ECU COURSE CATALOG

3

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 TOPCIS, 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 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 StudiesDIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.

1 Credit

EHS-2882 Special Studies- 2 Credits DIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.

EHS-2883 Special StudiesDIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.

3 Credits

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 Environmental and Public Health Administration 3 Credits

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-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 Water Quality and Treatment 3 Credits
A COMPREHENSIVE STUDY OF THE PROPERTIES, DISTRIBUTION AND
UTILIZATION OF WATER IN NATURAL AND MAN-MADE SYSTEMS;
CONVENTIONAL WATER AND WASTEWATER TREATMENT PRACTICES ARE
PRESENTED. 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-3703Biostatistics 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 Environmental Toxicology 3 Credits
A STUDY OF THE POISONOUS OR TOXIC PROPERTIES OF SUBSTANCES AND
THE REGULATIONS AND MANAGEMENT PRACTICES FOR THESE CHEMICALS.
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 MILKBORNE 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 PREVENTITIVE 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

Environmental and Risk Assessment 3 Credits STUDY OF THE FACTORS REQUIRED FOR THE PREPARATION AND EVALUATION OF AN ENVIRONMENTAL ASSESSMENT; ALSO AN INTRODUCTION TO RISK ASSESSMENT AND MANAGEMENT, INCLUDING ACCIDENT PREVENTION. Required Previous: EHS-1114 or department approval

Environmental Health Laboratory EHS-4802 2 Credits 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

EHS-4943 Field Experience **Environmental/Public** in Health 3 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.

EHS-4981 Seminar-1 Credit DIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.

EHS-4982 Seminar-2 Credits DIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.

FHS-4983 Seminar-3 Credits DIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.

EHS-4984 Seminar-4 Credits DIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.

EHS-4991 Individual Study in **Environmental** Science 1 Credit

DIRECTED INDIVIDUAL STUDY ON SPECIAL SUBJECT OR PROBLEM.

Individual **Environmental** EHS-4992 Study in Science 2 Credits DIRECTED INDIVIDUAL STUDY ON SPECIAL SUBJECT OR PROBLEM.

Environmental Individual EHS-4993 Study in 3 Credits

DIRECTED INDIVIDUAL STUDY ON SPECIAL SUBJECT OR PROBLEM.

Science

EHS-4994 Individual Study in **Environmental** Science 4 Credits

DIRECTED INDIVIDUAL STUDY ON SPECIAL SUBJECT OR PROBLEM.

EHS-5981 **Seminar in Environmental Science** 1 Credit DIRECTED INTENSIVE STUDY ON SELECTED PROBLEM OR SPECIAL TOPIC.

EHS-5982 Seminar in Environmental Science 2 Credits DIRECTED INTENSIVE STUDY ON SELECTED PROBLEM OR SPECIAL TOPIC.

EHS-5983 Seminar in Environmental Science 3 Credits DIRECTED INTENSIVE STUDY ON SELECTED PROBLEM OR SPECIAL TOPIC.

EHS-5984 **Seminar in Environmental Science** 4 Credits DIRECTED INTENSIVE STUDY ON SELECTED PROBLEM OR SPECIAL TOPIC.

EHS-5991 Individual Study in Environmental Health Science

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-5992 Individual Study in Environmental Health Science 2 Credits

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-5993 Individual Study in Environmental Health Science 3 Credits

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-5994 Individual Study in Environmental Health Science 4 Credits

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-H2613 Honors-Occupational Health and 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. Required Previous: MATH-1513

Honors-Envrmntal Health Administration EHS-H3153 3 Credits

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-H3603 **Honors-Air Quality** 3 Credits THE FUNDAMENTALS OF AIR POLLUTION PHENOMENA, EFFECTS, AND APPLICABLE CONTROL MEASURES. Required Previous: CHEM-1114

EHS-H3803 **Honors-Environmental Toxicology** 3 Credits A STUDY OF THE POISONOUS OR TOXIC PROPERTIES OF SUBSTANCES AND THE REGULATIONS AND MANAGEMENT PRACTICES FOR THESE CHEMICALS. Required Previous: CHEM-1114

EHS-H4203 **Honors-Community Health** 3 Credits 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 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 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** DIRECTED GROUP STUDY ON SPECIAL SUBJECT OR PROBLEM.