ENVIRONMENTAL PUBLIC HEALTH (ENPH)

ENPH 110 Introduction to Environmental Health (3 crs)

• A basic understanding and interest in science is recommended prior to enrollment in this course. Wellness for one credit.

Health-oriented problems in the environment with attention directed to air and water pollution, solid waste, housing, occupational health and safety, food sanitation, animal zoonoses, ecology of health and disease, radiological health, energy, and global environmental health.

Attributes: Wellness Theory, GE IIF Natural Science-Interdisciplinary Studies, LE-K1 Natural Sciences, LE-R3 Civic and Environmental Issues Lecture/Discussion Hours: 3 Lab/Studio Hours: 0

ENPH 150 Disease Detectives: Epidemics and Data (3 crs)

Prerequisite: MATH 20 or Placement in MATH 104 or above. No credit if taken after ENPH 450.

Introduction to disease outbreak investigation. Epidemiology as a scientific way of thinking using non-intensive mathematics including examples from current events.

Attributes: GE IIF Natural Science-Interdisciplinary Studies, LE-K1 Natural Sciences, LE-R3 Civic and Environmental Issues Lecture/Discussion Hours: 3 Lab/Studio Hours: 0

ENPH 291 Special Topics (1-3 crs)

Consent: Instructor Consent Required A variable content course consisting of topics of special interest to students and faculty that are not covered in other environmental health courses.

Repeat: Course may be repeated for a maximum of 6 credits Lecture/Discussion Hours: 1-3 Lab/Studio Hours: 0

ENPH 324 Radiation, Air Pollution and Health (3 crs)

Prerequisite: CHEM 109 or CHEM 115. No credit if taken after ENPH 322 or ENPH 422.

Examines the fundamentals, human health implications, and safety practices related to ionizing radiation from radioactive materials. Examines the fundamentals, human, and environmental health consequences of air pollution, along with mitigation strategies.

Lecture/Discussion Hours: 3 Lab/Studio Hours: 0

ENPH 364 Occupational Safety Management (3 crs)

• Access to computer with Internet access, some familiarity with Internet use, some familiarity with workplace safety issues. No credit if taken after ENPH 495 the spring of 2001.

Recognition and control of safety hazards in various workplaces, basic safety theory, applicable health and safety regulations, and ethical obligations. Behavioral change techniques. Opportunity for students to research specific workplace settings and issues.

Lecture/Discussion Hours: 3 Lab/Studio Hours: 0

ENPH 370 US Health Systems and Policy (3 crs)

Examines health and healthcare policy from a public health perspective. Addresses basic concepts associated with the distribution of health and illness in society and the organization of the health care system. Evaluates the roles played by local, state, and federal agencies and non-governmental organizations in the provision of health care and uses public health case studies to understand and critique the effectiveness and fairness of the current system.

Grading Basis: A-F Grades Only Lecture/Discussion Hours: 3 Lab/Studio Hours: 0

ENPH 397 Student Academic Apprenticeship (1-2 crs)

Prerequisite: Limited to environmental public health majors. Consent: Instructor Consent Required Experience for qualified students to facilitate teaching and learning in ENPH

courses. Students develop and enhance knowledge in ENPH and their abilities to communicate that knowledge to other students.

Repeat: Course may be repeated for a maximum of 4 credits Grading Basis: S/U Only Grade Basis Lecture/Discussion Hours: 1-2 Lab/Studio Hours: 0

ENPH 399 Independent Study (1-3 crs)

Prerequisite: Minimum junior standing. Consent: Department Consent Required An opportunity for students to pursue an environmental research topic of their choice in collaboration with a faculty mentor.

Repeat: Course may be repeated

ENPH 432 Preparation for Practicum (2 crs)

Prerequisite: Limited to environmental public health majors. Minimum junior standing.

An interactive course covering expectations during practicum, presentations on various areas of environmental health practice, opportunities for shadowing, preparation of resumes, practice interviewing.

Grading Basis: A-F Grades Only Lecture/Discussion Hours: 2 Lab/Studio Hours: 0

ENPH 435 Practicum in Environmental Public Health (3 crs)

Prerequisite: ENPH 432. Minimum junior standing. Consent: Instructor Consent Required A full-time supervised 10-week internship experience in an approved governmental agency, industry, or consulting company.

