

## **MA 375 NUMERICAL METHODS AND SOFTWARE**

SPRING ONLY/ODD YEARS

3 credit hours

This course is an introduction to such topics as interpolation, integration, solutions of linear systems of equations, solutions of linear and nonlinear equations, and solutions of ordinary differential equations. It includes the use of numerical software libraries. Prerequisite: Grade of C or better in MA204 and MA341, CS201 or CS202.

## **MA 385 APPLIED STATISTICS**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course covers: statistical inference, sampling theory, hypothesis testing, correlation, and non-parametric statistics as applied to the social, life and physical sciences and to business. Prerequisite: Grade of C or better in MA151 or equivalent course.

## **MA 387 STATISTICS FOR SCIENCES**

FALL ONLY/ALL YEARS

3 credit hours

The topics include exploring data in graphs and in numerical values, introducing basic probability theory for statistics, sampling distributions, estimation theory, testing hypothesis, correlation, linear regression, variance analysis, and non-parametric statistics. The course consists of three hours of lecture weekly. The lab, MA387L must be taken concurrently. Prerequisite: Grade C or better in MA161A or higher. Students enrolled in MA387 Statistics for Sciences for credit may not also earn credit for MA385 Applied Statistics.

## **MA 387L STATISTICS FOR SCIENCE LABORATORY**

FALL ONLY/ALL YEARS

1 credit hour

MA387L is the laboratory part of MA387 and MUST be taken concurrently. The purpose of lab is to reinforce concepts learned in lecture, with an emphasis on translating familiar statistical problems into SPSS tasks. It emphasizes the principles and criteria for selecting the appropriate statistical techniques as well as making proper conclusions. Students will get hands-on experience applying the topics covered to real datasets. Corequisite: Must take MA387 concurrently.

## **MA 392 LABORATORY TEACHING AND ASSISTING**

FALL/SPRING/ALL YEARS

1 - 2 credit hours

This course provides for practical educational experiences in teaching and assisting with developmental math classes. It may not be used for more than two upper division math elective credits. Prerequisite: Grade of B or better in MA203 or consent of instructor.

## **MA 411 INTRODUCTION TO ABSTRACT ALGEBRA I**

FALL ONLY/ALL YEARS

3 credit hours

This course offers a study of modern algebra with topics from group theory and ring theory. Prerequisites: Grades of C or better in MA205, MA302 and MA341.

## **MA 411G INTRODUCTION TO ABSTRACT ALGEBRA I**

FALL ONLY/ALL YEARS

3 credit hours

This course offers a study of modern algebra with topics from group theory and ring theory. Prerequisites: Grades of C or better in both MA205, MA302, and MA341.

## **MA 412 INTRODUCTION TO ALGEBRA II**

SPRING ONLY/ALL YEARS

3 credit hours

This is the second course in a two-semester sequence of introductory courses in abstract algebra. Topics covered include field theory, Sylow theorems, introductory Galois Theory, and some of advanced group theory, module and ring theory. Prerequisites: Grades of C or better in MA411.

## **MA 412G INTRODUCTION TO ABSTRACT ALGEBRA II**

SPRING ONLY/ALL YEARS

3 credit hours

This is the second course in a two-semester sequence of introductory courses in abstract algebra. Topics covered include field theory, Sylow theorems, introductory Galois theory, and some of advanced group theory, module and ring theory. Prerequisites: Grades of C or better in MA341 and MA411.

## **MA 421 INTRODUCTION TO ANALYSIS I**

FALL ONLY/ALL YEARS

3 credit hours

This is the first course in a two-semester sequence designed to provide an introduction to the rigorous study of the foundations of calculus. Topics covered include the completeness of the real numbers, elementary topology, continuous functions, and numerical sequences and series. Prerequisites: A grade of C or better in MA205 and MA302.

## **MA 421G INTRODUCTION TO ANALYSIS I**

FALL ONLY/ALL YEARS

3 credit hours

This is the first course in a two-semester sequence designed to provide an introduction to the rigorous study of the foundations of calculus. Topics covered include the completeness of the real numbers, elementary topology, continuous functions, and numerical sequences and series. Prerequisites: Grades of C or better in MA205 and MA302.

## **MA 422 INTRODUCTION TO ANALYSIS II**

SPRING ONLY/ALL YEARS

3 credit hours

This is the second course in a two-semester sequence designed to provide an introduction to the rigorous study of the foundations of calculus. Topics covered include differentiation, integration, sequences and series of functions. Prerequisites: A grade of C or better in MA421.

## **MA 422G INTRODUCTION TO ANALYSIS II**

SPRING ONLY/ALL YEARS

3 credit hours

This is the second course in a two-semester sequence designed to provide an introduction to the rigorous study of the foundations of calculus. Topics covered include differentiation, integration, sequences and series of functions. Prerequisite: A grade of C or better in MA421G.

## **MA 431 TOPICS IN ADVANCED MATHEMATICS**

AS REQUIRED

3 credit hours

This course offers selected topics in advanced mathematics such as topology, mathematical induction, non-Euclidean geometries. Different subject matter may be repeated for credit. Prerequisite: Grades of C or above in MA205 and MA302.

## **MA 431G TOPICS IN ADVANCED MATHEMATICS**

AS REQUIRED

3 credit hours

This course offers selected topics in advanced mathematics such as topology, mathematical induction, non-Euclidean geometries. With different subject matter may be repeated for credit. Prerequisite: Grades of C or above in MA205 and MA302.

## **MA 441 MODERN GEOMETRY**

AS REQUIRED

3 credit hours

This course treats non-Euclidean and advanced Euclidean geometry. Prerequisites: Grades of C or better in both MA205 and MA302.



## **MA 441G MODERN GEOMETRY**

AS REQUIRED

3 credit hours

This course treats non-Euclidean and advanced Euclidean geometry. Prerequisites: Grades of C or better in both MA205 and MA302.

## **MA 451 INTRODUCTION TO PROBABILITY THEORY**

FALL ONLY/EVEN YEARS

3 credit hours

This course covers probability spaces; combinatorial analysis; independence and conditional probability; discrete and continuous random variables including binomial, Poisson, exponential and normal distributions; expectations; joint, marginal and conditional distribution functions; moment generating functions; law of large numbers; central line theorems. Prerequisites: MA-205.

## **MA 451G PROBABILITY AND STATISTICS**

FALL ONLY/EVEN YEARS

3 credit hours

This course covers probability spaces; combinatorial analysis; independence and conditional probability; discrete and continuous random variables including binomial, Poisson, exponential and normal distributions; expectations; joint, marginal and conditional distribution functions; moment generating functions; law of large numbers; central line theorems. Prerequisite: MA-205.

## **MA 453 OPERATIONS RESEARCH MODELS**

AS REQUIRED

3 credit hours

Operations research models are designed to optimize, maximize, or minimize real world processes. Computer methods and packages are included for linear and dynamic programming, life and death processes, P.E.R.T.-C.P.M., trend analysis and queuing theory. Prerequisites: MA341 and either MA385 or MA387 and MA387L.

## **MA 460 NUMERICAL LINEAR ALGEBRA**

AS REQUIRED

3 credit hours

The course covers topics such as numerical solutions to systems of linear equations; linear least squares problems; eigenvalue and eigenvector problems. Methods include Gauss-Jordan elimination, Seidel iterating, the QR algorithm, and linear optimization. It includes the use of numerical software libraries. Prerequisites: Grades of C or better in MA205, MA302, and MA375.

## **MA 460G NUMERICAL LINEAR ALGEBRA**

AS REQUIRED

3 credit hours

This course covers topics such as numerical solutions to systems of linear equations; linear least squares problems; eigenvalue and eigenvector problems. Methods include Gauss-Jordan elimination, Seidel iterating, the QR algorithm and linear optimization. It includes the use of numerical software libraries. Prerequisites: Grades of C or better in MA205, MA302, and MA341.

## **MA 461G NUMERICAL ANALYSIS**

FALL ONLY/ODD YEARS

3 credit hours

This course covers: root finding for non-linear equations, numerical integration, numerical methods for ordinary differential equations, interpolation theory, and approximation functions. The course makes use of numerical software libraries. Prerequisites: Grade of C or better in MA205 and MA302.

## **MA 472 FOURIER SERIES AND BOUNDARY VALUE PROBLEMS**

FALL ONLY/EVEN YEARS

3 credit hours

This is the second course on the differential equations based on the multivariable calculus. Topics include Fourier series expansion, Fourier integral, and wave, heat and Laplace equations. Emphasis is placed on applications. Prerequisites: Grade of C or better in MA205 and MA301.

## MICRONESIAN STUDIES (MI)

### MI 461 PACIFIC WOMEN WRITERS

SPRING ONLY/EVEN YEARS

3 credit hours

This course entails an intensive study of representative works of Pacific Women Writers to acquaint the students with the contours--in terms of styles, themes, symbols, images, language, politics, and subject matter--of the writing of females who represent an emerging literature as well as a new exciting part of the region's cultural heritage. Students will emerge with an understanding of the place of this literature in the larger context of Pacific Literature, Women's Literature, Minority Literature and Contemporary Literature in English. Prerequisites: EN210, EN323 or consent of the Instructor.

### MI 461G PACIFIC WOMEN WRITERS

3 credit hours

This course entails an intensive study of representative works Of pacific women writers to acquaint the students with the Contours--in terms of styles, themes, symbols, images, language, politics, and subject matter--of the writing of females who Represent an emerging literature as well as a new and exciting part of the region's cultural heritage. Students will emerge with an understanding of the place of this literature in the larger context of pacific literature, women's literature, minority literature, and contemporary literature in English. Prerequisite: EN 210,EN 215 or instructor's consent.

### MI 501 PEOPLES AND CULTURES OF MICRO

FALL ONLY/ALL YEARS

3 credit hours

This course provides a comprehensive overview of the cultures and societies of the Micronesian area. Prerequisite: Graduate Standing or Senior Level or Consent of Instructor.

## MI 502 HISTORY OF MICRONESIA

SPRING ONLY/ALL YEARS

3 credit hours

This course provides a comprehensive understanding of a thematic historical approach of the Micronesian region. A critical examination of the various forms of historical evidence, both indigenous and Western, pertaining to the region will be addressed. Prerequisite: Graduate Standing or Senior Level or Consent of Instructor.

### MI 503 CONTEMPORARY ISSUES AND PROBLEMS

SPRING ONLY/ALL YEARS

3 credit hours

Online

This course provides an in-depth understanding of contemporary issues and problems facing Micronesian society: economic development, political status and change, ethnicity and population shift, resources and environment, social and health problems. Prerequisite: Graduate Standing or Senior Level or Consent of instructor.

## MI 506 PHYSICAL GEOGRAPHY OF MICRONESIA

FALL ONLY/EVEN YEARS

3 credit hours

This course is a study of the origin and characteristics of the physical environments and biogeography of Micronesia through an analysis of physical geographic elements, their patterns of distribution, interrelationships, and problems. Prerequisites: Graduate standing or senior level.

## MI 508 MICRONESIAN PHILOSOPHY

AS REQUIRED

3 credit hours

This course examines the various approaches to philosophy found in Micronesia. Philosophy is framed by historical and cultural conditions. This course will explicate the meaning and significance of philosophical wisdom for the dominant cultures, past and present, in Micronesia. Prerequisite: Graduate Standing.

## **MI 510 GOVERNANCE OF ISLAND POLITIES**

SPRING ONLY/ODD YEARS

3 credit hours

This course is an analysis the challenges confronting government and political life on Guam and other Pacific island polities, focusing on examples from Micronesia related to post-colonial transition, globalization, economic strategies, globalization, cultural preservation, and sustainability of island societies. Prerequisites: MI502 or consent of instructor.

## **MI 512 GUAM/CHAMORRO STUDIES**

FALL ONLY/EVEN YEARS

3 credit hours

This seminar is a historical analysis of Guam's colonial legacy and a critical examination of major contemporary issues including Chamorro cultural survival, land, social and economic development, political status, religion, and modern modes of scholarly inquiry in Guam. This seminar presupposes introductory courses in the History of Guam (HI211) or related disciplines such as Culture and Education in Guam (ED265); Government and Politics of Guam (PS303); Introduction to Community Services on Guam (SW110).

## **MI 513 RESEARCH METHODOLOGY IN SOCIAL SCIENCES**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This graduate course will cover a wide range of topics dealing with processes trends and approaches to basic research methodologies and design found in the social sciences. Thae focus of this graduate course will be on qualitative and quantitative research methods and design. This course examines basic research methods, including causation, research design, experimental designs, sampling (simple random sampling, stratified sampling, cluster sampling, etc.) data gathering techniques (survey, observation, content analysis, and questionnaire design), data analysis, and interpretation of research results. The course covers the structuring of social science inquiry, conceptualization, operationalization, measurement, evaluation and presentation of research methods. The focus of this course will be on research methods and design in relation to social science research in the Micronesian Region.

## **MI 514 HEALTH AND HUMAN ADAPTATION IN MICRONESIA**

SPRING ONLY/ODD YEARS

3 credit hours

Primarily rooted in medical anthropology, this course uses a multidisciplinary approach to look at the status of health and human adaptation in Micronesia. By using specific examples of disease patterns, adaptation is looked at as an evolutionary process as well as synchronically. Strong emphasis is placed on the changing map of health and disease, generally in the Pacific and specifically in the Micronesian Islands. Along with medical anthropology, ideas and methods from related fields such as medical geography and epidemiology have also been incorporated into course materials. Following a broad overview of medical anthropology with introductions to its related fields, ideas and concepts central to health and adaptation will be presented, followed by case studies from Micronesia and the Pacific. Prerequisite: Graduate standing.

## **MI 517 CULTURAL ECOLOGY**

FALL ONLY/ODD YEARS

3 credit hours

Cultural ecology looks at the relationship between humans and their biotic and physical environments. Using diachronic and comparative perspectives, this course will survey the cultural ecology of Micronesian islanders. Particular attention will be given to the following themes: history, theory, and methods of cultural ecology; comparison of different approaches to the study of cultural adaptation; adaptation in permissive and marginal environments; and culture change in spatial and temporal perspectives. The format emphasizes seminar discussions and student presentations, but will also include some lectures, slides, films and videos. Prerequisite: Consent of instructor, MI501, MI502, or MI503.

## **MI 518 RELIGION, MAGIC, AND MYTH IN MICRONESIA**

AS REQUIRED

3 credit hours

This course surveys the traditional religions of Micronesia, with an emphasis on myth and ritual. Analysis of select samples of traditional ritual and myth from primary sources. Critical analysis is emphasized. Prerequisite: One proseminar course or consent of instructor.

## **MI 520 ECONOMIC DEVELOPMENT AND CHANGE IN MICRONESIA**

FALL ONLY/ODD YEARS

3 credit hours

Online

The seminar provides an overview of Micronesian economic systems past and present; focus is on the present as the new nations confront the need to develop market-based economies within a global context of diminishing resources and soaring populations.

## **MI 599 READINGS IN MICRO STUDIES**

SUMMER/EVEN YEARS

3 credit hours

This course provides students an initial opportunity to explore, via a schedule of in-depth readings, a range of topics and resource management; human services and community health; social, political, and economic issues; and culture, history, language, and the arts. Prerequisite: MI 501, MI 502, MI 503.

## **MI 599A READINGS IN MICRONESIAN STUDIES**

FALL/SPRING/ALL YEARS

3 credit hours

This course provides students an initial opportunity to explore, via a schedule of in-depth readings, a range of topics and issues in cultural ecology and resource management; human services and community health; social, political, and economic issues; and culture, history, language, and the arts. Prerequisite: MI501, 502, 503 and consent of instructor.

## **MI 599B READINGS IN MICRONESIAN STUDIES**

FALL/SPRING/ALL YEARS

3 credit hours

This course provides students an initial opportunity to explore, via a schedule of in-depth readings, a range of topics and issues in cultural ecology and resource management; human services and community health; social, political, and economic issues; and culture, history, language, and the arts. Prerequisite: MI501, 502, 503 and consent of instructor.

## **MI 599C READINGS IN MICRONESIAN STUDIES**

FALL/SPRING/ALL YEARS

3 credit hours

This course provides students an initial opportunity to explore, via a schedule of in-depth readings, a range of topics and issues in cultural ecology and resource management; human services and community health; social, political, and economic issues; and culture, history, language, and the arts. Prerequisite: MI501, 502, 503 and consent of instructor.

## **MI 599D READINGS IN MICRONESIAN STUDIES**

FALL/SPRING/ALL YEARS

3 credit hours

This course provides students an initial opportunity to explore, via a schedule of in-depth readings, a range of topics and issues in cultural ecology and resource management; human services and community health; social, political, and economic issues; and culture, history, language, and the arts. Prerequisite: MI501, 502, 503 and consent of instructor.

## **MI 691A SEMINAR IN MICRONESIAN STUDIES**

FALL/SPRING/ALL YEARS

1 - 3 credit hours

This course provides students an opportunity to pursue in-depth reading and individualized or small group research projects on selected topics in cultural ecology and resource management; human services and community health; social, political, and economic issues; and culture, history, language, and the arts. Prerequisite: MI501, 502, 503, 599.

## **MI 691B SEMINAR IN MICRONESIAN STUDIES**

FALL/SPRING/ALL YEARS

1 - 3 credit hours

This course provides students an opportunity to pursue in-depth reading and individualized or small group research projects on selected topics in cultural ecology and resource management; human services and community health; social, political, and economic issues; and culture, history, language, and the arts. Prerequisite: MI501, 502, 503, 599.

## **MI 691C SEMINAR IN MICRONESIAN STUDIES**

FALL/SPRING/ALL YEARS

1 - 3 credit hours

This course provides students an opportunity to pursue in-depth reading and individualized or small group research projects on selected topics in cultural ecology and resource management; human services and community health; social, political, and economic issues; and culture, history, language, and the arts. Prerequisite: MI501, 502, 503, 599.

## **MI 691D SEMINAR IN MICRONESIAN STUDIES**

FALL/SPRING/ALL YEARS

1 - 3 credit hours

This course provides students an opportunity to pursue in-depth reading and individualized or small group research projects on selected topics in cultural ecology and resource management; human services and community health; social, political, and economic issues; and culture, history, language, and the arts. Prerequisite: MI501, 502, 503, 599.

## **MI 695 THESIS**

FALL/SPRING/ALL YEARS

1 - 3 credit hours

Prerequisite: Consent of Instructor, completed Form A and successful completion of Comprehensive Examination.

## **MILITARY SCIENCE (MSL)**

### **MSL 101 INTRODUCTION TO THE ARMY AND CRITICAL THINKING**

FALL ONLY/ALL YEARS

2 credit hours

This course focuses on introduction to the Army and critical thinking. It introduces students to the Army and the Profession of Arms. Students will examine the Army profession and what it means to be a professional in the US Army. The overall focus is on developing basic knowledge and comprehension of the Army Leadership Requirements Model while gaining a complete understanding of the Reserve Officer's Training Corps (ROTC) program, its purpose in the Army, and its advantages for the student. Cadets also learn how resiliency and fitness supports their development as an Army leader. Includes an optional weekly lab facilitated by MSL III and supervised by Cadre. Prerequisite: Full-time student

## **MSL 102 FOUNDATIONS OF AGILE AND ADAPTIVE LEADERSHIP**

SPRING ONLY/ALL YEARS

2 credit hours

This course introduces Cadets to the personal challenges and competencies that are critical for effective leadership. Cadets learn how the personal development of life skills such as critical thinking, time management, goal setting and communication. Cadets learn the basics of the communication process and the importance for leader's to develop the essential skills to effectively communicate in the Army. Cadets will begin learning the basics of squad level tactics that will be reinforced during a weekly lab facilitated by MSL III Cadets and supervised by Cadre. Prerequisite: Full-time student, MSL-101 or instructor consent.

## **MSL 119 LEADERSHIP IN PHYSICAL CONDITIONING**

FALL/SPRING/ALL YEARS

3 credit hours

Physical conditioning with emphasis on leadership that is designed to progressively increase a student's physical fitness abilities using the U.S. Army's Physical Readiness Training (PRT) methods. This course is primarily ability group oriented, focusing on personal physical fitness goals, military traditions, and is offered to all full-time students with no commitment to the Army ROTC program. Prerequisites: Medical clearance and instructor's consent. Note: This course is cross listed with PE-119.

## **MSL 201 LEADERSHIP AND DECISION MAKING**

FALL ONLY/ALL YEARS

2 credit hours

This course focuses on leadership and decision making. The course adds depth to the Cadets understanding of the Adaptability Army Learning Area. The outcomes are demonstrated through Critical and Creative Thinking and the ability to apply Troop Leading Procedures to apply Innovative Solutions to Problems. The Army Profession is also stressed through leadership forums and a leadership self-assessment. Students are then required to apply their knowledge outside the classroom in a hands-on performance-oriented environment during an optional weekly lab facilitated by MSL III Cadets and supervised by Cadre. Prerequisite: Full-time student, MSL-101, MSL-102, or instructors consent.

## **MSL 202 ARMY DOCTRINE AND TEAM DEVELOPMENT**

SPRING ONLY/ALL YEARS

2 credit hours

This course focuses on the Army doctrine and team development. The course begins the journey to understand and demonstrate competencies as they relate to Army doctrine. Army Values, Teamwork, and Warrior Ethos and their relationship to the Law of Land Warfare and philosophy of military service are also stressed. The ability to lead and follow is also covered through Team Building exercises at squad level. Students are then required to apply their knowledge outside the classroom in a hands-on performance-oriented environment during an optional weekly lab facilitated by MSL III Cadets and supervised by cadre. Prerequisites: Full-time students, MSL-101, MSL-102, MSL-201, or instructor consent.

## **MSL 251 RANGER CHALLENGE TRAINING**

FALL ONLY/ALL YEARS

2 credit hours

The ranger challenge training is a pass/fail Course for any currently enrolled ROTC cadet. This Course will challenge students to be tactically And technically in military proficiency while Improving their overall physical fitness. This Course will instill team building, confidence and Challenge students to participate in the ranger Challenge competition. Weekend training and off Campus may be required. Travel lodging and meals For off-island competition provided at government Expense if you make the team. Prerequisite: enrolled in ROTC program and Instructor's consent.

## **MSL 252 PREPARATION FOR CADET SUMMER TRAINING (CST)**

SPRING ONLY/ALL YEARS

2 credit hours

The course focuses on additional preparation for Students that desire to attend cadet summer Training. Students will be challenged in practical Leadership positions during physical readiness Training to develop their self-awareness and Critical thinking skills. Students will receive Methodical and specific feedback on their Leadership abilities in preparation for cadet Summer training located at fort Knox, Kentucky. This course is designed to increase Self-confidence through group training and Activities. Prerequisite: instructor consent.

