

ECU COURSE CATALOG

2025-2026 ENVIRON. HEALTH SCIENCE COURSES

EHS-1114 Introduction to Environmental Health Science 4 Credits

STUDY OF THE INTERACTIONS BETWEEN HUMANS AND THEIR ENVIRONMENT AND THE ADMINISTRATIVE AND PHYSICAL MEASURES USED TO PROTECT HUMAN HEALTH AND THE NATURAL ENVIRONMENT. EMPHASIS GIVEN TO ENVIRONMENTAL AND PUBLIC HEALTH TOPICS OF CURRENT CONCERN. Required Previous or Concurrent: Class Pre-requisite(s): 19 on ACT-Science or SAT equivalent, PHSCI-0123, or Placement exam.

EHS-1114L Introduction to Environmental Health Science Lab 0 Credits

LAB FOR EHS-1114 Required Concurrent: EHS-1114

EHS-2223 Watershed Management 3 Credits

A BASIC INTRODUCTION TO WATERSHED MANAGEMENT. THE COURSE COVERS THE MOST IMPORTANT WATERSHED MANAGEMENT TOPICS, ABOUT WHICH WATERSHED MANAGERS, LOCAL OFFICIALS, INVOLVED CITIZENS, DECISION MAKERS, NATURAL RESOURCE MANAGERS AND OTHERS SHOULD HAVE AT LEAST AN INTRODUCTORY LEVEL OF KNOWLEDGE. THE COURSE IS AN EXPANDED VERSION OF THE US-EPA'S WATERSHED ACADEMY, AND STUDENTS WHO SUCCESSFULLY COMPLETE THE COURSE WILL RECEIVE CERTIFICATION.

EHS-2313 Solid and Hazardous Waste Management 3 Credits

A COMPREHENSIVE STUDY OF THE SOLID WASTE PROBLEM WITH EMPHASIS ON RCRA AND HAZARDOUS WASTE MANAGEMENT.

EHS-2413 Radiologic Health 3 Credits

AN INTRODUCTION IN RADIOLOGICAL HEALTH INCLUDING SOURCES OF RADIATION, TYPES OF RADIATION, DETECTION AND CONTROL MEASURES, AND PERSONNEL PROTECTION FROM RADIATION SOURCES.

EHS-2613 Occupational Health & Safety 3 Credits

AN INTRODUCTION TO THE OCCUPATIONAL HEALTH AND SAFETY ACT OF 1970. THE COURSE INCLUDES THE RECOGNITION, EVALUATION, AND CONTROL OF HEALTH AND SAFETY HAZARDS IN THE WORK ENVIRONMENT.

EHS-2713 Environmental Economics 3 Credits

A STUDY OF THE BASIC PRINCIPLES OF ECONOMICS, AND THEIR IMPLICATIONS AND APPLICATIONS TO ENVIRONMENTAL POLICY, REGULATION AND ENVIRONMENTAL HEALTH SCIENCE.

EHS-2881 Special Studies- 1 Credit

DIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.

EHS-2882 Special Studies- 2 Credits

DIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.

EHS-2883 Special Studies- 3 Credits

DIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.

EHS-2884 Special Studies- 4 Credits

DIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.

EHS-3114 Epidemiology 4 Credits

A STUDY OF THE ETIOLOGY AND CHARACTERISTICS OF THE PRINCIPAL DISEASES OF MAN AND THE CONTROL OF INFECTED INDIVIDUALS AND ENVIRONMENTS. METHODS OF PRESENTING AND INTERPRETING EPIDEMICITY AND ENDEMICITY ARE PRESENTED. LABORATORY AND FIELD EXPERIENCES ARE PROVIDED. Required Previous: MATH-1513

EHS-3114L Epidemiology Lab 0 Credits

LAB FOR EHS-3114 Required Concurrent: EHS-3114

EHS-3153 Policy and Practices in Environmental Health 3 Credits

THE LEGAL AND FINANCIAL BASIS OF ENVIRONMENTAL AND PUBLIC HEALTH PROGRAMS, POLICIES AND MANAGEMENT PRACTICES UTILIZED TO PROTECT

INDIVIDUAL, COMMUNITY, AND OCCUPATIONAL HEALTH. TOPICS INCLUDE STATE AND FEDERAL AGENCIES AND THEIR REGULATION OF AIR, WATER, WASTE, AND OCCUPATIONAL HEALTH.