Attributes: LE-I1 Integration, Service-Learning, Full 30 Hours Repeat: Course may be repeated for a maximum of 8 credits Lecture/Discussion Hours: 3 Lab/Studio Hours: 0

ENPH 441 Water and Wastewater (3 crs)

Prerequisite: ENPH 110; BIOL 111 or BIOL 151; and CHEM 104 or CHEM 109 or CHEM 115 or consent of instructor.

Investigative procedures, sampling techniques, analysis and treatment of water and wastewater. Emphasis on water pollution, aquatic nuisances, drinking water quality, on-site waste disposal, municipal and industrial wastewater treatment, private wells, and groundwater contamination.

Attributes: Undergraduate/Graduate Offering Lecture/Discussion Hours: 2 Lab/Studio Hours: 2

ENPH 443 Microbial Safety of Food (4 crs)

Prerequisite: BIOL 250, BIOL 306, or BIOL 361 or concurrent registration in any of these three courses. No credit if taken after ENPH 442.

Principles of food microbiology including common foodborne pathogens, strategies to protect the food supply, environmental sanitation, regulations, and HACCP. Environmental sampling of food and milk, common laboratory tests.

Attributes: Field Trip(s) Required Grading Basis: A-F Grades Only Lecture/Discussion Hours: 3 Lab/Studio Hours: 2

ENPH 445 Hazardous and Solid Waste Management (3 crs)

•Dual-listed with ENPH 645.

Examination of the generation, use, handling, and storage of solid waste, and of materials posing significant chemical, biological, and radiological risks to health. Several field trips will supplement in-class learning.

Attributes: Field Trip(s) Required Lecture/Discussion Hours: 3 Lab/Studio Hours: 0

ENPH 460 Fundamentals of Industrial Hygiene (3 crs)

Prerequisite: ENPH 110 and MATH 246.

The recognition, evaluation, and control of chemical, physical, biological and ergonomic stresses that may cause sickness or impaired health to employees or residents of the community.

Lecture/Discussion Hours: 3 Lab/Studio Hours: 0

ENPH 476 Vector-Borne Disease Control (3 crs)

Prerequisite: Successful completion of at least one of the following courses or consent of instructor: BIOL 151, BIOL 214, BIOL 221, BIOL 250 Vector-borne disease health effects, identification of vectors and pests, and approaches for preventing vector-borne disease globally, nationally and regionally.

Attributes: Undergraduate/Graduate Offering Lecture/Discussion Hours: 3 Lab/Studio Hours: 0

ENPH 490 Environmental Toxicology and Risk Assessment (3 crs)

Prerequisite: BIOL 221 or 111, ENPH 110 or 210, CHEM 325 or consent of instructor.

Examination of the principles, theories, and applications of human environmental toxicology through investigation of chemical, cellular, physiological, environmental, and ecological levels. Introduction to contemporary health risk assessment methods.

Attributes: Undergraduate/Graduate Offering Lecture/Discussion Hours: 3 Lab/Studio Hours: 0

ENPH 491 Special Topics (1-3 crs)

Consent: Instructor Consent Required

A variable content course consisting of advanced topics of special interest to students and faculty that are not covered in other environmental health courses.

Repeat: Course may be repeated for a maximum of 6 credits Lecture/Discussion Hours: 1-3 Lab/Studio Hours: 0

ENPH 495 Directed Studies (1-3 crs)

Consent: Department Consent Required Permits the student to pursue a defined organized study of a problem in an intensive way under the direction of a department of public health professions staff member.

Repeat: Course may be repeated

ENPH 499 Independent Study (1-3 crs)

Prerequisite: Minimum senior standing. Consent: Department Consent Required An opportunity for senior students to pursue an environmental topic of their choice. A detailed project report will be required.

Repeat: Course may be repeated

ENPH 641 Water and Wastewater (3 crs)

Prerequisite: ENPH 110; BIOL 111 or BIOL 151; and CHEM 104 or CHEM 109 or CHEM 115 or consent of instructor

Investigative procedures, sampling techniques, analysis and treatment of water and wastewater. Emphasis on water pollution, aquatic nuisances, drinking water quality, on-site waste disposal, municipal and industrial wastewater treatment, private wells, and groundwater contamination.