## **MSL 292 CADET INITIAL ENTRY TRAINING (CIET)**

SUMMER/ALL YEARS

6 credit hours

CIET is four weeks of intense classroom and field training held in the summer at Fort Knox, Kentucky. By transforming Cadets through this rigorous training, completion of MSL-292 qualifies a Cadet for entry in the Army ROTC Advanced Course, provided the Cadet has two years of college remaining (undergraduate or graduate). Cadets who attend this pass/fail course are given instruction on basic soldiering skills as well as basic leadership training evaluation. Travel, meals, and lodging provided at government expense. Prerequisite: Professor of Military Science (PMS) approval.

## **MSL 298 CADET PROFESSIONAL DEVELOPMENT TRAINING (CPDT)**

SUMMER/ALL YEARS

6 credit hours

This cadet professional development training Provides a deeper look into what it means to lead America's soldiers. Cadet professional Development training opportunities are available Including basic airborne course, air assault School, cadet troop leader training and cadet Internships. This course normally takes place During the summer. Training program locations Change every year and are located around the World, and could include fort Benning, Georgia, West point military academy, Asia, and Europe. Prerequisite: enrolled in army ROTC, meet Prescribed requirements, and the professor of Military Science approval.

## **MSL 299 INDIVIDUAL LEADERSHIP STUDIES**

FALL/SPRING/ALL YEARS

3 credit hours

Directed reading and research in a military science related areas of concentration in this pass/fail course. Students select materials based on instructor approval. A maximum of three (3) credits can be applied to the minor requirements in this course series. Prerequisite: MSL101, MSL102 or instructor consent.

## **MSL 301 TRAINING MANAGEMENT AND THE WAR-FIGHTING FUNCTIONS**

FALL ONLY/ALL YEARS

3 credit hours

This course focuses on training management and the warfighting functions. It is an academically challenging course where you will study, practice, and apply the fundamentals of Training Management and how the Army operates through the Warfighting functions. At the conclusion of this course, you will be capable of planning, preparing and executing training for a squad conducting small unit tactics. Includes a weekly leadership lab, participation in leading physical readiness training and a weekend field training exercise. This course utilizes peer facilitation overseen by ROTC Seniors, supervised by ROTC Cadre. Prerequisite: Full-time student, MSL-101, MSL-102, MSL-201, MSL-202 (or MSL-292), and Professor of Military Science approval.

## **MSL 302 APPLIED LEADERSHIP IN SMALL UNIT OPERATIONS**

SPRING ONLY/ALL YEARS

3 credit hours

This course focuses on applied Army leadership in small unit operations. It is an academically challenging course where you will study, practice and apply the fundamentals of direct level leadership and small unit tactics at the platoon level. At the conclusion of this course, you will be capable of planning, coordinating, navigating, motivating and leading a platoon in the execution of a mission. Includes a weekly lab, participation in leading physical readiness training, and a weekend field training exercise. This course utilizes peer facilitation overseen by ROTC Seniors, supervised by ROTC Cadre. Successful completion of this course will help prepare students for the Cadet Summer Training Advance Camp, which cadets will attend in the summer at Fort Knox, KY. Prerequisite: Full-time, MSL-101, MSL-102, MSL-201, MSL-202 (or MSL-292), MSL-301, and Professor of Military Science approval.

## **MSL 351 RANGER CHALLENGE LEADERSHIP COURSE**

FALL ONLY/ALL YEARS

2 credit hours

The Ranger Challenge Leadership Course is a pass/fail course for any currently enrolled ROTC cadet. This course will challenge students to be proficient in military tactical skills while improving their physical fitness. Students at this level will serve in the leadership chain to junior MSL251 students. This course will also instill confidence and challenge students to participate in the Ranger Challenge competition. Weekend training may be required. Travel, lodging and meals for off-island competition provided at government expense. Prerequisite: Enrolled in ROTC program and instructor's consent.

## **MSL 392 CADET LEADERSHIP COURSE**

SUMMER/ALL YEARS

6 credit hours

The purpose of the CLC is a five-week summer program to evaluate and train all Army ROTC Cadets. This course normally takes place between the junior and senior years and is of intense classroom and field training held in the summer at Fort Knox, Kentucky. Travel, meals, and lodging provided at government expense. Prerequisite: MSL-302 and PMS approval.

## **MSL 394 SEMINAR IN MILITARY HISTORY**

3 credit hours

## **MSL 398 CADET PROFESSIONAL DEVELOPMENT TRAINING (CPDT)**

SUMMER/ALL YEARS

6 credit hours

This cadet professional development training Provides a deeper look into what it means to lead America's soldiers. Cadet professional Development training opportunities are available Including basic airborne course, air assault School, cadet troop leader training and cadet Internships. This course normally takes place During the summer. Training program locations Change every year and are located around the World, and could include Fort Benning, Georgia, West point military academy, Asia, and Europe. Prerequisite: enrolled in Army ROTC, meet Prescribed requirements, and the professor of Military Science approval

## **MSL 399 INDEPENDENT READING**

AS REQUIRED

3 credit hours

Directed reading and research in a military science related area of concentration in this pass/fail course. Student selects materials based on instructor approval. A maximum of three (3) credits can be applied to the minor requirements in this course series. Prerequisite: PMS consent.



## **MSL 401 THE ARMY OFFICER**

FALL ONLY/ALL YEARS

3 credit hours

This course focuses on development of the Army Officer. It is an academically challenging course where you will develop knowledge, skills and abilities to plan, rescue and assess training at the small unit level. You will also learn about Army programs that support counseling subordinates and evaluating performance, values and ethics, career planning, and legal responsibilities. At the conclusion of this course, you will be familiar with how to plan, prepare, execute and continuously assess the conduct of training at the Army's company or field grade officer level. Includes a weekly lab overseeing MSL-301 (juniors) lesson facilitation and supervised by ROTC Cadre. This course requires cadets to participate in the physical readiness training and a weekend field training exercise. Prerequisite: MSL-101, MSL-102, MSL-201, MSL-202 (or MSL-292), MSL-301, MSL-302, and/or Professor of Military Science approval.

## **MSL 402 COMPANY GRADE LEADERSHIP**

SPRING ONLY/ALL YEARS

3 credit hours

The course is an academically challenging course where you will develop knowledge, skills and abilities required of junior officers pertaining to the Army in Unified Land Operations and Company Grade Officer roles and responsibilities. This course includes reading assignments, homework assignments, small group assignments, briefings, case studies, practical exercises and an Oral Practicum. The Oral Practicum explores the cadet's knowledge of how you will be prepared for the Army Warfighting Challenges (AWFC) covered throughout the ROTC Advanced Course. Successful completion of this course will assist in preparing cadets for their Basic Officer Leaders Course and is a mandatory requirement for commissioning as a second lieutenant. Includes a lab per week overseeing MSL III lesson facilitation and supervised by ROTC Cadre. Prerequisite: MSL-101, MSL-102, MSL-201, MSL-202 (or MSL-292), MSL-301, MSL-302, MSL-401 and/or Professor Military Science approval.

## **MUSIC (MU)**

### **MU 101 MUSIC FUNDAMENTALS**

FALL/SPRING/ALL YEARS

3 credit hours

This course is an applied introduction to the fundamental elements of music. Students learn the basics of music reading, dictation, composition and score familiarization in this studio course through project work. Western musical literature and its instruments are surveyed.

### **MU 102 WORLD MUSIC**

FALL ONLY/ALL YEARS

3 credit hours

This course is an exploration into the music of various cultures of the world. A vast array of music will be heard from all continents except Antarctica. No previous music experience or music reading ability is necessary.

### **MU 104 UNIVERSITY SINGERS**

FALL/SPRING/ALL YEARS

1 credit hour

This is an auditioned mixed chorus with previous experience required. The goal is the preparation and performance of a wide variety of choral literature. Vocal technique, sight reading, and music theory appropriate to choral music are taught. Prerequisite: Audition. This course may be repeated for credit.

### **MU 105 BAND**

FALL/SPRING/ALL YEARS

1 credit hour

This is an auditioned instrumental ensemble with previous instrumental study and performance experience required. The goal is the study, preparation, and performance of standard instrumental ensemble literature. It may be repeated for credit. Prerequisite: Audition and Consent of Instructor.

## **MU 106 INTRODUCTION TO MUSIC**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course is an introduction to perceptive listening covering musicians and styles of music from the Middle Ages to the present day. It is designed primarily for the general education program.

## **MU 110 CLASS VOICE**

FALL/SPRING/ALL YEARS

1 credit hour

This is an introductory course in singing. The fundamentals of vocal technique which apply to most styles of singing are taught. Music reading appropriate for the singer is also emphasized. It is recommended that MU104 or MU304 be taken concurrently.

## **MU 121 BEGINNING CLASS PIANO**

FALL ONLY/ALL YEARS

2 credit hours

This is the study of basic piano techniques and music fundamentals.

## **MU 122 INTERMEDIATE CLASS PIANO**

SPRING ONLY/ALL YEARS

2 credit hours

A continuation of MU121, this course covers additional piano techniques, sight reading skills and applied music theory. A variety of compositional styles is explored. Prerequisite: MU121 or consent of instructor.

## **MU 160 MUSIC THEORY I**

FALL ONLY/ODD YEARS

2 credit hours

This course is an introduction to elements of pitch and rhythm, triads and seventh chords, diatonic chords in major and minor keys, principles of voice leading, root position part writing, and harmonic progressions. Prerequisite: knowledge of music notation.

## **MU 161 MUSIC THEORY II**

SPRING ONLY/EVEN YEARS

2 credit hours

A continuation of MU 160, this course covers triads and seventh chords in inversion, cadences, phrases, period forms, non-chords tones, use of the dominant seventh chord and other diatonic seventh chords, and part writing using inversions. Prerequisite: Completion of MU160 with a "C" or better or consent of instructor.

## **MU 170 EAR TRAINING I**

FALL ONLY/ALL YEARS

2 credit hours

This course is designed to improve music aural comprehension for music majors and minors. Ear Training I is predominantly concerned with the recognition of all intervals, common scales and modes and all triads. Computer software is used as part of the training. Some rhythmic dictation and sight singing is also part of this course. Instructor's permission required.

## **MU 171 EAR TRAINING II**

SPRING ONLY/ALL YEARS

2 credit hours

This course is designed to improve music aural comprehension for music majors and minors. Ear Training II is predominantly concerned with the recognition of 7th and 9th chords, complex rhythms, melodic and chord transcriptions and advanced sight singing. Computer software will be used as part of the training. Instructor's permission required or successful completion of MU170 Ear Training I.

## **MU 202 APPLIED MUSIC**

FALL/SPRING/ALL YEARS

2 credit hours

This course consists of individual instruction in piano, voice, or other musical instrument. It may be repeated for credit. Prerequisite: Previous study of an instrument or voice and consent of instructor. Audition is required.

## **MU 260 MUSIC THEORY III**

FALL ONLY/EVEN YEARS

2 credit hours

A continuation of MU161, this course covers secondary dominant chords, secondary leading tone chords, modulations, binary and ternary forms, mode mixture, the Neapolitan chord, augmented sixth chords and part writing. Prerequisite: Completion of MU161 with a "C" or better or consent of instructor.

## **MU 261 MUSIC THEORY IV**

SPRING ONLY/ODD YEARS

2 credit hours

A continuation of MU260, this course covers enharmonic spellings and modulations, ninth, eleventh and thirteenth chords, twentieth century practices, set theory, serialism, aleatoric and electronic music. Prerequisite: Completion of MU260 with a "C" or better or consent of instructor.

## **MU 302 INTERMEDIATE APPLIED MUSIC**

FALL/SPRING/ALL YEARS

2 credit hours

A continuation of MU202, this course offers individual instruction in piano, voice, or other musical instrument. It may be repeated for credit. Prerequisite: MU202 and consent of instructor. Audition is required.

## **MU 304 UPPER DIVISION UNIVERSITY SINGERS**

FALL/SPRING/ALL YEARS

1 credit hour

This is a concurrent upper division continuation of MU104 UNIVERSITY SINGERS. It may be repeated for credit. Prerequisite: An audition and at least junior class standing.

## **MU 305 UPPER DIVISION BAND**

FALL/SPRING/ALL YEARS

1 credit hour

This is the study, preparation and performance of advanced instrumental ensemble literature. It may be repeated for credit. Prerequisite: MU105 or consent of instructor.

## **MU 306 SPECIAL TOPICS IN MUSIC**

SPRING ONLY/ODD YEARS

1 - 3 credit hours

This course offers intensive study of a specific topic in Music. It may be repeated for credit, with transcript showing the topic studied, e.g., Piano Pedagogy, Music History. Prerequisite: MU101 or MU106.

## **MU 310 MUSIC HISTORY I**

FALL ONLY/EVEN YEARS

3 credit hours

This is a survey of masterpieces and composers of music from the Medieval Era through the Baroque Era. Prerequisite: MU161 or consent of instructor.

## **MU 311 MUSIC HISTORY II**

SPRING ONLY/ODD YEARS

3 credit hours

This course is a survey of masterpieces and composers of music from 1750 to the present. Prerequisite: MU161 or consent of instructor.

## **MU 315 INSTRUMENTAL TECHNIQUES**

FALL ONLY/ODD YEARS

3 credit hours

This course is an applied introduction to woodwind, brass and percussion instrumental playing techniques, instrument maintenance, history methodology, pedagogy, and literature for solo and ensemble experiences. This course is designed to prepare students planning to teach in public school music programs. Prerequisite: MU161 or consent of instructor.

## **MU 321 CONDUCTING**

FALL ONLY/ALL YEARS

3 credit hours

The study and application of basic conducting skills are covered in this course. Prerequisite: MU161 or consent of instructor.

## **MU 402 SENIOR RECITAL**

FALL/SPRING/ALL YEARS

2 credit hours

This course offers individual instruction of an instrument or voice which requires the preparation, study and performance of a public senior recital. The recital should consist of at least three style periods and should be approximately forty minutes in length. Prerequisite: Six (6) credits of MU302.

## **NATURAL SCIENCE (NS)**

### **NS 101 INTRODUCTION TO PHYSICAL SCIENCE**

AS REQUIRED

3 credit hours

Online/Hybrid

This is a survey course in Astronomy, Physics and Science Measurements. It consists of three hours of lecture per week. The lab, NS101L, MUST be taken concurrently.

Prerequisite: MA085 a-b or MA089 or equivalent.

Corequisite: NS101L.

### **NS 101L INTRODUCTION TO PHYSICAL SCIENCE LABORATORY**

AS REQUIRED

1 credit hour

Online

NS101L is the laboratory portion of NS101 and MUST be taken concurrently. The course consists of one three-hour laboratory per week. Corequisite: NS101.

### **NS 102 INTRODUCTION TO PHYSICAL SCIENCE**

AS REQUIRED

3 credit hours

This is a survey course in Geology, Chemistry, and Special Topics in Science. It consists of three hours of lecture per week. The lab, NS102L, MUST be taken concurrently.

Prerequisite: MA085 a-b or MA089 or equivalent.

Corequisite: NS102L.

## **NS 102L INTRODUCTION TO PHYSICAL SCIENCE LABORATORY**

AS REQUIRED

1 credit hour

NS102L is the laboratory portion of NS102 and MUST be taken concurrently. The course consists of one three-hour laboratory per week. Corequisite: NS102.

## **NS 110 INTRODUCTION TO THE EARTH**

AS REQUIRED

3 credit hours

Online

This course is a basic study of the earth's minerals, rocks and natural resources and the processes, which have shaped the earth's surface such as sedimentation, mountain building, and erosion by water, wind, ice and downslope movements. Major focus is placed on the roles of volcanism, earthquakes, sea-floor spreading and paleomagnetism in explaining plate tectonic theory. The importance of geological hazards to man's activities is investigated. It consists of three hours of lecture per week. The lab, NS110L, MUST be taken concurrently.

Corequisite: NS110L.

### **NS 110L INTRODUCTION TO THE EARTH LABORATORY**

AS REQUIRED

1 credit hour

NS110L is the laboratory portion of NS110 and MUST be taken concurrently. The lab includes mineral and rock identification, modeling of Earth structures, interpretation of field sites, and map interpretation. The course consists of one three-hour lab/field trip per week. Corequisite: NS110.

## **NS 112 HISTORY OF THE EARTH**

### **AS REQUIRED**

3 credit hours

This course offers a fundamental view of the geologic history of the earth, including its origin, physical development, and evolution of life as revealed in the fossil record. Interrelationships between physical and biological events are stressed. Emphasis is placed on the principles and methods used by geologists to unravel earth history. The geologic history of the Mariana Arc and the western Pacific, associated with field trips on Guam, is included. It consists of three hours of lecture per week. The lab, NS112L, MUST be taken concurrently. Prerequisites: EN110. NS110-110L Introduction to the Earth is recommended. Corequisite: NS112L.

## **NS 112L HISTORY OF THE EARTH LABORATORY**

### **AS REQUIRED**

1 credit hour

NS112L is the laboratory portion of NS112 and MUST be taken concurrently. The lab includes analysis of sedimentary environments, fossil identification, interpretation of field sites, and geologic map interpretation. The course consists of one three-hour lab/field trip per week. Corequisite: NS112.

## **NS 230 INTRODUCTION TO ASTRONOMY**

### **AS REQUIRED**

3 credit hours

This introduction to astronomy covers topics relating to the solar system, the galaxy, stellar evolution, and cosmology. It consists of three hours of lecture per week. The lab, NS230L, MUST be taken concurrently. Prerequisite: MA110.

## **NS 230L INTRODUCTION TO ASTRONOMY LABORATORY**

### **AS REQUIRED**

1 credit hour

NS230L is the laboratory portion of NS230 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Corequisite: NS230.

## **NS 330 METEOROLOGY**

### **AS REQUIRED**

3 credit hours

This is a course in atmospheric phenomena, methods and investigation, some of the methods of obtaining data and predictive weather, and an introduction to possible means of weather control. It consists of three hours of lecture per week. The lab, NS330L, MUST be taken concurrently. Prerequisite: One year of university level physical science drawn from courses in chemistry and/or physics or consent of instructor. Corequisite: NS330L.

## **NS 330L METEOROLOGY LABORATORY**

### **AS REQUIRED**

1 credit hour

NS330L is the laboratory portion of NS330 and MUST be taken concurrently. The course consists of one three-hour laboratory period per week. Corequisite: NS330.

## **NS 355 TOPICS IN GEOLOGY**

### **AS REQUIRED**

3 credit hours

This course offers studies of selected topics in advanced geology, such as environmental geology, structures and plate tectonics, mineralogy, petrology, hydrology etc. With different subject matter, this course may be repeated for credit. The course involves three hours of classroom study per week. The lab, NS355L, MUST be taken concurrently for some topics, to be specified. Prerequisites: NS110-110L or NS112-112L or consent of instructor. Corequisite: NS355L (for some topics).

## **NS 355L TOPICS IN GEOLOGY LABORATORY**

### **AS REQUIRED**

1 credit hour

NS355L is the laboratory portion of NS355 and MUST be taken concurrently for some topics. The course consists of one three-hour laboratory/field trip per week. Corequisite: NS355.

## **NS 380 PRINCIPLES OF SOIL SCIENCE**

FALL ONLY/ALL YEARS

3 credit hours

This course delves into the basic principles of the fundamentals of the chemical, physical, and biological properties of soils; their formation, fertility, and management, and the effects of inorganic and organic chemicals on soil processes and properties as they relate to environmental pollution. Two hours of lecture, one-hour recitation and three hours laboratory weekly. Prerequisites: MA115 or higher and any two chemistry courses.

## **NS 380L PRINCIPLES OF SOIL SCIENCE LABORATORY**

FALL ONLY/ALL YEARS

1 credit hour

This course is a corequisite of AL/NS380 and must be taken concurrently. The course meets for three hours of laboratory weekly. Prerequisites: MA115 or higher and any two chemistry courses.

## **NS 392 LABORATORY TEACHING AND ASSISTING**

AS REQUIRED

1 - 3 credit hours

This course provides for practical educational experience in undergraduate course laboratories. It may be taken more than once for credit. Prerequisites: Completion of the course in which the laboratory is offered, or of an equivalent course and consent of instructor.

## **NS 491 SEMINAR**

AS REQUIRED

1 credit hour

This course is based on discussion of current problems, discoveries, and trends in the physical sciences, based primarily on student reviews of pertinent literature. May be taken more than once for credit with consent of program faculty. Prerequisite: Upper division standing and consent of program faculty.

## **NS 495 SENIOR THESIS**

AS REQUIRED

3 credit hours

This course offers preparation of a thesis based on field and/or laboratory investigation of a subject chosen by the student from the physical sciences and approved by the Physical Science faculty. Although the thesis shall emphasize physical science, it may be interdisciplinary and involve engineering, biology, geography, etc. It is generally undertaken in the senior year but may be started in the junior year. Eligibility for this course is based on consultation with the faculty advisor. An oral presentation by the student is also required.

## **NURSING (NU)**

### **NU 112 MEDICAL TERMINOLOGY**

FALL/SPRING/ALL YEARS

2 credit hours

This course introduces prefixes, suffixes, and root words used in medical language. A basic understanding of the language used in medicine and nursing will enable the health care professional or community member to communicate more effectively and efficiently with other members of the health professions. Analysis, spelling, pronunciation, and application of medical terms and abbreviations will be emphasized. This course is open to nursing majors as well as non-nursing majors. It may also be taken by restricted students.

### **NU 200B COMMUNICATION AND METAL HEALTH CONCEPTS**

FALL ONLY/ALL YEARS

3 credit hours

This course introduces students to basic nursing concepts and the nursing process as applied to the individual client. Students learn the role necessary to attain and maintain health. Prerequisites: California Reading Test at 12th Grade Level or Greater, AN101 BI124-124L, BI125-125L, CH100-100L, CH101-101L, CO210, EN111, PY101, MA151 acceptance to the pre-nursing level, and consent of instructor. Corequisite: NU214, BI225, BI225L and ED201.

## **NU 202B FUNDAMENTALS OF NURSING**

SPRING ONLY/ALL YEARS

4 credit hours

This course introduces students to basic nursing concepts and the nursing process as applied to the care of individual clients. Students learn the role of the nurse as provider of care and basic skills necessary to attain and maintain health. Prerequisites: NU200B, NU214, BI225-1225L, ED201 and consent of instructor. Corequisites: NU203B, NU204B, NU205B NU207B and AL185.