EHS-3543 Water Resources 3 Credits

A COMPREHENSIVE STUDY OF WATER RESOURCES WITH SPECIAL EMPHASIS ON PROTECTION OF WATER QUALITY AND REMEDIATION OF CONTAMINATED WATER RESOURCES. Required Previous: EHS-1114

EHS-3553 Environmental Contaminants 3 Credits

A STUDY OF AIR AND WATER QUALITY. TOPICS INCLUDE POLLUTION SOURCES, EFFECTS, DISTRIBUTION, ASSESSMENT, CONTROL AND TREATMENT MEASURES. Required Previous: CHEM-1114

EHS-3603 Air Quality 3 Credits

THE FUNDAMENTALS OF AIR POLLUTION PHENOMENA, EFFECTS, AND APPLICABLE CONTROL MEASURES. Required Previous: CHEM-1114

EHS-3703 Biostatistics 3 Credits

A STUDY OF STATISTICAL METHODS COMMONLY USED IN ENVIRONMENTAL AND LIFE SCIENCE. TOPICS INCLUDE DESCRIPTIVE AND INFERENTIAL STATISTICS AND OTHER RELATED CALCULATIONS. Required Previous: MATH-1513

EHS-3803 Toxicology and Waste Management 3 Credits

A STUDY OF SOLID AND HAZARDOUS WASTE MANAGEMENT AND REDUCTION. INVESTIGATION INTO THE TOXIC PROPERTIES OF SUBSTANCES ALONG WITH MANAGEMENT PRACTICES FOR THESE CHEMICALS WITH EMPHASIS ON THE PROTECTION OF HUMAN HEALTH. Required Previous: CHEM-1114

EHS-4013 Native American Environmental and Health Issues 3 Credits

A STUDY OF THE RANGE OF ENVIRONMENTAL AND HEALTH ISSUES IMPACTING NATIVE AMERICANS PAST AND PRESENT. INCLUDED IN THE STUDY IS A HISTORY OF THESE ISSUES FROM FIRST CONTACT, THE RESERVATION PERIOD, CREATION OF THE INDIAN HEALTH SERVICE TO SELF-GOVERNANCE. Required Previous: EHS-1114

EHS-4113 Institutional Environmental Health 3 Credits

RECOGNITION, EVALUATION, AND CONTROL MEASURES OF VARIABLES AFFECTING THE ENVIRONMENTAL HEALTH ASPECTS OF WORK HABITS, SCHOOLS, CAMPS, HOSPITALS, NURSING HOMES, DAY CARE CENTERS, AND OTHER PUBLIC FACILITIES ARE PRESENTED. Required Previous: EHS-1114

EHS-4143 Food Hygiene and Consumer Protection 3 Credits

A STUDY OF THE HEALTH EFFECTS OF FOOD AND MILK BORNE DISEASES, INCLUDING A DISCUSSION OF FOOD AND MILK AS VEHICLES OF INFECTION, ESSENTIALS OF MILK AND FOOD QUALITY, AND STANDARDS FOR FOOD SERVICE EQUIPMENT. Required Previous: EHS-1114

EHS-4203 Community Health 3 Credits

A STUDY OF COMMUNITY HEALTH'S HISTORY, PROGRESSION, AND PROMOTION OF PREVENTIVE METHODS. CURRENT ISSUES IN ENVIRONMENTAL/COMMUNITY HEALTH ARE REVIEWED. TOPICS INCLUDE FOOD AND MILK PROTECTION; HEALTH PROGRAM ASPECTS OF AIR, WATER AND SOLID WASTE, MEASURES FOR THE ABATEMENT AND CONTROL OF DISEASE VECTORS, CODE ENFORCEMENT FOR SEPTIC SYSTEMS, SWIMMING POOLS, AND PRIVATE WATER WELLS, INJURY PREVENTION, PUBLIC/COMMUNITY/OCCUPATIONAL HEALTH RISK ASSESSMENTS. Required Previous: EHS-1114

EHS-4503 Chronic Disease and Global Health 3 Credits

A STUDY OF THE CHRONIC DISEASES FACING THE UNITED STATES SUCH AS HEART DISEASE, DIABETES, AND CANCER. HEALTH ISSUES OF A GLOBAL NATURE SUCH AS CHRONIC DISEASES, INFECTIOUS DISEASES AND MENTAL HEALTH ARE REVIEWED. Required Previous: EHS-1114

EHS-4553 Environmental and Organic Chemistry 3 Credits

INTRODUCTION TO THE CHEMISTRY OF THE NATURAL ENVIRONMENT AND FATE, TRANSPORT AND SIGNIFICANCE OF ORGANIC CHEMICAL CONTAMINANTS. Required Previous: CHEM-1114