Attributes: MPH Flat Rate Tuition, Special Course Fee Required Grading Basis: A-F Grades Only Lecture/Discussion Hours: 2 Lab/Studio Hours: 2

ENPH 641A Water and Wastewater (3 crs)

Prerequisite: ENPH 110; BIOL 111 or BIOL 151; and CHEM 104 or CHEM 109 or CHEM 115 or consent of instructor. Limited to students accepted into the Master of Public Health Accelerated Plan.

•Dual listed with ENPH 641. This course is part of the Master of Public Health accelerated degree program. Additional graduate-level work will need to be completed as specified in the course syllabus.

Investigative procedures, sampling techniques, analysis and treatment of water and wastewater. Emphasis on water pollution, aquatic nuisances, drinking water quality, on-site waste disposal, municipal and industrial wastewater treatment, private wells, and groundwater contamination.

Attributes: Undergraduate/Graduate Offering, MPH Flat Rate Tuition, Special Course Fee Required Lecture/Discussion Hours: 2 Lab/Studio Hours: 2

ENPH 645 Hazardous and Solid Waste Management (3 crs)

• Dual-listed with ENPH 445.

Examination of the generation, use, handling, and storage of solid waste, and of materials posing significant chemical, biological, and radiological risks to health. Several field trips will supplement in-class learning.

Attributes: Field Trip(s) Required Grading Basis: A-F Grades Only

ENPH 645A Hazardous and Solid Waste Management (3 crs)

Prerequisite: Limited to students accepted into the Master of Public Health Accelerated Plan.

•Dual listed with ENPH 645. This course is part of the Master of Public Health accelerated degree program. Additional graduate-level work will need to be completed as specified in the course syllabus.

Examination of the generation, use, handling, and storage of solid waste, and of materials posing significant chemical, biological, and radiological risks to health. Several field trips will supplement in-class learning.

Attributes: Field Trip(s) Required Lecture/Discussion Hours: 3 Lab/Studio Hours: 0

ENPH 676 Vector-Borne Disease Control (3 crs)

Prerequisite: Successful completion of at least one of the following courses or consent of instructor: BIOL 151, BIOL 214, BIOL 221, BIOL 250 Vector-borne disease health effects, identification of vectors and pests, and approaches for preventing vector-borne disease globally, nationally and regionally.

Attributes: MPH Flat Rate Tuition, Special Course Fee Required Grading Basis: A-F Grades Only

ENPH 676A Vector-Borne Disease Control (3 crs)

Prerequisite: Successful completion of at least one of the following courses or consent of instructor: BIOL 151, BIOL 214, BIOL 221, BIOL 250. Limited to students accepted into the Master of Public Health Accelerated Plan.

•Dual listed with ENPH 676. This course is part of the Master of Public Health accelerated degree program. Additional graduate-level work will need to be completed as specified in the course syllabus.

Vector-borne disease health effects, identification of vectors and pests, and approaches for preventing vector-borne disease globally, nationally and regionally.

Attributes: Undergraduate/Graduate Offering, MPH Flat Rate Tuition, Special Course Fee Required Lecture/Discussion Hours: 3 Lab/Studio Hours: 0

ENPH 690 Environmental Toxicology and Risk Assessment (3 crs)

Prerequisite: BIOL 221 or 111, ENPH 110 or 210, CHEM 325 or consent of instructor.

Examination of the principles, theories, and applications of human environmental toxicology through investigation of chemical, cellular, physiological, environmental, and ecological levels. Introduction to contemporary health risk assessment methods.

Attributes: MPH Flat Rate Tuition, Special Course Fee Required Grading Basis: A-F Grades Only

ENPH 690A Environmental Toxicology and Risk Assessment (3 crs)

Prerequisite: BIOL 221 or 111, ENPH 110 or 210, CHEM 325 or consent of instructor. Limited to students accepted into the Master of Public Health Accelerated Plan.

•Dual listed with ENPH 690. This course is part of the Master of Public Health accelerated degree program. Additional graduate-level work will need to be completed as specified in the course syllabus.

Examination of the principles, theories, and applications of human environmental toxicology through investigation of chemical, cellular, physiological, environmental, and ecological levels. Introduction to contemporary health risk assessment methods.

Attributes: Undergraduate/Graduate Offering, MPH Flat Rate Tuition, Special Course Fee Required Lecture/Discussion Hours: 3 Lab/Studio Hours: 0