## **NU 203B FUNDAMENTALS OF NURSING PRACTICUM**

SPRING ONLY/ALL YEARS

4 credit hours

This course applies the nursing process to the care of individual clients. Students demonstrate the role of provider of care and apply basic skills necessary to attain and maintain health in the clinical setting. Prerequisites: NU200B, NU214, BI225-225L, ED201 and consent of instructor. Corequisite: NU202B, NU204B, NU205B and NU207B and consent of instructor.

## **NU 204B HEALTH ASSESSMENT**

SPRING ONLY/ALL YEARS

2 credit hours

This course focuses on assessment, which is the first step of the nursing process. Students learn and practice skills and techniques to assess physical, psychosocial, cultural, spiritual and developmental variables in well clients across the lifespan. Prerequisite: NU200B, NU214 ED201, BI225-225L or consent of instructor. Corequisite: NU202B, NU203B, NU205B and NU207B.

## **NU 205 INTRO TO FAMILY HEALTH**

SPRING ONLY/SPRING ONLY

5 credit hours

Nursing care of families with emphasis on provisions of comprehensive care to families in the childbearing and of family development. Application of theories of learning, human growth and development, family dynamics including cultural considerations and stress adaptation. Nursing process and health teaching principles integrated. Laboratory experience in clinics and the acute care setting to develop skills necessary to assist families to reach their optimal health potential. Three hours theory and six hours of lab weekly. Prerequisites: NU201, 202, ED201, CO210, BI124a-b.

## **NU 205B HEALTH ASSESSMENT PRACTICUM**

SPRING ONLY/ALL YEARS

1 credit hour

This course focuses on the laboratory and practicum component of NU204B. Students apply assessment techniques within the laboratory or clinical settings. This course is taken concurrently with NU204B or with consent of instructor. Prerequisite: NU200B, NU214 ED201, BI225-225L or consent of instructor. Corequisite: NU202B, NU203B, NU204B and NU207B.

## **NU 207B PHARMACOLOGY IN NURSING**

SPRING ONLY/ALL YEARS

2 credit hours

This course presents the basic concepts of medication usage, dosage computations, and medication administration skills. The use of the nursing process when administering medications is presented. Prerequisites: BI225-225L, ED201, NU200B, NU214 and consent of instructor. Corequisite: NU202B, NU203B, NU204B and NU205B.

## **NU 212 EMPOWERMENT STRATEGIES FOR NURSING STUDENTS**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course focuses upon empowerment strategies for college success, with an emphasis on particular skills and techniques critical to growth and success in the nursing curriculum. Students learn in- depth skills related to study habits, time management, stress management, and assertive communication, and are expected to apply this knowledge to nursing and other college courses. Students will have the opportunity to determine their individual learning goals and implement a plan to meet these goals. This course is open to pre-nursing majors and nursing majors. It may also be taken by restricted students.

## **NU 214 DOSAGE CALCULATION**

FALL/SPRING/AS REQUIRED

1 credit hour

Hybrid

This course focuses on methods of calculating dosages for various drug forms and routes of administration, verifying accuracy of calculations and determining applicability of calculated dosages to route of administration and modes of delivering medications. Prerequisites: EN111, MA151 and consent of instructor. Corequisite: NU200B, BI225-225L, and ED201.

## **NU 223 CLINICAL MENTORSHIP**

SUMMER/SUMMER ONLY

1 credit hour

The clinical mentorship course will provide an opportunity to increase students' clinical experience. Students will be assigned a nurse-mentor recommended by the various health facilities. This course is designed for intensive clinical training. Students will register for the course to earn 1 credit (45 hours). Prerequisites: NU-202, NU-203, NU-204, NU-205, NU-207 and Instructors consent.

## **NU 294 CLINICAL REFRESHER**

SPRING ONLY

2 credit hours

## **NU 300S COMMUNICATION AND MENTAL HEALTH CONCEPTS**

FALL ONLY/ALL YEARS

3 credit hours

This course focuses on establishing helping relationships through self-awareness, self-responsibility, and communication skills. Students apply theories of the emotions, crisis, stress, cultural diversity, and caring to client care. Prerequisites: AN101, CO210, EN111, PY101, admission to the second-step BSN program, and consent of instructor. Corequisite: ED201.

## **NU 302B ADULT HEALTH NURSING**

FALL ONLY/ALL YEARS

6 credit hours

This course focuses on interventions that restore and maintain health in the adult client system. The physiologic alterations discussed include physiological, sociocultural, spiritual, and developmental functions. This course will focus on medical-surgical nursing, specifically the care of the client with diseases of the respiratory, cardiac, hematology, renal, and musculoskeletal systems, and the client experiencing chronic illness, peri-operative nursing, and cancer. Prerequisites: AL185, NU202B, NU203B, NU204B, NU205B, NU207B, and consent of instructor. Corequisites: NU303B and NU310 or consent of instructor.

## **NU 303B ADULT HEALTH PRACTICUM I**

FALL ONLY/ALL YEARS

4 credit hours

This course provides opportunities for the student to focus on the client with diseases presented in NU302B. Students provide care for the adult client system in an acute care setting. Prerequisites: AL185 NU202B, NU203B, NU204B, NU205B, NU207B, and consent of instructor. Corequisite: NU302B and NU310.



## **NU 304 NURSING OF THE CHRONICALLY ILL**

SPRING ONLY/SPRING ONLY

5 credit hours

A study of nursing care, comfort and support of individuals throughout the life span experiencing chronic maladaptive responses which complicate the family adaptation ability. Uses the nursing process and teaching principles to promote optimal adaptation. Includes the study of commonly used drugs and settings. Three hours theory and six hours lab weekly. Prerequisites: NU301, 302, 303 and EN111.

## **NU 304B FAMILY HEALTH NURSING**

SPRING ONLY/ALL YEARS

6 credit hours

This course focuses on contemporary concepts and theories about families. Students will apply the nursing process in the study of primary interventions and health promotion with continued consideration of secondary and tertiary interventions. Emphasis is on child bearing and child rearing families. Prerequisites: NU302B, NU303B, NU310. Corequisites: NU305B or consent of instructor.

## **NU 305 PSYCHIATRIC NURSING**

SPRING ONLY/SPRING ONLY

5 credit hours

This course is designed as an extension of the previous course work in mental health concepts and focuses on maladaptive behavioral functioning which interferes with personal, family and social relationships. Exploration of interventions which may lead to adaptation at higher levels of functioning and methods which may assist the individual in reintegration. Includes the study of drugs commonly used to assist in adaptation and reintegration. Three hours theory and six hours lab weekly. Prerequisites: NU301, 302, 303 and EN111.

## **NU 305B FAMILY HEALTH NURSING PRACTICUM**

SPRING ONLY/ALL YEARS

4 credit hours

This course focuses on the application of contemporary concepts and theories about families. Students apply the nursing process in provision of primary nursing interventions. Clinical experiences are in a variety of community and/or acute care settings with childrearing families. Prerequisites: NU302B, NU303B, NU310. Corequisites: NU304B, or consent of instructor.

## **NU 306S HEALTH ASSESSMENT**

SPRING ONLY/ALL YEARS

2 credit hours

This course focuses on assessment, which is the first step of the nursing process. Students learn and practice skills and techniques to assess physical, psychosocial, cultural, spiritual, and developmental variables in well clients across the lifespan. Prerequisites: Enrollment in the Second-Step BSN program track, or RN/GN with consent of instructor. Corequisite: NU307S, NU324S, NU325S or RN/GN employed in a clinical setting.

## **NU 307S HEALTH ASSESSMENT PRACTICUM**

SPRING ONLY/ALL YEARS

1 credit hour

This course focuses on the laboratory and practicum component of NU306S. Students apply assessment techniques within the laboratory and clinical settings. This course consist of one (1) laboratory and two (2) practicum hours per week, taken concurrently with NU306S or with consent of instructor. Prerequisite: Enrollment in the Second-Step BSN program track, or RN/GN with consent of instructor. Corequisite: NU306S, NU324S, NU325S, or RN/GN employed in a clinical setting.

## **NU 310 PATHOPHYSIOLOGY**

FALL ONLY/ALL YEARS

3 credit hours

This course explores the basic physiologic mechanism of disease across the lifespan. Major pathophysiology concepts, with emphasis on assessment and analysis, pertinent to clients with an illness are presented. The focus of this course will be chronic illness, cancer, and diseases of the respiratory, cardiac, hematologic, renal, and musculoskeletal systems. Prerequisites: for Generic Program: NU202B, NU203B, NU204B, NU205B, NU207B. SSBSN: Completion of basic nursing program, 6-8 Chemistry credits with lab, 6-8 Anatomy and physiology credits with lab, Microbiology with lab, AN101, PY101, EN111, ED201, CO210 or permission of instructor.

## **NU 323 CLINICAL MENTORSHIP**

SUMMER/SUMMER ONLY

1 credit hour

The clinical mentorship will provide an opportunity to increase students' clinical experience. Students will be assigned a nurse-mentor recommended by the various health facilities. This course is designed for intensive clinical training purposes. Students will register for the course to earn 1 credit (45 hours). Course may be repeated with instructor approval. Prerequisites: NU-304, NU-305, and instructor's consent.

## **NU 324S PROFESSIONAL NURSING**

SPRING ONLY/ALL YEARS

3 credit hours

This course serves as the transition or bridge course for the registered or graduate nurse to integrate previous nursing education with the philosophy of baccalaureate nursing education. The emphasis is on the synthesis of nursing concepts and the nursing process within a theoretical base. In addition, this course serves to update the RN/graduate nurse student on current issues in practice, health care management, as well as ethical/legal and other professional issues. Prerequisites: EN111, Chemistry 6-8 credits with lab, Anatomy and Physiology 6-8 credits with lab, microbiology with lab, AL185, and NU300S or equivalent. Corequisites: NU306S, NU307B, NU325S.

## **NU 325S PROFESSIONAL NURSING PRACTICUM**

SPRING ONLY/ALL YEARS

3 credit hours

This course is the clinical component for the professional application of the nursing process and nursing theory course. The nurse develops her/his experience to meet individual professional goals. Each student follows one or more families as a client system for the experience of assessing intrapersonal, interpersonal, and extra personal stressors and implementing primary, secondary and/or tertiary interventions. Prerequisites: Chemistry with lab, Anatomy and Physiology with lab, microbiology with lab, AL185 and NU300S. Corequisites: NU306S, NU307B, NU324S.

## **NU 326 NURSING MANAGEMENT**

SPRING ONLY/ALL YEARS

2 credit hours

This course focuses on issues and trends within the healthcare system, including management and leadership styles. This course also covers professional development, ethical/legal situations, community resources, local and federal policies and licensure relevant to a beginning nurse. Prerequisite: NU310. Corequisites: NU302B, NU303B, NU304B, NU305B or consent of instructor.

## **NU 344 AGING: MYTH AND REALITIES**

FALL ONLY/ALL YEARS

3 credit hours

This course explores major issues and concepts pertinent to the study of the aging process (gerontology). The prevailing theories of the social/biological aging process and the economics, physical and psychological problems that might arise in late life are presented. Students learn how these factors impinge on the well-being of the older person and the social structure of a community. Aging as it occurs in different societies and throughout history is discussed. Social myths and stereotypes are explored. An overview of existing aging policies and special programs for the older population is included, as is a section on dying, death and grieving.

## **NU 403 COMMUNITY HEALTH NURSING PRACTICUM**

FALL ONLY/ALL YEARS

3 credit hours

This course focuses on application of the nursing process to address community health and psychiatric mental health. Emphasis is on primary, secondary, and tertiary intervention in institutional and community settings. Prerequisites: NU302B, NU303B, NU304B, NU305B, NU310 or NU324S, and NU325S or instructor permission. Corequisites: NU308, NU309, NU412, NU416 or instructor permission.

## **NU 408 PSYCHIATRIC MENTAL HEALTH NURSING**

FALL ONLY/ALL YEARS

3 credit hours

This course focuses on the use of the nursing process to foster mental health with individuals, families and groups exhibiting maladaptive behavior. Emphasis is on secondary and tertiary intervention in institutional and community settings using therapeutic communication, group therapy, and other modalities in collaboration with other care providers. Prerequisites: NU-302B, NU-303B, NU-304B, NU-305B or NU-324S, NU-325S or instructor permission. Corequisites: NU-409, NU-412, NU-403, NU-416 or instructor permission.

## **NU 409 PSYCHIATRIC NURSING PRACTICUM**

FALL ONLY/ALL YEARS

2 credit hours

This course focuses on application of the nursing process to address community health and psychiatric mental health. Emphasis is on primary, secondary, and tertiary intervention in institutional and community settings. Prerequisites: NU302B, NU303B, NU304B, NU305B, or NU324S, NU325S or instructor permission. Corequisites: NU308, NU412, NU403, NU416 or instructor permission.

## **NU 412 COMMUNITY HEALTH NURSING**

FALL ONLY/ALL YEARS

3 credit hours

This course presents principles of community health nursing. The focus is on primary, secondary, and tertiary interventions for client systems including individuals, families, aggregates and communities. Health care policy issues and political strategies are also addressed. Prerequisites: NU302B, NU303B, NU304B, NU305B, NU310, or NU324S and NU325S, or instructor permission. Corequisite: NU308, NU309, NU403, NU416, or instructor permission.

## **NU 415 INDEPENDENT NURSING PRACTICUM**

SPRING ONLY/ALL YEARS

3 credit hours

This course provides practice in a specialty area of the student's choice. The student functions in the role of a beginning practitioner with supervision and guidance faculty and an expert nurse preceptor. Prerequisites: NU403, NU412, NU416. Corequisite: NU418, NU419, NU420.

## **NU 416 RESEARCH IN NURSING AND HEALTH SCIENCES**

FALL ONLY/ALL YEARS

3 credit hours

This course focuses on the research process and the use of research in nursing. The roles of the consumer of research, critical thinker, and leader in professional nursing are integrated through the use of the research process. Prerequisite: HS405. Corequisite: MA387 and MA387L.

## **NU 418 LEADERSHIP IN NURSING**

SPRING ONLY/ALL YEARS

3 credit hours

This course focuses on the nurse's role as leader and manager of client care within an organizational structure. Students and faculty will discuss the application of leadership and management theory in the practice setting. Prerequisites: NU403, NU412 and NU416. Nurses in practice/leadership positions can take this course without being enrolled in the nursing program. Corequisites: NU415, NU419, NU420.

## **NU 419 LEADERSHIP IN NURSING PRACTICUM**

SPRING ONLY/ALL YEARS

1 credit hour

This practicum course provides an opportunity for the student to apply leadership and management theory in a selected practice situation. Prerequisites: NU412, NU403, and NU416. Nurses in practice/leadership positions can take this course without being enrolled in the nursing program. Corequisite: NU418, NU420, NU415.

## **NU 420 TRENDS IN NURSING**

SPRING ONLY/ALL YEARS

2 credit hours

This course includes a comprehensive study of the major historical, social, political, and educational changes that have influenced the practice of nursing, nursing education, and health care. The focus of this course is on the ethical and legal problems affecting nursing care. Building from this overview, the students are prepared to meet the challenge of the rapidly changing environment in which nurse's practice. Prerequisites: NU403, NU412, and NU416. Corequisites: NU415, NU418, NU419.

## **NU 423 CLINICAL MENTORSHIP**

SUMMER

1 credit hour

The clinical mentorship will provide an opportunity to increase students' clinical experience. Students will be assigned a nurse-mentor recommended by the various health facilities. This course is designed for intensive clinical training purposes. Students will register for the course to earn 1 credit (45 hours). Course may be repeated with instructor approval. Prerequisites: NU-304, NU-305, and instructor's consent.

## **PUBLIC ADMIN (PA)**

### **PA 201 PUBLIC ADMINISTRATION IN GUAM AND IN THE WESTERN PACIFIC**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course examines the historical context of Public Administration institutions in Guam and in the Western Pacific and applies the concepts of efficiency, economy and effectiveness of the study, design and delivery of island public services. The course also examines public administration approaches, methods and techniques which can (a) contribute to a strengthening of managerial capacity and capability among government institutions in Guam and in the Western Pacific, and (b) improve and enhance the overall quality and accessibility of island public services. The course is designed to better prepare present and future public administrators for the challenges they face or will encounter in the public administration profession in Guam and in the Western Pacific.

### **PA 205 DATA AND STATISTICS FOR BUSINESS AND GOVERNMENT**

FALL/SPRING/ALL YEARS

3 credit hours

This course is an introduction to the modern theory and methodology of statistics, which are then reinforced by using a scientific approach combined with a statistical software to solve problems relevant to business, economics and public administration. The course is ideal as a prerequisite for taking BA310 (Applied Statistics for Business and Economics) or PA305 (Data Analysis in Public Administration). Prerequisites: BA110 and MA110 or higher with a grade of C or better in both courses.

## **PA 206 PUBLIC HEALTH AND DISEASE MANAGEMENT**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This course is an introduction to the history of public/private health care and the establishment of the present-day health care system. The class is designed to teach the conceptual difference between health and disease, wellness and sickness, and their changing patterns. Local and federal laws, policies, rules and regulations for the provision of physical and mental health, and social services are explored and analyzed. Special emphasis is placed on the ethical issues of health and social care.

## **PA 207 ADMINISTRATION OF HEALTH CARE SERVICES**

FALL ONLY/ALL YEARS

3 credit hours

The course introduces the student to the management of contemporary health care and social services systems. It examines the structure and function of health care and social services institutions, including the historical developments and the political, economic, and socio-cultural issues that molded them. This knowledge is integrated into the organizational environment and dynamics of the local institutions and helps with the examination of their management practices. Various management styles and their effectiveness are analyzed and discussed.

## **PA 210 PUBLIC ADMINISTRATION AND MANAGEMENT: CONCEPTS AND APPLICATIONS**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course covers the functioning of public administration and management in government structures; the history and environment of public administration and management in the U. S. and in the Government of Guam; the development and application of concepts, principles, and techniques of public administration and management in the public sector; and problems, issues, needs, achievements in public administration and management.

## **PA 215 SUPERVISION IN GOVERNMENT ORGANIZATIONS**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course examines the operations and structure of government organizations from a supervision point of view. The course instructs students in critical supervisory theories, techniques and skills necessary for attaining superior results and accountability in government and not-for-profit organizations. The course is designed to assist students in becoming effective supervisors in public organizations and presents supervisory concepts organized around various functions such as planning, organizing, directing and controlling. The course equips Public Administration, Criminal Justice and other students with the supervisory skills they will need for growth of professional competence in the public service.

## **PA 233 IMPACT OF GOVERNMENT REGULATORY ADMINISTRATION ON BUSINESS**

FALL/SPRING/ALL YEARS

3 credit hours

This course offers an overview and rationale of public policies and administrative regulations as applied to the private sector, analysis and implementation of public policies/regulations; substantive, methodological and practical problems and issues of public policies and regulatory administration toward business by Federal, State and Local government, and governments in the Asian-Pacific region.

## **PA 303 GOVERNMENT FINANCE**

FALL/SPRING/ALL YEARS

3 credit hours

This is a survey of public financial administration; the budgetary process; the budget as an instrument of fiscal policy; sources of revenue; the procurement function; financial planning; and control.

## **PA 304 GOVERNMENT PUBLIC INFORMATION**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers the basic principles underlying public information and public relations activity and community relations practices of government; rudiments of techniques used in public information activity and public and community relations practices of government in dealing with the citizenry.

## **PA 305 DATA ANALYSIS IN PUBLIC ADMINISTRATION**

FALL/SPRING/ALL YEARS

3 credit hours

This course provides students with basic research tools used in of public administration, criminal Justice, and other applied fields. Emphasis is given to data collection, analysis, and interpretation skills. Major topics include research methods and techniques to study planning, organizing, staffing, directing, reporting and budgeting. Applied policy research is the consistent theme for this course. Prerequisites: BA130 with a C grade or better.

## **PA 306 HEALTH CARE PLANNING AND EVALUATION**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This course is designed to teach the fundamental techniques, methodologies and political constraints of population-based planning for human services, with an emphasis on health. It explores the origins and purpose of planning and the planning process as a means of implementing social change. Existing planning policies are presented and analyzed with the objective of formulating an outline for a health or social plan for the community. Special emphasis is placed on the evaluation process. A local, national and international perspective of health and social planning is utilized in teaching this course.

## **PA 307 THE ECONOMICS OF HEALTH CARE**

SPRING ONLY/ALL YEARS

3 credit hours

This course investigates the system of economics and the application of classical and modern economic theories to the health care field and social services organizations. During the course students investigate the decision-making processes as they relate to financial health and social care resources management. The student also learns the nature and interpretation of financial reports.

## **PA 347 LEADERSHIP AND COLLABORATION IN ORGANIZATIONS AND SOCIETY**

FALL/SPRING/ALL YEARS

3 credit hours

The course integrates personal leadership with collaboration and networking for organizational performance and societal gain. The course strengthens practical leadership and collaborative skills. Prerequisites: BA240 (for BBA majors) or PA210 (for PA majors).

## **PA 401 COMMUNITY PLANNING**

SUMMER/ALL YEARS

3 credit hours

This course is an introduction to community planning; relationships of physical form to environment, function, aesthetic principles, cultural values, planning as a synthesis of a frame of reference based on economics, political, social, cultural, physical, and administrative factors.

## **PA 401G COMMUNITY PLANNING**

FALL ONLY/ODD YEARS

3 credit hours

This course is an introduction to community planning; relationships of physical form to environment, function, aesthetic principles, cultural values, planning as a synthesis of a frame of reference based on economic, political, social, cultural, physical, and administrative factors. Prerequisite: SO101.

## **PA 402A POLICY EVALUATION**

FALL/SPRING/ALL YEARS

3 credit hours

The course examines the public policy Process (i.e., formation, implementation, and Evaluation) in public administration and Governance and examines a broad range of Substantive public policies (U.S., Federal, Guam, Regional, and international). The course also Integrates a variety of basic policy techniques Of analysis and the application of models in Public administration to help better understand Public-policy making and its impact on government And societal institutions. Students will learn Practical tools in developing public policy and In concepts and techniques of policy development, Analysis. The course will employ case studies to Illustrate concepts and techniques of policy Development, analysis, and debate. May be taken More than once, if topic is different. A. Policy Evaluation. B. Grant administration. C. Fraud Examination d. Procurement e. Emergency Management.

## **PA 402B GRANT ADMINISTRATION**

FALL/SPRING/ALL YEARS

3 credit hours

The course examines the public policy Process (i.e., formation, implementation, and Evaluation) in public administration and Governance and examines a broad range of Substantive public policies (U.S., Federal, Guam, Regional, and international). The course also Integrates a variety of basic policy techniques Of analysis and the application of models in Public administration to help better understand Public-policy making and its impact on government And societal institutions. Students will learn Practical tools in developing public policy and In concepts and techniques of policy development, Analysis. The course will employ case studies to Illustrate concepts and techniques of policy Development, analysis, and debate. May be taken More than once, if topic is different. A. Policy Evaluation. B. Grant administration. C. Fraud Examination d. Procurement e. Emergency Management.