EHS-4703	Consumer Risk and Protection	3 Credits	EHS-5803	Environmental Toxicology	3 Credits
THIS COURSE EXPLORES THE ROLE OF FOOD AS A VEHICLE OF INFECTION, EMPHASIZING FOOD SAFETY, QUALITY STANDARDS, AND CONSUMER PROTECTION. IT INTEGRATES RISK ASSESSMENT TECHNIQUES WITH FOOD SAFETY, ENVIRONMENTAL FACTORS, AND HAZARD MANAGEMENT. TOPICS INCLUDE ENVIRONMENTAL ASSESSMENT, RISK MANAGEMENT, AND STRATEGIES FOR ACCIDENT PREVENTION, WITH A FOCUS ON ENSURING FOOD SAFETY AND PROTECTION. Required Previous: EHS-1114 or department approval			ADVANCED GRADUATE STUDY OF THE POISONOUS OR TOXIC PROPERTIES OF SUBSTANCES AND THE REGULATIONS AND MANAGEMENT PRACTICES FOR THESE CHEMICALS. CREDIT CANNOT BE OBTAINED FOR BOTH WRPM-5803 AND EHS-5803.		
EHS-4802	Environmental Health Laboratory	2 Credits	EHS-5981	Seminar in Environmental Science	1 Credit
A STUDY OF MODERN EQUIPMENT USED IN THE ASSESSMENT OF ENVIRONMENTAL QUALITY. TOPICS INCLUDE CALIBRATION AND SAMPLING METHODS USED IN MEASUREMENTS OF AIR, WATER, AND SOIL CONTAMINANTS. Required Previous: EHS-1114			DIRECTED INTENSIVE STUDY ON SELECTED PROBLEM OR SPECIAL TOPIC.		
EHS-4943	Field Experience in Environmental/Public Health	3 Credits	EHS-5982	Seminar in Environmental Science	2 Credits
EACH STUDENT IS REQUIRED TO COMPLETE AT LEAST ONE, 3 SEMESTER HOUR FIELD TRAINING WITHIN A ONE SEMESTER TIME PERIOD CONSISTING OF A MINIMUM OF 180 HOURS OF EMPLOYMENT OR VOLUNTEER SERVICE IN AN APPROVED SETTING. THE COURSE MAY BE REPEATED ONCE FOR THE PURPOSE OF RECEIVING 6 TOTAL SEMESTER CREDIT HOURS EITHER DURING SEPARATE PORTIONS OF THE SAME SEMESTER OR DURING A DIFFERENT SEMESTER.			DIRECTED INTENSIVE STUDY ON SELECTED PROBLEM OR SPECIAL TOPIC.		
EHS-4981	Seminar-	1 Credit	EHS-5984	Seminar in Environmental Science	4 Credits
DIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.			DIRECTED INTENSIVE STUDY ON SELECTED PROBLEM OR SPECIAL TOPIC.		
EHS-4982	Seminar-	2 Credits	EHS-5991	Individual Study in Environmental Health Science	1 Credit
DIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.			DIRECTED INTENSIVE STUDY ON DEFINITE PROBLEM OR SPECIAL SUBJECT, BASED ON APPROVED OUTLINE OR PLAN, CONFERENCES, ORAL AND WRITTEN REPORTS. Required Previous: Twelve (12) from Environmental Health Science		
EHS-4983	Seminar-	3 Credits	EHS-5992	Individual Study in Environmental Health Science	2 Credits
DIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.			DIRECTED INTENSIVE STUDY ON DEFINITE PROBLEM OR SPECIAL SUBJECT, BASED ON APPROVED OUTLINE OR PLAN, CONFERENCES, ORAL AND WRITTEN REPORTS. Required Previous: Twelver (12) hours from Environmental Health Science		
EHS-4984	Seminar-	4 Credits	EHS-5993	Individual Study in Environmental Health Science	3 Credits
DIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.			DIRECTED INTENSIVE STUDY ON DEFINITE PROBLEM OR SPECIAL SUBJECT, BASED ON APPROVED OUTLINE OR PLAN, CONFERENCES, ORAL AND WRITTEN REPORTS. Required Previous: Twelve (12) hours from Environmental Health Science		
EHS-4991	Individual Study in Environmental Science	1 Credit	EHS-5994	Individual Study in Environmental Health Science	4 Credits