## **PA 402C FRAUD EXAMINATION**

FALL/SPRING/ALL YEARS

3 credit hours

The course examines the public policy Process (i.e., formation, implementation, and Evaluation) in public administration and Governance and examines a broad range of Substantive public policies (U.S., Federal, Guam, Regional, and international). The course also Integrates a variety of basic policy techniques Of analysis and the application of models in Public administration to help better understand Public-policy making and its impact on government And societal institutions. Students will learn Practical tools in developing public policy and In concepts and techniques of policy development, Analysis. The course will employ case studies to Illustrate concepts and techniques of policy Development, analysis, and debate. May be taken More than once, if topic is different. A. Policy Evaluation. B. Grant administration. C. Fraud Examination d. Procurement e. Emergency Management.

## **PA 402D PROBLEMS IN PUBLIC POLICY: PROCUREMENT**

FALL/SPRING/ALL YEARS

3 credit hours

The course examines the public policy Process (i.e., formation, implementation, and Evaluation) in public administration and Governance and examines a broad range of Substantive public policies (U.S., Federal, Guam, Regional, and international). The course also Integrates a variety of basic policy techniques Of analysis and the application of models in Public administration to help better understand Public-policy making and its impact on government And societal institutions. Students will learn Practical tools in developing public policy and In concepts and techniques of policy development, Analysis. The course will employ case studies to Illustrate concepts and techniques of policy Development, analysis, and debate. May be taken More than once, if topic is different. A. Policy Evaluation. B. Grant administration. C. Fraud Examination d. Procurement e. Emergency Management.

## **PA 402E EMERGENCY MANAGEMENT**

FALL/SPRING/ALL YEARS

3 credit hours

The course examines the public policy Process (i.e., formation, implementation, and Evaluation) in public administration and Governance and examines a broad range of Substantive public policies (U.S., Federal, Guam, Regional, and international). The course also Integrates a variety of basic policy techniques Of analysis and the application of models in Public administration to help better understand Public-policy making and its impact on government And societal institutions. Students will learn Practical tools in developing public policy and In concepts and techniques of policy development, Analysis. The course will employ case studies to Illustrate concepts and techniques of policy Development, analysis, and debate. May be taken More than once, if topic is different. A. Policy Evaluation. B. Grant administration. C. Fraud Examination d. Procurement e. Emergency Management.

## **PA 403 PUBLIC PERSONNEL ADMINISTRATION**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers the development and management of human resources; history of the Civil Service career system; training practices; human relations in supervision; Issues and cases in professional leadership ethics in SBPA disciplines with case study examples from the United States, Guam, Asia and the Western Pacific provides the framework for the course. Codes of conduct, clientele and organizational relationships, legal requirements and professional accountability are studied with a leadership ethics emphasis for the public and private sector.

## **PA 405 LEADERSHIP ETHICS IN THE PROFESSIONS**

FALL/SPRING/ALL YEARS

3 credit hours

This course emphasizes Best Practices in Leadership Ethics and Governance in Business, Government, and Societal Institutions. The course examines ethics in the workplace and the roles of organizational leaders in fostering ethical behavior. Contemporary ethical challenges, scenarios and ethics case studies from the United States, Guam, Asia, and the Western Pacific provide the framework for the course. The course takes an SBPA interdisciplinary approach to leadership Ethics in order to prepare students for professional employment and/or advancement in an increasing diverse technological and global society. Lectures, case studies, simulations, scenarios, self-assessment exercises, reading assignments and field activities explore the basic frameworks of ethical and moral leadership. The course emphasizes leadership development, team building, ethical decision making, enhanced communication skills, strategic thinking, and people skills. Upon completion of the course, students are expected to demonstrate a competency in critical thinking skills to both identify and remedy ethical issues typically encountered d in organizational setting and interaction. Successful graduate of the course normally pursues careers in government, business, accounting, finance, nonprofits, social work, and education organizations. The course is available to all University of Guam students.



## **PA 420 PUBLIC FINANCE & FISCAL POLICY**

FALL/SPRING/ALL YEARS

3 credit hours

This course is a study of the manipulation of spending and tax revenue by governmental bodies in such a way as to affect the levels of output, employment, income, and prices in the economy; public financial administration; budgeting, procurement, planning, and control.

## **PA 480 PUBLIC ADMINISTRATION CAPSTONE**

FALL/SPRING/ALL YEARS

3 credit hours

This course is the capstone of the Bachelor of Science Public Administration (BSPA) degree program integrating concepts and skills learned in the BSPA Foundation. This is an integrative, problem-solving course in which the knowledge gained in the major is applied to public administration case studies where the students will evaluate and provide solutions to actual problems. There is a special emphasis on a student's abilities to utilize critical thinking skills to analyze strategic trends in public administration and demonstrate proficiency. Prerequisites: 1) Graduating seniors only; b) Completion of PA-405 and either PA305 or MA-385; and c) Consent of the instructor.

## **PA 490 SPECIAL PROJECT IN PUBLIC ADMINISTRATION**

FALL/SPRING/ALL YEARS

3 credit hours

This special research course is intended to acquaint criminal justice and public Administration majors with the contemporary Principles and techniques of research in these Disciplines. Students organize and participate in A major or research endeavor focusing on criminal Justice/ public administration topics dealing with Guam and the Asian-Pacific region.

## **PA 494 SS: SEM IN INTNL DEV ECONOMICS**

AS REQUIRED/AS REQUIRED

3 credit hours

## **PA 498 PUBLIC ADMINISTRATION INTERNSHIP**

FALL/SPRING/ALL YEARS

3 credit hours

This course provides qualified students with the opportunity to gain experience in public and criminal justice administration. Students are placed in government agencies and related organizations and work under the supervision of a management official. Students must consult with the Internship Coordinator prior to enrolling. Prerequisite: Instructor's consent.

## **PA 501 APPLIED RESEARCH METHODOLOGY**

FALL/SPRING/ALL YEARS

3 credit hours

Concentrated study of research methodology, including planning, organizing and executing research projects; techniques of gathering data; use of library facilities and other sources of information; analysis and interpretation of data; the art and strategy of presenting oral and written findings. \*This course must be taken within a student's first 12 credits in the MPA program.

## **PA 510 ADMINISTRATIVE THOUGHT**

FALL ONLY/ALL YEARS

3 credit hours

This course offers an overview of classic and contemporary theories of public administration and bureaucracy. The role and process of American public administration are studied in the social and political context of legislatures, executives, legal and judicial structures, and in relationship to political parties and clientele groups. The modern administrative state and its illustrations of democratic theory and practice, are examined.

## **PA 525 PUBLIC BUDGETING**

FALL ONLY/ALL YEARS

3 credit hours

Budgetary practices of federal, state, territorial, and local governments. The budget cycle, budget preparation, and execution. Includes techniques such as PPB (Planning, Programming, Budgeting) in the Federal government and zero-base in GovGuam budgeting.

## **PA 526 PRIVATE ENTERPRISE AND PUBLIC POLICY**

SPRING ONLY/ALL YEARS

3 credit hours

This course will examine the governmental process in the formulation of policy, the framework and organization of administrative agencies in the regulation and supervision of policy, and the nature of the 'public interest' and the Interrelationship of interests affecting governmental policy toward business enterprise. This course will also address communication skills in a collaborative setting and build the capacity to lead in the development and deployment of public policy initiatives and the changes in the public policy sector.

## **PA 530 PUBLIC PERSONNEL, DISCIPLINARY, AND PERFORMANCE MANAGEMENT**

FALL ONLY/ALL YEARS

3 credit hours

The study of government organization management practices and problems; the general effectiveness of major agencies including their relationships with U.S., local legislative bodies, clientele and other governmental units and public bodies. This course establishes the broad parameters of what constitutes the major roles, responsibilities and activities of public managers. This course is particularly suited for students with limited background in public management. Stress is placed on the development of analytical techniques that are useful in the identification and resolution of commonly occurring problems in public management.

## **PA 535 INTERGOVERNMENTAL RELATIONS**

SPRING ONLY/ALL YEARS

3 credit hours

Study of the dynamics of relations among governmental units, including the movement towards regionalization and councils of government. Study of the impact of "new federalism" concepts and revenue sharing upon states, territories and of local issues and problems.

## **PA 540 ADMINISTRATIVE LAW**

SPRING ONLY/ALL YEARS

3 credit hours

Study of administrative law, including issues of separation of powers; regulatory commissions; processes of administrative adjudication; and judicial review.

## **PA 545A PUBLIC POLICY AND GOVERNANCE**

FALL/SPRING/ALL YEARS

3 credit hours

This course will examine the governmental process in the formulation of policy, the framework and organization of administrative agencies in the regulation and supervision of policy, and the nature of the 'public interest' and the interrelationship of interests affecting governmental policy toward business enterprise. This course will also address communication skills in a collaborative setting and build the capacity to lead in the development and deployment of public policy initiatives and the changes in the public policy sector.

## **PA 545B PUBLIC PRIVATE PARTNERSHIPS**

FALL/SPRING/ALL YEARS

3 credit hours

This course will explore advanced organization and management theory including organization, systems design and analysis, decision theory, power, politics, and authority from the vantage point of how governments are partnering with for-profit and non-profits to redefine the traditional methods of public administration in a multi-stakeholder, solution oriented value proposition. Prerequisite: BA240.

## **PA 545C COMPARATIVE PUBLIC ADMINISTRATION**

FALL/SPRING/ALL YEARS

3 credit hours

Administrative structures and processes of industrialized and developing areas of the world. Distribution of government services in the various bureaucratic organizations.

## **PA 545D PUBLIC PLANNING**

FALL/SPRING/ALL YEARS

3 credit hours

This course deals with methods of social, economic, and physical planning. The concept of planning is approached from the theoretical, methodological and philosophical perspectives. It focuses on problem analysis to the final stages of program implementation and evaluation.

## **PA 545E PUBLIC CONTRACTING AND PROCUREMENT POLICIES AND PRACTICES**

FALL/SPRING/ALL YEARS

3 credit hours

An examination of the legal and regulatory framework governing public contracting within the dimensions of past and present national and local objectives. A particular emphasis is placed on its contribution to government efficiency and effectiveness.

## **PA 550 COMPARATIVE PUBLIC ADMIN**

FALL ONLY/ALL YEARS

3 credit hours

Administrative structures and processes of industrialized and developing areas of world. Distribution of government services in the various bureaucratic organizations.

## **PA 560 LEADERSHIP AND SOCIAL RESPONSIBILITY OF ORGANIZATIONS**

SPRING ONLY/ALL YEARS

3 credit hours

An examination of the meaning of business ethics and its significance in business decision making. By thoughtful analysis of the moral issues raised by business practices, graduate students will raise their comprehension of the moral decisions of business. Students will apply ethical theories and concepts to social issues. In addition, students will gain practice during examinations and interpretations of positions taken by various stakeholder groups affected by business and vice-versa.

## **PA 561 PUBLIC PLANNING**

SPRING ONLY/ALL YEARS

3 credit hours

This course deals with methods of social, economic, and physical planning. The concept of planning is approached from the theoretical, methodological and philosophical perspectives. It focuses on problem analysis to the final stages of program implementation and evaluation.

## **PA 565 PUBLIC CONTR&PROCUREMENT POLICY& PRACTICES**

FALL ONLY/ALL YEARS

3 credit hours

An examination of the legal and regulatory framework governing public contracting within the dimensions of past and present national and local objectives. A particular emphasis is placed on its contribution to government efficiency and effectiveness.

## **PA 570A SPECIAL TOPICS IN PUBLIC PERSONNEL ADMINISTRATION - POLICY**

FALL/SPRING/ALL YEARS

3 credit hours

a) Policy: Current problems and issues in the management of government programs are explored through: The changing character of public personnel management as affected by citizen participation and representation, community action groups, minority employment, diversity, technology, global issues, merit system administration, economics, constitutional rights, environmental concerns, upward mobility, development crises and problems, labor-management relations, public interest advocacy, decentralization and devaluation of administrative activities, and management information systems.

### **PA 570B SPECIAL TOPICS IN PUBLIC PERSONNEL ADMINISTRATION- CURRENT RELEVANT ISSUES**

FALL/SPRING/ALL YEARS

3 credit hours

b) Current/Relevant Issues: Current problems and issues in the management of government programs are explored through: The changing character of public personnel management as affected by citizen participation and representation, community action groups, minority employment, diversity, technology, global issues, merit system administration, economics, constitutional rights, environmental concerns, upward mobility, development crises and problems, labor-management relations, public interest advocacy, decentralization and devaluation of administrative activities, and management information systems.

### **PA 570C SPECIAL TOPICS IN PUBLIC PERSONNEL ADMINISTRATION - EMPLOYMENT LAW**

FALL/SPRING/ALL YEARS

3 credit hours

c) Employment Law: Current problems and issues in the management of government programs are explored through: The changing character of public personnel management as affected by citizen participation and representation, community action groups, minority employment, diversity, technology, global issues, merit system administration, economics, constitutional rights, environmental concerns, upward mobility, development crises and problems, labor-management relations, public interest advocacy, decentralization and devaluation of administrative activities, and management information systems.

### **PA 570D SPECIAL TOPICS IN PUBLIC PERSONNEL ADMINISTRATION - ORGANIZATIONS**

FALL/SPRING/ALL YEARS

3 credit hours

d) Organizations: Current problems and issues in the management of government programs are explored through: The changing character of public personnel management as affected by citizen participation and representation, community action groups, minority employment, diversity, technology, global issues, merit system administration, economics, constitutional rights, environmental concerns, upward mobility, development crises and problems, labor-management relations, public interest advocacy, decentralization and devaluation of administrative activities, and management information systems.

### **PA 570E SPECIAL TOPICS IN PUBLIC PERSONNEL ADMINISTRATION - SYSTEMS**

FALL/SPRING/ALL YEARS

3 credit hours

e) Systems: Current problems and issues in the management of government programs are explored through: The changing character of public personnel management as affected by citizen participation and representation, community action groups, minority employment, diversity, technology, global issues, merit system administration, economics, constitutional rights, environmental concerns, upward mobility, development crises and problems, labor-management relations, public interest advocacy, decentralization and devaluation of administrative activities, and management information systems.

### **PA 590 SPECIAL PROJECTS IN PUBLIC ADMINISTRATION**

FALL ONLY/FALL ONLY

3 credit hours

In-depth study relating to a special interest of the student in some aspect of Public Administration. A formal scholarly paper is required.

## **PA 598 INTERNSHIP: PUBLIC ADMINISTRATION**

FALL/SPRING/ALL YEARS

3 credit hours

This course provides qualified students with the opportunity to gain experience in public administration. Students are placed in government agencies and related organizations and work under the supervision of a management official. Students must consult with the Internship Coordinator prior to enrolling. This course is required for all pre-service students.

## **PA 692 PRACTICUM**

FALL/SPRING/ALL YEARS

3 credit hours

The Capstone course is the culminating experience that incorporates applied research and real-world application in the field under the guidance of a major professor. The Capstone will also serve as the MPA Qualifying Exam. This course may only be taken in the student's graduating semester. Prerequisite: Consent of MPA Chair.

## **PA 695 THESIS**

FALL/SPRING/ALL YEARS

6 credit hours

Thesis provides an opportunity for students to complete a scholarly research project under the supervision of a thesis committee, comprised of a program faculty chairperson and at least two additional members. Students are required to have their thesis proposal approved by their committee prior to enrolling in PA695. Prerequisite: Consent of Advisor.

## **PHYSICAL EDUCATION (PE)**

### **PE 109 TECHNOLOGY IN PHYSICAL EDUCATION**

AS REQUIRED

3 credit hours

This course provides students with an introduction to the types of technology utilized in physical education and health. Students learn to find and access search engines and data bases to create authentic assessments. Students also learn how to research and write grants to supplement and fund physical education/health budgets. Prerequisites: None.

## **PE 117 FOLK, SQUARE, AND SOCIAL DANCE**

FALL ONLY/ODD YEARS

3 credit hours

This course includes the fundamental techniques and terms common to dance. Basic skills for educational dance programs are emphasized, to include, but not limited to world folk dances, American square and country/western line dances, and social/ballroom. Historical, multicultural concepts, and etiquette related to dance are included. Students will be introduced to basic style and choreography appropriate to each dance form.

## **PE 118 OUTDOOR PURSUITS AND RACQUET SPORTS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course introduces the student to the basic concepts and skills of outdoor pursuits and racquet sports in the school setting. Emphasis is on the development of enjoyable and appropriate cooperative and competitive modes of behavior. This includes skill acquisition, explanation/ demonstration of skills, appropriate progressions, safety, etiquette, and self-awareness. Attention is given to healthful approaches for vigorous lifetime physical activity. Prerequisite: NONE.

## **PE 119 LEADERSHIP IN PHYSICAL CONDITIONING**

FALL/SPRING/ALL YEARS

3 credit hours

Physical conditioning with emphasis on leadership that is designed to progressively increase a student's physical fitness abilities using the U.S. Army's Physical Readiness Training (PRT) methods. This course is primarily ability group oriented, focusing on personal physical fitness goals, military traditions, and is offered to all full-time students with no commitment to the Army ROTC program. Prerequisites: Medical clearance and instructor's consent. Note: This course is cross listed with MSL-119.

## **PE 124 INDOOR INDIVIDUAL SPORTS**

FALL ONLY/ODD YEARS

3 credit hours

This course provides students with opportunities to engage in various individual sports taught in the schools such as: badminton, tennis, bowling, fencing, archery, golf, and self-defense. Students learn how to plan developmentally appropriate activities and assess student performance toward learning objectives. Prerequisites: None.

## **PE 125 WILDERNESS SPORTS AND ADVENTURE EDUCATION**

AS REQUIRED

3 credit hours

This course provides students with opportunities to participate in physically challenging outdoor activities such as camping backpacking, canoeing, hiking, mountaineering, orienteering, and windsurfing. Students engage in initiatives where obstacles are contrived and environments are created that challenges students to work with individuals and groups to solve problems. Prerequisites: None.

## **PE 126 OUTDOOR TEAM SPORTS**

SPRING ONLY/ODD YEARS

3 credit hours

This course provides instruction in a variety of outdoor team sports that are included in the schools. Analysis of skills, drills, strategies and rules are addressed as well as lead-up games for different age groups and skill levels.

## **PE 127 INTRODUCTION TO TUMBLING AND RHYTHMIC GYMNASTICS**

SPRING ONLY/EVEN YEARS

2 credit hours

This course introduces the student to the concepts and procedures for teaching basic tumbling and rhythmic gymnastics in a school setting. Emphasis is given equally to safety, skill acquisition, spotting techniques, explanation/demonstration of skills, and appropriate progressions for a tumbling program. Students are provided with the opportunity to acquire skills and spotting techniques for basic stunts, balances, and rhythmic gymnastics.

## **PE 212 MOTOR LEARNING**

FALL ONLY/ODD YEARS

3 credit hours

This course provides students with an understanding of the processes that underlie human movement learning. Students learn how to assess performance and provide effective instruction that optimizes skill acquisition and performance.

## **PE 214 COMMUNITY HEALTH FOR EDUCATORS**

FALL ONLY/EVEN YEARS

3 credit hours

This course provides students who are interested in teaching health in the 6-12 setting, an introduction to the various aspects of community health at the local, federal, and international levels. This course introduces students to the discipline of community health education and examines the social/political reasons why community health problems continue to exist. Students think critically on issues concerning the legislation and financing of health care services as well as view a community's health status as a part of a larger, global community. Prerequisites: HS200.

## **PE 220 INDOOR TEAM SPORTS**

FALL ONLY/EVEN YEARS

3 credit hours

This is a professional preparation course providing instruction in a variety of team sports that are included in the schools. Analysis of skills, drills, strategies and rules are addressed as well as teaching strategies for different age groups and skill level.

## **PE 305 HISTORICAL AND PHILOSOPHICAL FOUNDATIONS OF PHYSICAL EDUCATION**

FALL ONLY/EVEN YEARS

3 credit hours

This course reviews the history of sport, fitness and physical education; the impact that events have had on their development; and how physical education, fitness and the use of sport is influenced by society. Emphasis is placed on philosophical perspectives and ethical values of this profession for the educator. Content is devoted to the study and understanding of sport and physical activity within numerous cultures throughout history to support diversity and help students consider the multiple perspectives expressed through the incorporation of sport and physical activity. This course includes discussion of current theories, philosophies, and practices in the profession.

## **PE 312 SCHOOL HEALTH**

SPRING ONLY/ODD YEARS

3 credit hours

This course provides students who are interested in teaching health in the 6-12 setting, an in-depth understanding of personal health issues and health issues in general that affect students in the 6-12 setting. This course integrates the concepts of the Coordinated School Health Program (CSHP). Prerequisite: HS200, PE214.

## **PE 326 SPORTS INSTRUCTION/ ATHLETICS I**

AS RESOURCES PERMIT

3 credit hours

This course provides students who are interested in sports instruction for individual and team sports at the elementary level, with an understanding of developmentally appropriate practices. This course specifically focuses on appropriate skill development, sport pedagogy, organization and administration, nutrition, and risk management specific to the elementary level. Observation and service learning experiences provide for application of classroom material. The course also prepares students to take the American Sport Education Program (ASEP) exam. Prerequisites: ED201, PE212, PE352.

## **PE 352 METHODS OF TEACHING ELEMENTARY PHYSICAL EDUCATION**

FALL ONLY/ALL YEARS

3 credit hours

This course focuses upon planning, implementing, and assessing developmentally appropriate physical education, dance and health programs that meet national standards and the diverse needs of students in Pre-K-6 grade. Prerequisite: ED201, ED300, with grades of C or above.

## **PE 353 METHODS OF TEACHING MIDDLE AND HIGH SCHOOL HEALTH AND PHYSICAL EDUCATION**

SPRING ONLY/ALL YEARS

3 credit hours

This course prepares the physical or health Teacher Candidate to develop and present physical education and health programs that meet the needs of all students in the secondary school setting including those with disabilities or health-related limitations. Attention is given to develop knowledge, skills and dispositions required to implement and assess developmentally appropriate secondary programs. Prerequisites: ED201, ED300, with a grade of C or better. Students must have been admitted to the Concentration in Teaching Physical Education.

## **PE 426 SPORTS INSTRUCTION/ATHLETICS II**

### **AS REQUIRED**

3 credit hours

This course provides students who are interested in sports instruction for individual and team sports at the secondary level, with an understanding of developmentally appropriate practices. This course specifically focuses on appropriate skill development, sport pedagogy, organization and administration, nutrition, and risk management specific to the secondary level. Observation and service learning experiences provide for application of classroom material. The course also prepares students to take the American Sport Education Program (ASEP) exam. Prerequisites: ED201, PE212, PE353.

## **PE 446 ENTREPRENEURSHIP: NEW VENTURE CREATION**

### **SPRING ONLY/ALL YEARS**

3 credit hours

Provides an opportunity to develop a business plan through the application of the principles, theories and practices learned in the previous entrepreneurship courses. Emphasis will be placed on the practicability of the plan and the ability to present the concept as a viable and profitable business venture. Note: This course is cross listed with BA446.

## **PE 454 ADAPTED AND DEVELOPMENTAL PHYSICAL EDUCATION**

### **SPRING ONLY/ODD YEARS**

3 credit hours

This course emphasizes assessment, design, and implementation of physical education that meets the developmental characteristics and special needs of pre-school and school age children, youth, and adults including those with disabilities or health related impairments. Particular attention is paid to adaptations to instruction, equipment and facilities to accommodate and individualize PE instruction for students with disabilities in schools and participants in community settings. Prerequisites: ED201, ED300 with a grade of C or above.

## **PE 454G ADAPTED AND DEVELOPMENTAL PHYSICAL EDUCATION, RECREATION, AND DANCE**

### **SPRING ONLY/ODD YEARS**

3 credit hours

This course emphasizes assessment, design, and implementation of physical education that meets the developmental characteristics and special needs of preschool and school age children, youth, and adults including those with disabilities or health related impairments. Particular attention is paid to adaptations to instruction, equipment and facilities to accommodate and individualize PE instruction for students with disabilities in schools and participants in community settings. Prerequisite: ED 201, ED 300 and either PE 352 or PE 353 with a grade of C or above.

## **PHYSICS (PH)**

## **PH 210 INTRODUCTORY PHYSICS LABORATORY**

### **FALL ONLY/ALL YEARS**

1 credit hour

This course consists of experiments dealing with mechanics, heat, and sound. It acts as a laboratory for PH251. It meets for three hours weekly.

## **PH 211 INTRODUCTORY PHYSICS LABORATORY**

### **SPRING ONLY/ALL YEARS**

1 credit hour

Online

This course consists of experiments dealing with electricity, magnetism, optics, and atomic physics. It acts as a laboratory for PH252. It meets for three hours weekly.

## **PH 251 UNIVERSITY PHYSICS**

### **FALL ONLY/ALL YEARS**

4 credit hours

Online/Hybrid

This is the first of a two-semester course in general physics using applied calculus. Classical mechanics, heat and thermodynamics are considered. It includes four hours of lecture per week. Prerequisite: MA203 or concurrent enrollment.



## **PH 252 UNIVERSITY PHYSICS**

SPRING ONLY/ALL YEARS

4 credit hours

Online

A continuation of PH251, this course deals with classical electricity and magnetism, optics, wave motion and sound. It includes three hours of lecture per week.

Prerequisite: PH251.

## **PH 301 MECHANICS**

FALL ONLY/ODD YEARS

3 credit hours

Mechanics is the study of static, kinematic, and dynamic principles. It includes four hours of lecture per week.

Prerequisite: PH252.

## **PH 305 THERMODYNAMICS**

SPRING ONLY/ODD YEARS

3 credit hours

Thermodynamics includes the consideration of temperature, equations of state, heat, the first law, the second law, entropy, thermodynamic functions, introduction to kinetic theory and statistical mechanics, and applications to related scientific areas. It consists of three hours of lecture per week. Prerequisite: PH252.

## **PHILOSOPHY (PI)**

### **PI 101 INTRODUCTION TO PHILOSOPHY**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course introduces the student to the nature of philosophy and to philosophical thinking, through a discussion of various important topics in philosophy. Issues can include the philosophy of mind, death and immortality, knowledge, time and time travel, free will, personality identity, the nature of morality, the existence of God and more.

## **PI 102 CONTEMPORARY ETHICAL PROBLEMS**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course provides a careful and critical examination of the moral issues in our society, including (but not limited to) the ethics of food, climate change, ethics and the city, robotics, population ethics, space exploration, human enhancement, medical ethics, animal ethics and environmental ethics. This course develops students' abilities to engage in ethical reasoning through the application of ethical theories and moral concepts to concrete, real-world cases.

### **PI 103 INTRODUCTION TO ASIAN AND NON-WESTERN PHILOSOPHY**

FALL ONLY/ALL YEARS

3 credit hours

This course introduces the student to philosophical thinking as it developed in non-western intellectual traditions. The course may cover philosophical thought that has grown out of Indian, Chinese, Japanese, Korean, Islamic, African, and indigenous civilizations.

### **PI 210 INTRODUCTION TO LOGIC**

FALL ONLY/ODD YEARS

3 credit hours

This is a philosophy methods course that provides an introduction to the study of formal and informal arguments. Skills to be covered include the identification and analysis of arguments, recognition of fallacies, and modern techniques for analyzing and symbolizing certain kinds of arguments.

## **PI 220 ETHICAL THEORY**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This is a philosophy methods course on ethical reasoning and an essential course for anyone interested in personal, social, or professional ethics. It examines classical and contemporary theories on morality, from both western and non-western philosophical perspectives. The course helps the student to think through the different theories and concepts that we rely on to guide our actions.

## **PI 230 INDIGENOUS PHILOSOPHY**

3 credit hours

This course offers a close look at various "indigenous" intellectual traditions, which may include Chamorro and Micronesian, Melanesian, Hawaiian, Maori, North American first nations, Inuit, Aztec, Polynesian, Sami, Okinawan and Ainu philosophies. We will engage with different perspectives, worldviews, with an aim to appreciating the contributions indigenous philosophies can make to universal human questions about the nature of human beings, the world, and our place in it, as well as to debates about concrete issues, such as health care and environmental protection.

## **PI 301 HISTORY OF WESTERN PHILOSOPHY I**

FALL ONLY/ODD YEARS

3 credit hours

This survey course provides an historical study of philosophical concepts and issues during the ancient, medieval, and renaissance period. The focus of the course is on prominent Western thinkers and a study of the philosophical systems they devised and the problems that they addressed.

## **PI 302 HISTORY OF WESTERN PHILOSOPHY II**

SPRING ONLY/EVEN YEARS

3 credit hours

This course is a continuation of the philosophical survey begun in PI301 covering principal issues and philosophical figures that dominate the modern and contemporary periods of philosophy. Emphasis again is on pivotal Western philosophers and their influence on the development of Twentieth Century philosophy.

## **PI 306 PHILOSOPHY OF RELIGION**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This course acquaints the student with topics central to the philosophy of religion. This may include issues such as the evidentialist and anti-evidentialist attempts to support or discredit the religious hypothesis; proofs of God's existence; the interrelationship between reason, faith, revelation, and science; God's attributes; the problem of evil; the nature of mysticisms and religious experience; reaction to theism; and more.

## **PI 331 PHILOSOPHY OF ART**

SPRING ONLY/EVEN YEARS

3 credit hours

This course is a study of the major philosophical positions taken in relation to the arts. Prerequisites: FA231 or consent of instructor.

## **PI 410 COMMUNITY ENGAGED PHILOSOPHY**

FALL ONLY/ALL YEARS

3 credit hours

Community engaged philosophy focuses on philosophy as a practice of critical thinking. This class incorporates the pedagogical principle of the philosophy for children (p4c), a constructivist approach to education that encourages students to think or themselves and become the authors of their learning. This course can help educators learn how to foster critical thinking skills in their students and create a dynamic, engaged classroom. While the focus of the course is the philosophy of education, it is a recommended course for senior students of an all disciplines for exercising and developing high-level critical thinking skills and learning how these skills can be utilized in discussion and debate.

## **PI 481 CAPSTONE SEMINAR IN PHILOSOPHY**

FALL/SPRING/ALL YEARS

3 credit hours

Online

Each time this course is offered it covers one specific area of philosophy or one particular philosopher in a seminar format. The course is particularly recommended for those students who wish to develop their skills in careful reading, discussion and debate, and analysis to a high level. The skill cultivated in this course gives students an advantage when it comes to any kind of learning at university (and beyond). The course may be repeated for credit under different topics.

## **PI 481G Capstone Seminar in Philosophy**

FALL ONLY/SPRING ONLY

3 credit hours

Each time this course is offered it covers one specific area of philosophy or one particular philosopher in a seminar format. The course is particularly recommended for those students who wish to develop their skills in careful reading, discussion and debate, and analysis to a high level. The skill cultivated in this course gives students an advantage when it comes to any kind of learning at university (and beyond). The course may be repeated for credit under different topics.

## **PI 486 TRAVEL STUDIES IN ASIA**

SUMMER/ODD YEARS

3 credit hours

Philosophy students and others interested in gaining a direct intensive exposure to Asian culture and philosophy will be interested in participating in this course. Each summer one of the faculty in the philosophy program takes a group of students into a particular Asian country of choice. At this time, destination of this course is planned to be either India, Tibet, China, or Japan. This course is invaluable for students who are specializing in Asian philosophy, though anyone could benefit from this unique opportunity to gain a direct encounter with one of these countries under the guidance of an expert in the culture and religion/philosophy of that particular country.

## **PI 486G TRAVEL STUDIES IN ASIA**

SUMMER/ODD YEARS

3 credit hours

Philosophy students and others interested in gaining a direct intensive exposure to Asian culture and philosophy will be interested in participating in this course. Each summer one of the faculty in the philosophy program takes a group of students into a particular Asian country of choice. At this time, destination of this course is planned to be either India, Tibet, China, or Japan. This course is invaluable for students who are specializing in Asian philosophy, though anyone could benefit from this unique opportunity to gain a direct encounter with one of these countries under the guidance of an expert in the culture and religion/philosophy of that particular country.

## **PI 508 MICRONESIAN PHILOSOPHY**

SPRING ONLY/ODD YEARS

3 credit hours

This Course examines the various approaches to philosophy found in Micronesia. Philosophy is framed by historical and cultural conditions. This course will explicate the meaning and significance of philosophical wisdom for the dominant cultures, past and present, in Micronesia. Prerequisite: Graduate Standing.

## COLLEGE OF ARTS AND SCIENCES (PM)

### PM 394 PEER MENTORING

FALL ONLY/FALL ONLY

3 credit hours

This course is designed to train students to serve as a peer mentors/advisor. The course covers the theory and practice of peer academic advising with emphasis on study and interpersonal skill development and cross-cultural communication. Prerequisites: EN-111 and instructors consent.

## POLITICAL SCIENCE (PS)

### PS 101 INTRODUCTION TO GOVERNMENT AND POLITICS

FALL/SPRING/ALL YEARS

3 credit hours

Online

With emphasis on the democratic political system, this course is a study of political behavior, the role of government in society, and different forms of government in the world.

### PS 202 GOVERNMENT IN THE UNITED STATES

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

An analysis of the plan and structure of the federal system of the United States, this course places special emphasis on the meaning of democracy and ideas, form and values of political and economic institutions in the United States.

### PS 215 INTERNATIONAL RELATIONS

SPRING ONLY/ALL YEARS

4 credit hours

Hybrid

This course presents a general framework in the study of international politics, examines the forces that motivate policy, the tools to promote foreign policy objectives, and international cooperation and conflict resolution.

## PS 225 STATE AND TERRITORIAL GOVERNMENT

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course entails the analysis of U.S. State and Territorial Governmental systems, including the study of constitutionalism, federalism, separation of powers, civil rights, political parties, interest groups, political status, and political development. Emphasis is placed on the analysis of the structure and function of the Territorial Government of Guam.

### PS 300 RESEARCH METHODOLOGY IN POLITICAL SCIENCE

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This course introduces the methods and skills necessary to conduct research in political science. Students design and execute a research project in a substantive area of political science. Prerequisite: PS101 and MA151, or consent of instructor.

### PS 302 COMPARATIVE POLITICS

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

The course provides students with the tools to undertake a comparative study of political processes and government institutions, with particular attention to democracies. Prerequisite: PS101 and PS215 or consent of instructor.

### PS 304 POLITICS OF ASIA

FALL ONLY/EVEN YEARS

3 credit hours

This course provides an introduction the political institutions, processes and problems of counties in Asia. Prerequisites: PS101 or PS202 OR consent of instructor.

## **PS 306 POLITICS OF DEVELOPING NATIONS**

FALL ONLY/ODD YEARS

3 credit hours

Hybrid

This course is a study of political development and change in "Third World" countries, understood to comprise the postcolonial societies of Asia-Pacific, Africa, Latin America and the Middle East. The course will examine the challenges of governance, cultural pluralism, and rapid socio-economic change with emphasis on the impact of colonial legacies and international political, ideological and economic influences. Special attention will be paid to the need of Small island developing states. Prerequisites: PS101 or PS215 or consent of instructor.

## **PS 307 POLITICS OF ECONOMIC DEVELOPMENT**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

The course investigates the role of political decision in fostering or hindering economic development, with special emphasis on the experience of industrialization in Asia. Prerequisites: BA110 and either PS101 or PS215 or consent of instructor.

## **PS 310 REGIONAL AND INTERNATIONAL ORGANIZATIONS**

SPRING ONLY/ODD YEARS

3 credit hours

Hybrid

This course discusses the origin, structure, and functions of regional and international organizations, focusing on the United Nations, the European Union, NATO, and the Association of South East Asian Nations. Prerequisite: PS215, or consent of instructor.

## **PS 326 POLITICAL PHILOSOPHY**

FALL ONLY/ALL YEARS

3 credit hours

Online/Hybrid

This course examines and analyzes the thought of political philosophers from classical antiquity to the present. The intent of the course is to explain what political philosophy is and to explore the relationship between politics and philosophy. Prerequisite: PS101 or instructor's consent.

## **PS 398 INTERNSHIP**

FALL ONLY/ALL YEARS

3 credit hours

This course provides an internship for student that will allow for the application of political science theory to practical work in the community. Placement in a government agency or non-government organization will be coordinated with the instructor. Prerequisites: PS101 and junior standing, or consent of instructor.

## **PS 402 AMERICAN CONSTITUTIONAL DEVELOPMENT/LAW**

FALL ONLY/ODD YEARS

3 credit hours

This course is the study of the origin and adaptation of the United States Constitution as a principal factor in the development of the political system of the United States. Major U.S. Supreme Court cases are analyzed in their governmental context, particularly with regard to federal-territorial relations as they have impacted on Guam and Micronesia. Prerequisite: PS101 or PS202, or consent of instructor.

## **PS 403 UNITED STATES FOREIGN POLICY**

FALL ONLY/ODD YEARS

3 credit hours

This course analyzes the factors and processes, and the major events in U.S. Foreign Policy formulation and implementation with emphasis on the Asian and the Pacific region. Prerequisite: PS101, or PS215, or consent of instructor.

## **PS 412 POLITICS OF MICRONESIA**

FALL ONLY/ALL YEARS

3 credit hours

This course explores government and politics in Micronesia. This course focuses on such concepts and themes as U.S. territorial policy and relations, political status, political/economic development, environmental policy, self-determination, political culture, political socialization, federalism. Pre-requisites: PS101 or PS225 or consent of instructor.

## **PS 420 INTERNATIONAL LAW**

FALL ONLY/EVEN YEARS

3 credit hours

This course examines the purposes, origins, adjudication, and enforcement of international law in emphasizing the practical areas of human rights, self-determination, maritime law, state recognition, and secession. The course focuses on the history and sources of international law, the effectiveness of international law in global politics, and the future of international law as it relates to the international system. Prerequisite: PS215, or consent of instructor.

## **PS 426 AMERICAN POLITICAL THOUGHT**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This course examines political thought among Americans since independence. Specific topics may include American variation on liberalism and conservatism. Prerequisite: PS101 or PS202 or PS326 or consent of instructor.

## **PS 430 GEOPOLITICS AND ISLAND SECURITY**

SPRING ONLY/EVEN YEARS

3 credit hours

This course provides a framework for investigating the impact of geography and geographical thinking on International Relations, with an emphasis on the role of islands in global conflict and the impact of this role on genuine island security. This course examines the origins of geopolitics, the roll of Guam and the Freely Associate States in the Indo-Pacific great-power competition, spatial understandings of war, decolonization and political status related to Micronesia's role in regional geopolitics, the role of non-human actors such as mountains, weather and flora/faun on global conflict, geopolitical futures forecasting using horizon scanning, emerging issues analysis, and scenario planning, and the development of alternative forms of security. Prerequisite: PS215 or Consent of Instructor.

## **PS 440 INDIGENOUS POLITICS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course traces the political relationship between indigenous and non-indigenous peoples as part of wider global relations among indigenous societies, colonial powers and contemporary national and international regimes and institutions. Students will gain an understanding of government policies and the responses to these practices by indigenous peoples by critically evaluating the political frameworks and policy responses used to deal with indigenous-settler relations. This course will consider - among other topics - land, education, citizenship and identity, representation, social movements and self-determination, "Close the Gap" and recognition. Prerequisites: PS225 or consent of instructor.

## **PS 482 SPECIAL TOPICS IN POLITICAL SCIENCE**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

This course is designed to cover important political issue of contemporary significance in various topics in (A) American and regional government, (B) Comparative government, and (C) International relations. This course may be repeated for credit under different topics.

Prerequisites: PS101 and either PS300 or PS302, or consent of instructor.

## **PS 492 CAPSTONE IN POLITICAL SCIENCE**

FALL/SPRING/ALL YEARS

2 credit hours

This capstone course is taken by political science majors in their senior year. In this course, students "cap off" their education in political science by completing a research paper and public presentation. This course allows students to practice political science research methods and apply political science theories to a research project in American and regional government, comparative government, or international relations. It includes an examination to assess student proficiency in the program learning outcomes. Prerequisites: Senior standing completion of PS300, PS302, and consent of instructor.

## **PSYCHOLOGY (PY)**

### **PY 100 PERSONAL ADJUSTMENT**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This is an applied introductory-level course intended to help students learn personal adjustment skills through a variety of experiential activities and projects. Students are encouraged to work together to create a supportive environment for addressing important psychological issues, such as self-concept, identity stress, anxiety, depression, loneliness, substance use, relationships, gender roles, sexuality, family, and culture. The course applies evidence-based techniques for modifying behavior to goals selected by the individual student. The course also focuses on behavioral health issues of regional significance, including risk of suicide, domestic violence, and substance abuse. The course addresses these issues in part by drawing on cultural strengths, protective factors, and forms of resilience that are unique to the Pacific Island region.

### **PY 101 GENERAL PSYCHOLOGY**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This course provides an introduction to the basic principles of psychology, to methods for research in psychology, and to key findings from its subfields. Topics include the biological bases of behavior sensation and perception, consciousness and altered states, learning, human memory, problem-solving, motivation and emotion, development across the life span, personality, stress and coping, psychological disorders, psychotherapy, and social behavior.

## **PY 201 CHILD DEVELOPMENT**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This course provides a scientific and up-to-date picture of child development in physical, cognitive, emotional and social areas from the prenatal period up to adolescence. The course examines the way children actually live, the current social conditions that influence their lives, and the practical applications of child development research and its relevance to the lives of children and their families in the Western Pacific region. Course material enables students to appreciate the developmental capabilities and needs of children at different ages and the role of culture in early child development. Prerequisite: PY101.

## **PY 202 ADOLESCENT PSYCHOLOGY**

SPRING ONLY/ALL YEARS

3 credit hours

Online/Hybrid

This course offers an overview of physical, cognitive, social and emotional development during adolescence. It introduces theory and research on contemporary social problems affecting adolescents and engages students in active research to explore these issues locally, regionally and nationally. Prerequisite: PY101.

## **PY 210 INTRODUCTION TO EXPERIMENTAL PSYCHOLOGY**

SPRING ONLY/ALL YEARS

3 credit hours

This is an introduction to experimental design, methods, and statistics used in psychological research. Prerequisite: PY101. Corequisite: PY210L.

## **PY 210L INTRODUCTION TO EXPERIMENTAL PSYCHOLOGY LABORATORY**

SPRING ONLY/ALL YEARS

1 credit hour

This is the laboratory component of PY210. They MUST be taken concurrently. The lab meets for three hours each week. Students learn APA writing style, conduct experiments, analyze data, write reports, and present results. Prerequisite: PY101. Corequisite: PY210.

## **PY 304 LEARNING AND MOTIVATION**

FALL ONLY/EVEN YEARS

3 credit hours

The investigation of learning and motivation involves the experimental study of the effects of experience on behavior and the organization of action in animals and humans. The course examines actions ranging from basic biological motives (e.g., eating, drinking, and sex) to complex human social motives (e.g., attachment and achievement). Important issues and theories in the control of actions will be considered through an exploration of different kinds of learning and the role of cognition and emotion in motivated behavior. Prerequisite: PY101. Corequisite: PY304L.

## **PY 304L LEARNING AND MOTIVATION LABORATORY**

FALL ONLY/EVEN YEARS

1 credit hour

This is the laboratory component of PY304 and MUST BE taken concurrently. Students conduct experiments with simulated and live animals to learn laboratory techniques and better understand seminal studies encountered in the didactic course. All students meet each week for one-hour general instruction and then coordinate with the instructor and group mates to condition animals for two more hours. Prerequisite: PY101. Corequisite: PY304.

## **PY 305 SENSATION AND PERCEPTION**

SPRING ONLY/ODD YEARS

3 credit hours

Mechanisms of visual, auditory, gustatory, olfactory, and tactile experience are examined. Topic coverage includes: information processing by the vertebrate nervous system, basic concepts of psychophysics, stimulus coding and feature extraction by the sensory systems. Laboratory demonstrations and experiments are conducted, with students performing an independent project. Prerequisites: PY101 and PY210.



## **PY 309 HISTORY AND SYSTEMS OF PSYCHOLOGY**

FALL ONLY/EVEN YEARS

3 credit hours

This course is a study of the historical development of modern psychology, of its foundation in the other sciences and philosophy, and of the people, ideas and theoretical systems that have been most influential in shaping contemporary psychological thought. Prerequisite: PY101.

## **PY 342 THE PSYCHOLOGY OF CLOSE RELATIONSHIPS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course addresses how relationships form, change and end between friends, family members and romantic partners. Topics include interpersonal attraction; types of intimacy and love; sexuality in close relationships; parent-child and sibling relationships; friendship; fairness, selfishness and altruism; communication; social power; jealousy; conflict; ending relationships; loneliness; social networks; and therapy for relationships. This course emphasizes: 1) knowledge of theory and research findings in close relationships; and 2) developing one's own skills for creating and maintaining rewarding relationships. Prerequisite: PY101.