DIRECTED INDIVIDUAL STUDY ON SPECIAL SUBJECT OR PROBLEM.			DIRECTED INTENSIVE STUDY ON DEFINITE PROBLEM OR SPECIAL SUBJECT, BASED ON APPROVED OUTLINE OR PLAN, CONFERENCES, ORAL AND WRITTEN REPORTS. Required Previous: Twelve (12) hours from Environmental Health Science		
EHS-4992	Individual Study in Environmental Science	2 Credits	EHS-H2613	Honors-Occupational Health and Safety	3 Credits
DIRECTED INDIVIDUAL STUDY ON SPECIAL SUBJECT OR PROBLEM.			AN INTRODUCTION TO THE OCCUPATIONAL HEALTH AND SAFETY ACT OF 1970. THE COURSE INCLUDES THE RECOGNITION, EVALUATION, AND CONTROL OF HEALTH AND SAFETY HAZARDS IN THE WORK ENVIRONMENT. Required Previous: MATH-1513		
EHS-4993	Individual Study in Environmental Science	3 Credits	EHS-H3153	Honors-Envrmntal Health Administration	3 Credits
DIRECTED INDIVIDUAL STUDY ON SPECIAL SUBJECT OR PROBLEM.			THE STRUCTURE AND OPERATION OF ENVIRONMENTAL AND PUBLIC HEALTH ADMINISTRATIVE AGENCIES. THE LEGAL AND FINANCIAL BASIS OF REGULATORY PROGRAMS AND MANAGEMENT PRACTICES UTILIZED TO PROTECT INDIVIDUALS, COMMUNITIES AND THE NATURAL ENVIRONMENT.		
EHS-4994	Individual Study in Environmental Science	4 Credits	EHS-H3603	Honors-Air Quality	3 Credits
DIRECTED INDIVIDUAL STUDY ON SPECIAL SUBJECT OR PROBLEM.			THE FUNDAMENTALS OF AIR POLLUTION PHENOMENA, EFFECTS, AND APPLICABLE CONTROL MEASURES. Required Previous: CHEM-1114		
EHS-5223	Watershed Management	3 Credits	EHS-H3803	Honors-Environmental Toxicology	3 Credits
ADVANCED STUDY OF WATERSHED MANAGEMENT. THE COURSE COVERS THE MOST IMPORTANT WATERSHED MANAGEMENT TOPICS ABOUT WHICH WATERSHED MANAGERS, LOCAL OFFICIALS, INVOLVED CITIZENS, DECISION MAKERS, NATURAL RESOURCES MANAGERS AND OTHERS SHOULD HAVE AT LEAST AN INTRODUCTORY LEVEL OF KNOWLEDGE. CREDIT CANNOT BE APPLIED FROM BOTH EHS-5223 AND WRPM-5223.			A STUDY OF THE POISONOUS OR TOXIC PROPERTIES OF SUBSTANCES AND THE REGULATIONS AND MANAGEMENT PRACTICES FOR THESE CHEMICALS. Required Previous: CHEM-1114		
EHS-5553	Water Quality and Treatment	3 Credits	EHS-H4203	Honors-Community Health	3 Credits
ADVANCED GRADUATE STUDY OF THE PROPERTIES, DISTRIBUTION AND UTILIZATION OF WATER IN NATURAL AND MAN-MADE SYSTEMS; CONVENTIONAL WATER AND WASTEWATER TREATMENT PRACTICES ARE PRESENTED.			A STUDY OF COMMUNITY HEALTH'S HISTORY, PROGRESSION, AND PROMOTION OF PREVENTITIVE METHODS. CURRENT ISSUES IN ENV/COMM HLTH ARE REVIEWED. TOPICS INCLUDE FOOD AND MILK PROTECTION, HLTH PROGRAM ASPECTS OF AIR, WATER AND SOLID WASTE, MEASURES FOR THE ABATEMENT AND CONTROL OF DISEASE VECTORS, CODE ENFORCEMENT		
EHS-5802	Environmental Health Lab	2 Credits			
ADVANCED STUDY MODERN EQUIPMENT USED IN THE ASSESSMENT OF ENVIRONMENTAL QUALITY. TOPICS INCLUDE CALIBRATION AND SAMPLING METHODS USED IN MEASUREMENTS OF AIR, WATER, AND SOIL CONTAMINANTS.					

FOR SEPTIC SYSTEMS, SWIMMING POOLS, AND PRIVATE WATER WELLS, INJURY PREVENTION, PUBLIC/COMMUNITY/OCCUPATIONAL HEALTH RISK ASSESSMENTS. Required Previous: EHS-1114

EHS-H4553 Honors-Environmental & Organic Chemistry 3 Credits

INTRODUCTION TO THE CHEMISTRY OF THE NATURAL ENVIRONMENT AND FATE, TRANSPORT AND SIGNIFICANCE OF ORGANIC CHEMICAL CONTAMINANTS. Required Previous: CHEM-1114

EHS-H4983 Honors-Seminar in Environmental Sci 3 Credits

DIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.