## **PY 370 INTRODUCTION TO CLINICAL PSYCHOLOGY**

FALL ONLY/ALL YEARS

3 credit hours

This course offers an examination of the methods and profession of clinical psychology, including history, theories, types of psychological problems, methods of assessment, forms of intervention, current development. Prerequisite: PY101.

## **PY 394 SS:PSYCHOLOGY OF HUMAN SEXUALITY**

SPRING ONLY/SPRING ONLY

3 credit hours

This course will address the psychological, Physiological, and sociocultural facets of human Sexuality. Current research will be used to Explore various topics within human sexuality, Including psychological theories of sexuality and Sexual development; psychological research on Sexuality; psychological perspectives on gender And sexual orientations; sexual disorders and an Overview of their corresponding psychological Treatments; and cross-cultural perspectives on Sexual behavior. Other topics will include sexual Anatomy; individual behavioral elements in Attraction; the value of sexuality in Relationships; elements of positive sexual Communication; decisions about contraception, Pregnancy, abortion, and prostitution; curtailing Sexually transmitted diseases; and preventing Sexual coercion. Prerequisite: PY-101

## **PY 404 COGNITIVE PSYCHOLOGY**

SPRING ONLY/EVEN YEARS

3 credit hours

This course offers an examination of the major capacities and functions involved in human learning. Major topics discussed include historical background, verbal learning, language and thought, serial position learning, concept formation and forgetting. Prerequisite: PY101.

## **PY 405 ANIMAL BEHAVIOR**

FALL ONLY/ODD YEARS

3 credit hours

The investigation of animal behavior involves the comparison of behavior across a wide range of animal species. Emphasis will be on principles and phenomena in animal development, control of behavior, communication, feeding, reproduction, habitat selection, and mating systems. Evolutionary theory, as a framework for the adaptive character of behavior in animals and humans, is emphasized. Some semesters may involve intensive investigation of the behavior of a single animal species in the Micronesian region. Prerequisite: PY101 or BI158/158L. Corequisite: PY405L.

## **PY 405L ANIMAL BEHAVIOR LABORATORY**

FALL ONLY/ODD YEARS

1 credit hour

PY405L, is the Laboratory component of PY405 and MUST be taken concurrently. The course meets for three hours per week. Students learn about animal laboratory procedures and basic phenomena by working with experimental animals and local critters. Prerequisite: PY101 or BI158/158L. Corequisite: PY405.

## **PY 413 RESEARCH METHODOLOGY IN THE BEHAVIORAL SCIENCES**

FALL ONLY/ALL YEARS

3 credit hours

Online/Hybrid

This course is an in-depth study of the scientific research process, and an application of its principles and techniques to proposing, designing, conducting and analyzing original research. Students demonstrate mastery of APA style and deliver research results orally and in written format. Prerequisite: PY101, PY210, and MA385 or MA-387 MA-387L. Corequisite: PY413L.

## **PY 413G RESEARCH METHODOLOGY IN THE BEHAVIORAL SCIENCES**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This course is an in-depth study of the scientific research process, and an application of its principles and techniques to proposing, designing, conducting and analyzing original research. Students demonstrate mastery of APA style and deliver research results orally and in written format. Prerequisites: PY101, PY210 and MA385 or MA-387/L. Corequisite: PY413L

## **PY 413L RESEARCH METHODOLOGY IN THE BEHAVIORAL SCIENCES LAB**

FALL ONLY/ALL YEARS

1 credit hour

Online/Hybrid

This course is the laboratory component of PY413. This lab must be taken concurrently. Students are expected to complete a list of project-specific reading, design an independent study, participate in data collection, analyze the data, and report the results in writing and orally. Prerequisite: PY-101, PY-210,MA-385 or MA-387 MA-387L. Co-requisite: PY413/G.

## **PY 413L/G RESEARCH METHODOLOGY IN THE BEHAVIORAL SCIENCE LAB**

FALL ONLY/ALL YEARS

1 credit hour

Online/Hybrid

This course is the laboratory component of PY413. This lab must be taken concurrently. Students are expected to complete a list of project-specific reading, design an independent study, participate in data collection, analyze the data, and report the results in writing and orally. Prerequisite: PY-101, PY-210, and MA-385. Co-requisite: PY413/G.

## **PY 420 ABNORMAL PSYCHOLOGY**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers the study of historical changes in theories and methods of treatment; theory of personality development; dynamics of adjustment; the symptoms, dynamics, therapy, and prognosis of various abnormal reaction patterns, both functional and organic; and modern theories and methods of diagnosis, therapy, and prevention. Prerequisite: PY101.

## **PY 420G ABNORMAL PSYCHOLOGY**

FALL/SPRING/ALL YEARS

3 credit hours

This course covers the study of historical changes in theories and methods of treatment; theory of personality development; dynamics of adjustment; the symptoms, dynamics, therapy, and prognosis of the various abnormal reaction patterns, both functional and organic; and modern theories and methods of diagnosis, therapy, and prevention. Prerequisite: PY101.

## **PY 426 PERSONALITY THEORY**

FALL ONLY/ALL YEARS

3 credit hours

This course provides an intensive and comparative overview of the theories of personality from Freudian, Neo-Freudian, Trait, Cognitive, Socio-behavioral, Existential and Humanistic perspectives. Major theorists' concepts and principles, assessment and techniques are examined within a cross cultural and ethnically diverse context. Prerequisite: PY101.

## **PY 426G PERSONALITY THEORY**

FALL ONLY/ALL YEARS

3 credit hours

This course provides an intensive and comparative overview of the theories of personality from Freudian, Neo-Freudian, Trait, Cognitive, Socio-behavioral, Existential and Humanistic perspectives. Major theorists' concepts and principles, assessment and techniques are examined within a cross cultural and ethnically diverse context. Prerequisite: PY101 and graduate standing.

## **PY 440 SOCIAL PSYCHOLOGY**

FALL ONLY/ALL YEARS

3 credit hours

This course applies the scientific method to analysis of the behavior of individual people in social situations. Topics include aggression, attitude formation and persuasion, conflict resolution, conformity, gender roles, group decision making, interpersonal attraction, positive social behaviors, prejudice, social factors in the self-concept, social information processing, and applications of social psychology to social problems. Prerequisite: PY101.

## **PY 440G SOCIAL PSYCHOLOGY**

FALL ONLY/ALL YEARS

3 credit hours

This course applies the scientific method to analyses of the behavior of individual people in social situations. Topics include aggression, attitude formation and persuasion, conflict-resolution, conformity, gender roles, group decision making, interpersonal attraction, positive social behaviors, prejudice, social factors in the self-concept, social information processing, and applications of social psychology to social problems. Prerequisite: PY101.

## **PY 442 CROSS-CULTURAL PSYCHOLOGY**

SPRING ONLY/ODD YEARS

3 credit hours

Cross-cultural psychology seeks to identify behaviors common to all human beings and differences in behavior caused by differences in culture. This course covers cross-cultural commonalities and differences in development, thinking and problem solving, perception, motivation, values, relations between the sexes, aggression, and organizational behavior. The course also covers recommendations for contact between members of different cultures. Prerequisite: A minimum of 3 credits in psychology at the 300 or 400 level.

## **PY 455 PSYCHOLOGY OF WOMEN**

SPRING ONLY/ALL YEARS

3 credit hours

Online/Hybrid

This course offers a study of women through feminist scholarship and research. It is designed to introduce students to the myriad factors influencing the development of girls and women in a variety of cultures and societies, including Micronesia. Areas covered include feminist scholarship and research; gender socialization, women's biology and (mental) health; sexuality; victimization and abuse; work career, and power issues. Prerequisite: PY101.

## **PY 455G PSYCHOLOGY OF WOMEN**

SPRING ONLY/EVEN YEARS

3 credit hours

Online

This course offers a study of women through feminist scholarship and research. It is designed to introduce students to the myriad factors influencing the development of girls and women in a variety of cultures and societies, including Micronesia. Areas covered include feminist scholarship and research; gender socialization, women's biology and (mental) health; sexuality; victimization and abuse; work career, and power issues. Prerequisite: PY101.

## **PY 475 MICRONESIA AND MENTAL HEALTH**

SPRING ONLY/ODD YEARS

3 credit hours

This course offers an examination of mental health services and problems in Micronesia. Geography, political systems, health problems, peoples and cultures provide the context for a detailed examination of mental health and social change concerns within our region. Prevalence of psychiatric disorders within Micronesia, applications of psychological interventions to regional concerns, and Micronesian perspectives toward psychology are the primary focus of the course. Prerequisite: PY101, PY370, PY420 or consent of instructor.

## **PY 491 PSYCHOLOGICAL RESEARCH SEMINAR**

FALL/SPRING/ALL YEARS

3 credit hours

This course gives students experience in conducting psychological research as collaborators in faculty-supervised investigations. Students complete a list of project-specific readings, participate in the planning and supervision of data collection, help to code and interpret data, and design proposals for further research in the topic area. This course may be repeated for elective credit. Prerequisites: PY101 and the consent of the instructor. MA151 is recommended.

## **PY 492A PSYCHOLOGY PRACTICUM**

FALL ONLY/ALL YEARS

3 credit hours

This practicum course in clinical psychology places students in a mental health or social service facility under the supervision of an approved practicum supervisor. Students are required to attend a weekly seminar on professional issues and ethics and minimally spend one day a week in a placement setting. This course is restricted to psychology majors. PY492a and/or PY492b may be repeated for elective credit. Prerequisites: PY101, PY370, PY420 or consent of instructor.

## **PY 492B PSYCHOLOGY PRACTICUM**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This practicum course in clinical psychology places students in a mental health or social service facility under the supervision of an approved practicum supervisor. Students are required to attend a weekly seminar on professional issues and ethics and minimally spend one day a week in a placement setting. This course is restricted to psychology majors. PY492a and/or PY492b may be repeated for elective credit. Prerequisites: PY101, PY370, PY420 or consent of instructor.

## **PY 495H HONORS THESIS**

3 credit hours

## **PY 501 ETHICAL, LEGAL, AND PROFESSIONAL ISSUES IN THE PRACTICE OF CLINICAL PSYCHOLOGY**

FALL ONLY/EVEN YEARS

3 credit hours

This course provides a comprehensive overview of the ethical, legal, and professional issues encountered in the practice of clinical psychology. Students study the APA Ethics Code as well as local and national laws that regulate mental health practice. Topics include professional competence, client rights, informed consent, privacy, confidentiality and privileged communication. Special attention is given to procedures for evaluating and responding to suicidality and dangerousness, for working with minors and other vulnerable populations, and for reporting suspected child or elder abuse. Prerequisite: Consent of instructor.

## **PY 502 MICRONESIA AND MENTAL HEALTH**

SPRING ONLY/ODD YEARS

3 credit hours

This course offers an examination of mental health services and problems in Micronesia. Geography, political systems, health problems, peoples and cultures provide the context for a detailed examination of mental health and social change concerns within our region. Prevalence of psychiatric disorders within Micronesia, applications of psychological interventions to regional concerns, and Micronesian perspectives toward psychology are the primary focus of the course. Prerequisite: Consent of instructor.

## **PY 503 PSYCHOPATHOLOGY AND PSYCHODIAGNOSIS**

FALL ONLY/ODD YEARS

3 credit hours

This course provides an intensive study of the various forms of psychopathology described in the Diagnostic and Statistical Manual of Mental Disorders (DSM), including current theory and research on their phenomenology, etiology, and treatment. Emphasis is placed on learning to formulate accurate psychiatric diagnoses with both adults and children using the DSM's multiaxial diagnostic system. Students also engage in historical and cross-cultural analysis of psychiatric discourse, and consider alternative frameworks for conceptualizing abnormal behavior. Prerequisite: Consent of instructor.

## **PY 504 TOPICS IN CLINICAL PSYCHOLOGY**

SPRING ONLY/EVEN YEARS

3 credit hours

This course offers in-depth study of a special topic in clinical psychology. The focus varies depending on faculty and student interests as well as needs in the community. Possible topics include: forensic psychology, substance abuse treatment, applied behavior analysis, trauma and crisis intervention, psychodynamic therapy, couples therapy, group therapy, narrative therapy, qualitative research, and psychopharmacology. With different subject matter, this course may be repeated for credit. Prerequisite: Consent of instructor.

## **PY 511 RESEARCH METHODS IN CLINICAL PSYCHOLOGY I: RESEARCH DESIGN**

FALL ONLY/EVEN YEARS

3 credit hours

The Research Methods in Clinical Psychology series prepares students to conduct and evaluate research aimed at the investigation of clinical phenomena and the development of evidence-based clinical practices. The first course in the series focuses on research design, including experimental, quasi-experimental, correlational, qualitative, single-case, and meta-analysis methodologies. Students also study historical and current trends in the literature addressing research on psychopathology, assessment, psychotherapy, and prevention. Prerequisite: Consent of instructor.

## **PY 512 RESEARCH METHODS IN CLINICAL PSYCHOLOGY II: STATISTICS**

SPRING ONLY/ODD YEARS

3 credit hours

Hybrid

The Research Methods in Clinical Psychology series prepares students to conduct and evaluate research aimed at the investigation of clinical phenomena and the development of evidence-based clinical practices. The second course in the series focuses on statistics, including a brief review of univariate and bivariate techniques, followed by in-depth study of multivariate procedures such as multiple regression, analysis of covariance, multivariate analysis of variance and covariance, profile analysis, discriminant analysis, logistic regression, canonical correlation, and factor analysis. Prerequisites: PY511 and consent of instructor.

## **PY 521 CLINICAL ASSESSMENT I: ADULT**

FALL ONLY/ODD YEARS

3 credit hours

In the Clinical Assessment series, students learn to conduct a comprehensive diagnostic interview, and to administer, score, and interpret a variety of psychological assessment instruments, including measures of cognitive functioning, personality, and psychopathology. Students also learn to formulate treatment recommendations based on assessment data, write assessment reports, and give feedback to clients. Emphasis is placed on conducting culturally responsive clinical assessments through consideration of the literature on assessment with diverse populations. The first course in the series focuses on assessment with adults. During the semester, students conduct at least one clinical assessment with an adult client, including writing the assessment report and providing feedback to the client. Prerequisite: Consent of instructor.

## **PY 522 CLINICAL ASSESSMENT II: CHILD AND ADOLESCENT**

SPRING ONLY/EVEN YEARS

3 credit hours

In the Clinical Assessment series, students learn to conduct a comprehensive diagnostic interview, and to administer, score, and interpret a variety of psychological assessment instruments, including measures of cognitive functioning, personality, and psychopathology. Students also learn to formulate treatment recommendations based on assessment data, write assessment reports, and give feedback to clients. Emphasis is placed on conducting culturally responsive clinical assessments through consideration of the literature on assessment with diverse populations. The second course in the series focuses on assessment with children and adolescents. During the semester, students conduct at least one clinical assessment with a child or adolescent client, including writing the assessment report and providing feedback to the parents and the client. Prerequisite: Consent of instructor.

## **PY 641 CLINICAL INTERVENTION I: COGNITIVE-BEHAVIORAL THERAPY**

FALL ONLY/EVEN YEARS

3 credit hours

The first Clinical Intervention course provides a comprehensive overview of cognitive and behavioral approaches to psychotherapy, including their application in the treatment of specific disorders. A multicultural emphasis is used to examine how cultural knowledge can enhance the effective and appropriate use of the different therapeutic methods. During the semester, students engage in cognitive-behavioral therapy with clients through the Graduate Practicum in Clinical Psychology. Prerequisite: Consent of instructor. Corequisite: PY692a.

## **PY 642 CLINICAL INTERVENTION II: CHILD AND ADOLESCENT THERAPY**

SPRING ONLY/ODD YEARS

3 credit hours

Hybrid

The second Clinical Intervention course provides a comprehensive overview of the various approaches to conducting psychotherapy with children and adolescents, including consideration of the role of the therapist in working with parents, schools, and community agencies. A multicultural emphasis is used to examine how cultural knowledge can enhance the effective and appropriate use of the different therapeutic methods. During the semester, students engage in therapy with children and adolescents through the Graduate Practicum in Clinical Psychology. Prerequisite: Consent of instructor. Corequisite: PY692b.

## **PY 643 CLINICAL INTERVENTION III: FAMILY SYSTEMS THERAPY**

FALL ONLY/ODD YEARS

3 credit hours

The third Clinical Intervention course provides a comprehensive overview of family systems approaches to psychotherapy, including the application of systems theory across a diverse range of family structures and presenting problems. A multicultural emphasis is used to examine how cultural knowledge can enhance the effective and appropriate use of the different therapeutic methods. During the semester, students engage in family systems therapy with families through the Graduate Practicum in Clinical Psychology. Prerequisite: Consent of instructor. Corequisite: PY692c.

## **PY 644 CLINICAL INTERVENTION IV: EXISTENTIAL-HUMANISTIC THERAPY**

SPRING ONLY/EVEN YEARS

3 credit hours

The fourth Clinical Intervention course provides a comprehensive overview of existential and humanistic approaches to psychotherapy through the study of theoretical and literary works influenced by existentialist thought. A multicultural emphasis is used to examine how cultural knowledge can enhance the effective and appropriate use of the different therapeutic methods. During the semester, students engage in existential-humanistic therapy with clients through the Graduate Practicum in Clinical Psychology. Prerequisite: Consent of instructor. Corequisite: PY692d.

## **PY 692A GRADUATE PRACTICUM IN CLINICAL PSYCHOLOGY I**

FALL ONLY/EVEN YEARS

1 credit hour

The Graduate Practicum in Clinical Psychology provides students with the opportunity to gain supervised experience in clinical psychology practice at Isa Psychological Services Center or through external placement in a mental health or social service agency. Students are also required to attend a weekly seminar where they receive training and supervision in a particular therapeutic modality. In the first practicum, students learn various techniques associated with cognitive-behavioral therapy and see at least one client for weekly therapy employing the cognitive-behavioral approach. Students are required to complete a minimum of 100 practicum hours over the course of the semester. Prerequisite: Consent of instructor. Corequisite: PY641.

## **PY 692B GRADUATE PRACTICUM IN CLINICAL PSYCHOLOGY II**

SPRING ONLY/ODD YEARS

1 credit hour

The Graduate Practicum in Clinical Psychology provides students with the opportunity to gain supervised experience in clinical psychology practice at Isa Psychological Services Center or through external placement in a mental health or social service agency. Students are also required to attend a weekly seminar where they receive training and supervision in a particular therapeutic modality. In the second practicum, students learn various techniques for working with children and adolescents and see at least one child or adolescent client for weekly therapy. Students are required to complete a minimum of 100 practicum hours over the course of the semester. Prerequisite: Consent of instructor. Corequisite: PY642.

## **PY 692C GRADUATE PRACTICUM IN CLINICAL PSYCHOLOGY III**

FALL ONLY/ODD YEARS

1 credit hour

The Graduate Practicum in Clinical Psychology provides students with the opportunity to gain supervised experience in clinical psychology practice at Isa Psychological Services Center or through external placement in a mental health or social service agency. Students are also required to attend a weekly seminar where they receive training and supervision in a particular therapeutic modality. In the third practicum, students learn various techniques associated with family systems therapy and see at least one family for weekly therapy employing the family systems approach. Students are required to complete a minimum of 100 practicum hours over the course of the semester. Prerequisite: Consent of instructor. Corequisite: PY643.

## **PY 692D GRADUATE PRACTICUM IN CLINICAL PSYCHOLOGY IV**

SPRING ONLY/EVEN YEARS

1 credit hour

The Graduate Practicum in Clinical Psychology provides students with the opportunity to gain supervised experience in clinical psychology practice at Isa Psychological Services Center or through external placement in a mental health or social service agency. Students are also required to attend a weekly seminar where they receive training and supervision in a particular therapeutic modality. In the fourth practicum, students learn various techniques associated with existential-humanistic therapy and see at least one client for weekly therapy employing the existential-humanistic approach. Students are required to complete a minimum of 100 practicum hours over the course of the semester. Prerequisite: Consent of instructor. Corequisite: PY644.



## **PY 695A THESIS I**

FALL/SPRING/ALL YEARS

1 - 3 credit hours

The Master's Thesis provides an opportunity for students to complete a scholarly research project under the supervision of a thesis committee, comprised of a program faculty chairperson and at least two additional members. In the first thesis course, students begin collecting and analyzing their data and present the preliminary results at a formal progress meeting with their committee. Students are required to have their thesis proposal approved by their committee prior to enrolling in PY695a. Prerequisite: Consent of advisor.

## **PY 695B THESIS II**

FALL/SPRING/ALL YEARS

1 - 3 credit hours

The Master's Thesis provides an opportunity for students to complete a scholarly research project under the supervision of a thesis committee, comprised of a program faculty chairperson and at least two additional members. In the second thesis course, students complete their data collection and analysis, prepare a written draft of the thesis, and orally present their work at a formal thesis defense with their committee. Prerequisites: PY695a and consent of advisor.

## **PY 697 COMPREHENSIVE EXAM**

FALL/SPRING/ALL YEARS

0 credit hours

This course provides an opportunity to document the successful completion of the PRAXIS II or comprehensive exam. It is a way to ensure that a student's academic evaluation accurately reflects the additional requirement for PRAXIS II or comprehensive exam and does not provide a false indication that the student is ready to graduate.

## **PY 698A INTERNSHIP IN CLINICAL PSYCHOLOGY I**

FALL/SPRING/ALL YEARS

3 credit hours

The Internship in Clinical Psychology places students in a mental health or social service agency where they receive advanced training in the duties of a master's level clinical psychologist, including psychological assessment, psychotherapy, consultation, and report writing. Students are required to complete a minimum of 300 internship hours in each of the two internship courses (PY698a and PY698b). A total of 600 internship hours is required prior to graduation. Prerequisite: Consent of instructor.

## **PY 698B INTERNSHIP IN CLINICAL PSYCHOLOGY II**

FALL/SPRING/ALL YEARS

3 credit hours

The Internship in Clinical Psychology places students in a mental health or social service agency where they receive advanced training in the duties of a master's level clinical psychologist, including psychological assessment, psychotherapy, consultation, and report writing. Students are required to complete a minimum of 300 internship hours in each of the two internship courses (PY698a and PY698b). A total of 600 internship hours is required prior to graduation. Prerequisites: PY698a and consent of instructor.

## **SOCIOLOGY (SO)**

### **SO 101 INTRODUCTION TO SOCIOLOGY**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course is a study of human society, its diversity, its nature, structure, and processes including foundations of culture, social interaction, social controls, social change and cross-cultural relations. Special emphasis is given to social processes in Micronesia and the Western Pacific.

## **SO 201 CONTEMPORARY SOCIETY**

FALL ONLY/FALL ONLY

3 credit hours

Hybrid

An application of sociological principles to contemporary society.

## **SO 202 CONTEMPORARY SOCIAL PROBLEMS**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course is a study of the nature and root causes of social problems. Topics include such problems as inequality, crime population, environmental degradation and poverty. Students develop skills in critically analyzing their world and understand the causes and solutions to contemporary problems regionally and internationally.

## **SO 203 INTRODUCTION TO QUANTITATIVE AND QUALITATIVE RESEARCH METHODS**

FALL ONLY/ALL YEARS

3 credit hours

Online/Hybrid

This course gives undergraduate students experience in conducting quantitative and qualitative research on social issues relevant to the region. The course covers a wide range of topics dealing with processes, trends and approaches to basic research methodologies and designs found in the social sciences. The course examines the basic research methods of the social sciences, including causation, research design experimental designs, sampling data gathering techniques, data analysis and interpretation of research results. The course covers the structuring of social inquiry, conceptualization, operationalization, measurement, evaluation and presentation of first hand research. This course introduces students to the necessary tools needed for designing and implementing basic social science research. The rationale of this course is to introduce quantitative and qualitative empirical science to undergraduate students. Prerequisites: EN111, MA110, SO101 with a grade C or better or instructor's consent.

## **SO 221 SOCIOLOGY OF HEALTH AND MEDICINE**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This course introduces students to sociological perspectives of medical practice and health. We explore some of the major ways that health and medical practice are structured by global inequalities and by the inequalities of class, race, gender and nationality. We also explore how our everyday lives and identities are influenced by knowledge production in the field of medicine. The history of medicine and the medical profession will also be briefly explored.

## **SO 230 MARRIAGE AND THE FAMILY**

FALL/SPRING/ALL YEARS

3 credit hours

This is a comparative study of family relationships with special attention given to the social and cultural aspects of the family, mate selection, marriage adjustment, parental roles, and family stability. Prerequisites: SO101 or consent of instructor.

## **SO 302 DEVIANCE AND SOCIAL CONTROL**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This course offers a theoretical orientation into the study of deviance and relevant methodological consideration. It covers extent of and trends in different forms of deviance, a description of offenders and victims, the consequences of attempts at social control, and public opinion regarding various deviant acts. Prerequisite: SO101 or SO202 or consent of instructor.

## **SO 332 GLOBALIZATION AND HUMAN DYNAMICS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course examines representative peoples in various parts of the world with regard to selected themes concerning globalization and human dynamics. Themes explored may include ethnicity, multiculturalism, nation building, and tourism. Prerequisite: AN101 or SO101.

## **SO 342 SOCIOLOGY OF SEX AND GENDER**

FALL ONLY/EVEN YEARS

3 credit hours

This course examines traditional and contemporary views of gender roles and life chances for men and women in a social and cross-cultural context. It examines what relations exist between men and women and how women and men contribute to, negotiate with, and explore gender and traditional definitions of masculinity and femininity. Prerequisites: SO101 and SO230 or consent of instructor.

## **SO 344 AGING: MYTH AND REALITIES**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This course explores the major issues and concepts pertinent to gerontology, the study of the aging process. The prevailing theories of the social/biological aging process, and the economic, physical and psychological problems that might arise in late life are presented, and students learn how these factors impinge on the well-being of the older person and the social structure of a community. Aging as it occurs in different societies and throughout history is discussed. Social myths and stereotypes are explored. An overview of existing aging policies and special programs for the older population is included, as is a section on dying, death and grieving. Prerequisite: SO101 or consent of instructor.

## **SO 350 DEVELOPMENT OF SOCIOLOGICAL THEORY - CLASSICAL**

FALL ONLY/ALL YEARS

3 credit hours

Online/Hybrid

Classical Sociological Theory examines the thought of sociologists from Auguste Comte, Karl Marx, Emil Durkheim and Max Weber through the writings of the Chicago School in the United States. These classical sociological writings are critically examined as to their present impact on theory today. Prerequisite: SO101 or consent of instructor.

## **SO 351 DEVELOPMENT OF SOCIOLOGICAL THEORY - CONTEMPORARY**

SPRING ONLY/ALL YEARS

3 credit hours

This course introduces students to scholars who have had a significant influence on the practice of sociological research since the post-World War II era. We explore major genres of contemporary social theory including: structuralism, constructionism, post-structuralism, post-modernism, feminism, critical race theory, queer theory, performativity and other approaches deemed relevant by the instructor. Students learn to critically evaluate the strength and weaknesses of various theoretical approaches as they make connections between social theory and research practice in sociology. The final project requires students to describe the theoretical approach(es) they plan to use in their final research project for the sociology capstone course. Prerequisite: SO101.

## **SO 355 SOCIOLOGY OF WOMEN**

FALL ONLY/ODD YEARS

3 credit hours

The Sociology of Women is designed to make students more aware of themselves as women, or if they are male, of others as women. We learn to ask questions important to women because we still lack information obtained from women's points of view. The course is directed first toward the study of women and then toward the study of women in society as a whole. Prerequisite: SO101 or consent of instructor.

## **SO 360 SOCIAL MOVEMENTS AND CHANGE**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This course is the study of the nature and characteristics of society and the changes society is undergoing.

Prerequisite: SO101 or consent of instructor.

## **SO 386 JUVENILE DELINQUENCY AND CRIMINOLOGY**

SPRING ONLY/ALL YEARS

3 credit hours

Online

Students will learn the differences between juvenile delinquency, criminology, deviance and criminal justice.

This course applies the sociological perspective to the study of the nature, causes and origins of juvenile delinquency and crime. This course presents a critical evaluation of current theories of delinquency and criminal causation. Some questions that are addressed include: What is unique about the juvenile court system and the laws relating to juvenile offenders. How do institutional and no-institutional treatment programs for juveniles' function? How effective have the various delinquency control and prevention programs been? What is crime? How does behavior become labeled as criminal? What forces lead to criminal behavior becoming legalized, and legal behavior becoming criminalized, and who commits crimes? Prerequisite: SO-101 or consent of instructor.

## **SO 405 COMMUNITY DEVELOPMENT**

SPRING ONLY/ODD YEARS

4 credit hours

Hybrid

This course on Community Development at the University of Guam explores the values of respect, compassion, and community rooted in Micronesia and in the broader context of the Pacific Asia region. This course seeks to empower students to work for the betterment of their communities. Students learn from and engage with local organizations and participate in an international field school to Bali, Indonesia. Prerequisites: SO101 and consent of instructor

## **SO 405G COMMUNITY DEVELOPMENT**

SPRING ONLY/ODD YEARS

4 credit hours

This course on Community Development at the University of Guam explores the values of respect, compassion, and community rooted in Micronesia and in the broader context of the Pacific Asia region. This course seeks to empower students to work for the betterment of their communities. Students learn from and engage with local organizations and participate in an international field school to Bali, Indonesia. Prerequisites: SO101 and consent of instructor

## **SO 411 SOCIAL ISSUES IN MICRONESIA AND GUAM**

FALL ONLY/ALL YEARS

3 credit hours

Online/Hybrid

This course provides the student with an in-depth sociological understanding of current issues and problems facing Micronesian society today, a part which is Guam. A critical examination of drug and alcohol abuse, family violence, crime, environmental issues, health disparities, political status, suicide, economic disparity and development issues, and other relevant topics will be addressed. Prerequisites: SO101, SO203 or consent of instructor.

## **SO 414 RESEARCH METHODOLOGY IN SOCIOLOGY**

SPRING ONLY/ALL YEARS

3 credit hours

Online/Hybrid

This course covers the structuring of sociological inquiry, conceptualization, measurement and operationalization, and the use of bibliography, reference tools and research methods in Sociology. Presentation and cooperative evaluation of research materials, methods, and projects are required. Prerequisites: SO101, SO350 or by consent of instructor.

## **SO 418 SOCIAL STRATIFICATION**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This is a review of theory and research bearing on the institutional arrangement, individuals, roles and groups in hierarchical relationships known as systems of social stratification, with particular reference to differences between stratification in industrial and less developed societies. Prerequisite: SO101 and MA385, or consent of instructor.

## **SO 445 INEQUALITY AND IDENTITY**

FALL ONLY/EVEN YEARS

3 credit hours

This course is designed to raise awareness of the dynamics of race/ethnicity, class, and gender in the shaping of society. The course explores the problems of conflict and accommodation between groups in multicultural societies. It analyzes variations in levels of harmony and conflict between such groups. Students are required to carry out a research project analyzing some aspect of gender, class, or ethnicity in Micronesia. Prerequisites: SO101, SO202 or consent of instructor.

## **SO 455 SOCIOLOGY OF WOMEN**

FALL ONLY/ODD YEARS

3 credit hours

Hybrid

This course examines the ways in which gender and social structure shape conditions for women. In anticipating social structures and organizations that might influence women's lives, the course considers several areas such as the socialization of women, images of women, women in media, women and work, women and households, women and crime, and women and migration. Prerequisite: SO101 and SO230 or consent of instructor.

## **SO 475 HUMAN ECOLOGY: PROBLEMS AND SOLUTIONS**

FALL ONLY/ODD YEARS

3 credit hours

This course examines the relationship between human populations and their environments in the context of functional interdependence involving population, environment, organization and technology. Special attention is given to an examination of world population, geography, and an analysis of the causes, consequences and solutions to modern day social and environmental problems. Prerequisite: SO101, SO202 and MA385 or consent of instructor.

## **SO 480 SPECIAL TOPICS**

FALL/SPRING/ALL YEARS

3 credit hours

Hybrid

Special Topics Courses, such as the Sociology of Education, Sociology of Religion, Medical Sociology, Sociology of Government and Politics, etc. are offered intermittently as faculty resources permit. Students should keep aware of the current offerings in a given semester and plan their course selection accordingly. Prerequisites: SO101, SO350 and MA385, or consent of instructor. This course may be repeated for credit as the topic changes.

## **SO 491 SOCIOLOGICAL RESEARCH SEMINAR**

SPRING ONLY/ALL YEARS

3 credit hours

Hybrid

This course gives students experience in conducting sociological research as collaborators in faculty-supervised research projects. Students will complete a list of readings that are specific to the research project, assist in project planning, research design, data collection, and data analyses. Students will also collaborate (where appropriate) in the preparation and presentation of research findings. Prerequisite: SO101, SO414, MA385 or consent of instructor. May be repeated up to six credit hours.

## **SO 498 INTERNSHIP**

FALL/SPRING/ALL YEARS

1 - 6 credit hours

The internship program permits the student to utilize her/his academic experience in both the academic and non-academic realm through teaching assistantships, placement in financial, social service, health-related or other organizations in the community. Prerequisites: SO101, SO203, SO350, or consent of instructor. May be repeated up to six credit hours.

## **SOCIAL WORK (SW)**

### **SW 110 INTRODUCTION TO COMMUNITY SERVICES ON GUAM**

FALL/SPRING/ALL YEARS

3 credit hours

This course is about services available in Guam to meet human needs and to alleviate social problems. Principles of social justice, human rights, collective responsibilities and respect for diversities are introduced and discussed. Student learn to conceptualize human needs and human service organizations, and to explore and describe demographic characteristics and cultural diversities in Guam. Emphasis is on the development of knowledge from the perspective of consumers of human services and on skills necessary to locate, gain access to and effectively utilize such services. The course is a General Education course; for social work students, this is not a required course.

## **SW 201 SOCIAL WELFARE AND DEVELOPMENT: GLOBAL CHALLENGES**

FALL/SPRING/ALL YEARS

3 credit hours

Online

This introductory course critically examines social welfare and social development from an international and comparative perspective with a focus on the importance of institutional arrangements, cultural practices and values systems. The promotion of social, racial, economic and environmental justice to advance human rights is an intrinsic dimension of social development. Embedded in this global perspective, students learn about the evolving mission and purposes, roles and functions of professional social work. This course also assist students in reflecting on and learning the ethical use of technology. The course is a General Education course; for social work students, completing this course is a requirement to be admitted into the Bachelor of Social Work program.

### **SW 313 RESEARCH METHODS FOR HEALTH AND SOCIAL SERVICES**

SPRING ONLY/ALL YEARS

3 credit hours

This course offers an overview of quantitative and qualitative research methods and their application in health and social service systems to improve social work and health care practice, programs and policy. Course content includes ethical, culturally informed, anti-racist, and anti-oppressive strategies that address inherent biases in social work and health care practice; recognizing multiple ways of knowing and indigenous bodies of knowledge. Students learn to evaluate and critique research literature, develop research questions, collect and interpret data, and share research findings appropriately. The course is a required course for social work students, recommended to be taken in the first year of the BSW program. Prerequisite: MA151

### **SW 330 Generalist Social Work Practice Methods AND OVERVIEW**

FALL ONLY/ALL YEARS

3 credit hours

This is the first in a series of four social work practice methods courses, it offers an overview of theories and practice methods underlying generalist social work with individuals, couples, families, groups, organizations, and communities. Students begin to learn to integrate and apply social work knowledge, social work ethics, and skills in a culturally humble, competent and purposeful manner. Students learn to professionally engage with client systems, to assess resources, to collaboratively determine goals and to implement plans to achieve these goals, and finally to critically evaluate professional social work practice. The course is required and restricted to social work students who have been admitted into the BSW program. Students take this course in the first year of the BSW program.

### **SW 331 GENERALIST SOCIAL WORK PRACTICE METHODS WITH GROUPS**

SPRING ONLY/ALL YEARS

3 credit hours

This social work practice methods course offers theories and practice methods underlying generalist social work practice and has a strong focus on knowledge, values and skills development for working with a variety of groups in diverse settings; including culturally relevant meanings, practices and purposes of groups. Students learn professional social work skills pertaining to engagements with groups and their members, to assessing group structures and processes, to developing options for interventions and culturally appropriate evaluations of outcomes, and to manage personal and professional value conflicts and affective reactions. The course is required and restricted to social work students who have been admitted into the BSW program. Students take this course in the first year of the BSW program.

### **SW 332 GENERALIST SOCIAL WORK PRACTICE METHODS WITH ORGANIZATIONS AND COMMUNITIES**

FALL ONLY/ALL YEARS

3 credit hours

This generalist social work practice methods course offers theories and approaches underlying generalist social work practice with organization and communities, including the ethical use of technology and the use of consultations. Students learn culturally responsive ways of engaging with organizations and communities and managing value conflicts and affective reactions; of assessing contexts, structures and processes of organizations and communities; of developing and pursuing mutually agreed-on plans; and of critically evaluating effects of interventions on multiple levels. The course is required and restricted to social work students who have been admitted into the BSW program. Students take this course in the first year of the BSW program.

### **SW 333 GENERALIST SOCIAL WORK PRACTICE METHODS INDIVIDUALS AND FAMILIES**

SPRING ONLY/ALL YEARS

3 credit hours

This course is about generalist social work practice methods with families and individuals. Guided and framed by the professional Social Work Code of Ethics, it offers theories and approaches related to culturally competent engagement, assessment, intervention and evaluation of practice with families and individuals. Emphasis is given to the identification of inherent biases; the use of empathy, reflection and interpersonal skills, to the development and implementation of agreed-on plans, and to the culturally competent and critical evaluation of practice outcomes. The course is required and restricted to social work students who have been admitted into the BSW program. Students take this course in the first year of the BSW program.

### **SW 344 AGING: MYTH & REALITIES**

FALL ONLY/ALL YEARS

3 credit hours

This course explores the major issues and concepts pertinent to gerontology, the study of the aging process. The prevailing theories of the social/biological aging process, and the economics, physical and psychological problems that might arise in late life are presented, and students learn how these factors impinge on the well-being of the older person and the social structure of a community. Aging as it occurs in different societies and throughout history are discussed. Social myths and stereotypes are explored. An overview of existing aging policies and special programs for the older population is included, as is a section on dying, death and grieving.

### **SW 345 SOCIAL JUSTICE**

FALL ONLY/ALL YEARS

3 credit hours

This course presents historic backgrounds that have led to the injustices pertaining to contemporary social, racial, economic and environmental realities of today. It describes the current dynamics and consequences of various forms of human oppression and discrimination. Students learn to anchor generalist social work practice in advocacy for universal human rights, to critically analyze justice issues from diverse points of experiences, to identify structural foundations and barriers to change, to promote social change and to implement interventions that advance social, racial, economic and environmental justice. The course is a required course for social work students, it is recommended to be taken in the first year of the BSW program.

### **SW 350 HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT I**

FALL ONLY/ALL YEARS

3 credit hours

This course explores the reciprocal relationship between human behavior and social environments. Students learn theories of human behavior, person-in-environment, and other multidisciplinary theoretical frameworks to understand human behavior. The particular emphasis of this course is on human development from conception to young adulthood; including physical, emotional and intellectual developments. Students demonstrate cultural humility and competence when applying research findings to advance the understanding of human behavior in Micronesian environments. The course is a required course for social work students, it is taken in the first year of the BSW program.

### **SW 351 HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT II**

SPRING ONLY/ALL YEARS

3 credit hours

This course explores the reciprocal relationship between human behavior and social environments. Students learn theories of human behavior, person-in-environment, and other multidisciplinary theoretical frameworks to understand human behavior. The particular emphasis of this course is on human development from adulthood to death; including physical, emotional and intellectual developments. Students demonstrate cultural humility and competence when applying research findings to advance the understanding of human behavior in Micronesian environments. The course is a required course for social work students, it is recommended to be taken in the first year of the BSW program.



## **SW 355 HUMAN SEXUALITY**

SPRING ONLY/ALL YEARS

3 credit hours

This course offers a broad overview of human sexuality from a multidisciplinary perspective: including biological, psychological, sociological, cross-disciplinary and cross-cultural frameworks. It provides current information in the field today and contextualizes human sexuality within human rights and social, racial, and economic justice. The course provides an opportunity for students to reflect on their personal values, attitudes, beliefs, and behaviors regarding sexuality and to discuss and examine critical practice issues in his/her professional field. The course is an elective course for social work students.

## **SW 400 FIELDS OF SOCIAL WORK PRACTICE**

FALL/SPRING/ALL YEARS

3 credit hours

Each semester, this course examines the history, current policy issues and practice trends in a different field of social work practice; such as family and children's services, youth services, older adults, substance abuse, health care, disabilities, school social work, social work in the workplace, indigenous and international social work, etc.. Course offerings are based on an assessment of community needs and student interests. Students learn about the goodness of fit between their personal interests and the professional requirements of these fields for possible future career choices. The course is an elective course for social work students; with different subject matters every semester, this course may be taken more than once for credit.

## **SW 406 SOCIAL POLICY**

FALL ONLY/ALL YEARS

3 credit hours

This course focuses on current social policies within the context of historical and contemporary factors that shape social policy in U.S. territories. Students analyze political and organizational processes which influence policy formulation, implementation and evaluation within practice settings with individuals, families, organizations and communities. Students learn to use anti-racist and anti-oppressive lenses to identify inherent biases and to advance human rights and social, racial, economic, and environmental justice. The course is a required course for social work students, it is taken in the second year of the BSW program. Pre-requisite SW330 and SW345.

## **SW 408 ADVOCACY FOR SOCIAL JUSTICE**

SPRING ONLY/ALL YEARS

3 credit hours

This course is about practical ways of advancing social justice and human rights; including racial, economic and environmental justice on individual and system levels. Using the Social Work Code of Ethics, students learn to identify justice issues for diverse client systems, assess potentials for change and choose issues for justice advocacy. Students collaborate with each other and/or interest groups in the community to articulate goals and objectives for advocacy, they develop and implement action plans, use technology ethically, and they critically evaluate their advocacy efforts. The course is taken in the second year of the BSW program. Pre-requisite SW406.

## **SW 410 SOCIAL WELFARE AND SOCIAL DEVELOPMENT IN MICRONESIA**

FALL ONLY/ALL YEARS

3 credit hours

This course provides a brief historical review of Micronesia leading to a comparative description of young island nations in the Micronesia region. The course outlines how indigenous welfare practices have persisted, been destroyed, altered and reinvented in recent time periods. Students learn to use anti-racist and anti-oppressive social work lenses and practice approaches in the Micronesian context, to assess how welfare policies affect delivery and access to social services, and how to practice cultural humility and competence in Guam and the Micronesian Region. The course is a required course for social work students.

## **SW 460 BEHAVIORAL HEALTH PRACTICE FOR SOCIAL WORKERS**

FALL ONLY/ALL YEARS

3 credit hours

This course explores the roles of social workers in behavioral health settings, specifically as multi-disciplinary team members. It provides the basics in assessment, treatment, and evaluation of clinical disorders contained in the DSM-5. Students learn selected policies that govern this field of practice, to demonstrate professional behavior, to manage personal and professional value conflicts and affective reactions, to demonstrate respect for client self-determination, to use supervision and consultation, and to collaborate interprofessionally and interculturally. The course is a required course for social work students. Prerequisite SW333.

## **SW 480 FAMILY VIOLENCE**

SPRING ONLY/ALL YEARS

3 credit hours

This course examines family violence and family resilience in Guam and the Micronesian region from a cross-cultural, interactional and interdisciplinary practice perspective. Students learn about issues of family violence from the viewpoints of victims, members of their extended family, perpetrators, and those who intervene in pursuit of human rights and social justice for children and adult members of families. The course content is heavily based on local data and the practice experiences of local social workers. Students learn to engage with client systems, to respect client self-determination, assess challenges and opportunities, intervene and critically evaluate practice pertaining to family violence. The course is a required course for social work students.

## **SW 485A FIELD INSTRUCTION**

FALL ONLY/ALL YEARS

4 credit hours

Each student collaborates with his/her assigned field instructor to develop and carry out an individual learning contract for beginning generalist social work practice, through 210 field contact hours and 45 in-class seminar hours. In field instruction students demonstrate the mastery of all social work competencies which they learned in social work courses. Field instruction is required and restricted to BSW students.

## **SW 485B FIELD INSTRUCTION**

SPRING ONLY/ALL YEARS

4 credit hours

Each student collaborates with his/her assigned field instructor to develop and carry out an individual learning contract for beginning generalist social work practice, through 210 field contact hours and 45 in-class seminar hours. In field instruction students demonstrate the mastery of all social work competencies which they learned in social work courses. Field instruction is required and restricted to BSW students.

## **THEATRE (TH)**

### **TH 101 INTRODUCTION TO THE THEATER**

FALL/SPRING/ALL YEARS

3 credit hours

This course introduces the study of theater. Course lectures include theater history and production practices. Attendance at University Theater production is mandatory. Active participation in one University Theater production, as cast or crew, is required. (Grading System: A-B-C-D-F-NC).

### **TH 102 ACTING I**

FALL/SPRING/ALL YEARS

3 credit hours

This is an experiential-based course, which prepares students to acquire a crucial understanding of the art of acting and its relationship to dramatic art as a whole. A brief overview of the evolution of acting styles from a classical external-based approach to a modern internal-based approach may be introduced to further enhance the student's awareness and appreciation of the development of acting.

### **TH 105 STATECRAFT**

FALL ONLY/EVEN YEARS

3 credit hours

This is an introduction to stagecraft with practical work in the scene shop and on University Theater productions. It consists of two one-hour lectures and one three-hour afternoon workshop each week.

### **TH 202 ACTING II**

SPRING ONLY/EVEN YEARS

3 credit hours

Acting II is a continuation of TH102. It offers continued work on character development, scene study, and moves into advanced improvisational techniques. Prerequisite: TH102 (with grade of "B" or better) or Consent of Instructor.

## **TH 205 STAGE MANAGEMENT**

FALL ONLY/ODD YEARS

3 credit hours

This is an introduction to the organization of live performing organizations and the effective management of performing artists. Students will analyze scripts, prepare prompt books and gain practical experience on a University Theater production.

### **TH 292 THEATER PRACTICUM**

FALL/SPRING/ALL YEARS

1 credit hour

This course offers supervised participation in a University Theater production. Students gain practical experience while exploring the various areas of theater production. It may be repeated for credit. Prerequisite: Must be a Fine Arts/Theater major or minor or have consent of instructor.

### **TH 308 DIRECTING**

FALL ONLY/ODD YEARS

3 credit hours

This course includes selecting, analyzing, casting and rehearsing a one-act play performed for a selected audience. Prerequisite: TH202 or consent of instructor.

### **TH 315 SCENIC DESIGN**

SPRING ONLY/EVEN YEARS

3 credit hours

This is an exploration of the principles and elements of theatrical design with an emphasis on scenery design and painting. Students will complete design projects, build models and work with paint elevation.

### **TH 316 LIGHTING DESIGN**

SPRING ONLY/ODD YEARS

3 credit hours

This is an exploration of the principles and elements of theatrical design with an emphasis on lighting design and sound technology. Students learn the technology involved in live lighting and sound production and generate design projects.

## **TH 392 ADVANCE THEATRE PRACTICUM**

FALL/SPRING/ALL YEARS

2 credit hours

CRSE UOG Theatre production in a major role or capacity. Students gain practical experience while furthering skills in the various areas theatre production. It may be repeated for credit. Prerequisite: TH 292 or consent of instructor.

## **TH 394 SPECIAL TOPICS: VOICE AND SPEECH**

AS REQUIRED

3 credit hours

This course introduces student to major schools of actor voice work, giving them the tools to access emotion and inner life through freedom of breath and to harness that emotion into powerful expression. The course also introduces students to foundational tools for dialect study. Prerequisite: Instructor Consent.

## **TH 425 THEATER HISTORY I**

FALL ONLY/EVEN YEARS

3 credit hours

This is a comprehensive survey of Western and Oriental Theater from earliest times to 1700.

## **TH 426 THEATER HISTORY II**

SPRING ONLY/ODD YEARS

3 credit hours

This is a comprehensive survey of Western and Oriental Theater from 1700 to the present.

## **TH 480 PROJECTS IN THEATRE**

3 credit hours

This course offers students the opportunity to demonstrate specific theatre production skills under supervised participation. Students gain practical leadership experience while mastering skills in a specific art of theatre production. Prerequisite: TH-292 and TH-393 or consent of instructor.

## **WOMEN&GENDER STUDIES (WG)**

### **WG 101 INTRODUCTION TO WOMEN & GENDER STUDIES**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course provides an introduction to basic concepts and key issues in women and gender studies, utilizing a life-span approach. Topics include gender socialization and identity formation, sexuality, cultural representations, gender relations, family, work, class stratification, violence, constructions of masculinity, and oppression, as well as racial and cultural diversity.

### **WG 201 GENDER AND SOCIETY**

FALL ONLY/ALL YEARS

3 credit hours

Online

Using the slogan, 'the personal is political' as a guiding principle, this course investigates some of the predominant trends in feminist research, thought and activism historically as well as in contemporary society focusing specifically on the dynamics of individual experience and collective activities.

### **WG 230 MARRIAGE AND THE FAMILY**

FALL/SPRING/ALL YEARS

3 credit hours

This is a comparative study of family relationships with special attention given to the social and cultural aspects of the family, mate selection, marriage adjustment, parental roles, and family stability. Prerequisites: SO101 or consent of instructor.

## **WG 323 LITERATURE BY WOMEN**

FALL ONLY/ALL YEARS

3 credit hours

Online/Hybrid

This course explores representative literature by women around the globe and across time. The course reading covers a variety of literary forms which may include the novel, short story, poetry and such non-fiction as essays, journals, and diaries. Students acquire an understanding of these various literary forms and how women writers have used them to express religious, political, social and philosophical concerns. They also are introduced to a growing body of feminist literary theory. This course allows students to gain an understanding of the social-historical place of literature by women. Prerequisite: EN111; any 200-level literature course or consent of instructor.

## **WG 380 WOMEN, POLITICS AND POLICY**

FALL ONLY/EVEN YEARS

3 credit hours

This course examines the ways in which gender structures the arena of politics and shapes our understanding of it. Students learn how the meaning of "politics" is articulated and transformed by women in different settings at the local, national, regional and international levels. Prerequisite: PS101 or WG101.

## **WG 391 SELECTED STUDIES IN WOMEN AND GENDER STUDIES**

FALL ONLY/ALL YEARS

3 credit hours

This course is dedicated to a specific in-depth investigation of an area of women and gender studies. The course content will vary each time the course is offered and can be taken more than one for credit. Examples include: masculinity, women and art, gay/lesbian/transgender cultures, women's memoir and life-writing, gender and popular culture, gender and international development, and women, labor and the economy. Prerequisite: WG101.

## **WG 455 PSYCHOLOGY OF WOMEN**

SPRING ONLY/ALL YEARS

3 credit hours

Online

This course offers a study of women through feminist scholarship and research. It is designed to introduce students to the myriad factors influencing the development of girls and women in a variety of cultures and societies, including Micronesia. Areas covered include feminist scholarship and research; gender socialization, women's biology and (mental) health; sexuality; victimization and abuse; work career, and power issues. Prerequisite: PY101.

## **WG 455G PSYCHOLOGY OF WOMEN**

SPRING ONLY/EVEN YEARS

3 credit hours

This course offers a study of women through feminist scholarship and research. It is designed to introduce students to the myriad factors influencing the development of girls and women in a variety of cultures and societies, including Micronesia. Areas covered include feminist scholarship and research; gender socialization, women's biology and (mental) health; sexuality; victimization and abuse; work career, and power issues. Prerequisite: PY101.

## **WG 461 PACIFIC WOMEN WRITERS**

SPRING ONLY/ODD YEARS

3 credit hours

This course entails an intensive study of representative works of Pacific Women Writers to acquaint students with the contours of this emerging literature in terms of styles, themes, symbols, images, language, politics, and subject. Students will gain an understanding of the place of this literature in the larger context of Pacific Literature, Women's Literature, Minority Literature and Contemporary Literature in English. Prerequisite: EN111; Any 200-level literature course or consent of instructor.

## **WG 461G PACIFIC WOMEN WRITERS**

SPRING ONLY/EVEN YEARS

3 credit hours

This course entails an intensive study of representative works of Pacific Women Writers to acquaint students with the contours of this emerging literature in terms of styles, themes, symbols, images, language, politics, and subject. Students will gain an understanding of the place of this literature in the larger context of Pacific Literature, Women's Literature, Minority Literature and Contemporary Literature in English. Prerequisite: EN111; Any 200-level literature course or consent of instructor.

## **WG 490 SPECIAL PROJECT**

AS REQUIRED

3 credit hours

LANGUAGE:CHINESE (CI)

## **CI 101 ELEMENTARY CHINESE (MANDARIN) I**

AS REQUIRED

4 credit hours

Online

This is a beginning course in Mandarin Chinese with emphasis on listening, speaking, writing and grammar.

## **CI 102 ELEMENTARY CHINESE (MANDARIN) II**

AS REQUIRED

4 credit hours

This course is a continuation of CI101. Emphasis is on improving on and adding to the oral-aural competency gained in CI101. Reading in the Chinese language are also stressed, and more complex language structures and concepts are taught. Prerequisite: CI102 or the equivalent skill level.

## **CI 201 INTERMEDIATE CHINESE (MANDARIN) I**

AS REQUIRED

4 credit hours

This is the third semester of Mandarin Chinese. Emphasis is placed on advanced conversation, reading, and writing. Prerequisite: CI101 and CI102 or the equivalent skill level.

## **CI 202 INTERMEDIATE CHINESE (MANDARIN) II**

AS REQUIRED

4 credit hours

This is the fourth semester of Mandarin Chinese. Emphasis is placed on advanced conversation, reading, and writing. Prerequisite: CI101, CI102, and CI201 or the equivalent skill level.

LANGUAGE: CHUUKESSE (CK)

## **CK 101 CONVERSATIONAL CHUUKESSE**

AS REQUIRED

4 credit hours

The purpose of this course is to teach basic conversational skills in Chuukese to students who begin the course with little or no formal training in the language.

## **CK 210 NEW CHUUKESSE ORTHOGRAPHY**

AS REQUIRED

4 credit hours

The purpose of this course is to teach the Chuukese new orthography to students with some oral proficiency in the language. Students taking this course are taught to spell words uniformly based on the Chuukese dialect spoken by most Chuukese. Prerequisite: CK101 or permission of instructor.

LANGUAGE: CHAMORRO (CM)

## **CM 101 ELEMENTARY CHAMORU I**

FALL ONLY/ALL YEARS

4 credit hours

Hybrid

This is a beginning course with emphasis on oral-aural competency.

## **CM 102 ELEMENTARY CHAMORU II**

SPRING ONLY/ALL YEARS

4 credit hours

This is a continuation of CM101. Emphasis is on improving and adding to the oral-aural competency gained in CM101. Reading in the CHamoru language is also introduced, and more complex language structures and concepts are taught. Prerequisite: CM101; two-year high school CHamoru , or consent of instructor.

## **CM 110 INTRO TO CHAMORU STUDIES**

FALL ONLY/ALL YEARS

3 credit hours

Online/Hybrid

This course will introduce students to the interdisciplinary approach to CHamoru Studies as a community engaged academic discipline. It provides a broad survey of major issues and concerns specific to CHamoru society in both historical and contemporary contexts. The course emphasizes CHamoru perspectives, experiences, and systems of knowledge as an effective frame work for students to use in their ongoing critical engagement with local, region, and global issues. The course includes a considerable service-learning and community engagement component that compels students to connect their academic study of CHamoru Studies with the communities, organization, and efforts outside of the university campus.

## **CM 201 INTERMEDIATE CHAMORU I**

FALL ONLY/ALL YEARS

4 credit hours

This is an intermediate level Chamorro language course, which continues the oral-aural development of CM101 and CM102. Vocabulary development and expansion continues; however, the primary emphasis is on comprehending and utilizing more complicated language structures in the Chamorro language, as well as application and usage of the numerous affixation processes. Reading comprehension and reading skills are introduced. Prerequisite: CM102, or consent of instructor.

## **CM 202 INTERMEDIATE CHAMORU II**

SPRING ONLY/ALL YEARS

4 credit hours

CM202 is the second semester, second year CHamoru course, which is a continuation of CM201 Intermediate CHamoru I. Vocabulary development and expansion continues in four designated specialized areas; however, the primary emphasis is on comprehending and utilizing more advanced language structures. Prerequisite: CM201.

## **CM 210 CHAMORU STUDIES AND PRACTICE**

FALL/SPRING/ALL YEARS

3 credit hours

Online/Hybrid

This course explores CHamoru art forms and practices. It examines the ways in which such forms and practices reflect the ways of life and beliefs of the indigenous people of the Marianas. Each semester, the course will focus on a selected art form or practice. Students may repeat the course once with a different topic.

## **CM 232 MICRONESIAN SEAFARING SYSTEM**

FALL ONLY/ALL YEARS

3 credit hours

This course is an introduction to the Micronesian seafaring system. Particular emphasis is placed on building skills for constructing canoe houses and canoes. In this course, students gain knowledge in navigation, plant use, ocean and weather patterns, and indigenous mathematical measurements.

## **CM 294 SPECIAL STUDIES**

FALL ONLY/FALL ONLY

3 credit hours

## **CM 301 ADVANCED CHAMORU I - READING**

FALL ONLY/EVEN YEARS

4 credit hours

This course emphasizes reading competency, further development of oral-aural skills, and the phonological and morphological structures of the CHamoru language. Prerequisites: CM201 and CM202 or consent of instructor.

## **CM 302 ADVANCED CHAMORU II-WRITING**

SPRING ONLY/ODD YEARS

4 credit hours

This course emphasizes writing competency, further development of oral-aural skills, and the syntactical and semantic structures of the CHamoru language, and CHamoru orthography. Prerequisites: CM202 and CM301 or consent of instructor.

## **CM 332 TRADITIONAL NAVIGATION**

SPRING ONLY/ALL YEARS

3 credit hours

This course gives students an understanding on Micronesian traditional navigation as part of the seafaring system. This system includes knowledge and skills taught in the canoe house, including understating of the living environment, to the highly specialized skills in canoe and structural building, traditional healing, weather predictions, and traditional navigation. It provides understanding of navigational elements such as wind and wave patterns, and indigenous cosmology. The course will also explain Micronesian wayfinding through complex ?etak? and system of estimation and dead reckoning. Prerequisite: Consent of Instructor.

## **CM 340 CHAMORU CULTURE**

FALL ONLY/ALL YEARS

3 credit hours

Online

This course critically examines and re-evaluates historic and contemporary representation of CHamoru culture. Dance, music, change, storytelling, graphic and textile are, and other cultural forms are set alongside a background understanding of culture as a dynamic expression of changing historical, social, political, environmental, economic, and other conditions in the Mariana Islands from ancient to contemporary times. This course employs an interdisciplinary approach to critically exploring these cultural forms and the varying contexts out of which they arise. This exploration will be conducted while considering the larger issue surrounding the politics of cultural representation to include identity, modernity, adaptation and resistance, debates of over authenticity, ownership and appropriation, and the ongoing CHamoru cultural renaissance of the 21st century. Prerequisites: CM102 and CM110, or consent of instructor.

## **CM 390 SPECIAL PROJECT**

3 credit hours

## **CM 394 SS: MICRONESIAN SEARARING: LEGENDS, Cchan**

SUMMER/SUMMER ONLY

3 credit hours

## **CM 412 TOPICS IN CHAMORU STUDIES**

SPRING ONLY/ODD YEARS

3 credit hours

This course is an intensive study of a specific topic or theme relative to historical analysis of the Mariana Islands colonial legacy and contemporary issues including CHamoru cultural survival, land, social and economic development, political status, religion, and modern modes of scholarly inquiry in the Mariana Islands. Prerequisite: CM340 or consent of instructor. This course is to be taught concurrently with Existing GUAM/CHamoru STUDIES (MI512)

## **CM 432 MICRONESIAN CANOE BUILDING**

3 credit hours

This course gives students an understanding on the concept of the Micronesian (proa) canoe as part of the seafaring systems. This system includes an array of Indigenous knowledge and skills taught in the canoe house, beginning with basic understanding of the living environment, to the highly specialized skills in canoe building and traditional navigation. The course will provide the basic safety handling on tools, phases of canoe building and designs using traditional measurements, and multifunctionality of canoe components. Prerequisite: CM-394 or consent of instructor.



## **CM 491 CHAMORU STUDIES SENIOR CAPSTONE**

SPRING ONLY/ODD YEARS

3 credit hours

The senior capstone course provides an opportunity for students to complete a capstone project that integrates the learning objectives identified by the CHamoru studies program with the mission of the University and the broader community. Students will be able to choose from several options for their capstone project that may include research, demonstration, or creative expression. All capstone projects will be delivered in the CHamoru language. Prerequisites: CM302 and consent of Instructor.

## **CM 494 SPECIAL STUDIES**

AS REQUIRED/AS REQUIRED

3 credit hours

LANGUAGE:FRENCH (FR)

## **FR 101 ELEMENTARY FRENCH I**

AS REQUIRED

4 credit hours

This is a beginning course with emphasis on grammar, conversation, reading, and French culture.

## **FR 102 ELEMENTARY FRENCH II**

AS REQUIRED

4 credit hours

This is a continuation of FR 101. It introduces students to further basic language skills. Prerequisite: FR101 or equivalent.

LANGUAGE:GERMAN (GN)

## **GN 101 ELEMENTARY GERMAN I**

AS REQUIRED

4 credit hours

This course includes a systematic coverage of the essentials of German, teaching communication by oral and written drills, reading practice, and listening experience. Selected text provides an introduction to German history and culture.

## **GN 102 ELEMENTARY GERMAN II**

AS REQUIRED

4 credit hours

This is a continuation of GN101. It introduces students to further basic language skills. Prerequisite: GN101 or equivalent.

LANGUAGE:JAPANESE (JA)

## **JA 101 ELEMENTARY JAPANESE I**

FALL/SPRING/ALL YEARS

4 credit hours

Online/Hybrid

This course provides beginners with basic skills in listening, speaking, reading and writing in Japanese. Special Emphasis is on oral-aural skills.

## **JA 102 ELEMENTARY JAPANESE II**

FALL/SPRING/ALL YEARS

4 credit hours

Online

This is a continuation of Elementary Japanese I with increasing emphasis on reading and writing skills. Prerequisite: JA101 with a grade of C or better or equivalent.

## **JA 105 BUSINESS JAPANESE I**

AS REQUIRED

4 credit hours

This is an alternative second semester course for Elementary Japanese, introducing the student to the vocabulary and practices peculiar to doing business with Japanese. This course (like JA102) completes the GE requirement in language. Language lab required. Prerequisite: JA101.

## **JA 201 INTERMEDIATE JAPANESE I**

FALL ONLY/EVEN YEARS

4 credit hours

Online/Hybrid

This is a course continuing the development of oral-aural, reading and writing skills begun at the elementary level. Prerequisites: JA102 with a grade of C or better or equivalent, or demonstrated control of its content.

## **JA 202 INTERMEDIATE JAPANESE II**

SPRING ONLY/ODD YEARS

4 credit hours

Hybrid

This is a course with emphasis on reading competency and further development of oral-aural skills. Prerequisite: JA201 with a grade of C or better or equivalent or demonstrated control of its content.

## **JA 215 JAPANESE FOR TOURISM**

SPRING ONLY/ALL YEARS

4 credit hours

This course is designed to develop Japanese Language skills and cultural knowledge for the use in the tourism industry on Guam. Prerequisites: JA101 with a grade of C or better or equivalent, or consent of instructor.

## **JA 217 JAPANESE CULTURE AND SOCIETY**

FALL ONLY/ALL YEARS

3 credit hours

Hybrid

This course introduces some issues in contemporary Japanese society and examines how social and cultural factors influence social behaviors of the Japanese. A variety of videos will be used, as well as cultural demonstrations and guest speakers.

## **JA 301 THIRD YEAR JAPANESE I**

FALL ONLY/ODD YEARS

4 credit hours

Hybrid

This course continues the emphasis on reading competency and further development of oral-aural skills. Prerequisite: JA202 with a grade C or better or equivalent, or consent of instructor.

## **JA 302 THIRD YEAR JAPANESE II**

SPRING ONLY/EVEN YEARS

4 credit hours

Hybrid

This is a continuation of Third Year Japanese I. Prerequisites: JA301 or demonstrated control of its content.

## **JA 401 FOURTH YEAR JAPANESE I**

AS REQUIRED

4 credit hours

Hybrid

This is a course with primary emphasis on reading authentic Japanese materials, i.e., newspapers, magazines, novels, rather than material developed for instructional purposes. Prerequisites: JA302 or demonstrated control of its content.

## **JA 402 FOURTH YEAR JAPANESE II**

AS REQUIRED

4 credit hours

This is a continuation of the reading of authentic Japanese materials. After completion of this course, the student should be able to read most Japanese publications. Prerequisites: JA401 or demonstrated control of its content.

## LANGUAGE: KOREAN (KO)

### KO 101 ELEMENTARY KOREAN I

FALL/SPRING/ALL YEARS

4 credit hours

Online

This is an introductory course in Korean language. Students study fundamental of the language, including listening, speaking, reading, writing, vocabulary, and grammar, develop oral communication skills in context and Korean cultural awareness.

### KO 102 ELEMENTARY KOREAN II

FALL/SPRING/ALL YEARS

4 credit hours

Hybrid

This is a continuation of KO101 Elementary Korean I. This course focuses on strengthening student's knowledge in Korean Language, including listening, speaking, reading, writing, vocabulary and grammar as well as developing context-base oral communication skills and increasing Korean cultural awareness. Prerequisite: KO-101 with a final grade of C or better in KO-101.

## LANGUAGE:POHNPEIAN (PN)

### PN 101 CONVERSATIONAL POHNPEIAN

AS REQUIRED

4 credit hours

The purpose of this course is to teach basic conversational skills in Pohnpeian to students who begin the course with little or no formal training in the language.

## LANGUAGE:SPANISH (SN)

### SN 101 ELEMENTARY SPANISH I

FALL/SPRING/ALL YEARS

4 credit hours

Online/Hybrid

This is a beginning course with emphasis on grammar, conversation, reading, and Spanish culture.

## SN 102 ELEMENTARY SPANISH II

FALL/SPRING/ALL YEARS

4 credit hours

Online

This is a continuation of SN101. It introduces students to further basic language skills. Prerequisite: SN101 or equivalent.

## LANGUAGE:TAGALOG (TA)

### TA 101 CONVERSATIONAL TAGALOG I

FALL/SPRING/ALL YEARS

4 credit hours

This is a beginning course, with emphasis on grammar, conversation, reading, writing and Tagalog culture.

### TA 102 CONVERSATIONAL TAGALOG II

SPRING ONLY/ALL YEARS

4 credit hours

This course is a continuation of TA101. Further skills on grammar, conversation, and reading of Tagalog are covered.

### TA 186 TAGALOG LNGE WKSP IN THE PHILIPPINES

AS REQUIRED

4 credit hours

This is a travel course that builds on skills development in Tagalog 101, with emphasis on conversation, grammar, reading and writing of Tagalog, along with an emphasis on learning and understanding Philippines culture and history. Prerequisite: TA101 and Consent of Instructor.